

Evelina Radeva

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SUMMARY OF MAJOR FINDINGS FOR PENNSYLVANIA

This 18th edition of CompScope™ Medical Benchmarks for Pennsylvania can help policymakers and other stakeholders in the workers' compensation system identify current cost drivers and emerging trends in payments, prices, and utilization of medical services among nonhospital¹ and hospital providers. It also shows how medical payments per claim and their cost components in Pennsylvania compared with 17 other states.

We analyzed claims with experience through 2016 for injuries up to and including 2015. In some cases we used a longer time frame to supply historical context for key metrics. We also added information from other Workers Compensation Research Institute (WCRI) studies to provide a more complete picture of the system in Pennsylvania.

The performance measures included in the major findings and supporting slides in the report were selected to provide useful interstate comparisons on key measures within the workers' compensation system and to provide context for discussions of public policy issues. We include measures in the major findings and supporting slides if they are significant cost drivers in one or more of the following ways: (1) they represent major components of overall medical payments, (2) they contribute to the change of costs in the state, and (3) they are major components in the differences between the costs in the state and the median study state.²

Each state summary is focused on the most important findings as related to public policy implications and current public policy discussions. Therefore, each state summary may focus on different measures and use a somewhat different structure from other state reports.

MAJOR FINDINGS FOR PENNSYLVANIA

- [Lower prices and higher utilization](#) offset each other to result in fairly typical [medical payments per claim](#) compared with other study states:
 - Hospital [outpatient payments per service](#) in Pennsylvania were lower than typical, offset by higher [services per claim](#). In addition, proportionally [more injured workers](#) in Pennsylvania received at least one service in a hospital setting than in most study states.
 - [Medical fee schedules](#) in Pennsylvania have resulted in lower [overall prices](#) compared with other study states.³ This was a main reason for lower-than-typical [payments per claim to physicians](#).
 - Pennsylvania had among the highest overall number of [visits per claim and services per visit](#) among the study states. The main driver of higher utilization was [physical medicine services](#).
- [Medical payments per claim](#) grew faster in Pennsylvania than in other study states between 2010 and 2015 (for claims with an average maturity of 12 months), driven by [hospitals](#). The year-to-year changes

¹ Nonhospital providers include physicians, physical/occupational therapists, chiropractors, nurses, clinical social workers, and other ancillary practitioners. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital).

² The terms [typical and median](#) are used interchangeably in this study.

³ Sources: Fomenko and Liu. 2016. [Designing Workers' Compensation Medical Fee Schedules, 2016](#). Yang and Fomenko. 2017. [WCRI Medical Price Index for Workers' Compensation, Ninth Edition \(MPI-WC\)](#).

in [average prices paid](#) and [utilization of services](#) were small.

OFFSETTING COMPONENTS RESULTED IN TYPICAL MEDICAL PAYMENTS PER CLAIM

Pennsylvania had fairly typical [medical payments per claim](#)⁴ with more than seven days of lost time for all claim maturities. Medical payments per claim in Pennsylvania reflect a combination of lower [prices paid for professional services, lower hospital outpatient payments per service, and higher utilization of services](#)⁵ when compared with other study states. Lower-than-typical prices paid were a result of lower [fee schedule rates](#)⁶ in Pennsylvania. Pennsylvania uses [separate fee schedules](#) to regulate payments for professional services, hospital inpatient and outpatient services, and ambulatory surgery centers (ASCs). Higher-than-typical [utilization](#) in Pennsylvania was largely driven by [physical medicine](#). In addition, Pennsylvania had a higher [percentage of claims with hospital services](#), likely reflecting hospital-affiliated practices.

HIGHER PERCENTAGE OF CLAIMS WITH HOSPITAL SERVICES, LOWER HOSPITAL OUTPATIENT PAYMENTS PER SERVICE, MORE SERVICES PER CLAIM

For 2015/2016 claims,⁷ 74 [percent of claims](#) with more than seven days of lost time had services in a hospital in Pennsylvania, compared with 66 percent in the typical study state. System participants have indicated that a higher proportion of hospital-affiliated practices have led to a higher [percentage of claims with hospital outpatient care](#) in states like Pennsylvania, Massachusetts, Michigan, and Wisconsin.⁸

Based on 2015/2016 claims, the number of hospital outpatient [services per claim](#) in Pennsylvania was the highest of the study states. However, lower [payments per service](#) resulted in fairly typical overall hospital [outpatient payments per claim](#). Pennsylvania had the highest number of services per claim for [evaluation and management \(office visits\)](#) and [treatment/operating/recovery room services](#), and the second highest number of services per claim for [physical medicine services](#), of the study states. In contrast, the average [hospital outpatient payment](#) per service was lower to typical in Pennsylvania compared with the median study state for common services such as office visits and radiology. Pennsylvania also had lower-than-typical [payments per service](#) for treatment/operating/recovery room services compared with the median study state. Treatment/operating/recovery room services include services billed by facilities, mostly in conjunction with surgical procedures.

In Pennsylvania, reimbursements for [hospital outpatient services](#) are based on Medicare rates. The workers' compensation medical fee schedule was initially set at 113 percent of Medicare. The Pennsylvania medical fee schedule was frozen on December 31, 1994, and since that date it has been updated annually by the

⁴ All lump-sum payments are reported as indemnity payments. This achieves consistency and comparability in this measure across all states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data.

⁵ Utilization is benchmarked using a utilization index, which incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided. For hospital outpatient services, utilization is based on the number of services per claim.

⁶ The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee-schedule-to-Medicare ratios between states (*Designing Workers' Compensation Medical Fee Schedules*, 2016).

⁷ 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, with experience through March 31, 2016. Other injury year/evaluations are denoted similarly.

⁸ Physicians Advocacy Institute. 2016. [Physician Practice Acquisition Study: National and Regional Employment Changes](#).

percentage change in the statewide average weekly wage. Hospital outpatient providers not subject to the Medicare fee schedule⁹ are reimbursed using a provider's actual charge multiplied by the ratio of costs to charges based on the most recent audited Medicare cost report. Note that these cost-to-charge ratios were frozen in 1994, similar to the rates for all other types of providers. In addition, hospital inpatient services are generally regulated based on diagnosis-related groups (DRGs).

Surgical treatment involves payments to providers of [surgery \(professional services\) and payments to the facilities](#) where the surgery is performed—in an ASC or in a hospital. Facility payments are measured by payments for treatment, operating, and recovery rooms, not including surgery-related costs (supplies and equipment and anesthesia) or payments for professional services (for example, surgeon fees).

The [average facility payment per claim](#) for both hospital outpatient and ASC services was lower in Pennsylvania than in most study states for 2015 claims (evaluated as of 2016) and higher percentage of facility services were provided in a hospital setting rather than an ASC. Pennsylvania uses separate [fee schedules](#) to regulate payments for surgeries performed in ASCs and surgeries performed in hospital outpatient facilities. Facility payments for surgeries performed in ASCs are based on ASC payment groups, including the Medicare list of covered services and related classifications in these groups. Facility payments for hospital outpatient surgery are mainly based on a cost-to-charge ratio, which is hospital specific. The result of this has been that [facility payments](#) for common surgeries performed in ASCs were lower than payments for the same types of surgeries performed in hospital outpatient facilities. This finding comes from a WCRI research study—*Payments to Ambulatory Surgery Centers, 2nd Edition*—that compared facility payments for similar types of knee and shoulder surgical episodes across 33 states. In Pennsylvania, only 38 percent of knee surgeries were performed in ASCs compared with a range of 16 to 77 percent in the other study states (Savych, 2016).

For surgeries (all types of surgeries combined) performed in hospital inpatient settings, the average hospital [payment per inpatient episode](#) in Pennsylvania was typical for 2014 claims (evaluated as of 2016).

In addition to payments to the facility associated with the surgical procedure, this report provides information on payments to surgeons (the professional component). The [average payment per claim to surgeons](#) (for all types of surgeries) was typical in Pennsylvania, reflecting [price regulations](#).¹⁰ The [proportion of claims with major surgery](#) was typical in Pennsylvania at all claim maturities.

LOWER-THAN-TYPICAL PAYMENTS PER CLAIM TO PHYSICIANS DUE TO LOWER PRICES

The average [payment per claim to physicians](#) in Pennsylvania was lower than in most study states in 2015/2016, generally reflecting lower [prices paid](#). Lower prices relative to other study states were a result of [medical fee schedules](#) in Pennsylvania. Pennsylvania implemented a Medicare resource-based relative value scale (RBRVS) [fee schedule](#) in 1993 by setting the reimbursement rates at 113 percent of Medicare in that year. Since 1995, fee schedule rates have been updated annually based on changes in the statewide average weekly wage in Pennsylvania. It is important to emphasize that at the time of implementation of the Pennsylvania workers' compensation fee schedule, the Medicare RBRVS was in its early stages of

⁹ Examples of providers not subject to Medicare are hospital outpatient acute care providers, specialty hospitals, comprehensive outpatient rehabilitation facilities, and outpatient physical therapy centers.

¹⁰ WCRI's *A New Benchmark for Workers' Compensation Fee Schedules: Prices Paid by Commercial Insurers?* found that for a common knee arthroscopy procedure, the median workers' compensation price paid in Pennsylvania was similar to group health prices (Fomenko and Victor, 2013).

implementation. Since 1995, [Medicare has made many changes](#) in its reimbursement approach for certain provider types. Freezing the relative values in workers' compensation in Pennsylvania, which have been updated over time by Medicare, has resulted in post-1995 fee schedule rates in Pennsylvania sometimes being lower than current Medicare rates.

According to *Designing Workers' Compensation Medical Fee Schedules, 2016* (Fomenko and Liu, 2016), the [ratio of fee schedule rates](#) for professional services in Pennsylvania compared with Medicare in Pennsylvania was lower to typical relative to other states with workers' compensation fee schedules. Consistent with the fee schedules, [prices paid](#) for some services, such as evaluation and management, neurological and neuromuscular testing, and pain management injections, were lower in Pennsylvania than in the typical state in 2016 (January through June). Prices paid for major radiology (magnetic resonance imaging [MRIs] and computerized tomography [CT] scans), minor radiology (X rays and ultrasounds), physical medicine, and major surgery were typical in Pennsylvania. Note that providers of evaluation and management treated patients using more [visits per claim](#) in Pennsylvania than in many other study states for 2015/2016 claims. Another WCRI study¹¹ provides interstate comparisons of key outcomes reported by injured workers in 15 states. The information was collected directly from telephone interviews with injured workers who had experienced at least seven days of lost time. In Pennsylvania, only 13 percent of surveyed [workers reported "big problems"](#) getting the medical provider or services they wanted.

HIGHEST MEDICAL UTILIZATION OF ALL STUDY STATES, DRIVEN BY PHYSICAL MEDICINE

Pennsylvania had lower prices paid than most study states, but the use of [physical medicine services](#) has led to Pennsylvania having higher [overall utilization](#) compared with the other states.

In Pennsylvania, physical medicine services for all types of providers accounted for [24 percent](#) of all medical payments for claims with more than seven days of lost time in 2013 (evaluated as of 2016). Pennsylvania had among the highest percentage of all study states on this metric. In other study states, physical medicine accounted for between 10 and 24 percent of medical payments. Furthermore, the average [medical payment per claim](#) for physical medicine was among the highest of the study states. Higher-than-typical payments per claim were driven by higher [utilization of services](#), measured as the number of [visits per claim](#), the number of [services per visit](#), and the resource intensity of services provided. [Prices paid](#) for physical medicine services in Pennsylvania were generally similar to the median study state.

In Pennsylvania, providers of physical medicine delivered 28 [visits per claim for physical medicine](#) compared with 20 in the median study state for 2015/2016 claims. Furthermore, they provided an average of 4.3 [services at each visit](#), compared with 3.7 in the typical study state. When examining two groups of claims, those with and without major surgery, we found that Pennsylvania had among the highest number of [visits per claim](#) for both surgical and nonsurgical claims. Pennsylvania had a typical [percentage of claims with major surgery](#) at all claim maturities. Previous CompScope™ benchmarking studies have shown that since 1996, Pennsylvania has had a higher use of physical medicine than the other study states.

Pennsylvania does not set limits on the number of physical medicine services or visits and does not specify treatment guidelines regarding necessity and reasonableness of physical medicine services. But while Pennsylvania does not regulate the number of visits directly, the regulations do allow the workers' compensation insurance carrier to request a utilization review at any point during the treatment process.

¹¹ Savych and Thumula. 2016. [Comparing Outcomes for Injured Workers in Pennsylvania](#).

MEDICAL PAYMENTS PER CLAIM IN PENNSYLVANIA GREW FASTER THAN OTHER STATES 2010–2015 DRIVEN BY HOSPITALS; PRICES AND UTILIZATION WERE GENERALLY STABLE

For most services, Pennsylvania has experienced typical growth in [prices paid](#) (professional services), [utilization](#) (nonhospital and hospital outpatient), and overall [medical payments per claim](#) over the past decade. Between 2010 and 2015 (for trends, we report claims with an average maturity of 12 months), [medical payments per claim](#) in Pennsylvania grew 4.6 percent per year, driven mostly by increases in hospital [outpatient payments per service](#). The [rate of growth](#) in Pennsylvania was among the highest of the study states during that period.

Outpatient treatment/operating/recovery room payments per service grew 8.9 percent per year between 2010 and 2015 in Pennsylvania and were a key driver in the growth of medical payments per claim. The growth in [payments per claim](#) was faster in Pennsylvania than in most states, however the level of those [payments](#) was still below the median of all study states. In Pennsylvania, hospital outpatient providers subject to the cost reimbursement approach, as defined in the law, are reimbursed by the provider's actual charge multiplied by the ratio of cost to charges based on the most recent audited Medicare cost report. Note that for many services the fees were initially frozen in 1994 and then adjusted annually based on the changes in the statewide average weekly wage. In addition, system participants speculated that the fact that some providers are not subject to the fee schedule might be one reason for the faster-than-typical growth in hospital outpatient payments per claim.

Long-term trends in medical payments and utilization were driven by a number of factors. Over time, some services have shifted from hospital inpatient to hospital outpatient, while others have shifted from hospital outpatient to nonhospital settings such as ASCs. In Pennsylvania, for instance, the proportion of [claims with inpatient care](#) has decreased steadily since 2006, mainly reflecting a decrease in surgical cases. Similar results were observed in most [study states](#). Technological and clinical advances may have led to the shift in care from hospital inpatient to outpatient/ASC settings. In addition, the [percentage of claims with hospital outpatient facility services](#) (measured as payments for treatment/operating/recovery room services) decreased in many states from 2010 to 2015. During the same period, there was an increase in the [percentage of claims with freestanding ASC facility services](#). Unlike the trends in other study states, however, the percentage of claims with ASC facility services in Pennsylvania did not change materially during this period. System participants indicated that this may be because more ASCs are affiliated with hospitals in Pennsylvania than in other states.

For services provided in hospital inpatient settings, the [average hospital payment per inpatient episode](#) grew on average 5.4 percent per year in Pennsylvania from 2010 to 2015. The rate of growth was similar to other study states. For services provided by physical/occupational therapists, the [average payment per claim](#) grew on average 4.6 percent per year in Pennsylvania, similar to many study states.

OTHER FINDINGS FROM COMPSCOPE™ AND NEW WCRI RESEARCH

Physician dispensing of prescriptions is an area of public policy focus in many states because the costs of physician-dispensed drugs is often significantly higher than the costs of pharmacy-dispensed drugs. Effective December 26, 2014, Pennsylvania enacted [regulations](#) regarding physician dispensing of drug products. These regulations limit reimbursements to providers but also limit the dispensing to a shorter time frame. This edition of CompScope™ Medical Benchmarks shows the initial impact of Pennsylvania's 2014 physician

dispensing reforms. The study reports on prescription payments per claim dispensed by both pharmacies and physicians. Future WCRI studies will show the subsequent impact for physician and pharmacy dispensers separately. In 2015 (evaluated as of 2016), the [average prescription payment per claim with prescriptions](#) in Pennsylvania decreased 26 percent, driven by a decrease in the [average number of prescriptions per claim with prescriptions \(9 percent\)](#) and a decrease in the [average payment per prescription](#) (18 percent). These results are based on claims with a maximum experience of up to 15 months under the reform provisions. Using 2014/2016 claims, which show an early indication of the impact of the physician dispensing reforms, Pennsylvania remained higher than typical on the [average prescription payment per claim with prescriptions](#).

Use of opioids is another area of public policy focus in many states. When prescribed, the overall dosage [\(morphine equivalent amount\) per claim for opioids](#) was among the highest in Pennsylvania of 26 study states.¹² For 2013 claims (evaluated as of 2015), 9 percent of injured workers who had a claim with more than seven days of lost time, who did not have surgery but received opioids, received them on a [longer-term basis](#).¹³ Pennsylvania was higher than other states on this metric.

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¹² Thumula, Wang, and Liu. 2017. [Interstate Variations in Use of Opioids, 4th Edition](#).

¹³ Wang. 2017. [Longer-Term Dispensing of Opioids, 4th Edition](#).

INTRODUCTION AND HOW TO USE THIS ANALYSIS

This is the 18th edition of an annual series of analyses that benchmarks the performance of the Pennsylvania workers' compensation system. This study focuses on the costs, prices, and utilization of medical care received by injured workers. It examines these medical services in the aggregate, by type of provider and type of medical service. Related Workers Compensation Research Institute (WCRI) studies benchmark state fee schedules and worker outcomes. A companion study to this annual series benchmarks income benefits, claim costs, use of different types of benefits, litigiousness, timeliness of payment, etc. (CompScope™ Benchmarks, 2017). This annual series focuses on the performance of the workers' compensation benefit delivery system and does not address insurance markets, pricing, or regulation.

The unit of analysis in the CompScope™ benchmarking series is the individual workers' compensation claim, so most results are reported on a per claim basis. Therefore, changes in claim frequency do not directly factor into the measures we report. We do, however, discuss the percentage of claims with a particular service or provider when appropriate.

These benchmarks provide dual perspectives:

- How the Pennsylvania system performance metrics have changed over time (trends), using claims that arose between October 2009 and September 2015, usually with an average of 12, 24, and 36 months of experience; and
- How Pennsylvania compares with other states—specifically with 17 other mostly large states that were selected because they are geographically diverse, represent a variety of system features, and represent the range of states that are higher, medium, and lower on costs per claim. The average medical payment per claim in the median state in this group is similar to the median among all U.S. states (see “[Data and Methods](#)”).

HOW TO USE THIS BENCHMARKING REPORT

The format of this edition of the CompScope™ Medical Benchmarks study is designed to make the findings easily accessible while providing a rich and detailed set of benchmarks for those who want to drill down beneath the major findings.

- For those who want to get quickly to the bottom line, there is a short narrative [summary of major findings](#) and a [slide presentation](#) on major findings. The slides provide explanatory figures and charts, along with interactive links to the more detailed figures and tables that underlie the highlighted major findings.
- For those who want to drill down on a specific issue, the narrative summary and slide presentation both have links from each finding or slide to the underlying detailed tables and graphs.¹
- For those who are not familiar with the CompScope™ benchmarking studies, there is an “[Information](#)

¹ Readers using a paper copy of the report can manually drill down and locate the underlying graphs and tables supporting the narrative summary or a presentation slide.

[for First-Time Users](#)” section to provide detail about the key benchmarks we analyze, the data we use and the adjustments we make, and some presentational explanations.

- For those seeking a wide-ranging reference book to address the questions of interest, there are many detailed tables and graphs that are available for browsing or through links in the “[Quick Reference Guide to Figures and Tables](#).”
- For those who are interested in the medical management approaches used in each state, [Tables 5](#) and [6](#) summarize the medical cost containment strategies in place in 2017.
- The data and methods are fully described in the [Technical Appendix](#). This report also contains a short summary of the *Technical Appendix* entitled “[Data and Methods](#).”

Note: Each page of this report contains a “Back to Previous View” button that allows the reader to click on a link to another section and then return to the original page, eliminating the need for bookmarking.

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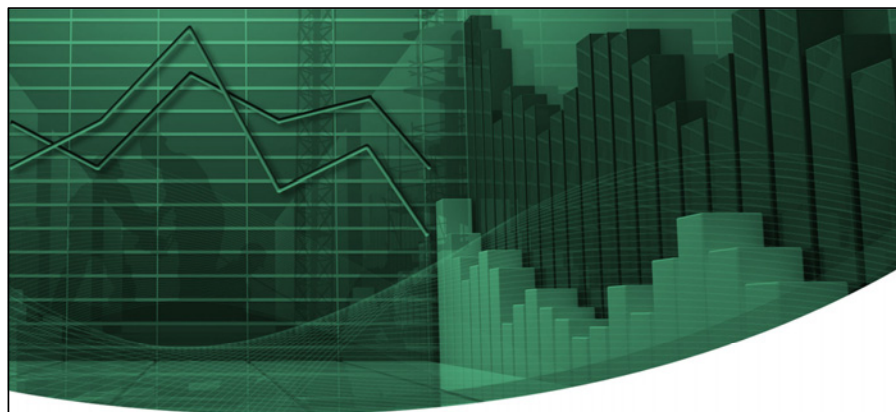
INTRODUCTION TO MAJOR FINDINGS SLIDES

The following pages are a slide discussion of *CompScope™ Medical Benchmarks for Pennsylvania, 18th Edition*. The slides highlight the major findings discussed in the summary of major findings for Pennsylvania and provide explanatory figures and charts. The notes to the right of some slides provide additional technical or substantive information pertinent to that slide. For example, the notes might contain links to external summaries of legislation or workers' compensation agency reports, a reference to a related figure or table, or an explanation of a relevant workers' compensation system feature. References to source information and definitions of key terms or abbreviations are located below the slide to which they apply. To view the notes, references, and/or definitions, the document magnification on your computer may need to be set at 100 percent or lower. Please note that the slides are also interactive, linking to other areas of this report where useful. For example, bar charts generally link to the box plot figures that contain the numbers underlying the chart. Links are indicated by underlining.

When describing the performance of a state in this report, we generally use the criteria and key terms in the chart below. Words used to describe an increase include *growth* and *rise*. Words used to describe a decrease include *fall*, *drop*, and *decline*. For some measures, such as those based on percentages of payments and percentages of claims, often specific numeric criteria are not used to apply the characterization of a state's value relative to the median, as the distributions of states' values on different percentage measures are often subject to different degrees of variation. Instead, we apply the characterization by reviewing where each state's value falls relative to other states in the overall distribution. A characterization is assigned after taking into consideration the magnitude of the values, the range and clusters of states' values, and the homogeneity or heterogeneity of the overall distribution.

Key to Terms Used in Report

Multistate Values	Comparison with Median State	
Higher	More than 10 percent above median	
Lower	More than 10 percent below median	
Typical or close to	Within 10 percent above or below median	
Trends	Change in Cost Measures (annual average percentage)	Change in Frequency Measures (annual average percentage points)
Very rapid increase	+9% and higher	+4 points and higher
Rapid increase	+6% to 8.9%	+2 to 3.9 points
Moderate increase	+3% to 5.9%	+1 to 1.9 points
Flat, little change	+2.9% to -2.9%	+0.9 to -0.9 points
Moderate decrease	-3% to -5.9%	-1 to -1.9 points
Rapid decrease	-6% to -8.9%	-2 to -3.9 points
Very rapid decrease	-9% and lower	-4 points and lower



CompScope™ Medical Benchmarks For Pennsylvania, 18th Edition



The following pages are a slide discussion of *CompScope™ Medical Benchmarks for Pennsylvania, 18th Edition*. The slides highlight the major findings and provide explanatory figures and charts. Please note that the slides are also interactive, linking to other areas of this study where useful. Links are indicated by underlining.

Outline Of Report Content

- Summary of major findings
- Slide presentation of major findings
- Summary of data and methods
- Information for first-time users of this report
- List of other WCRI studies of interest for Pennsylvania
- Scope of CompScope™ multistate benchmarks
- Tables and figures: multistate comparisons & trends
- References
- Glossary
- Detailed data and methods: Technical Appendix



Major Findings For Pennsylvania From CompScope™ Medical, 18th Edition

- Offsetting components resulted in typical medical payments per claim:
 - Higher % of claims with hospital services than in other study states; lower outpatient payments/service offset by higher services/claim
 - Lower-than-typical payments per claim to physicians; lower prices paid tied to lower fee schedule rates
 - Among highest utilization (visits per claim and services per visit) of all study states, largely driven by physical medicine
- Medical payments per claim grew faster than other states 2010–2015, driven by hospitals; prices and utilization generally stable

The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee schedule-to-Medicare ratios between states. Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)



Definitions: **Fee schedule:** Reflects the maximum allowable rate. Comparison is based on the percentage over the Medicare rate in each state. **Medical payments:** Payments for all medical services delivered to injured workers. Included are services rendered by physicians, physical/occupational therapists, chiropractors, and hospital outpatient and inpatient facilities. We included only services for which payments were made. Medical payments reflect both price and utilization of services. **Prices paid:** Reflects network discounts and other price negotiations between the payors and the providers.

Note: The terms *typical* and *median* are used interchangeably in this study. [See the criteria](#) for characterization of state performance used in this report.

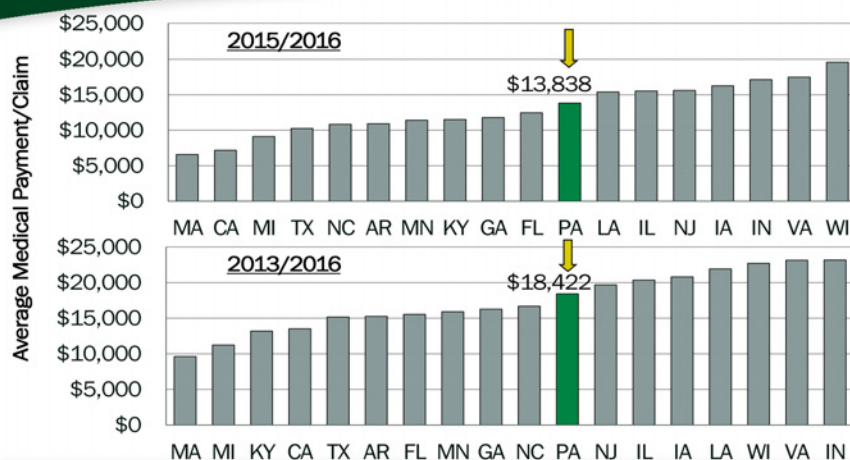
Sources: Yang and Fomenko. 2017. *WCRI Medical Price Index for Workers' Compensation, Ninth Edition (MPI-WC)*. Fomenko and Liu. 2016. *Designing Workers' Compensation Medical Fee Schedules, 2016*.

This 18th edition of CompScope™ Medical Benchmarks for Pennsylvania identifies current cost drivers and emerging trends in a wide variety of cost components, such as medical prices and utilization among hospital and nonhospital providers (physical/occupational therapists, chiropractors, and physicians). It also shows how medical payments per claim and their cost components in Pennsylvania compared with the other study states.

We analyzed claims with experience through 2016 for injuries up to and including 2015. In some cases we report a longer time frame to supply historical context for key metrics. We have also added information from other WCRI studies to provide a more complete picture of the system in Pennsylvania.

Note that all lump-sum settlements are reported as indemnity payments. This achieves consistency and comparability in this measure across all states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data.

PA Had Typical Medical Payments Per Claim At All Claim Maturities



Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Naming convention (example 2015/2016): The first year (2015) is the injury year, which we define as claims arising from injuries occurring from October 1, 2013, through September 30, 2015. The second year (2016) is the calendar year in which the claims were evaluated. All evaluations were done as of March 31 of the indicated year. Thus, 2015/2016 refers to claims with injuries occurring from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. Other injury year/evaluation combinations are denoted similarly.

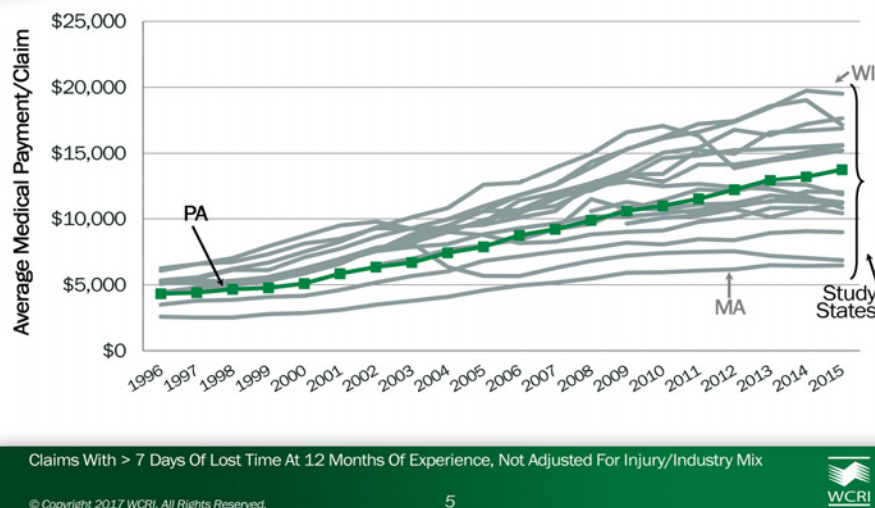
The average medical payment per claim with more than seven days of lost time in Pennsylvania was similar to the median study state for claims with both 12 months and 36 months of maturity.

Medical payments per claim reflect a combination of lower prices paid for professional services, lower hospital outpatient payments per service, and higher utilization of services when compared with the other study states.

We focus our analysis on claims with more than seven days of lost time because these claims account for the majority of payments in each state and reflect the full range of medical services provided in workers' compensation. In Pennsylvania, 19 percent of the claims had more than seven days of lost time—lower than most of the study states. Claims with more than seven days of lost time in Pennsylvania accounted for 89 percent of all paid dollars in 2013/2016.

Note that fees for medical bill review, case management, utilization review, and preferred provider networks are reported under a separate category—medical cost containment expenses per claim. This information can be found in our companion study, [CompScope™ Benchmarks for Pennsylvania, 17th Edition](#).

PA Medical Payments/Claim Grew Like Other Study States For More Than A Decade



Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

This chart shows the longer-term trend in medical payments per claim with more than seven days of lost time in each of the study states, with Pennsylvania highlighted.

During the entire study period, medical payments per claim consistently grew like many other study states. For example, from 1996 to 2015, medical payments per claim grew 6.3 percent per year in Pennsylvania, compared with 5.1 percent in the median study state. From 2010 to 2015, however, medical payments per claim in Pennsylvania grew faster (4.6 percent per year) than in the typical study state (1.9 percent per year). The result was largely driven by hospital outpatient payments.

After 2010, several states (California, Florida, Georgia, Illinois, Indiana, North Carolina, and Texas) had major changes related to medical payments. Details are provided on [Slide 43](#).

Medical payments represented between 36 and 47 percent of total costs in Pennsylvania, depending on the claim maturity. These percentages were lower than in other study states.

Offsetting Components Resulted In Typical Medical Payments Per Claim In PA

2015/2016 Claims	PA Relative To Other Study States			
	Payments Per Claim	% Of Claims	Price Or Payments/Service	Utilization Or Services/Claim
Hospital Outpatient	Typical	Higher	Lower	Higher
Hospital Inpatient*	Typical	Typical	N/A	N/A
Physician	Lower	Typical	Lower	Typical
Providers Of Physical Medicine*	Higher	Typical	Typical	Higher

* Hospital inpatient is based on 2014/2016 claims. Physical medicine: PT/OTs were the largest provider of these services in terms of payments and volume of provided services.

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Lower prices and higher utilization offset each other to result in typical medical payments per claim in Pennsylvania compared with the other study states. Medical fee schedules in Pennsylvania have resulted in lower overall prices compared with other study states. The main driver of higher utilization was physical medicine services. In addition, proportionally more injured workers received at least one service in a hospital setting than in most study states.

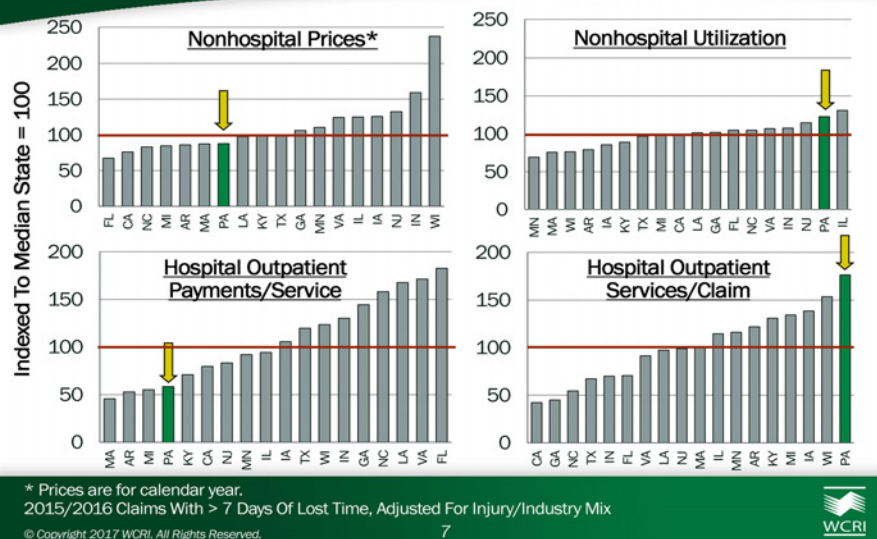
% Payments, 2015/2016	PA**	Median State
Physician	22.0%	35.0%
Hospital	49.4%	46.1%
Inpatient	22.5%	17.2%
Outpatient	26.9%	25.2%
PT/OT (all services)	15.0%	12.2%
Chiropractor (all services)	1.9%	0.7%

** These provider types accounted for 88 percent of medical payments. Twelve percent of the payments were for services by other nonhospital providers and unknown providers.

Key and definitions: **Hospital inpatient payments:** Payments made to a hospital for all services related to an inpatient stay. **Hospital outpatient payments:** Payments made to the hospital for services that are delivered outside an inpatient stay. **Providers of physical medicine:** Physical/occupational therapists (PT/OTs), physicians billing for physical medicine, chiropractors, and hospital outpatient providers.

Note: For hospital outpatient, the average payment per service and number of services per claim are used as proxies for prices and utilization because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services. See the definition for prices and utilization on the next slide.

PA Typical Medical Payments: A Combination Of Lower Prices And Higher Utilization



Definitions: **Prices** are benchmarked using a price index that measures the unit prices paid holding utilization constant. It is based on a marketbasket of common medical procedures used in workers' compensation cases, using detailed Current Procedural Terminology (CPT®) billing codes. CPT® is a registered trademark of the American Medical Association. **Providers of nonhospital services** include physicians, chiropractors, physical/occupational therapists, nurses, clinical social workers, and ancillary practitioners. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital). **Utilization** is benchmarked using a utilization index that incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided. The average number of services per claim was relative value unit weighted. See the [Technical Appendix](#) for more detail on how the price and utilization index was constructed.

Medical payments reflect the number of services provided (utilization) and actual prices paid for those services (prices).

As shown, typical medical payments per claim reflect offsetting factors: lower prices paid and higher utilization of medical services. Overall lower prices paid in Pennsylvania are consistent with a lower ratio of the Pennsylvania workers' compensation fee schedule to Pennsylvania Medicare than in other study states with workers' compensation fee schedules (Fomenko and Liu. 2016. [Designing Workers' Compensation Medical Fee Schedules, 2016](#)).

Higher utilization of medical services in Pennsylvania was largely driven by [physical medicine](#).

Note: Price information is reported on a calendar-year basis, as opposed to injury/evaluation year, which is used for the rest of the metrics in this study. The price information is based on all paid claims, i.e., claims with more than seven days of lost time and claims with less than or equal to seven days of lost time. The rest of the information in this report focuses primarily on claims with more than seven days of lost time.

PA Regulates Payments To Medical Providers Using Different Approaches

- Payments for professional services and outpatient providers subject to the Medicare fee schedule:
 - Payments are based on the Medicare Part B program
- Facility-based care:
 - Cost-reimbursed providers (defined in the law) are paid based on provider's cost-to-charge ratio
 - ASC providers are paid based on ASC payment groups, defined by HCFA
 - Inpatient acute care providers are generally paid based on DRGs
 - Trauma centers and burn facilities are paid based on 100% of usual and customary charges

Payments to physicians, physical therapists, chiropractors, and outpatient providers subject to the Medicare fee schedule are paid based on the Medicare Part B schedule. Reimbursements were initially set at 113 percent of Medicare rates in PA, then frozen, and as of January 1995, updated annually by the percentage changes in the SAWW. The PA workers' compensation fee schedule divides fees into four geographic regions (Medicare in PA has two regions) (§127.101, §127.103, §127.152 and §127.153).

In PA, hospital outpatient providers not subject to the Medicare fee schedule are reimbursed using the provider's actual charge, multiplied by the ratio of cost to charges based on the provider's latest audited Medicare cost report as of December 31, 1994. Note that these ratios were frozen in that year, multiplied by 113 percent, and then updated annually based on changes in the SAWW. Examples of providers not subject to Medicare are hospital outpatient acute care providers, specialty hospitals, comprehensive outpatient rehabilitation facilities, and outpatient physical therapy centers (§127.117 and §127.155).

Hospital inpatient payments in PA are paid based on DRGs, in effect as of December 31, 1994, multiplied by 113 percent, and then updated annually based on changes in the SAWW (§127.111 and §127.154).

Payments to providers of outpatient surgery in an ASC are based on the ASC payment groups defined by the HCFA. Similar to other providers, payments were frozen and then updated annually with the changes in SAWW (§127.125 and §127.159).

Key and definitions: **ASC:** Ambulatory surgery center. **DRG:** Diagnosis-related group. DRGs were developed for the Health Care Financing Administration. The DRGs form a manageable, clinically coherent set of patient classes that relate a hospital's case mix to the resource demands and associated costs experienced by the hospital. DRGs incorporate the principal diagnosis, secondary diagnoses, surgical procedures, age, sex, and discharge status of the patient. **HCFA:** Health Care Financing Administration. **Medicare Part B:** Medicare insurance that pays providers for physician services, outpatient hospital services, supplies, physical therapy, and other services. **SAWW:** Statewide average weekly wage.

History Of PA Medical Fee Schedules

- PA implemented the medical fee schedule in 1993
- PA used Medicare fee schedule as a basis to calculate fees
 - PA WC fee schedule was modeled on the 1993 transitional structure for Medicare reimbursement rates, Medicare RBRVS phased out in 2002
- Reimbursements for physicians, outpatient hospital services, physical therapy, and other services were initially set at 113 percent of Medicare rates
- Fees were frozen on December 31, 1994, and then adjusted annually based on changes in the statewide average weekly wage
- Procedures not covered by Medicare are paid either at 80% of U&C or actual charge, whichever is lower

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Key and definitions: **CPT:** Current Procedural Terminology. CPT codes are published by the American Medical Association. **RBRVS:** Resource-based relative value scale. In this system, payments for services are determined by the resource cost needed to provide them. The main components of an RBRVS payment system are relative value unit (RVU), cost conversion factor, and geographic adjustment (known as *geographic practice cost index* [GPCI]). There are six parts of each RBRVS assigned to a CPT code—physician work RVU, practice expense RVU, professional liability insurance RVU, work GPCI, practice expense GPCI, and professional liability insurance GPCI. **SAWW:** Statewide average weekly wage. **U&C:** Usual and customary. **WC:** Workers' compensation.

The PA workers' compensation fee schedule was enacted in 1993. Provisions of Act 44 became effective on August 31, 1993. Among other things, Act 44 established provisions for medical fee schedules, medical fee dispute resolutions, and utilization and peer review of medical treatment.

The main aspect of the medical fee schedule is that the reimbursements for a wide variety of services were initially set at 113 percent of Medicare rates in Pennsylvania in that year. As of December 31, 1994, fee schedule rates were frozen and, since that date, have been updated annually by the percentage changes in the SAWW. New codes are based on the Medicare rates with the 113 percent adjustment to establish the WC allowance and are consequently adjusted by the percentage change in the SAWW.

The PA WC fee schedule was modeled on the Medicare RBRVS structure and rates in 1993. At that time, Medicare RBRVS was in its initial phase of implementation. In 1999, Medicare began a transition to resource-based expense relative values for each CPT code that differs based on the site of service. In 2002, the resource-based practice expenses were fully transitioned.

Freezing the relative values in workers' compensation in Pennsylvania, which have been updated over time by Medicare, has resulted in post-1995 fee schedule rates in Pennsylvania sometimes being lower than current Medicare rates.

Major Findings For Pennsylvania From CompScope™ Medical, 18th Edition

- Offsetting components resulted in typical medical payments per claim:
 - ➔ Higher % of claims with hospital services than in other study states; lower outpatient payments/service offset by higher services/claim
- Lower-than-typical payments per claim to physicians; lower prices paid tied to lower fee schedule rates
- Among highest utilization (visits per claim and services per visit) of all study states, largely driven by physical medicine
- Medical payments per claim grew faster than other states 2010–2015, driven by hospitals; prices and utilization generally stable

The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee schedule-to-Medicare ratios between states. Source: *Designing Workers' Compensation Medical Fee Schedules*, 2016 (2016)

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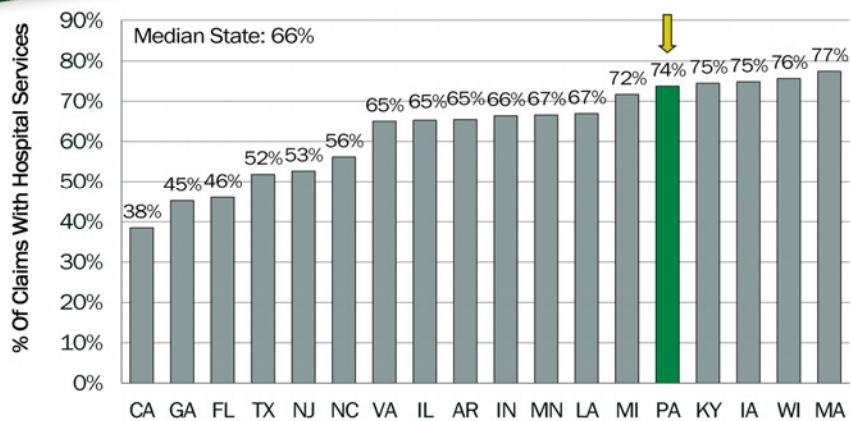
For hospital outpatient services, we report on claims with an average maturity of 12 months. The results for Pennsylvania were similar for less mature and more mature claims.

For hospital inpatient services and surgery, we show data based on more mature claims because large portions of these services are often utilized later than 12 months after the injury.

Throughout the report, the base for each individual provider type or service type is the number of claims with more than seven days of lost time that had a payment for the specific service. For example, the average payment per claim for physical medicine services is based on claims that had at least one physical medicine service.

Note: In this study, less mature claims denote claims with an average maturity of 12 months. More mature claims denote claims with an average maturity of 24 months or higher.

PA Had Higher-Than-Typical % Of Claims With At Least One Hospital-Based Service



2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Note: Billing provider is the medical professional or entity that bills for the services rendered. In some cases, the billing provider and rendering provider are the same. In some cases, the billing provider may have multiple rendering providers.

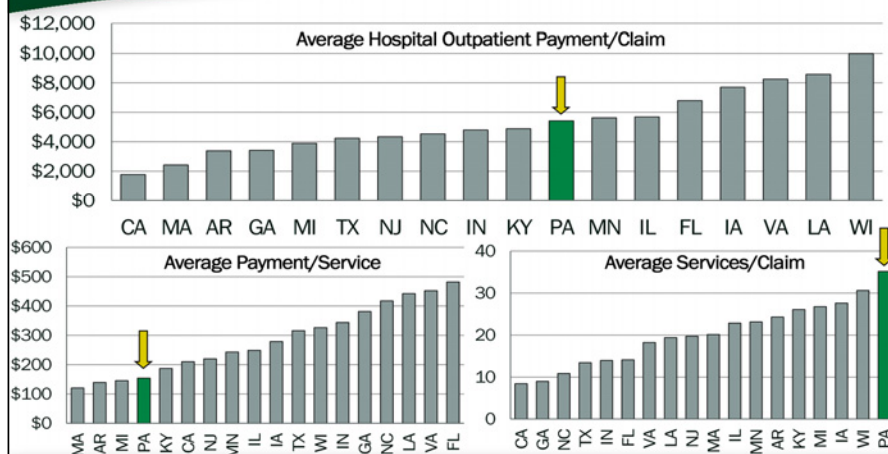
Note that the study includes only services for which payments were made during the analysis period.

Understanding how medical services are delivered and billed in Pennsylvania is an important factor when interpreting the results in this report. This slide shows the percentage of claims with at least one service delivered in a hospital setting (inpatient or outpatient).

The result generally reflects who bills for the medical services—private physician practices or hospital-affiliated practices. In Pennsylvania, proportionally more claims received services in hospital settings than in other study states. In general, states with a higher percentage of claims with hospital care likely have more services billed through a hospital that would be billed as nonhospital services in other states—especially commonly provided services, such as evaluation and management (office visits) and physical medicine.

A recent study by the Physicians Advocacy Institute noted that the share of hospital-employed physicians was greatest in the Midwest and was growing.

PA Hospital Outpatient Payments/Claim In Middle Of States, Masks Offsetting Factors



2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Note: Fixed-amount fee schedule refers to types of regulation that assign specific reimbursement for each procedure or each group of procedures.

Pennsylvania had typical hospital outpatient payments per claim. The average payment per claim reflects payments per service and number of services provided.

The 18 study states represent a mix in terms of hospital outpatient payment regulation. PA applies a professional services fee schedule to some hospital outpatient services and a ratio of cost-to-charges elsewhere. AR, CA, GA, IL, NC, MA, and TX have fixed-amount fee schedules. Reimbursement for hospital outpatient services in FL, LA, and MN are based on a percentage of charges. In KY and MI, hospital outpatient care is reimbursed based on a hospital-specific cost-to-charge ratio method. IA, NJ, VA, and WI do not regulate hospital outpatient payments. Effective July 1, 2014, IN implemented a first-time hospital fee schedule, which set reimbursement at 200 percent of Medicare. Reimbursement for professional services in IN is not regulated with a workers' compensation fee schedule.

PA Hospital Outpatient Payments Per Service Were Lower Than The Typical State

Hospital Outpatient Payments/Service	PA	18-State Median	% Difference	Relative To Other States
Treatment/Operating/Recovery Room	\$1,130	\$2,390	-53%	Lower
Major Radiology	\$895	\$950	-6%	Typical
Minor Radiology	\$144	\$168	-14%	Lower
Evaluation & Management	\$119	\$134	-11%	Typical
Physical Medicine	\$67	\$60	11%	Typical
Overall Hospital Outpatient	\$154	\$264	-42%	Lower

2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Definitions: **Evaluation and management:** Office visits. **Major radiology:** Computerized tomography (CT) scans and magnetic resonance imaging (MRIs). **Minor radiology:** X rays and ultrasounds. **Physical Medicine:** Physical medicine and chiropractic care, including procedures and modalities, such as exercises to develop flexibility, activities to improve function, and application of electrical stimulation. **Treatment/Operating/Recovery Room:** Included are payments for operating, treatment, recovery, and observation rooms billed by hospitals.

Note: For hospital outpatient, the average payment per service and number of services per claim are used as proxies for prices and utilization because revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services. See the [Technical Appendix](#) for more details.

In Pennsylvania, the average hospital outpatient payment per service was lower than typical. On the other hand, Pennsylvania had the highest number of [services per claim](#) of the study states.

This chart represents a mix in terms of reimbursement for hospital outpatient services in Pennsylvania. Services subject to the Medicare fee schedule are paid under the professional services fee schedule. Hospital outpatient providers subject to the cost reimbursement approach, as defined in the law, are reimbursed by the provider's actual charge multiplied by the ratio of costs to charges. Examples of providers not subject to Medicare in Pennsylvania are hospital outpatient acute care providers, specialty hospitals, comprehensive outpatient rehabilitation facilities, and outpatient physical therapy centers.

Note that a portion of hospital outpatient data capture payments to facilities for surgery performed in outpatient facilities or ambulatory surgery centers (if the billing is done through a hospital). See more on the next slides.

See [Figures 19](#) and [20](#) for the percentage of claims receiving services from and the percentage of medical payments made to each hospital outpatient service group.

Lower Hospital Outpatient Payments/Service Partly Offset By Higher Services/Claim In PA

Hospital Outpatient Services/Claim	PA	18-State Median	% Difference	Relative To Other States
Physical Medicine	70.8	38.4	84%	2nd Highest
Evaluation & Management	4.8	3.8	28%	Highest
Treatment/Operating/Recovery Room	3.6	2.4	47%	Highest
Minor Radiology	2.2	2.0	10%	Typical
Major Radiology	1.6	1.6	2%	Typical
Overall Hospital Outpatient	35.2	19.9	76%	Highest

2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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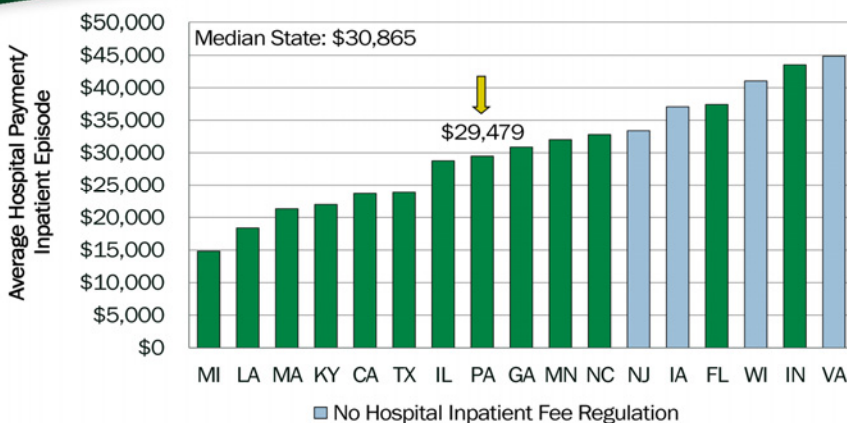
14



The higher number of services per claim for evaluation and management in Pennsylvania, relative to the median study state, was driven by visits per claim. Higher use of physical medicine was driven by more [visits per claim](#) and [services per visit](#), as discussed in the next major finding. A higher-than-typical number of services per claim for treatment/operating/recovery room was related to services per visit. On these metrics, Pennsylvania was either the highest or among the highest of the study states. System participants in Pennsylvania suggested that a higher-than-typical number of services per claim for operating room may be indicative of billing practices related to the nature of the fee schedule.

It should be noted that hospital outpatient [payments per claim](#), which incorporate both payments per service and number of services per claim, were lower in Pennsylvania relative to other states for [treatment/operating/recovery room](#) and [minor radiology](#). In contrast, payments per claim for [physical medicine](#) and [evaluation and management](#) were higher than other states (due to higher utilization of these services).

PA Had Typical Hospital Payments Per Inpatient Episode For 2014/2016 Claims



2014/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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15



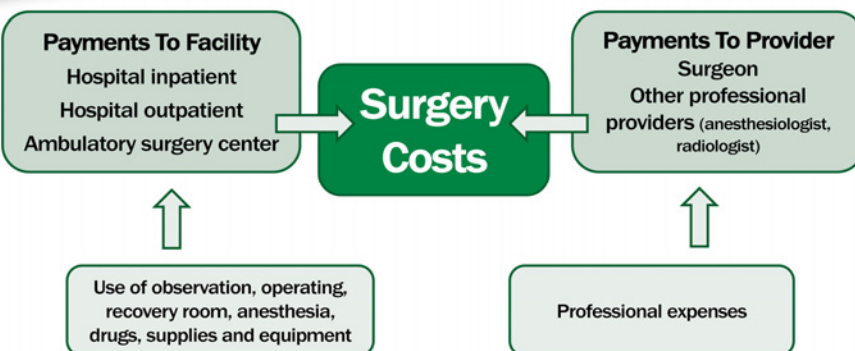
For 2014/2016 claims, the average hospital payment per inpatient episode in Pennsylvania was in the middle of the study states.

The study states represent a mix in terms of inpatient payment regulation—per diem, by diagnosis-related group (DRG), or discounted charges—which could be one factor underlying these results. Of the states included in this study, payments in CA, GA, IL, PA, and TX are based on DRG groups; NC uses a combination of a percentage of charges and DRG groups; FL, and LA use a per diem method; MA uses a payment on account factor; KY and MI use a cost-to-charge ratio; MN does not have an exclusive method of reimbursement—it uses a combination of several approaches. Reimbursement for hospital care is not regulated through a fee schedule in IA, IN (prior to July 1, 2014), NJ, VA, and WI.

Definition: Hospital payments/inpatient episode: Payments made to a hospital for all services related to an inpatient stay. Payments made for professional services are not included if billed separately. The hospital inpatient episode or overnight stay was constructed as the unit of analysis. Specifically, hospital inpatient care was identified based on room and board revenue codes. The service dates, which include one day before and one day after the day of the room and board charge, were used to capture all other hospital services provided during the inpatient stay.

Note: The cell sizes underlying the data in Arkansas for hospital inpatient measures are too small to support an interstate comparison.

Surgery Cost Components



Payments made for anesthesia, drugs, supplies and equipment, and professional services are not included in facility payments if billed separately.

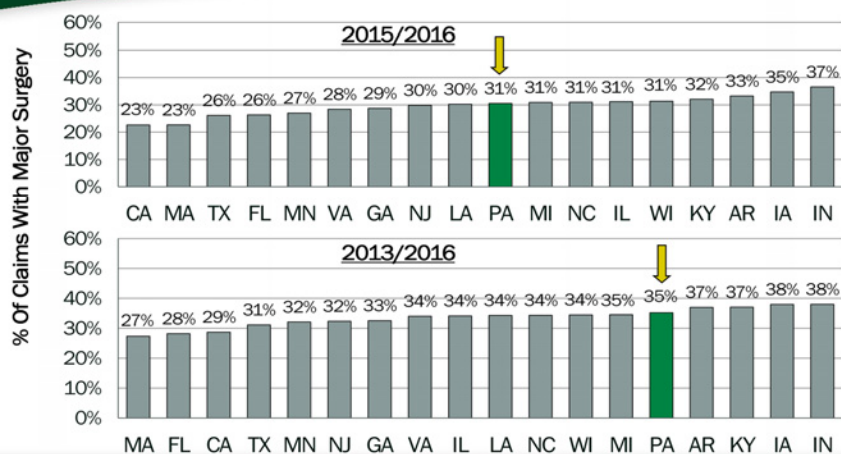
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There are two aspects of medical care costs when a major surgery is involved in treatment: what was paid to the provider and what was paid to the facility where the surgery was done. WCRI's CompScope™ Medical Benchmarks and other WCRI studies provide insights on both of these aspects of medical care costs in workers' compensation.

Overall % Of Claims With Major Surgery In PA In The Middle Group Of Study States



Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Definitions: Major surgery: Subset of the surgery section of the CPT manual. Includes invasive surgical procedures, as opposed to surgical treatments and pain management injections. Common surgeries include knee and shoulder arthroscopic, laminectomies, laminotomies, lumbar fusion, discectomies, carpal tunnel, and hernia repair. See [Table TA.2](#).

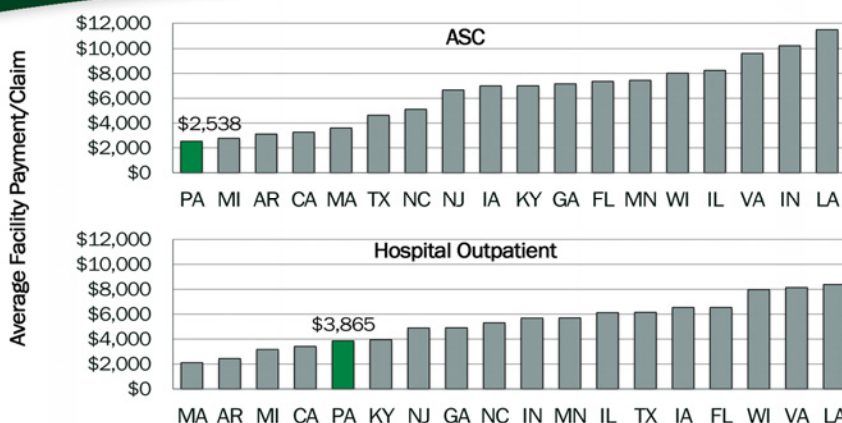
Note: Surgery rate and percentage of claims with major surgery are used interchangeably in this study. There is a slight difference between percentage of claims with major surgery on this slide and [Figure 10](#). The base on this slide is all types of providers, while the information on Figure 10 is based on nonhospital providers.

Pennsylvania had a typical utilization rate of major surgery among the states in this study for all claim maturities. We show data based on 36 months of maturity to include a broader spectrum of surgeries and [associated payments](#).

Between 2010 and 2015 (12 months), the [proportion of claims with major surgery](#) in Pennsylvania decreased slightly. However, surgery rates were relatively stable for more mature claims (36 months).

Another WCRI study, [Why Surgery Rates Vary](#), found that for low back surgery—typically with less clinical consensus among providers than for knee surgery—several factors explain the variation in the surgery rates among study states. These factors are practice norms in the local area, reimbursement rates for surgery, number of surgeons in the area, and access to nonsurgical providers. The study also found that little of the area variation in knee surgery rates was explained by the factors listed above. More agreement among providers on whether surgery is appropriate could play a key role in determining whether certain factors affect surgery rates.

PA Facility Payments/Claim To ASC And Hospital Outpatient Dept. Among Lowest Of Study States



2015/2016 Claims With Facility Services, Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Key and definitions: ASC: Ambulatory surgery center. ASCs are identified based on provider coding information. ASCs are included in the physician category (unless the billing is done through a hospital). Payments for professional services are not included. **Dept.:** Department. **Facility payments per claim:** Mostly payments for treatment, operating, and recovery room services usually in conjunction with surgical procedures. Payments reported here do not include other surgery-related costs (supplies and equipment and anesthesia) or payments for professional services (for example, surgeon fees). This definition is narrower compared with the one used in other WCRI research. See [Slide 19](#).

Facility payments include payments for hospital and ASC treatment/operating/recovery room services, usually associated with surgical procedures. The facility payments in CompScope™ Medical Benchmarks are for all types of surgeries. Other WCRI studies report facility payments for a selected set of surgery types.

The average facility payment per claim for both ASCs and hospital outpatient departments was lower in PA than in other states. A relatively higher percentage of claims had surgical procedures performed in hospital outpatient departments than in ASCs.

PA uses separate fee schedules to regulate payments for surgeries done in ASCs and in hospital outpatient facilities. See a brief summary of the regulations on the next slide and [Slide 77](#).

Facility payments (ASCs and hospital outpatient combined) accounted for 9 percent of medical payments in PA—the lowest of the study states. The share of facility payments varied between 10 and 25 percent among the other study states in 2015/2016.

Facility Services, 2015/2016		PA	Median State
% Of Claims	ASC	12%	15%
	Hospital Outpatient	25%	22%
% Of Payments	ASC	2%	7%
	Hospital Outpatient	7%	10%

For Common Knee & Shoulder Surgery, PA Facility Payments (ASC & Hosp. Outp.) Lower To Typical

Knee And Shoulder Surgery Facility Services	PA Relative To Other Study States	Source
Hospital Outpatient Facility payments	Typical	<i>Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 6th Edition (2017).</i> Included 35 states.
Freestanding ASC Facility payments	Among lowest	<i>Payments to Ambulatory Surgery Centers, 2nd Edition (2016).</i> Included 33 states.
Freestanding ASC % of episodes	Lower	<i>Comparing Payments to ASCs and Hospital Outpatient Departments, 2nd Edition (2016).</i> Included 33 states.
Hospital Outpatient vs ASC Facility payments	ASC lower than hospital outpatient in PA; comparison similar to other states	<i>Comparing Payments to ASCs and Hospital Outpatient Departments, 2nd Edition (2016).</i> Included 33 states.

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Key and definition: ASC: Ambulatory surgery center. **Facility payments for knee and shoulder surgeries:** Payments for treatment, operating, and recovery rooms and other surgery-related costs (supplies and equipment and anesthesia), not including the professional component (for example, surgeon fees). **HCFA:** Health Care Financing Administration. **Hosp. Outp.:** Hospital outpatient.

Sources:

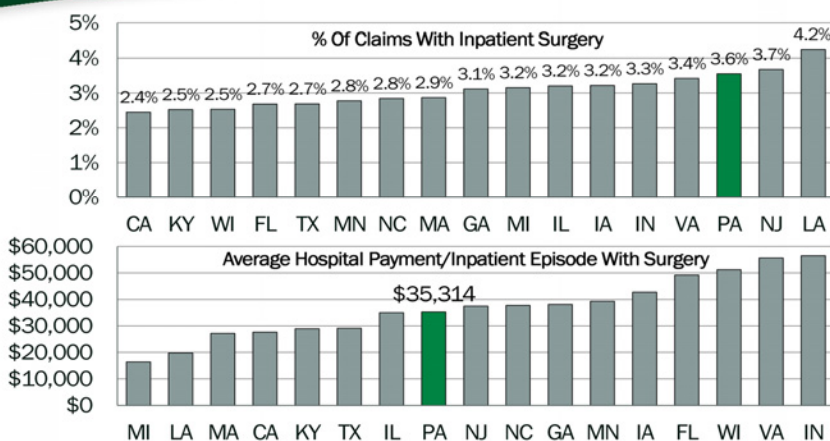
Fomenko and Yang. 2017. *Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 6th Edition*.
 Savych. 2016. *Payments to Ambulatory Surgery Centers, 2nd Edition*.
 Savych. 2016. *Comparing Payments to ASCs and Hospital Outpatient Departments, 2nd Edition*.

In addition to CompScope™ Medical Benchmarks, WCRI has published studies on hospital outpatient and ASC facility payments per episode for claims with specific surgeries.

Hospital facility payments for outpatient episodes with knee and shoulder surgery were typical in Pennsylvania in 2013. For surgeries done at ASCs, the average facility payment per surgical episode with knee arthroscopy was among the lowest in Pennsylvania of all study states. For instance, the average ASC payment for a knee arthroscopy in Pennsylvania was \$1,377, while the average hospital outpatient payment for the same procedure was \$4,210. Given different reimbursement approaches (described below), it is not surprising that only 38 percent of knee surgeries were performed in ASCs in Pennsylvania compared with a range of 16 to 77 percent in the other study states.

In PA, payments to ASC providers are based on the ASC payment groups defined by the HCFA. The payment amounts were multiplied by 113 percent, then frozen on December 31, 1994, and are now updated annually by the percentage change in the statewide average weekly wage. For surgical procedures not included in the Medicare list of covered services, payments are based on 80 percent of the usual and customary charge. In PA, facility payments for hospital outpatient surgery are mainly based on a cost-to-charge ratio, which is hospital specific.

PA Hospital Payments/Inpatient Episode With Any Surgery Typical Of Study States, % Of Claims Higher



2014/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Notes: Hospital payments per inpatient episode with surgery may include professional fees for surgery and other related services if billed as part of the global surgical package.

The cell sizes underlying the data in Arkansas for hospital inpatient measures are too small to support an interstate comparison.

For hospital inpatient services, we show data based on claims at an average maturity of 24 months because large portions of these services are often utilized later than 12 months after the injury.

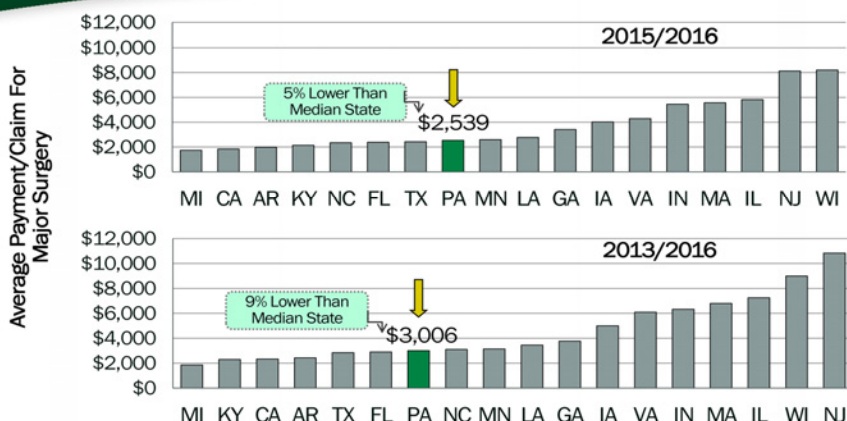
Pennsylvania had a higher percentage of surgeries performed in an inpatient setting. The average hospital payment per inpatient episode with a surgery was fairly typical.

In Pennsylvania, payments to providers of inpatient hospital services, whose Medicare program payments are based on diagnosis-related groups (DRGs), are calculated by multiplying the established DRG payment on the date of discharge by 113 percent. These DRG rates were frozen on December 31, 1994, and are updated annually by the percentage change in the statewide average weekly wage.

Acute care provided in trauma centers (Level I or Level II) or a burn facility is exempt from the medical fee caps and is paid based on 100 percent of usual and customary charges.

Hospital inpatient services accounted for 16 percent of overall medical payments in Pennsylvania in 2014/2016. This percentage was similar to that of other study states.

Average Professional Payment/Claim For Major Surgery In PA In The Middle Of States



Claims With Major Surgery (professional component), Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Note: There is a slight difference between the average payment per claim for major surgery on this slide and Figure 9. The base on this slide is payments to all types of providers, while the information on Figure 9 is based on nonhospital providers.

In contrast to previous slides where the focus was on payments to facilities associated with surgical procedures, here we show payments per claim for major surgery—that is, surgeon payments (professional component). On this slide we use more mature claims to better capture events such as delays in surgery, second surgeries, and surgeries done more than a year after the injury.

The average payment per claim for major surgery in Pennsylvania was typical for both less mature and more mature claims. Note that the ratio of Pennsylvania workers' compensation fee schedule rates for major surgery to Medicare rates in the state was in the middle of states with workers' compensation price regulations (Fomenko and Liu. 2016. *Designing Workers' Compensation Medical Fee Schedules*, 2016).

In addition, for common knee surgery, the median workers' compensation price paid in Pennsylvania was higher than group health prices. A higher price paid for major surgery in workers' compensation, relative to group health, is unlikely to create access-to-care issues for injured workers (Fomenko and Victor. 2013. *A New Benchmark for Workers' Compensation Fee Schedules: Prices Paid by Commercial Insurers?*).

Payments for major surgery accounted for 5.8 percent of all medical payments in Pennsylvania for 2013/2016 claims. In other study states, the share of payments for major surgery varied from 5.2 percent to 20.2 percent.

Key Findings For Pennsylvania From CompScope™ Medical, 18th Edition

- Offsetting components resulted in typical medical payments per claim:
 - Higher % of claims with hospital services than in other study states; lower outpatient payments/service offset by higher services/claim
 - Lower-than-typical payments per claim to physicians; lower prices paid tied to lower fee schedule rates
 - Among highest utilization (visits per claim and services per visit) of all study states, largely driven by physical medicine
- Medical payments per claim grew faster than other states 2010–2015, driven by hospitals; prices and utilization generally stable

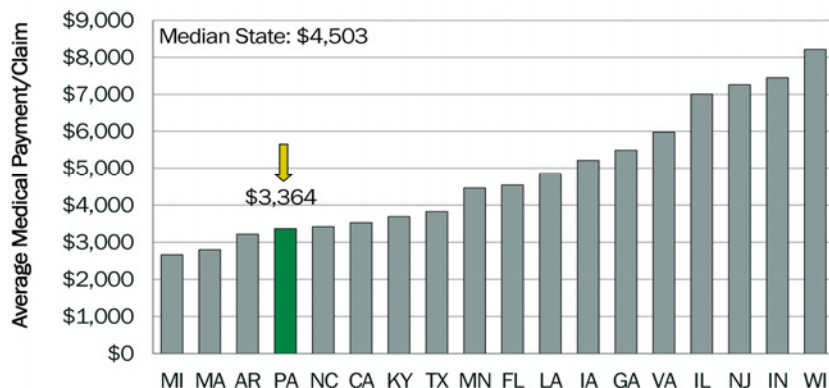
The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee schedule-to-Medicare ratios between states. Source: *Designing Workers' Compensation Medical Fee Schedules*, 2016 (2016)

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PA Average Payment Per Claim To Physicians Among Lowest Of Study States



2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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The average medical payment per claim to physicians (all types) was lower in Pennsylvania than in most study states in 2015/2016. The main driver of this result was lower prices paid than in other study states. Pennsylvania regulates reimbursements to physicians, as described earlier.

Definition: Physician: Includes surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors such as doctors of osteopathic medicine. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital).

Common Physician Services In PA Had Lower To Typical Payments Per Claim

Payments/Claim To Physicians	PA	Median State	% Difference	Relative To Other States
Major Surgery	\$2,553	\$2,645	-3%	Typical
Major Radiology	\$673	\$679	-1%	Typical
Evaluation & Management	\$625	\$719	-13%	Lower
Pain Management Injections	\$395	\$454	-13%	Lower
Minor Radiology	\$145	\$189	-24%	Lower
Overall Physician	\$3,364	\$4,503	-25%	Lower

2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Except for physical medicine, the average payments per claim for other types of services provided by physicians were lower or typical in Pennsylvania compared with the median study state.

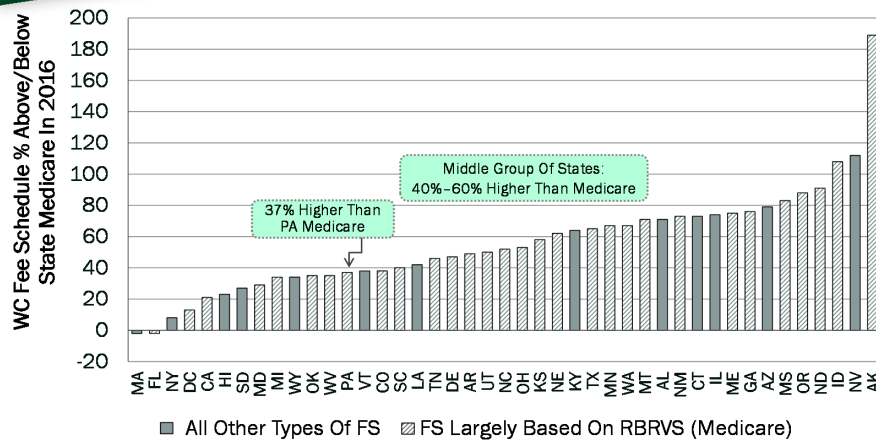
See [Figures 10](#) and [11](#) for the percentage of claims and percentage of medical payments made to each nonhospital service group.

Definition: Pain Management Injections: Pain management injections, including epidural or steroid injections on nerve roots and muscles for lumbar, sacral, cervical, or thoracic areas.

Notes: Payments for physical medicine billed by physicians are not shown since they represented 2.1 percent of total medical payments to physicians in Pennsylvania in 2015/2016.

There is a slight difference between the average payment per claim for major surgery on this slide and [Slide 21](#). The base on this slide is payments to all types of physicians, while the information on Slide 21 is based on all types of providers.

PA Fee Schedule (As % Of Medicare) For Professional Services Lower Than Many States



Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)

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Key: **Conversion factor:** Used to convert the relative value units into an actual dollar amount for each procedure. **DC:** District of Columbia. **FS:** Fee schedule. Reflects maximum allowable amount. Comparison is based on the percentage over the Medicare rate in each state. **RBRVS:** Resource-based relative value scale. **WC:** Workers' compensation.

Note: Rhode Island, which is not shown on the chart, has a non-Medicare-based FS. See the notes in that study for more details.

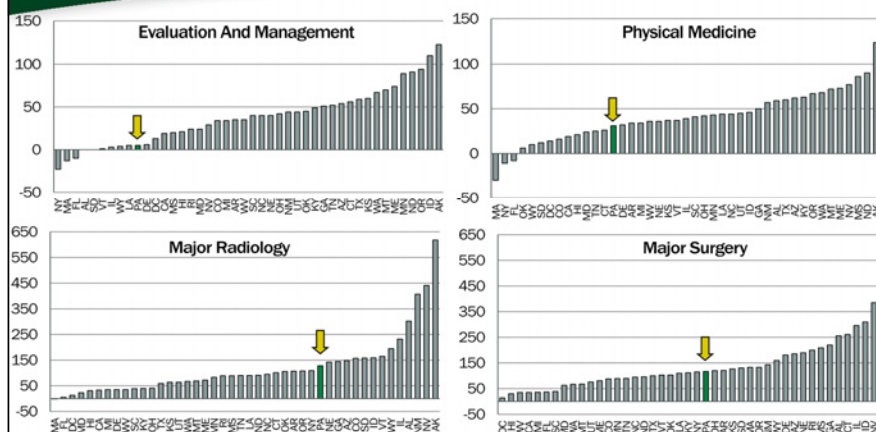
Source: Fomenko and Liu. 2016. *Designing Workers' Compensation Medical Fee Schedules, 2016*.

The WCRI report *Designing Workers' Compensation Medical Fee Schedules, 2016* compared workers' compensation fee schedule rates among 43 states and DC as of March 2016. Each state's workers' compensation fee schedule rate was compared with the Medicare fee schedule in the state. Fee schedule comparisons generally reflect the maximum allowable amount. However, some states may negotiate fees above the fee schedule or pay under agreement.

The 2016 data show that WC fee schedule rates in PA were on average 37 percent higher than Medicare rates in PA. States in the middle of this ranking had their fee schedule rates about 40–60 percent higher than Medicare. Of the states neighboring PA, three states had lower fee schedules (NY, MD, and W), two states had typical fee schedules (DE and OH), and NJ does not have a fee schedule.

Out of 43 states with workers' compensation fee schedules and DC, 30 jurisdictions implemented Medicare RBRVS. Other states used usual and customary fees, percentage of charges, or state-specific relative values. Of the states using Medicare, 22 states adopted multiple conversion factors and 8 states had a single conversion factor when computing fee schedule rates for different types of services. Some states had annual updates in the fee schedule rates, while others had periodic updates. Such variations in the design of the fee schedules may explain the variation in the percentage over Medicare between different service types in the typical study state.

PA Fee Schedule Lower For Evaluation And Management, Typical For Other Services



Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)

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Key: **E&M:** Evaluation and management (office visits). **FS:** Fee schedule. **WC:** Workers' compensation.

Source: Fomenko and Liu. 2016. *Designing Workers' Compensation Medical Fee Schedules, 2016*.

Continued from right: The Centers for Medicare & Medicaid Services (CMS) physician fee schedule for 2016 specified reimbursement rates for 91 localities in the U.S., including two localities in PA. The CMS reimbursement in PA for common office visits, physical medicine, radiology, major surgery, and pain management injections were higher than most of the other localities.

On this chart we show the interstate comparisons on fee schedule rates in 2016 for four major types of services.

In Pennsylvania, fee schedule rates (as a percentage over Medicare) were typical for major surgery, major radiology, and physical medicine. Only fee schedule rates for evaluation and management were lower than most states with price regulations.

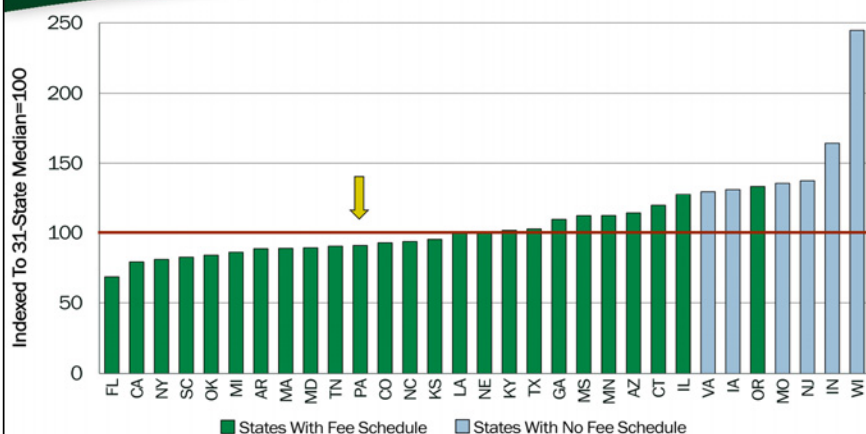
The interstate comparison shows that WC fee schedules are often designed to provide more incentives for specialty care, especially surgery, than for office visits or physical medicine. This decision may reflect state-specific concerns related to access to care or injured worker outcomes.

Note that the study also provides an example of maximum workers' compensation rates for eight commonly billed procedures in all study states.

Continued on the left.

FS Rates In 2016	PA % Over Medicare	Typical % Over Medicare
E&M	5%	30%–50%
Physical Medicine	31%	35%–50%
Major Surgery	117%	100%–140%
Major Radiology	128%	80%–130%

Overall Prices Paid For Professional (Nonhospital) Services In PA 9% Lower Than Median State



Prices Paid For Professional (nonhospital) Services In Calendar Year 2016 (January through June)
Source: WCRI Medical Price Index For Workers' Compensation, Ninth Edition (2017)

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On this chart we switch to prices paid for professional services. Prices paid include network discounts and other price negotiations between payors and providers. Price comparisons generally reflect how fee schedules were set up in each state.

This chart uses actual prices paid for professional services in 2016 in each of the 31 study states compared with the typical state (designated by the solid line). A bar above the line means higher prices paid, and below the line means lower prices paid.

Prices paid in Pennsylvania were 9 percent lower than the median study state. The results for Pennsylvania reflect the design of its medical fee schedule (as discussed on the previous chart).

Among the 31 states, Indiana, Iowa, Missouri, New Jersey, Virginia, and Wisconsin do not regulate reimbursement for professional services through a fee schedule.

Definition and note: Professional services: Nonhospital, nonfacility services billed by physicians, physical therapists, and chiropractors, excluding bills for ambulatory surgery center facilities, durable medical equipment, or pharmaceuticals. Price information is reported on a calendar-year basis, as opposed to injury/evaluation year, as used for the rest of the metrics in this study. The price index measures the unit prices paid holding utilization constant. It is based on a marketbasket of common medical procedures used in workers' compensation cases, using detailed Current Procedural Terminology (CPT) billing codes.

Source: Yang and Fomenko. 2017. *WCRI Medical Price Index for Workers' Compensation, Ninth Edition (MPI-WC)*.

PA Had Lower-Than-Typical Prices Paid For Office Visits, Typical For Other Services



Prices Paid For Professional (nonhospital) Services In Calendar Year 2016 (January through June)
Source: WCRI Medical Price Index For Workers' Compensation, Ninth Edition (2017)

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Prices paid in Pennsylvania were fairly typical of the study states for physical medicine, radiology, and major surgery. In contrast, prices paid for evaluation and management were 20 percent lower than the median study state.

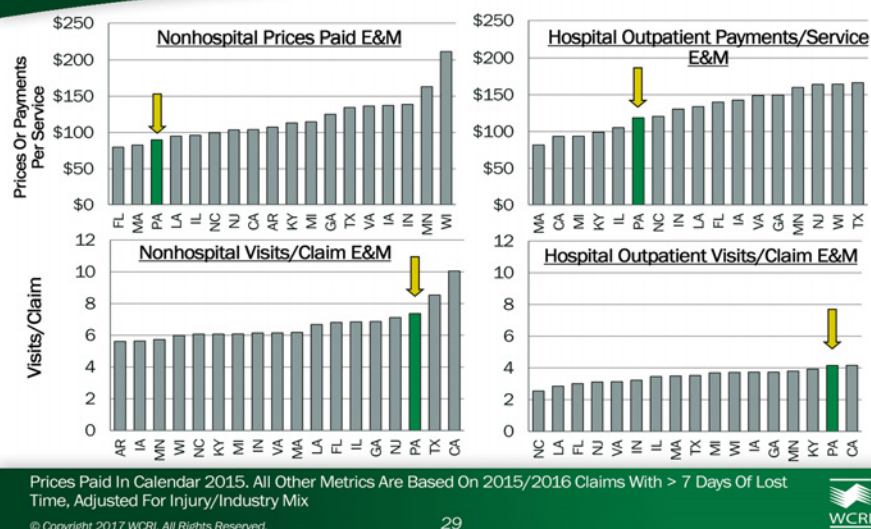
It is important to emphasize that at the time of implementation of the Pennsylvania workers' compensation fee schedule, the Medicare RBRVS was in its early stages of implementation. Since 1995, Medicare has made many changes in its reimbursement approach for certain provider types. Freezing the relative values in workers' compensation in Pennsylvania, which have been updated over time by Medicare, has resulted in post-1995 fee schedule rates in Pennsylvania sometimes being lower than current Medicare rates (see [Slides 75 and 76](#)).

Note about other services not shown on the chart: Prices paid were typical in Pennsylvania compared with other states for minor radiology and lower than typical for pain management injections and neurological/neuromuscular testing.

Key: **RBRVS:** Medicare resource-based relative value scale.

Source: Yang and Fomenko. 2017. *WCRI Medical Price Index for Workers' Compensation, Ninth Edition (MPI-WC)*.

Average Number Of Office Visits Per Claim Was Higher In PA Than In Most Study States



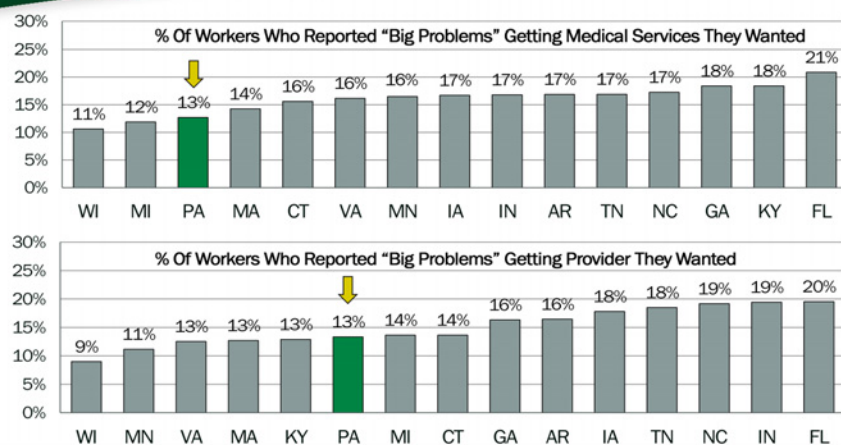
Pennsylvania had a higher-than-typical number of visits per claim for evaluation and management services (among nonhospital and hospital outpatient providers), which may partly offset lower prices paid.

Pennsylvania also had a higher-than-typical number of office visits per claim for more mature claims.

Key: **E&M**: Evaluation and management (office visits).

Note: The cell sizes underlying the data in Arkansas for hospital outpatient evaluation and management measures are too small to support an interstate comparison.

Despite Lower Prices Paid For E&M, Fewer Injured Workers Reported Access-To-Care Issues In PA



Key: **E&M**: Evaluation and management (office visits).

Notes: See Chapter 2 "Data and Methods" in the source report for details on criteria used for comparing states on worker outcomes.

Workers in IN, MA, MI, MN, NC, PA, VA, and WI were injured in 2010 and interviewed in 2013. Workers in CT, IA, and TN were injured in 2011 and interviewed in 2014. Workers in AR were injured in 2010 and 2011 and interviewed in 2014. Workers in FL, GA, and KY were injured in 2012 and interviewed in 2015.

Source: Savych and Thumula. 2016. *Comparing Outcomes for Injured Workers in Pennsylvania*.

This slide shows two measures of access to care in 15 states from the WCRI study *Comparing Outcomes for Injured Workers in Pennsylvania*.

The study measures access to care by asking workers whether they had problems getting the care that they or their primary provider wanted. The survey question was about the level of problems getting the medical services or primary provider the worker wanted: "no problems," "small problems," or "big problems." The study focuses on workers who reported "big problems" because the issues faced by workers with bigger access problems might be of greater policy interest. In general, most injured workers expressed satisfaction with the primary provider or medical services they received across the study states. In PA, 13 percent of workers reported "big problems" getting the provider or services they wanted.

The survey also documented that 27 percent of the injured workers in PA wanted to change their initial provider due to dissatisfaction with the care received. This percentage ranged from 17 to 30 percent among the study states.

In PA, the employer can direct the choice of medical provider for a period of 90 days from the date of the first visit. The employer establishes a panel of at least six designated health care providers. The worker is required to visit one of these providers for a period of 90 days. The worker can choose the provider if no panel is posted. The worker can change providers without restriction after 90 days (if a panel is posted) or at any time (if no panel is posted). See Table 6 for choice of medical providers among CompScope™ study states.

Major Findings For Pennsylvania From CompScope™ Medical, 18th Edition

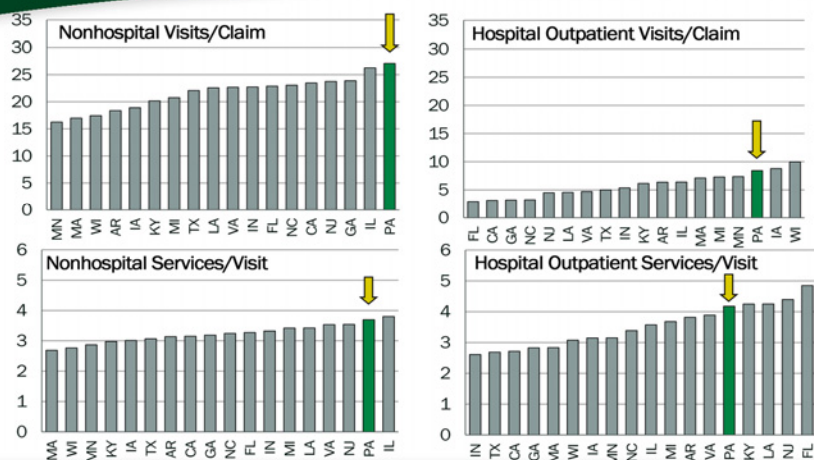
- Offsetting components resulted in typical medical payments per claim:
 - Higher % of claims with hospital services than in other study states; lower outpatient payments/service offset by higher services/claim
 - Lower-than-typical payments per claim to physicians; lower prices paid tied to lower fee schedule rates
- ➔ Among highest utilization (visits per claim and services per visit) of all study states, largely driven by physical medicine
- Medical payments per claim grew faster than other states 2010–2015, driven by hospitals; prices and utilization generally stable

The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee schedule-to-Medicare ratios between states. Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)
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For specific metrics related to physical medicine services, we report on more mature claims because physical medicine tends to be used at different points during the life of the claim in different states, and a longer maturity provides a more meaningful comparison across states.

PA Among The Highest Medical Utilization Per Claim Of All Study States



2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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This chart shows the two main aspects of services per claim: number of visits per claim and number of services per visit. Note that the percentage of claims with a specific service type is not factored into the overall number of services per claim. Rather, it is discussed separately.

Pennsylvania had among the highest number of visits per claim and services per visit among the study states. The main driver of higher utilization has been physical medicine services.

According to the regulations in Pennsylvania, if an employer has established a list of providers that meets the requirements of the act, injured workers must seek treatment with one of the designated providers for 90 days from the date of the first visit (\$127.751).

2013/2016	PA	Median State
Nonhospital Visits/Claim	37 (highest)	28
Nonhospital Services/Visit	3.7 (2nd highest)	3.2
Outpatient Visits/Claim	10 (higher)	7
Outpatient Services/Visit	4.1 (higher)	3.8

Physical Medicine Key Driver Of Higher-Than-Typical Visits Per Claim In PA

Number Of Visits/Claim, All Types Of Providers	PA	Median State	Relative To Other States
Physical Medicine	28.0	19.6	Highest
Evaluation & Management	7.9	6.6	Higher
Minor Radiology	3.3	3.2	Typical
Laboratory	1.8	1.9	Typical
Major Radiology	1.8	1.7	Typical

2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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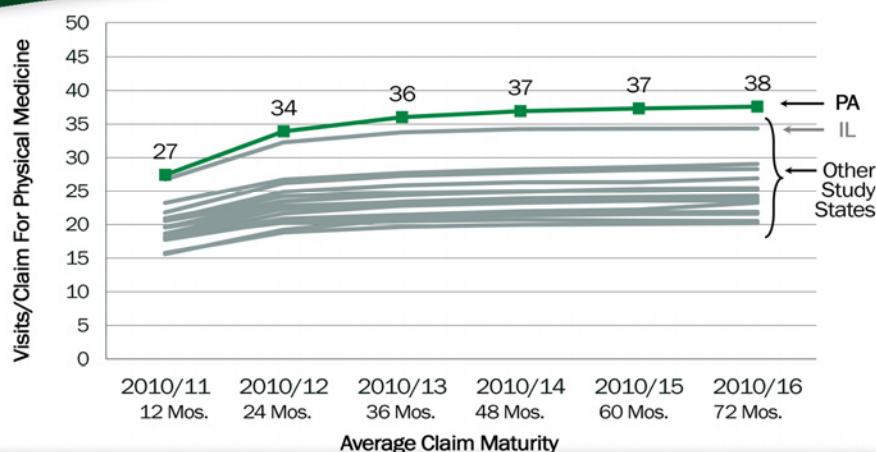
Key and definitions: **E&M:** Evaluation and management (office visits). **Laboratory:** Examinations such as microbiological, chemical, hematological, or pathological. **Physical medicine:** Includes procedures and modalities, such as exercises to develop flexibility, activities to improve function, and application of electrical stimulation. Included are services billed under Current Procedural Terminology (CPT) codes 97xxx and/or chiropractic or osteopathic manipulations billed under CPT codes 98xxx, regardless of the type of provider billing the codes (physician, physician's assistant, chiropractor, physical or occupational therapist, etc.).

Note: All types of providers include nonhospital and hospital outpatient providers.

Physical medicine was the main driver of the higher number of visits per claim in Pennsylvania than in other study states. Another metric, the utilization index among nonhospital providers, which incorporates number of visits per claim, number of services per visit, and the resource intensity of services provided, also identified physical medicine as an area with higher-than-typical utilization in Pennsylvania.

Visits/Claim, All Types of Providers		
2013/2016	PA	Median State
Physical Medicine	36.9 (highest)	23.6
E&M	10.9 (higher)	8.5
Minor Radiology	4.0 (typical)	3.6
Laboratory	2.4 (typical)	2.4
Major Radiology	2.2 (typical)	2.0

Physical Medicine Visits Per Claim For 2010 Injuries Highest In PA At All Maturities



Physical Medicine (all types of providers). Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Key and definitions: **Mos.:** Months. **Nonsurgical claim:** Treatment related to fractures, infections, and burns. **Surgical claim:** Invasive surgical procedures such as knee/shoulder arthroscopy and carpal tunnel.

Notes: 2010/16 refers to 2010/2016. Other injury year/evaluation combinations are denoted similarly.

Pennsylvania had longer duration of temporary disability than many study states. See CompScope™ Benchmarks for Pennsylvania, 17th Edition.

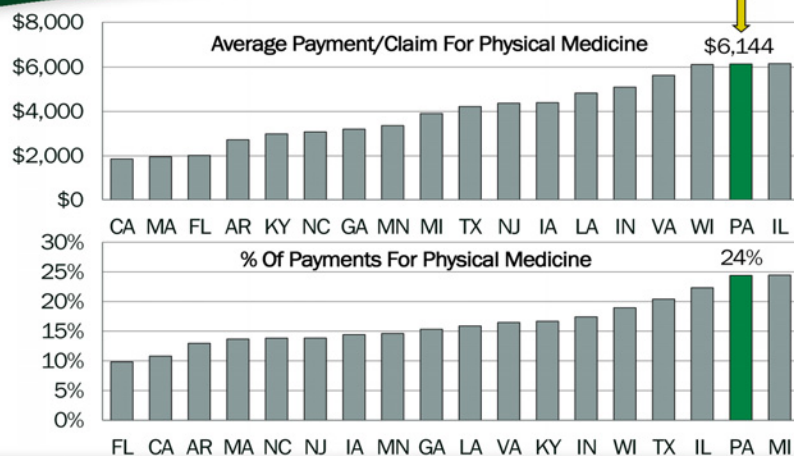
This chart shows the development in the average number of visits per claim with physical for injuries in 2010.

Pennsylvania had more visits per claim for physical medicine than any other study state. Higher and continuing use of physical medicine was observed among both surgical and nonsurgical claims.

Physical Medicine Visits/Claim, All Types of Providers In PA		
	Surgical	Nonsurgical
2010/2011	38	22
2010/2012	47	26
2010/2013	50	27
2010/2014	52	27
2010/2015	53	27
2010/2016	53	27

System participants in Pennsylvania suggested that in order to receive payments for lost wages, injured workers must remain out of work. This may create incentives for some injured workers to prolong their medical treatment, and consequently this may impact the number of physical medicine visits.

PA Had Among The Highest Average Payments Per Claim For Physical Medicine



Physical Medicine (all types of providers) 2013/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Key: **PT/OT:** Physical/occupational therapist.

In Pennsylvania, physical medicine services for all types of providers accounted for 24 percent of all medical payments for claims with more than seven days of lost time in 2013/2016. Pennsylvania had among the highest percentages of all study states on this metric. In other study states, physical medicine accounted for between 10 and 24 percent of medical payments. In addition, Pennsylvania had a typical percentage of claims with physical medicine among all types of providers.

All types of physical medicine providers had higher-than-typical payments per claim.

In Pennsylvania, physical medicine services can be billed by different types of providers: chiropractors, outpatient rehabilitation departments that are part of hospitals, private practices owned by PT/OTs, outpatient rehabilitation facilities (ORFs), comprehensive outpatient rehabilitation facilities (CORFs), and physician practices that provide physical medicine.

ORFs and CORFs are different provider types. An ORF is generally defined as a provider of services with an agreement to furnish outpatient therapy services to patients. Only restoration therapy is covered. A CORF is a facility that is primarily engaged in providing diagnostic, therapeutic, and restorative services to injured, disabled, or ill patients. The CORF must provide a comprehensive, coordinated skilled rehabilitation program for its patients that includes, at a minimum, CORF physicians' services, physical therapy services, and social or psychological services.

Higher Utilization Of PM Resulted In Higher-Than-Typical Payments Per Claim In PA

% Difference From Median Study State, Physical Medicine	Price	Utilization
Physician*	-7%	+68%
PT/OT	-13%	+49%
Chiropractor*	+1%	+134%
Hospital Outpatient**	+11%	+84%

* Payments to chiropractors represented 1.6% of total medical payments in PA in 2015/2016. Payments to physicians billing for physical medicine represented 2.1% of total medical payments to physicians in PA in 2015/2016.

** Hospital outpatient is based on payments/service and services/claim; information for all other providers is based on price and utilization index.

Physical Medicine By Type Of Provider. 2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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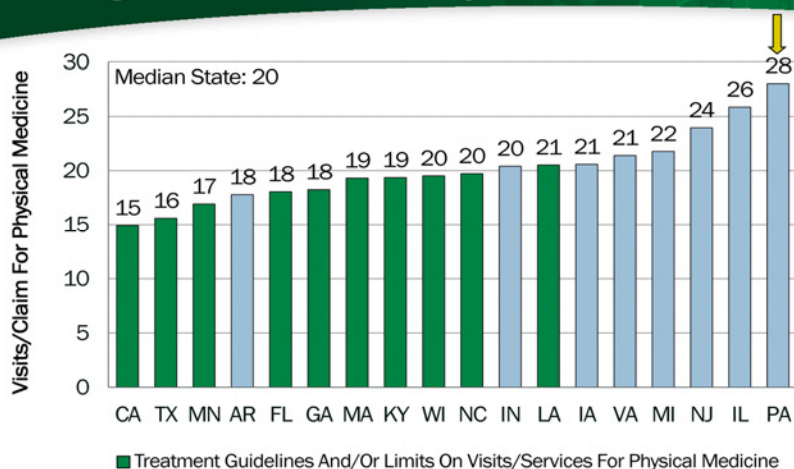
The table shows comparisons of the key components of medical payments for physical medicine—prices and utilization—between Pennsylvania and the typical state. The percentages are the differences in Pennsylvania relative to the median study state. Positive differences mean that Pennsylvania was higher than the median study state, and negative differences mean that Pennsylvania was lower than the median study state. Note that if the difference was within 10 percent of the median study state, we describe the state's result as typical.

The reason for higher-than-typical medical payments per claim for physical medicine in Pennsylvania was higher utilization among all types of providers. Prices paid for physical medicine services were typical.

Higher-than-typical utilization of physical medicine in Pennsylvania is not a new phenomenon. Previous CompScope™ benchmarking studies have shown that since 1996, Pennsylvania has had higher use of physical medicine than the other study states.

Key and definitions: **Chiropractor:** Payments to chiropractors are for all services they provide and bill (whether or not the services are considered physical medicine services). **Hospital outpatient payments:** Payments made to hospitals for services that are delivered outside an inpatient stay. **Physician:** Includes surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors such as doctors of osteopathic medicine. **PM:** Physical medicine and chiropractic care. **PT/OT:** Physical/occupational therapist; payments to PT/OTs are for all services they provide and bill (whether or not the services are considered physical medicine services).

PA Visits Per Claim For Physical Medicine The Highest Of The Study States



Physical Medicine (all types of providers) 2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Notes: States have different regulations with regard to physical medicine services. CA, MA, and MN use treatment guidelines and have specific service limits. FL, LA (as of 2011), TX, and WI use treatment guidelines. GA, KY, and NC have limits on the number of visits, weeks of treatment, or services. AR, IA, IN, IL, MI, NJ, PA, and VA do not apply treatment guidelines and/or limits on physical medicine visits/services. These states may or may not have utilization review programs. Another factor related to utilization of services is who directs the medical care. Many states are either employer choice of provider and/or they have specific limits on chiropractic care.

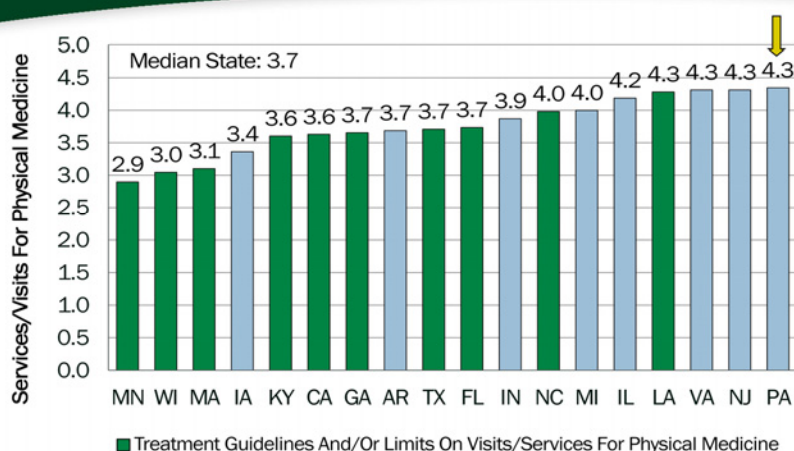
Source: Tanabe. 2015. *Workers' Compensation Medical Cost Containment: A National Inventory, 2015*.

On this and the next slide, we show the main components of medical utilization: number of visits per claim and number of services provided at each visit. This chart shows the average number of physical medicine visits per claim using all types of providers.

Note that states have different regulations with regard to physical medicine services. See more details in the notes below the slide.

Another factor related to utilization of services is who directs the medical care. Many states are either employer choice of provider and/or they have specific limits on chiropractic care. Several of the 18 states are employer choice states, and chiropractic utilization is much lower in those states: AR, IA, IN, MI (for the first 28 days), NC, and NJ. Several study states have limits on chiropractic care: CA, FL, and NC. That IA and IN are employer choice of provider states might be a contributing factor to the typical utilization of physical medicine in these states. In several states (GA, IL, PA, and VA), the employee chooses a medical provider from a designated list.

PA Services Per Visit For Physical Medicine Among The Highest Of Study States



Physical Medicine (all types of providers) 2015/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Notes: States with limits on physical medicine and chiropractic care: CA: 24 visits per life of injured worker's claim except if there is a need for postsurgical rehabilitation. FL: No more than 4 units of modalities or therapeutic treatment per visit; for chiropractic care, 24 treatments or 12 weeks of treatment. GA: No more than 4 procedures, modalities, or time units. KY: No more than 3 days per week; no more than 4 modalities; limits apply to chiropractic treatment and physical therapy. LA: Limited by reporting of functional progress with treatment; maximum duration 8 weeks or 24 visits. MA: Varies depending on diagnosis and physical therapy progress. MN: 12 weeks, with provision for additional treatment under specified circumstances. NC: Up to 30 visits without further authorization for physical therapy, 20 visits for chiropractic care. TX: No limits but preauthorization and use of Official Disability Guidelines are required.

This chart shows the average number of physical medicine services per visit using all types of providers.

PA had among the highest number of services provided at each visit.

This higher use of medical services in PA might be in part related to the lack of regulations regarding the use of physical medicine. Other states may use treatment guidelines or have specific limits on the number of visits or services. While PA does not regulate the number of visits directly, the regulations do allow for the workers' compensation insurance carrier to request a utilization review at any point during the treatment process. System participants suggested that utilization review in PA is retrospective rather than prospective, as is the practice in many states.

System participants in PA also indicated that physical medicine may be prescribed to achieve goals beyond the traditional medical necessity treatment guidelines. For instance, physical medicine is used to keep the injured worker engaged and physically participating in rehabilitation, particularly when the employer is unable to provide transitional duty.

Furthermore, PA had a lower-than-typical percentage of payments for care in networks (especially for hospitals), and this also may have been a factor in the higher use of some services.

Pennsylvania Had Typical Percentage Of Claims With Physical Medicine

Type Of Claim	PA	Median State	Relative To Median State
% Of Physical Medicine Claims (all types of providers)	73%	70%	Typical
% Of All Claims With Major Surgery	35%	34%	Typical
% Of Physical Medicine Claims With Major Surgery	30%	29%	Typical
% Of Physical Medicine Claims Without Major Surgery	43%	42%	Typical

2013/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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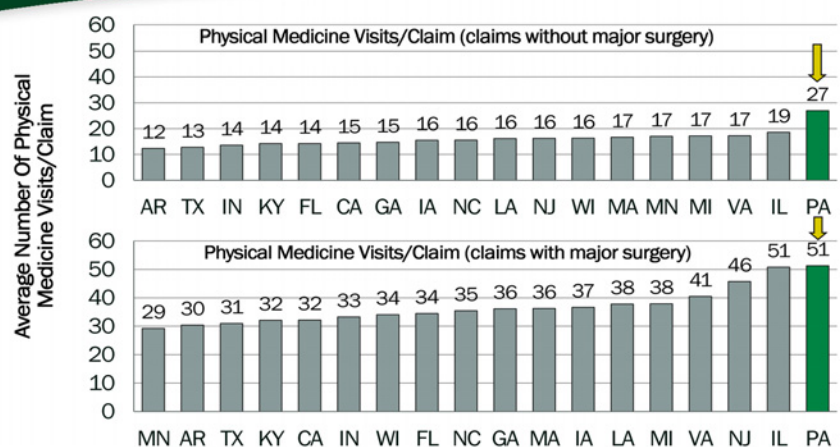


In Pennsylvania, 73 percent of claims in 2013/2016 had at least one physical medicine service (regardless of the provider). This percentage was typical of the study states.

In addition, the percentage of claims that received physical medicine and had surgery was also similar to the median study state. The proportion of claims with major surgery was typical of the study states at all claim maturities.

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PA PM Visits Per Claim Among Highest For Both Surgical And Nonsurgical Claims



Average Visits/Claim For Physical Medicine (all types of providers). 2013/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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Another way of looking at utilization of physical medicine is by examining surgical and nonsurgical claims.

Among nonsurgical claims, providers of physical medicine used on average 27 visits per claim in Pennsylvania, compared with 16 in the typical state. Among claims with surgery, providers in Pennsylvania used on average 51 visits per claim, higher than 36 in the median study state. Pennsylvania had a fairly typical surgery rate among the study states (for all claim maturities), and the surgery rate was relatively stable over the study period for more mature claims.

Physical Medicine Among Claims With And Without Major Surgery

2013/2016	Surgical	Nonsurgical
Average Payment Per Claim In PA	\$8,751 (3rd highest)	\$4,345 (highest of study states)
% Difference From Median State	43%	67%

Key: **PM:** Physical medicine.

Major Findings For Pennsylvania From CompScope™ Medical, 18th Edition

- Offsetting components resulted in typical medical payments per claim:
 - Higher % of claims with hospital services than in other study states; lower outpatient payments/service offset by higher services/claim
 - Lower-than-typical payments per claim to physicians; lower prices paid tied to lower fee schedule rates
 - Among highest utilization (visits per claim and services per visit) of all study states, largely driven by physical medicine
- ➔ Medical payments per claim grew faster than other states 2010–2015, driven by hospitals; prices and utilization generally stable

The interstate comparison of the fee schedule rates is measured by computing the ratio of fee schedule rates in each state with Medicare rates in that state, and then comparing these fee schedule-to-Medicare ratios between states. Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)
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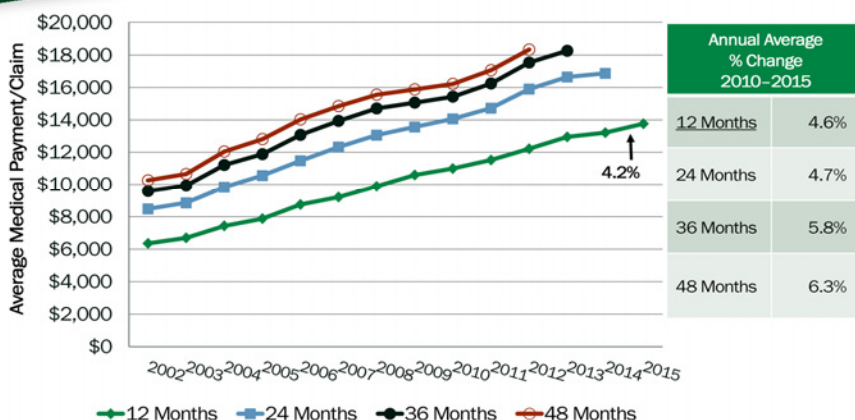
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PA Medical Payments Per Claim Grew 4%–6% Per Year Since 2010 (12–48 Months)



Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix

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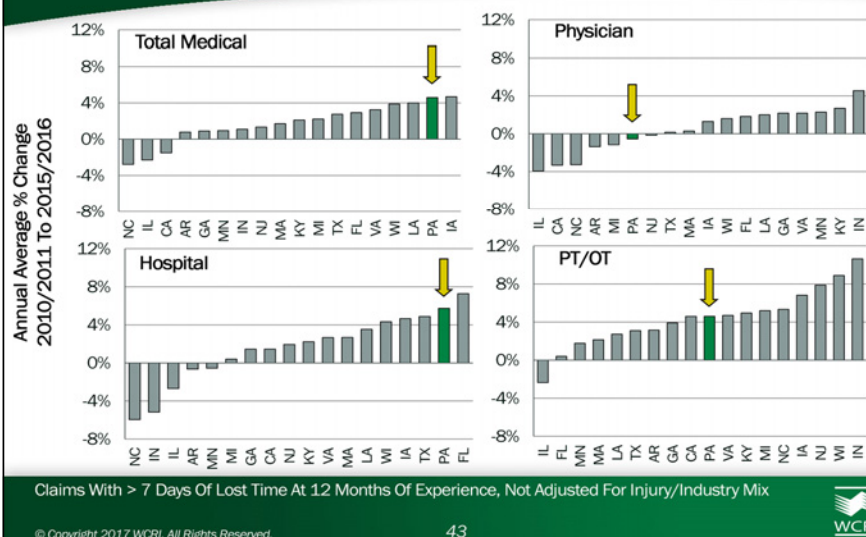


This chart shows the trends in total average medical payment per claim with more than seven days of lost time at different maturities.

Between 2010 and 2015, medical payments per claim grew between 4.6 and 6.3 percent per year, depending on the claim maturity. Between 2014 and 2015, medical payments per claim grew 4.2 percent in Pennsylvania, faster than the median study state. The growth was driven mainly by a large increase in hospital payments per inpatient episode.

Note: For claims at 12 months: 2015 refers to 2015/2016. For claims at 36 months: 2013 refers to 2013/2016. Other injury year/evaluation combinations are denoted similarly.

Hospital Payments Drove Faster Growth In Overall Medical Payments Per Claim In PA 2010–2015



The faster-than-typical growth in medical payments per claim in PA was driven largely by hospitals. Payments per claim to PT/OTs increased at rates similar to other study states. Payments per claim to physicians changed little between 2010 and 2015 in PA. This result was also similar to changes in other study states.

AAPC 2010 To 2015	PA	Median State
Total Medical Payments	4.6%	1.9%
Physician	-0.6%	0.8%
PT/OT	4.6%	4.6%
Hospital	5.7%	2.1%

Since 2010, several states have had major changes related to medical reimbursements. IL reduced medical fee schedule rates for all services by 30 percent, effective in September 2011. IN introduced a hospital fee schedule in July 2014. NC had interim fee schedule changes in 2013. As of April 2015, NC based reimbursement for nonhospital and hospital care on Medicare methodology. Effective May 2014, GA changed the outpatient reimbursement method, applying a Medicare approach. Effective January 2013, CA reduced the fee schedule rates for services provided in ASCs. Another reform provision changed the method for calculating the fee schedule for professional services from a CA state-specific to a Medicare-based fee schedule (effective January 2014).

Key: **AAPC**: Annual average percentage change. **PT/OT**: Physical/occupational therapist; payments to PT/OTs are for all services they provide and bill (whether or not the services are considered physical medicine services).

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Medical Payments/Claim In PA 2010–2015: Hospital Payments Growing, Others Generally Stable

- **Hospital outpatient payments per claim**: grew rapidly due to facility payments, % of claims decreased
- **Shifts from hospital to nonhospital providers (ASCs)**: no change in PA in contrast to other study states
- **Hospital payments for inpatient episode**: grew rapidly, especially in 2015, % of claims decreased
- **Services per claim (hospital and nonhospital)**: changed little
- **Prices paid for professional services**: changed little
- **Payments per claim to PT/OTs**: grew moderately, trend similar to other states

Some of these comparisons reflect trends from 2002 to 2015.

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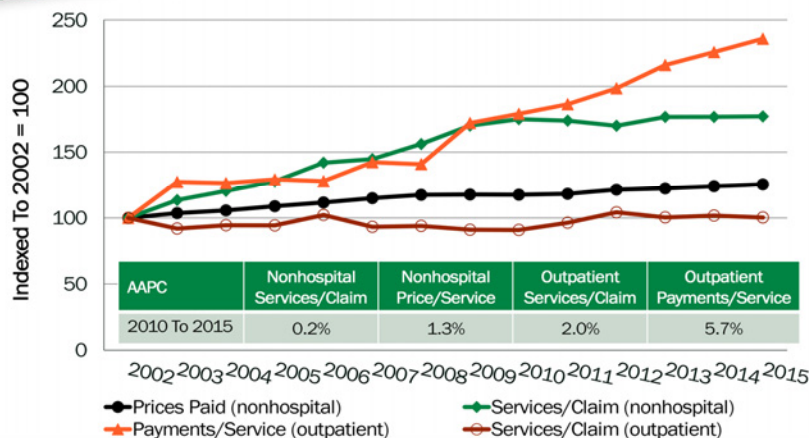
The analysis focuses on several trends observed in Pennsylvania and in multiple states during the study period between 2010 and 2015. In some cases we report a longer time frame to supply historical context for key metrics.

Except for facility payments per claim for treatment in a hospital outpatient setting, all other changes in Pennsylvania were consistent with the experience in most study states. Although facility payments per claim for hospital outpatient care grew at faster rates in Pennsylvania than in other study states, these payments were lower than typical.

Key: **ASC**: Ambulatory surgery center. **PT/OT**: Physical/occupational therapist.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA Slow Growth In Prices And Utilization, Faster Growth In Outpatient Pmt./Service 2010–2015



Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix. Prices Paid Are Reported On Calendar Year. Source: WCRI Medical Price Index For Workers' Compensation, Ninth Edition (2017)
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Prices paid and utilization for nonhospital and hospital outpatient services grew slowly in Pennsylvania. The growth in total medical payments per claim was driven mostly by hospital outpatient payments per service.

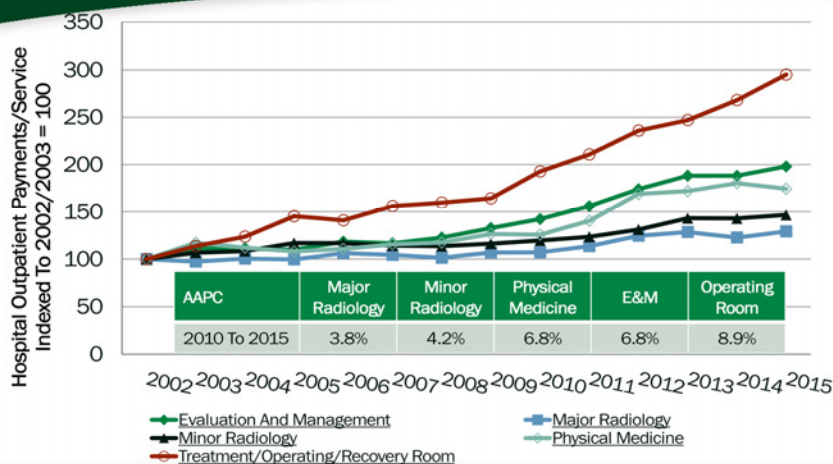
According to the Bureau of Labor Statistics, the CPI-M for hospital outpatient services (may include services not relevant to workers' compensation) in the United States grew on average 4.6 percent per year from 2010 to 2015. That was somewhat lower than the 5.7 percent per year growth for outpatient payments per service in Pennsylvania.

Key and definitions: **AAPC:** Annual average percentage change. **CPI-M:** Bureau of Labor Statistics, Consumer Price Index for Medical Care, U.S. city average, outpatient hospital services, Series ID: CUUR000055703. **Hospital outpatient payments:** Payments made to the hospital for services that are delivered outside of an inpatient stay. **Nonhospital:** Nonhospital providers include physicians, chiropractors, physical/occupational therapists, nurses, clinical social workers, and other ancillary practitioners. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital). **Pmt.:** Payments. **Services per claim:** Combination of the number of visits per claim and the number of services per visit.

Notes: For nonhospital providers, prices are benchmarked using an index. (Yang and Fomenko. 2017. *WCRI Medical Price Index for Workers' Compensation, Ninth Edition.*)

Prices per service are based on calendar years. For payments per service and services per claim, 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Outpatient Payments/Service Grew For Many Services In PA, Faster For Operating Room



Average Payment Per Service For Hospital Outpatient Services, Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix
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From 2010 to 2015, hospital outpatient payments per service grew rapidly for many types of services in Pennsylvania but most notably for treatment/operating/recovery room.

Payments per claim for operating room, which is a high-cost service, were the main driver of the changes in hospital payments per service. Payments per service for operating room increased from \$732 in 2010 to \$1,121 in 2015. Payments per service for E&M grew from \$85 in 2010 to \$119 in 2015.

In Pennsylvania, hospital outpatient providers subject to the cost reimbursement approach, as defined in the law, are reimbursed by the provider's actual charge multiplied by the ratio of costs to charges based on the most recent audited Medicare cost report.

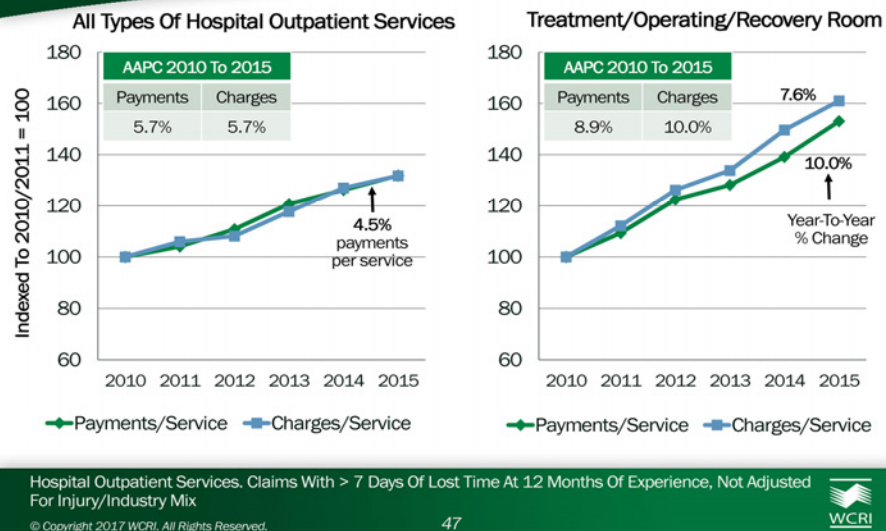
Examples of providers not subject to Medicare in Pennsylvania are hospital outpatient acute care providers, specialty hospitals, comprehensive outpatient rehabilitation facilities, and outpatient physical therapy centers.

Payments per claim for treatment/operating/recovery room services reflect payments for services billed by the facility (hospital), mostly in conjunction with surgical episodes. Note that the payments reported here do not include other surgery-related costs (supplies and equipment and anesthesia) or payments for professional services (for example, surgeon fees).

Key: **AAPC:** Annual average percentage change. **E&M:** Evaluation and management (office visits). **Operating Room:** Treatment/operating/recovery room services.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Growth In PA Hospital Outpatient Payments Per Service Reflected Growth In Charges



The growth in hospital outpatient payments per service in Pennsylvania closely tracked the growth in charges per service. From 2010 to 2015, overall hospital outpatient payments per service grew 5.7 percent per year, similar to the growth in charges (5.7 percent per year). Growth in payments per service for treatment/operating/recovery room outpaced the growth in other types of services. In 2015, payments per service for treatment/operating/recovery room grew 10.0 percent, faster than the growth in the overall hospital outpatient payments per service (4.5 percent).

System participants speculated that the fact that some providers are not subject to the fee schedule might be one reason for the faster-than-typical growth in hospital payments. In addition, if a provider's service code is listed in the charge master with no amount, it must be paid at 80 percent of billed charges (\$127.102). Each hospital has a unique set of service codes in the Pennsylvania charge master. See additional information on the next slide.

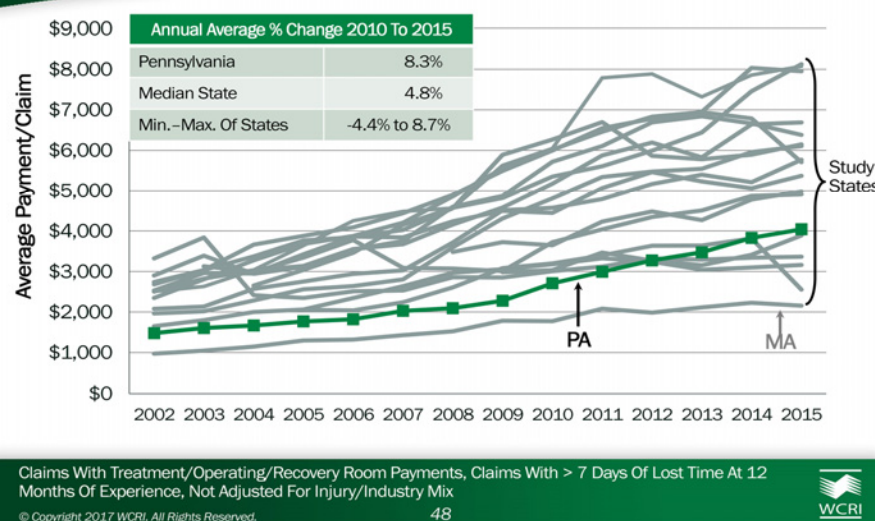
Note that Pennsylvania had among the lowest average payments per service for treatment/operating/recovery room of the study states in 2015. In contrast, Pennsylvania had the highest number of services per claim for that type of service.

Key: AAPC: Annual average percentage change.

Definition: Charge master: A provider's listing of current charges for procedures and supplies utilized in the provider's billing process.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA Payments Per Claim For Operating Room Grew Faster Than Median State



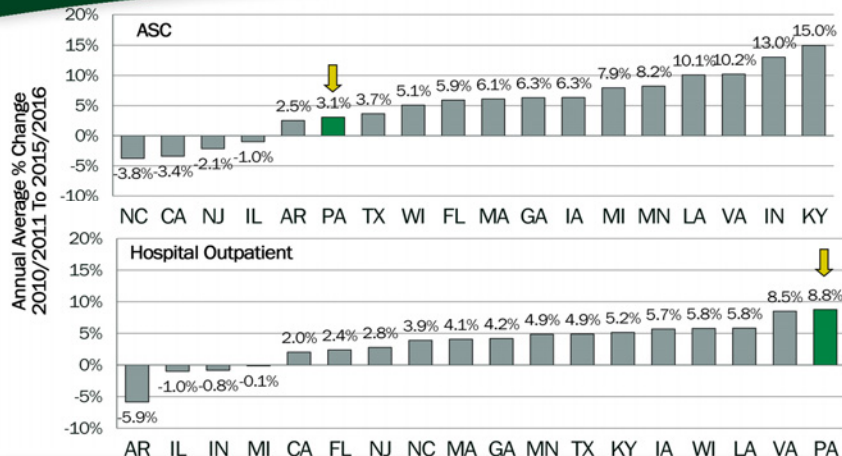
The average payment per claim for hospital outpatient treatment/operating/recovery room services grew substantially in many study states between 2010 and 2015. The growth in Pennsylvania was faster than in the median study state.

Despite the growth, Pennsylvania had lower payments per claim for hospital outpatient treatment/operating/recovery room services than other states for 2015 claims.

Key: AAPC: Annual average percentage change. **Max.:** Maximum. **Min.:** Minimum. **Operating Room:** Treatment/operating/recovery room services.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Hospital Outpatient Facility Payments/Claim Grew Faster In PA Than In All Other States



Facility Payments/Claim, Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix

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This slide summarizes the annual average percentage change in facility payments per claim to freestanding ASCs and hospital outpatient departments.

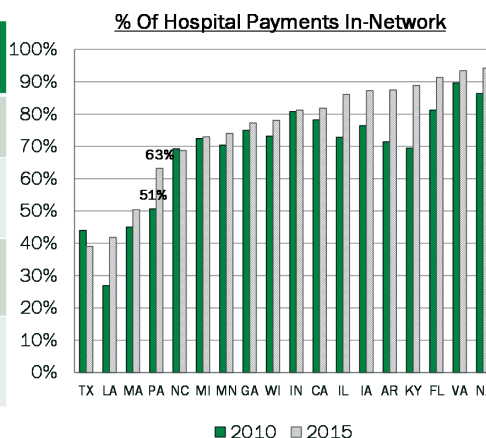
While hospital outpatient facility payments per claim grew faster in Pennsylvania than all study states, ASC facility payments per claim grew at lower-than-typical rates. This result likely reflects different reimbursement approaches to hospitals and freestanding ASCs. As described earlier, in Pennsylvania, payments to ASC providers are based on the ASC payment groups. The payment amounts were multiplied by 113 percent, then frozen on December 31, 1994, and are now updated annually by the percentage change in the statewide average weekly wage. Facility payments for hospital outpatient surgery are mainly based on a cost-to-charge ratio, which is hospital specific.

Key: **ASC:** Ambulatory surgery center.

Note: The rate of growth in hospital outpatient facility payments per claim on this chart and the chart on the previous slide varies slightly. Facility payments on this chart include payments for both treatment/operating/recovery room services and miscellaneous ambulatory surgical care, while the numbers on the previous slide include only payments for treatment/operating/recovery room services.

PA % Of Hospital Payments Which Were In-Network Increased, But Remained Lower Than Most States

Provider Type (2015)	% In-Network PA	Median State
Total	60% (lower)	73%
Physician	61% (lower)	72%
PT/OT	76% (typical)	80%
Hospital	62% (lower)	79%



Claims With > 7 Days Of Lost Time At 12 Months Of Experience. Trends are not adjusted for injury/industry mix; interstate comparisons are adjusted for injury/industry mix.

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One factor affecting the growth in hospital payments per claim during the analysis period could be network participation.

This chart shows the percentage of overall medical payments for care under network arrangements in 2015. Included are medical payments made in any type of health care network (for instance, HMO and PPO).

Between 2010 and 2015, the percentage of hospital payments made in-network increased 12 percentage points in Pennsylvania. Despite this large increase, Pennsylvania remained among the group of states with a lower percentage of medical payments for care in-network, overall and by provider type.

Key and definitions: % of payments in networks: Calculated as total payments to providers for medical care rendered within a health care network divided by the total payments to providers for all medical care, in and out of networks.

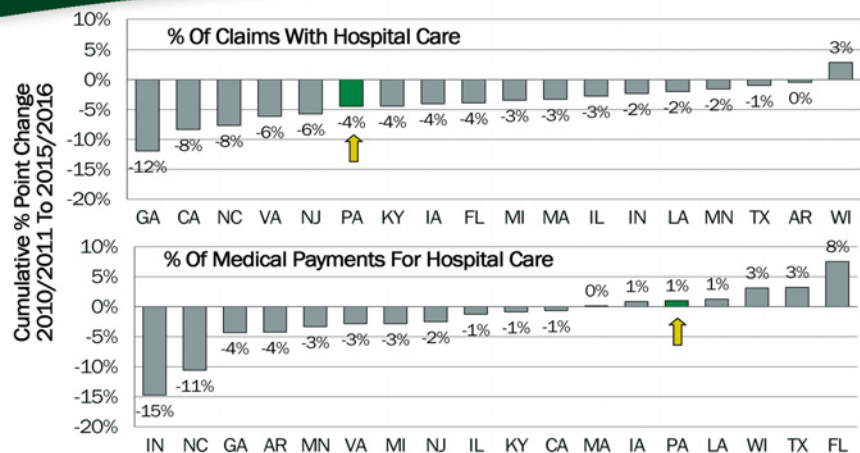
Note that the percentages by type of provider do not add up to 100 percent because they are calculated for each provider type separately. This measure is based on the identification of network care provided by the data sources.

HMO: Health maintenance organization. **Hospitals:** Trauma centers, inpatient, and outpatient treatment facilities.

Physicians: Surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors. **PPO:** Preferred provider organization. **PT/OT:** Physical/occupational therapist.

Note: 2015 refers to calendar year. Other years are denoted similarly.

% Of Claims With Hospital Care Decreased In Most Study States 2010–2015



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Adjusted For Injury/Industry Mix

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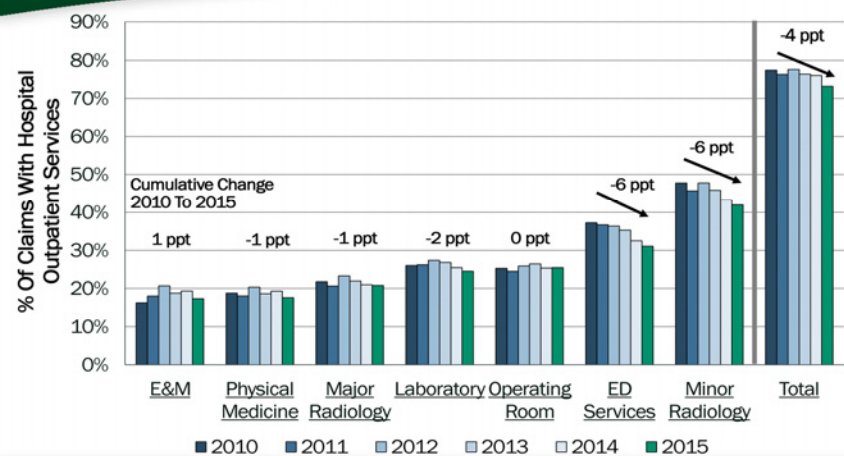
The trends in medical payments and utilization in many states were driven by a number of factors. Some services have shifted from inpatient to hospital outpatient, while others have shifted from hospital outpatient to nonhospital settings, such as ambulatory surgery centers.

One dimension of medical utilization is the percentage of claims that received a specific service. Between 2010 and 2015, the proportion of claims with hospital services decreased in most study states. But the resulting decrease in the percentage of payments was somewhat muted due to the increase in hospital payments per claim (especially for inpatient services) during the same period.

The states with the largest decreases on this chart had major regulatory changes during the analysis period. See [Slide 43](#).

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA % Of Claims With Hospital Outpatient Services Decreased Due To ED And Minor Radiology



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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This chart shows the percentage of claims with each major type of hospital outpatient service in Pennsylvania from 2010 to 2015.

Since 2010, the percentage of claims with hospital outpatient care in Pennsylvania decreased for some types of services like emergency and minor radiology. For other types of services, the percentage of claims fluctuated from one year to another with no clear trend of increase or decrease.

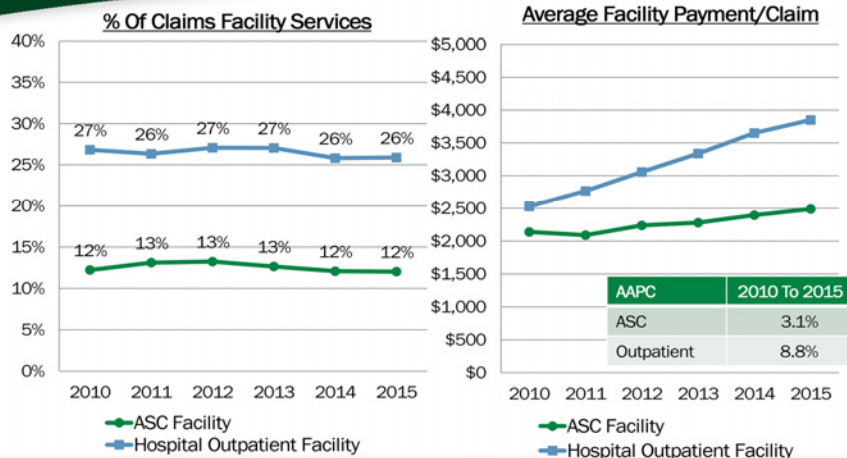
Pennsylvania had the largest decrease in the proportion of claims with ED services among all study states. Stakeholders indicated that this is likely due to an increasing use of urgent care centers and walk-in clinics where the services are billed by private practices.

From 2010 to 2015, most study states experienced a decrease in the percentage of claims with minor radiology in both hospital and nonhospital settings.

Key: **ED**: Emergency department services. **E&M**: Evaluation and management. **ppt**: Percentage points.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

% Claims With Outpatient Facility Services Stable In PA, No Material Shift To ASCs



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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This chart shows the trends in the percentage of claims with facility services and the average facility payment for services billed by freestanding ASCs and hospital outpatient departments.

From 2010 to 2015, there was little change in the percentage of claims with facility services in Pennsylvania. As discussed earlier, in Pennsylvania fewer surgeries were performed in freestanding ASCs, and the reimbursement in hospitals was higher than in ASCs for the same type of surgery. Between 2010 and 2015, hospital outpatient facility payments per claim grew faster than payments to ASCs. During the same time period, the proportion of claims with major surgery was relatively stable.

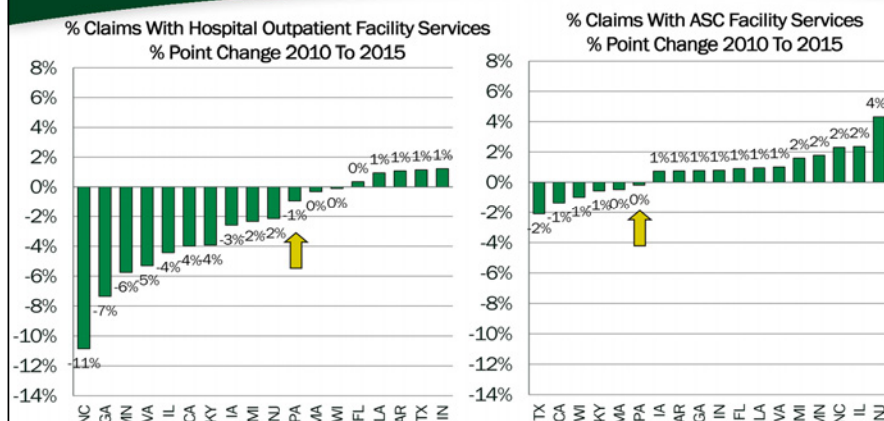
% Of Claims With Surgery (regardless of facility where surgery was done)

Injury Year	PA 12 Months	PA 36 Months	Median State 36 Months
2010	33%	35%	35%
2011	34%	36%	35%
2012	33%	36%	34%
2013	34%	36%	34%
2014	33%		
2015	32%		

Key: **AAPC**: Annual average percentage change. **ASC**: Ambulatory surgery center.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Shift From Hospital To ASC Providers In Many Study States 2010–2015



Claims With Facility Services With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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From 2010 to 2015 (claims with an average maturity of 12 months), most states experienced a noticeable shift in the percentage of claims with facility services from hospital outpatient to freestanding ASCs. More mature claims also indicated similar shifts.

In a few study states, including Pennsylvania, the percentage of claims with hospital outpatient services or ASC services was stable or changed little. Factors for this result may include market consolidations, including hospitals acquiring physician groups and licensing them as satellite outpatient departments. In these cases, the physician office bills through the hospital as an outpatient department.

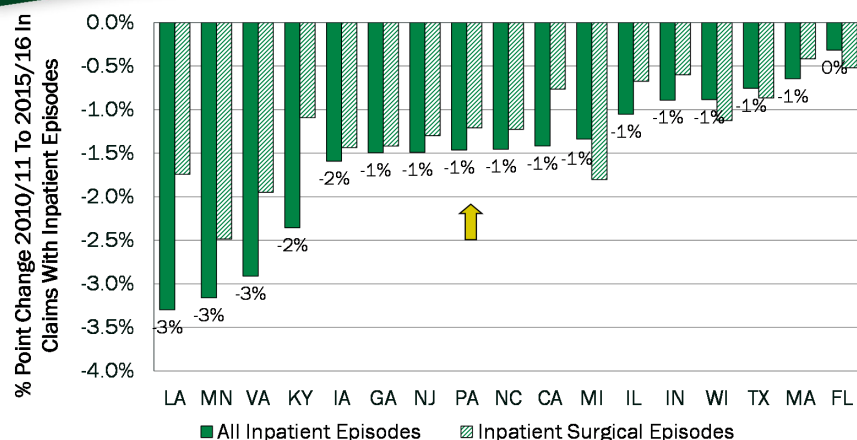
The results here are consistent with the evidence from the general health care market. Over the years, many surgical procedures have shifted from hospital outpatient departments to freestanding facilities. Trends in health care spending for the Medicare program from 2006 to 2014 documented a shift in services from inpatient to outpatient settings, as well as a shift in billing for some services from physician offices to outpatient hospital departments. Furthermore, data from the Agency for Healthcare Research and Quality notes that from 1992 to 2012, the total number of surgeries at community hospitals in the United States increased by 17 percent. Outpatient surgeries represented a growing share (65 percent) of all surgeries at community hospitals in the United States in 2012, up from 54 percent in 1992.

Key: **ASC**: Ambulatory surgery center.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Source: Medicare Payment Advisory Commission. 2016. *June 2016 Data Book: HealthCare Spending and Medicare Program*. Agency for Healthcare Research and Quality. *Statistical Brief #188*.

Decrease In % Of Claims With Hospital Inpatient Episodes In Most Study States 2010–2015



Claims With Hospital Inpatient Episodes As A Percentage Of Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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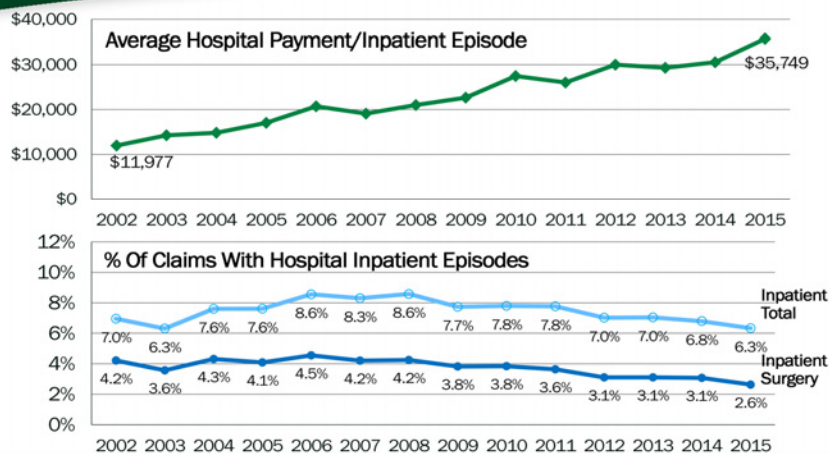


In nearly all study states, the percentage of claims with hospital inpatient episodes decreased from 2010 to 2015, based on less mature claims. A decrease was also observed for more mature claims (from 2010 to 2013, with an average maturity of 36 months). In addition, during the same period, the overall surgery rate (as a percentage of claims with more than seven days of lost time), decreased 1 to 5 percentage points among the study states.

Notes: Trends in hospital inpatient payments per episode are not shown for Arkansas because the cell sizes underlying the data are too small to support a trend analysis.

2015 refers to 2015/16. Other injury year/evaluation combinations are denoted similarly.

PA Hospital Inpatient Episodes: Payments Increased While % Of Claims Decreased



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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Definition: Hospital payments/inpatient episode: Payments made to a hospital for all services related to an inpatient stay. Payments made for professional services are not included if billed separately. Hospital inpatient episode or overnight stay was constructed as the unit of analysis. Specifically, hospital inpatient care was identified based on room and board revenue codes. The service dates, which include one day before and one day after the day of the room and board charge, were used to capture all other hospital services provided during the inpatient stay.

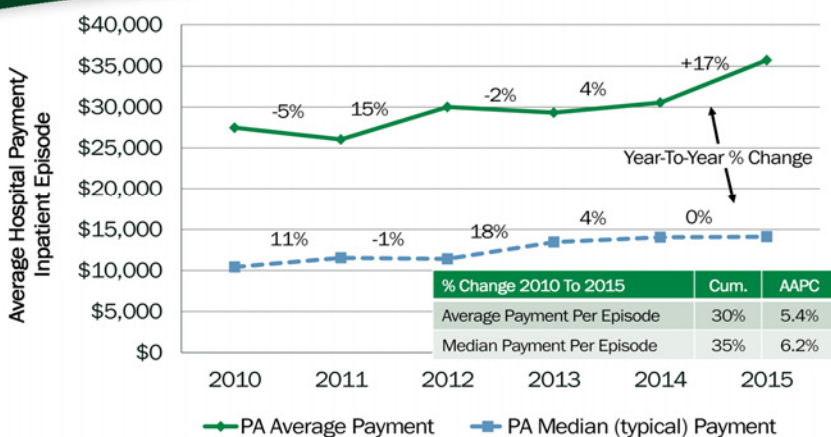
Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

This chart shows the payments and frequency of claims (percentage of claims) with hospital inpatient episodes in Pennsylvania.

While hospital payments per inpatient episode grew over time, the proportion of claims with inpatient care and inpatient surgery decreased. According to system participants, the frequency of injuries has been decreasing steadily in Pennsylvania, and as a result the severity of injuries increased, on average.

PA	2010	2015	Cumulative Change 2010 To 2015
% Inpatient Episodes	7.8%	6.3%	-1.5
% Inpatient Episodes With Surgery	3.8%	2.6%	-1.2
Average Payment Per Inpatient Episode	\$27,476	\$35,749	30%
% Payments For Inpatient Care	22.7%	21.5%	-1.2

PA 2015/16: Hospital Payments/Inpatient Episode Grew Rapidly, Large Year-To-Year Fluctuations



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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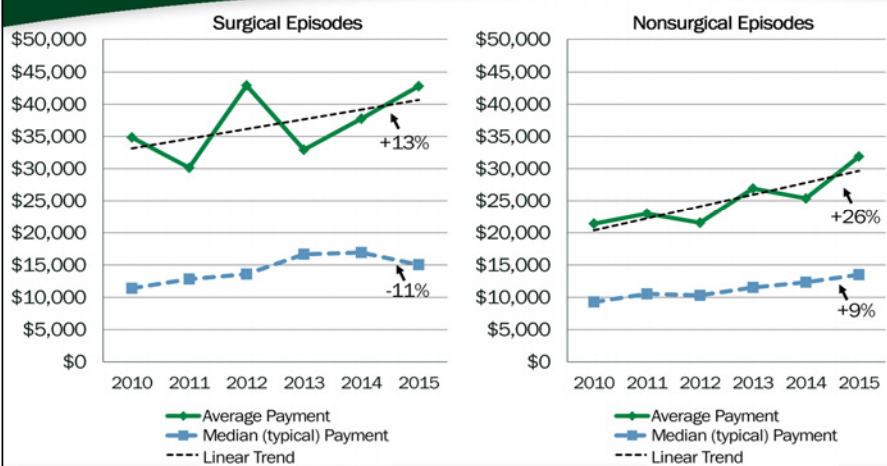
Key: **AAPC:** Annual average percentage change. **Cum.:** Cumulative.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

In 2015, the average hospital payment per inpatient episode in Pennsylvania increased 17 percent. Unlike the average, the median or typical payment per inpatient episode in Pennsylvania did not change in 2015. It is likely that the changes in the average cost per episode were partially driven by different lengths of stay and an increase in the occurrence of episodes involving longer, higher-cost stays.

For example, the top 15 episodes in Pennsylvania in 2015/2016 were 58 percent more expensive than the top 15 episodes in 2014/2015. The 15 most expensive inpatient episodes in 2015/2016 accounted for less than 2 percent of total episodes and 31 percent of inpatient payments. Furthermore, examining the top 15 most expensive inpatient episodes in 2015/2016 indicates large payments for procedure codes related to respiratory failure, burns, and injury of the thoracic aorta. In contrast, the top inpatient episodes in terms of paid dollars in 2014/2015 were related to fractures of different body parts.

Continued Growth In Hospital Payments Per Inpatient Episode In PA



Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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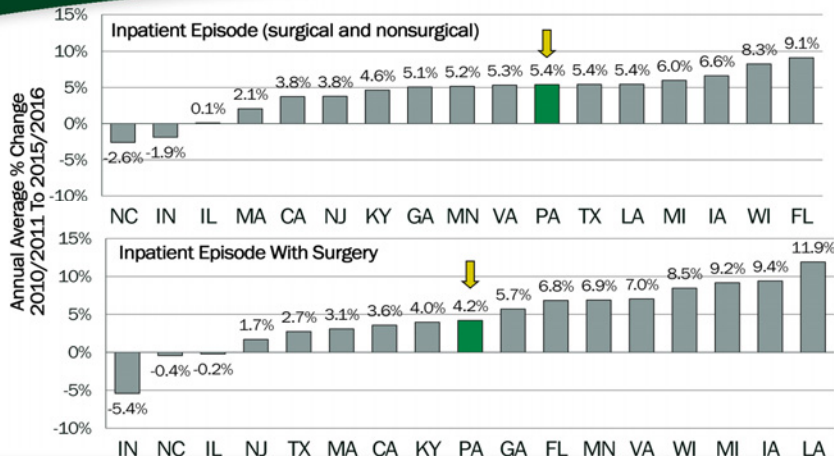


Key: **Linear trend:** Microsoft Office linear trend line which uses the method of ordinary least squares.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Both surgical and nonsurgical episodes drove the growth in hospital inpatient payments in Pennsylvania in 2015. The black dotted line in this chart is a linear trend line showing that despite year-to-year fluctuations, hospital payments per inpatient episode continued to increase.

Hospital Payments Per Inpatient Episode In PA Grew At Rates Similar To Other States



Hospital Payments/Inpatient Episode, Claims With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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The average total hospital payment per inpatient episode in Pennsylvania grew at rates similar to other study states between 2010 and 2015. Similar results were observed for hospital payments per surgical episode.

According to the Bureau of Labor Statistics, the CPI-M for inpatient services (may include services not relevant to workers' compensation) in the United States grew on average 5.2 percent per year from 2010 to 2015.

Key: CPI-M: Bureau of Labor Statistics, Consumer Price Index for Medical Care, U.S. city average, inpatient hospital services, Series ID:CUUR0000SS5702.

Notes: Trends in hospital inpatient payments per episode are not shown for Arkansas because the cell sizes underlying the data are too small to support a trend analysis.

2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

Medical Payments/Claim In PA 2010–2015: Hospital Payments Growing, Others Generally Stable

- **Hospital outpatient payments per claim:** grew rapidly due to facility payments, % of claims decreased
- **Shifts from hospital to nonhospital providers (ASCs):** no change in PA in contrast to other study states
- **Hospital payments for inpatient episode:** grew rapidly, especially in 2015, % of claims decreased
- ➔ **Services per claim (hospital and nonhospital):** changed little
- ➔ **Prices paid for professional services:** changed little
- ➔ **Payments per claim to PT/OTs:** grew moderately, trend similar to other states

Some of these comparisons reflect trends from 2002 to 2015.

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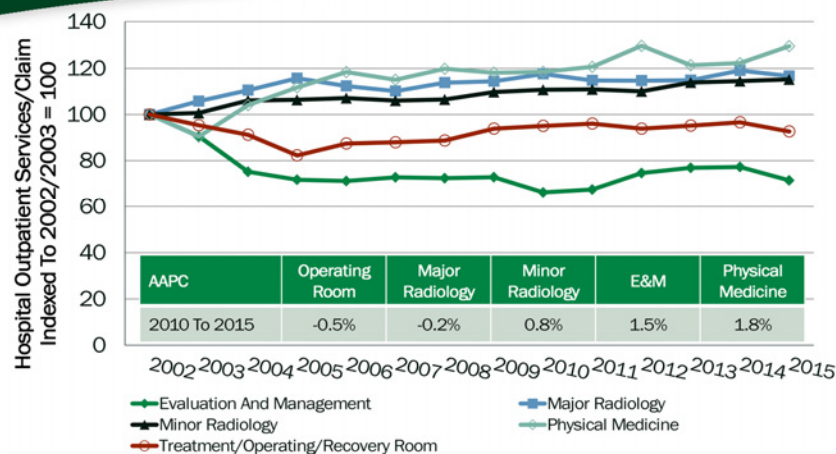
60



Key: ASC: Ambulatory surgery center. **PT/OT:** Physical/occupational therapist.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA Hospital Outpatient Services/Claim Relatively Stable For Many Years



Average Number Of Hospital Outpatient Services Per Claim With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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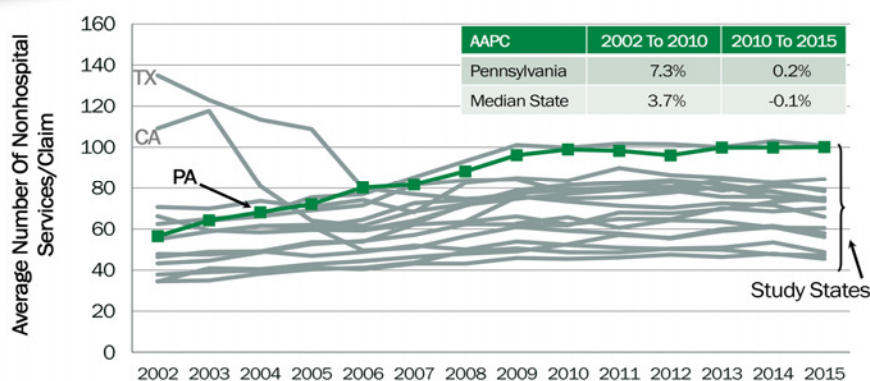


The average number of hospital outpatient services per claim was relatively stable in Pennsylvania for many years, including 2010 to 2015.

Key: **AAPC:** Annual average percentage change. **E&M:** Evaluation and management (office visits). **Operating Room:** Treatment/operating/recovery room services.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA 2010–2015: Nonhospital Services/Claim Remained Stable, Trend Similar To Other States



Nonhospital Services/Claim With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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From 2010 to 2015, the number of nonhospital services per claim in Pennsylvania was stable, similar to other states. In the earlier years before 2010, the number of services per claim grew at a faster rate in Pennsylvania than in other states. The main driver of this growth was the use of physical medicine services.

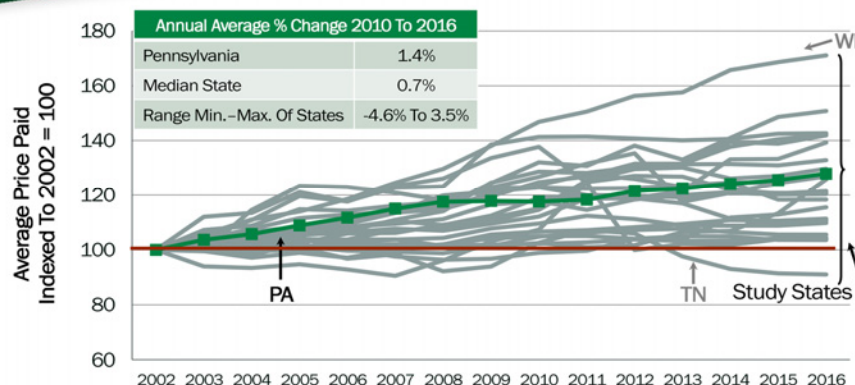
The two lines on the top of the chart in 2002 represent Texas and California. System stakeholders in Texas indicated that, beginning in 2002, there was increased payor effort and focus placed on containing medical costs through prospective and retrospective utilization review and increased denials of care. As a result, significant decreases in the number of physical medicine visits occurred. Further reforms introduced preauthorization for physical/occupational therapist services (2005), health care networks (2005), and adoption of evidence-based treatment guidelines (2007).

California enacted comprehensive reforms from 2002 to 2005. The decrease in the number of visits per claim reflects the combined impact of multiple reform provisions. The reforms created a utilization review program that limited chiropractic and physical therapy visits in two ways: adopted ACOEM guidelines and imposed 24-visit caps on physical therapy and chiropractic services for injuries on or after January 1, 2004. In addition, in 2005 California introduced health care networks (MPNs) for treating injured workers.

Key and definition: **AAPC:** Annual average percentage change. **ACOEM:** American College of Occupational and Environmental Medicine. **MPN:** Medical provider network. **Services per claim:** Combination of number of visits per claim and number of services per visit.

Note: 2015 refers to 2015/2016. Other injury year/evaluation combinations are denoted similarly.

PA 2010–2016: Prices Paid For Professional Services Grew Similarly To Other Study States



Prices Paid For Professional (nonhospital) Services In Calendar Years 2002 To 2016 (2016 data is January through June). Based On All Claims. Source: WCRI Medical Price Index For Workers' Compensation, Ninth Edition (2017)

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Key: **Min.-Max.:** Minimum–maximum.

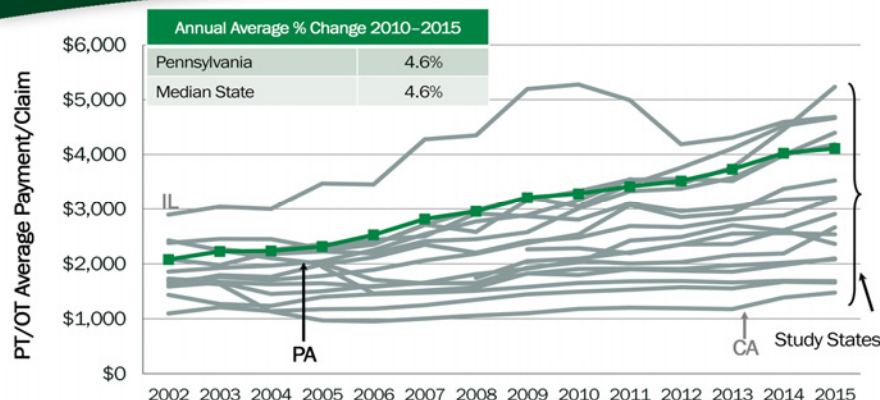
Source: Yang and Fomenko. 2017. *WCRI Medical Price Index for Workers' Compensation, Ninth Edition (MPI-WC)*.

This chart shows trends in prices paid for professional services in 28 states. The values shown are indexed to 2002 as the base year.

The growth in prices paid for professional services in Pennsylvania stabilized between 2010 and 2016 (2016 data is January through June). Similar results are observed in other study states.

From 2010 to 2015, the Consumer Price Index for medical professional services (published by the [U.S. Bureau of Labor Statistics](#), and may include services not relevant to workers' compensation), grew on average 1.9 percent per year for the Northeast urban region and 2.0 percent per year nationally.

PA 2010–2015: Moderate Growth In Payments Per Claim To PT/OT, Similar To Other Study States



PT/OT Payments/Claim With > 7 Days Of Lost Time At 12 Months Of Experience, Not Adjusted For Injury/Industry Mix

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Key: **PT/OT:** Physical/occupational therapist.

Note: For claims at 12 months: 2015 refers to 2015/2016. For claims at 36 months: 2013 refers to 2013/2016. Other injury year/evaluation combinations are denoted similarly.

Another major category of medical providers is PT/OTs. They represented 15 percent of total medical payments in Pennsylvania in 2015.

The average payment per claim to PT/OTs in Pennsylvania grew similarly to many study states between 2010 and 2015.

The line on the top of the chart represents Illinois. In September 2011, as part of major reforms, Illinois reduced the fee schedule rates for all medical services by 30 percent. Subsequently, the average medical payment per claim to PT/OTs decreased 21 percent between 2010 and 2012.

Other Findings For PA From CompScope™ Medical Benchmarks, 18th Edition

PA Physician Drug Dispensing Reforms (HB 1846, effective Dec. 26, 2014)

- Reimbursement to physicians limited to 110% of AWP of the manufacturer's original NDC
- Physician dispensing of Schedule II, Schedule III, and hydrocodone limited to 7-day supply following initial treatment (including surgery)
- Physician dispensing of other drugs limited to 30-day supply following initial treatment
- No physician dispensing of over-the-counter drugs

Early Metrics From 2015/16 Claims (up to 15 months of experience)

- Prescription payments per claim (pharmacy and physicians) decreased 26% due to lower payments per Rx and fewer Rx per claim

Physician dispensing of prescriptions is an area of public policy focus in many states because the cost of physician-dispensed drugs is often significantly higher than the cost of pharmacy-dispensed drugs—20–300 percent higher for drugs commonly dispensed in workers' compensation.

In contrast to pharmacies, prior to 2014, PA did not regulate payments for prescriptions dispensed to physicians. Reimbursements to pharmacies for both brand name and generic drugs are based on the AWP plus 10 percent. No dispensing fee is indicated in the statute, which has been in effect since 1995.

Effective December 2014, PA enacted reforms regarding physician dispensing. Key provisions of HB 1846 are summarized below:

- Limit the reimbursement for repackaged drugs dispensed by a physician to 110 percent of the AWP determined by the original manufacturer.
- Limit the reimbursement for Schedule II and Schedule III drugs to an initial 7-day supply beginning at the initial treatment, or an additional 15-day supply immediately after a medical procedure including surgery.
- Limit the reimbursement for any other drugs to an initial 30-day supply beginning at the initial treatment.
- Prohibit dispensing of over-the-counter drugs by hospital outpatient providers.

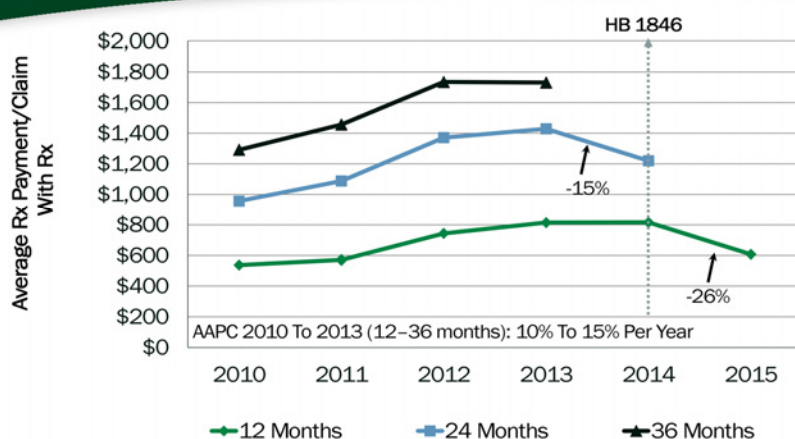
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Key: **AWP**: Average wholesale price. **Dec.:** December. **HB**: House Bill. **NDC**: National Drug Code. **Rx**: Prescriptions.

PA 2015: Avg. Rx Payment/Claim Decreased After 2014 Physician Dispensing Reforms



Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix

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Key: **AAPC**: Annual average percentage change. **Avg.:** Average. **HB**: House Bill. **Rx**: Prescriptions dispensed by pharmacies and physicians. See [Slide 68](#) and the [Technical Appendix](#) for details.

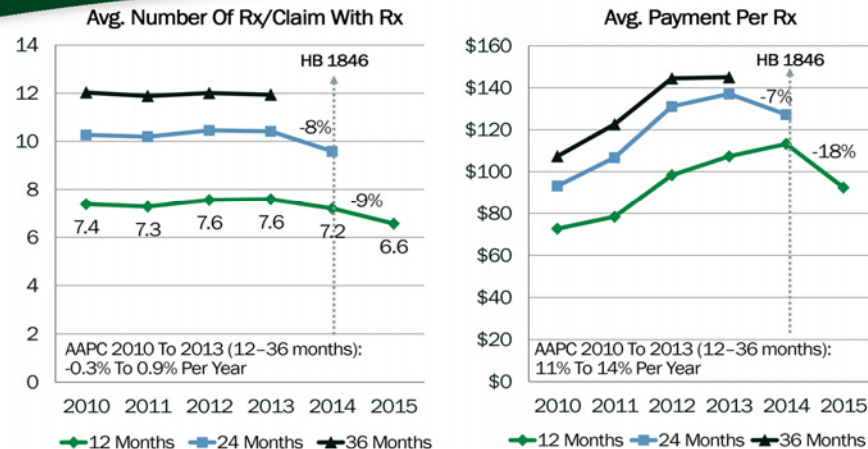
Note: For claims at 12 months: 2015 refers to 2015/2016. For claims at 36 months: 2013 refers to 2013/2016. Other injury year/evaluation combinations are denoted similarly.

This edition of CompScope™ Medical Benchmarks shows the initial impact of Pennsylvania 2014 physician dispensing reforms. The payments reported here combine prescriptions dispensed by both physicians and pharmacies. Future WCRI studies will show the subsequent impact for physician and pharmacy dispensers separately.

In 2015 (evaluated as of 2016), the average prescription payment per claim with prescriptions in Pennsylvania decreased 26 percent, driven by a decrease in the average number of prescriptions per claim with prescriptions (9 percent) and a decrease in the average payment per prescription (18 percent). The results are based on claims with a maximum experience of up to 15 months under the reform provisions.

Limits on prices paid for repackaged drug products dispensed by physicians are the most important feature of HB 1846. According to the [Pennsylvania Compensation Rating Bureau](#), this provision would produce the majority of estimated savings in Pennsylvania.

PA Rx Payments Decrease Driven By Avg. Payment/Rx And Avg. Number Of Rx/Claim



Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix

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Between 2014 and 2015 (for claims with an average maturity of 12 months), the average number of prescriptions per claim with prescriptions and average payment per prescription decreased in Pennsylvania. System participants indicated that between 2012 and 2015, several brand name drugs used in workers' compensation went off patent. This may have contributed to the decrease in some of the prescription drug metrics in 2014 in Pennsylvania.

Prior to the 2014 reforms, payments for prescriptions in Pennsylvania accounted for 5.8 percent of total medical payments for claims with an average maturity of 36 months. In other study states, the share of prescription payments ranged from 1 to 6 percent.

Key: **AAPC**: Annual average percentage change. **Avg.**: Average. **HB**: House bill. **Rx**: Prescriptions.

Note: For claims at 12 months: 2015 refers to 2015/2016. For claims at 36 months: 2013 refers to 2013/2016. Other injury year/evaluation combinations are denoted similarly.

2014/16 Claims Reflect Partial Impact HB 1846: PA Higher Than Typical On Most Rx Drug Metrics

Prescription Drug Metrics (claims with prescriptions)	PA	18-State Median	PA Relative To Other States
% Of Total Medical Payments For Prescriptions	4.3%	2.9%	Higher
Average Prescription Payment Per Claim	\$1,219	\$641	2nd Highest
Average Number Of Prescriptions Per Claim	9.6	8.4	Higher
Average Payment Per Prescription	\$127	\$78	2nd Highest

2014/2016 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix

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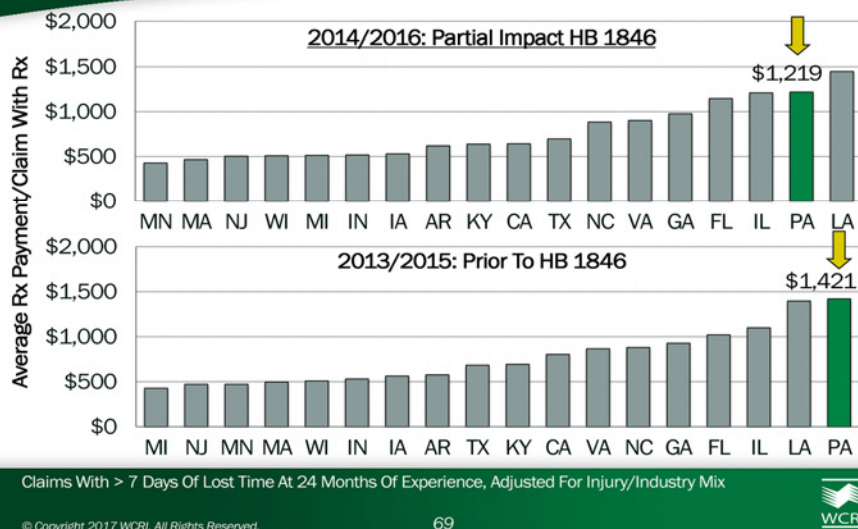
In the current edition of CompScope™ Medical Benchmarks, we introduced several new metrics related to prescription drug costs and utilization.

Prescriptions were identified if the National Drug Code (NDC) was available for that drug. In addition, we included prescriptions filled or refilled by the injured worker at a pharmacy or physician's office and paid under workers' compensation. Prescription medications dispensed at a hospital, administered by a medical provider (e.g., injectable medications), compounded drugs, nutritional supplements, and medical supplies and equipment billed with NDCs are not considered prescriptions in this report. See the [Technical Appendix](#) for more details.

Pennsylvania had among the highest average prescription payments per claim with prescriptions for 2014/2016 claims with more than seven days of lost time. Note that this period reflects a partial impact from HB 1846. Higher-than-typical prescription payments per claim resulted from higher payments per prescription and a higher number of prescriptions per claim in Pennsylvania relative to other study states.

Key: **HB**: House bill. **NDC**: National Drug Code. **Rx**: Prescriptions.

2014/16 Claims Reflect Partial Impact HB 1846: PA Rx Drug Payments/Claim Higher Than Typical



Here we show comparisons for the average prescription payment per claim with prescriptions for 2013/2015 and 2014/2016 claims with more than seven days of lost time. Note that 2014/2016 reflects a partial impact from HB 1846. Pennsylvania was among the highest of the study states on this metric. The next edition of this study will have a more complete picture of the impact of the physician dispensing reforms in Pennsylvania on the overall prescription payments per claim.

Key: **HB**: House bill. **Rx**: Prescriptions.

Other Findings For Pennsylvania From New WCRI Research

A Multistate Perspective on Physician Dispensing, 2011–2014

- Pre-reform, PA had higher-than-typical % of prescriptions and % of payments for physician-dispensed drugs
- Prescriptions of higher-priced new-strength drugs and formulations observed in PA, although not as prevalent as in some states

Interstate Variations in Use of Opioids, 4th Edition

- PA had among the highest amounts of opioids per claim of all study states
- The average amount of opioids per claim decreased in most study states 2010–2013 (24 months)

Longer-Term Dispensing of Opioids, 4th Edition

- PA had a higher-than-typical % of claims with opioids dispensed on a longer-term basis

Sources: *A Multistate Perspective On Physician Dispensing, 2011–2014* (2017); *Interstate Variations In Use Of Opioids, 4th Edition* (2017); *Longer-Term Dispensing Of Opioids, 4th Edition* (2017)

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This slide summarizes selected findings from new WCRI research for Pennsylvania.

WCRI studies on the use of opioids are based on nonsurgical claims with pain medications that received opioids in 2013 (evaluated as of 2015).

The term *opioids* used in this report refers to prescription opioids for pain relief, including natural (codeine, morphine), semisynthetic (hydrocodone, oxycodone, etc.), and synthetic (methadone, fentanyl) opioids. Over-the-counter, non-prescription pain medications are not included in the data.

Utilization of opioids is measured based on the morphine equivalent amount (MEA) for specific opioid medications, which takes into account the differences in strength as well as the quantity of opioid medications received by injured workers.

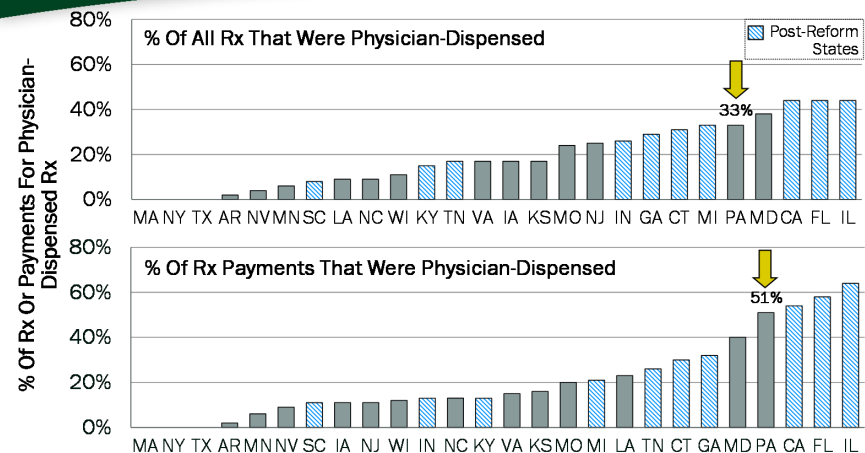
Longer-term dispensing of opioids:

Based on claims that received opioids within the first three months after the injury and had three or more visits to fill opioid prescriptions between the 7th and 12th months after the injury. This is an empirical definition, assuming that one opioid prescription likely represents at least a 30-day supply of opioids.

Key: **Rx**: Prescriptions.

Sources: Wang, Thumula, and Liu. *A Multistate Perspective on Physician Dispensing, 2011–2014*. Thumula, Wang, and Liu. 2017. *Interstate Variations in Use of Opioids, 4th Edition*. Wang. 2017. *Longer-Term Dispensing of Opioids, 4th Edition*.

PA Pre-Reform: Higher % Of Rx And % Of Rx Payments For Physician-Dispensed Drugs



Prescriptions Filled In Service Year 2014, For All Medical Claims With Injuries Occurring Within Two Years Prior To The Fill Date. Source: *A Multistate Perspective On Physician Dispensing, 2011–2014* (2017)
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WCRI's *A Multistate Perspective on Physician Dispensing, 2011–2014*, examined physician dispensing. As of April 2017, 22 states have made legislative or administrative changes to rules governing reimbursement for physician-dispensed drugs. Most reforms focused on prices paid to physicians by capping prices at the manufacturer's average wholesale price of the original drug. Recently, several states also made changes to limit physician-dispensed prescriptions for certain drugs or to a short time frame.

Prior to the 2014 reforms in Pennsylvania, the prevalence of physician dispensing, based on prescriptions dispensed, was higher—33 percent of prescriptions compared with 17 percent in the median study state. Physician-dispensed drugs represented a somewhat higher share of prescription payments in Pennsylvania—51 percent of payments compared with 16 percent in the median study state.

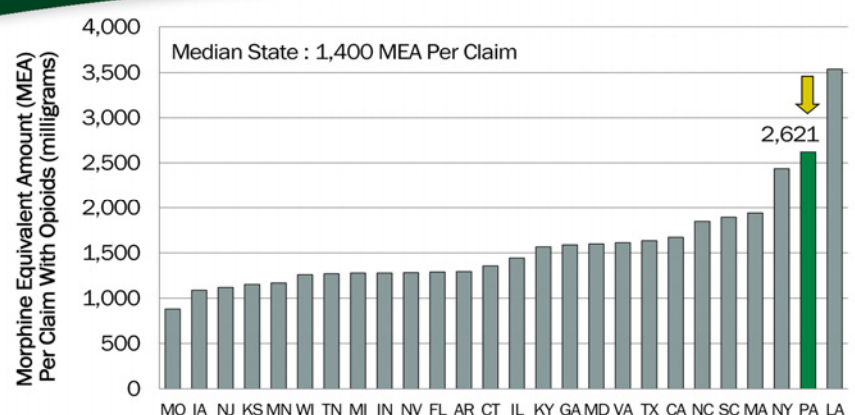
Key and definition: Rx: Prescriptions. **Service year:** The calendar year in which the prescriptions were filled.

Notes: States with reforms with effective year in parentheses: CA (2007), CT (2012), FL (2013), GA (2011), IL (2012), IN (2013), KY (2013), MI (2012), SC (2011), and TN (2012). See the technical appendix in the source study for a description of the reforms.

Physician dispensing is generally prohibited in Massachusetts, New York, and Texas.

Source: Wang, Thumula, and Liu. 2017. *A Multistate Perspective on Physician Dispensing, 2011–2014*.

Average MEA Per Claim With Opioids In PA Among Highest Of Study States



Nonsurgical Claims With > 7 Days Of Lost Time, Injuries From October 2012 To September 2013, Prescriptions Filled Through March 2015. Source: *Interstate Variations In Use Of Opioids, 4th Edition* (2017)
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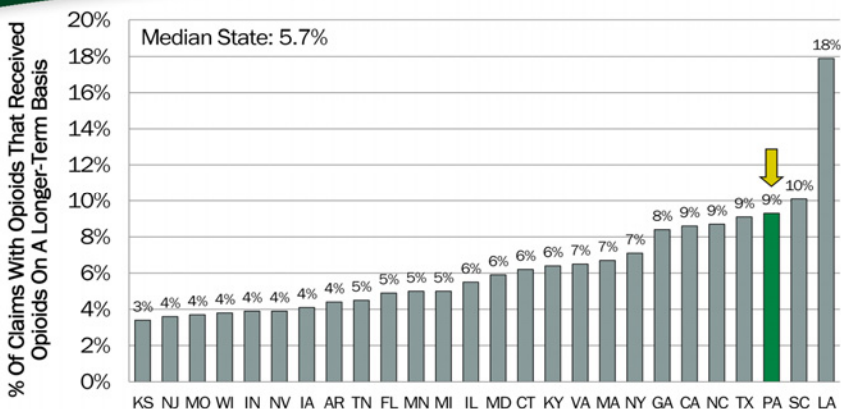
Another WCRI study examined the use of opioids in 26 states. When prescribed, the overall dosage (morphine equivalent amount) per claim for opioids was among the highest in Pennsylvania among 26 study states. The base here is nonsurgical claims with more than seven days of lost time for injuries from October 2012 to September 2013, with prescriptions filled through March 2015.

The study indicates that between 2010 and 2013 (24 months), there was an 11 percent decrease in the average MEA per claim in Pennsylvania. During the same time period, most of the study states experienced a 10 to 30 percent decrease in the average opioid amount per claim.

Key: MEA: Morphine equivalent amount.

Source: Thumula, Wang, and Liu. 2017. *Interstate Variations in Use of Opioids, 4th Edition*.

Longer-Term Dispensing Of Opioids More Prevalent In PA Than Most Study States



Nonsurgical Claims With > 7 Days Of Lost Time, Injuries From October 2012 Through September 2013, Prescriptions Filled Through March 2015. Source: *Longer-Term Dispensing Of Opioids, 4th Edition* (2017)
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Longer-term opioid dispensing in Pennsylvania was higher than typical for 2013 claims (evaluated as of 2015).

Between 2010 and 2013 (at 24 months), Pennsylvania experienced a 1 percentage point decrease in longer-term opioid dispensing.

Longer-term dispensing of opioids is based on claims that received opioids within the first three months after the injury and had three or more visits to fill opioid prescriptions between the 7th and 12th months after the injury. This is an empirical definition, assuming that one opioid prescription likely represents at least a 30-day supply of opioids.

Source: Wang. 2017. *Longer-Term Dispensing of Opioids, 4th Edition*.

Further Information For The Pennsylvania CompScope™ Medical Benchmarks Reader

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Illustration: WC Fee Schedule Rates In PA Higher Than Medicare Rates, Except For E&M

Procedure	2016 PA WC Fee Schedule, Part B		2016 CMS, Nonfacility Fee	
	Min.*	Max.*	Rest Of PA	Philadelphia
29881: Knee Arthroscopy	\$1,572	\$1,754	\$540	\$599
62311: Injection Steroid	\$337	\$388	\$214	\$243
72148: MRI Lumbar Spine	\$178	\$190	\$74	\$79
99213: Established Patient Office Visit	\$69	\$76	\$71	\$78
97110: Therapeutic Procedure	\$37	\$40	\$31	\$34
73030: X Ray Shoulder	\$21	\$23	\$9	\$10

* The PA WC fee schedule has 4 regions. The example shows the region with the min. and max. fee schedule rates across those four regions. CMS reports two regions for the physician fee schedule—metropolitan Philadelphia and the rest of PA.

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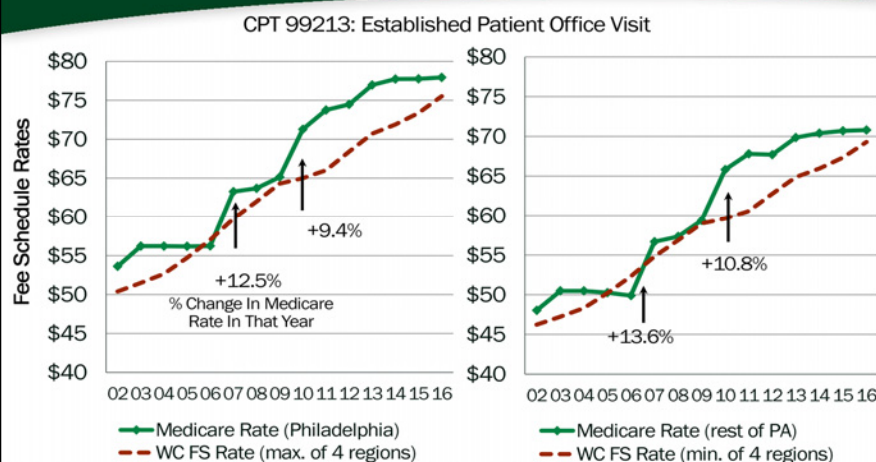
Key and definitions: **CMS:** Centers for Medicare & Medicaid Services. **CPT:** Current Procedural Terminology. **CPT 29881:** Arthroscopy, knee surgery, with meniscectomy, medial or lateral. **CPT 62311:** Injection, single (not via indwelling catheter), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid, lumbar, sacral (caudal). **CPT 72148:** MRI, spinal canal and contents, lumbar, without contrast material. **CPT 99213:** Established patient office visit, low-moderate severity, 15 minutes. **CPT 97110:** Therapeutic procedure, one or more areas, each 15 minutes, therapeutic exercises. **CPT 73030:** Radiologic exam, shoulder, complete, minimum of two views. **E&M:** Evaluation and management (office visits). **Max.:** Maximum. **Min.:** Minimum. **WC:** Workers' compensation.

This table compares workers' compensation fee schedule rates and Medicare rates in 2016 for commonly billed procedures in workers' compensation. Note that Medicare provides fees for two regions—Metropolitan Philadelphia and the rest of Pennsylvania. The workers' compensation fee schedule is based on four regions. For the purpose of this illustration, we show the regions with the lowest and the highest reimbursement amounts, thus providing the full range of maximum allowable fees.

For most procedures, workers' compensation fee schedule rates were higher than the Medicare rates in Pennsylvania. One exception was reimbursements for office visits, where the workers' compensation fee schedule was somewhat lower than Medicare in 2016. Note that Medicare rates in Pennsylvania for selected CPT codes were in the middle group of all Medicare fee schedule regions in the country.

The WCRI study *A New Benchmark for Workers' Compensation Fee Schedules: Prices Paid by Commercial Insurers?* compared the prices paid by WC payors and commercial insurers. The median price paid under WC in PA was 65 percent higher than the price paid under group health for common knee surgeries (CPT 29881). For frequent office visits (CPT 99213), the median price paid in WC was 7 percent lower in PA than in group health.

Price Relativities Between WC & Medicare In PA Changed: Medicare Increased Payments



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Key: **CPT:** Current Procedural Terminology. CPT codes are published by the American Medical Association. **CPT 99213:** Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three components: an expanded problem focused history; an expanded problem focused examination; medical decision making of low complexity. Usually, the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient. **FS:** Fee schedule. **Max.:** Maximum. **Min.:** Minimum. **SAWW:** Statewide average weekly wage. **WC:** Workers' compensation.

Note: 16 refers to calendar year 2016. Other years are denoted similarly.

These charts show the trend from 2002 to 2016 in the workers' compensation fee schedule in PA and Medicare for an established patient office visit (CPT 99213). PA has retained the fee schedule rates as of December 31, 1994, while updating amounts with the changes in the SAWW only. As a result, the price relativities between WC and Medicare in PA have changed.

Medicare significantly increased the reimbursement rates for various types of office visits. For example, between 2006 and 2007, Medicare increased the fees for established patient office visits by 12.5 percent in the Philadelphia region. Furthermore, between 2009 and 2010, rates were increased by 9.4 percent. In the rest of PA, Medicare reimbursements rose similarly: 13.6 percent in 2007 and 10.8 percent in 2010. As a result of the rapid growth in these two periods, Medicare rates in PA exceeded the maximum rates under the workers' compensation fee schedule. Since 2013, the gap between WC and Medicare rates has been narrowing. Note that actual prices paid to providers of office visits may deviate from FS rates due to network discounts or other price negotiations between providers and payors.

Workers' compensation rates in PA are adjusted annually with the changes in the SAWW. From 2002 to 2016, the SAWW increased 48 percent. The growth in Medicare rates for established patient office visits was also close to 48 percent.

PA Uses Separate Fee Schedules For Surgery In ASCs & Hospital Outpatient Departments

- Freestanding ASCs are paid fixed amount based on ASC payment groups
- Hospital outpatient facilities are paid based on provider's cost-to-charge ratio

Pennsylvania uses separate fee schedules to regulate payments for surgeries done in ASCs and surgeries done in hospital outpatient facilities. Facility payments for surgery done in ASCs are based on ASC payment groups, including the Medicare list of covered services and related classifications in these groups.

Facility payments for hospital outpatient surgery are mainly based on a cost-to-charge ratio, which is hospital specific. The result of this has been that facility payments for common knee surgery done in ASCs were lower than payments for the same type of surgery done in hospital outpatient facilities. After January 1, 1995, payments to providers of surgery in ASCs and cost-reimbursed providers not subject to the Medicare fee schedule had been frozen at December 31, 1994, allowances and then updated annually by the percentage change in the SAWW.

PA cost-reimbursed providers not subject to the Medicare fee schedule are defined in §127.117. In order to calculate the RCC, the PA WC Bureau used information from providers' detailed charge masters by procedure/service codes, then applied Medicare revenue codes with rates effective as of September 1, 1994. The Bureau calculated RCCs from the most recently audited Medicare cost report in effect as of December 31, 1994. When cost-reimbursed providers add new services with previously reported Medicare revenue codes, the fee schedule rate is based on the charge associated with the new code multiplied by the frozen RCC. Trauma centers and burn facilities are paid based on 100 percent of the usual and customary charges (§127.128).

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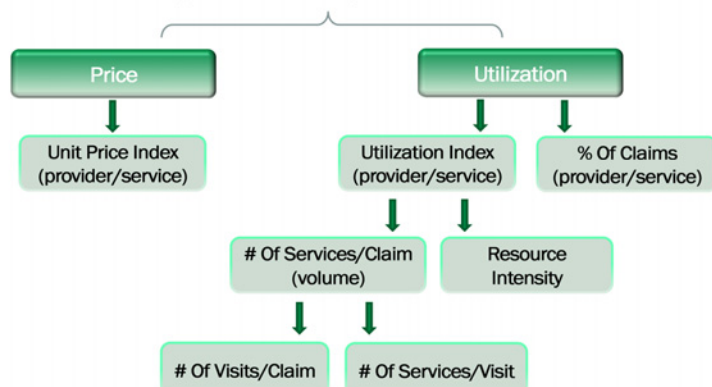
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Key and definition: **ASC:** Ambulatory surgery center. **Charge master:** A provider's listing of current charges for procedures and supplies utilized in the provider's billing process. **RCC:** Ratio of costs to charges. **SAWW:** Statewide average weekly wage. **WC:** Workers' compensation.

Average Medical Payment Per Claim: A Function Of Price And Utilization

Average Medical Payment Per Claim



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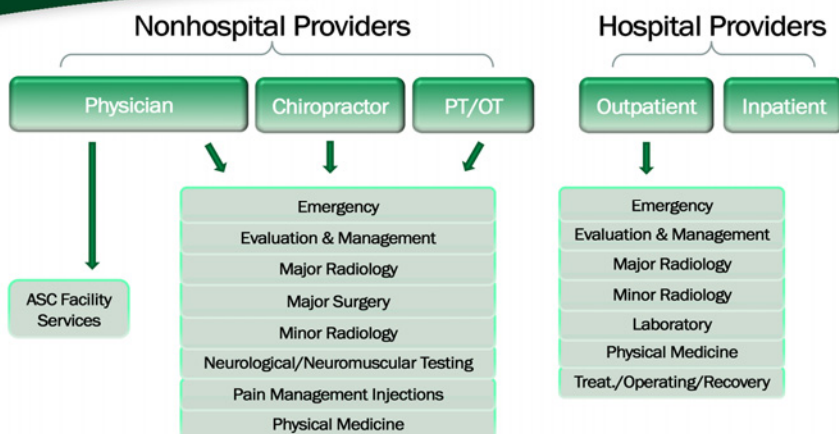
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This diagram shows the analytic framework for cost and utilization comparisons. The average medical payment per claim is the sum of medical payments made for each claim that involves at least one medical service divided by the number of claims with at least one medical service. The medical payment per claim is a function of the prices paid for services multiplied by the number of services per claim. Prices are measured using a price index that holds utilization constant, rather than a simple measure of the total payments divided by the number of services. Utilization is also measured as an index and is a function of the number of services per claim as well as the resource intensity of the services provided. Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by relative value units (RVUs), and the unweighted volume of services (services per claim).

See the "Data and Methods" section entitled "Analytic Framework" and the Technical Appendix, Section 1, "Conceptual Framework" for further details.

Reporting Of Major Types Of Medical Providers And Services



In the CompScope™ studies, all medical services are grouped by provider type and by service type. Nonhospital providers include mainly physicians, chiropractors, and physical or occupational therapists. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital). We classify all services provided by nonhospital or hospital outpatient providers into service groups. The major types of services are shown on the diagram. See the [Technical Appendix](#) for more details.

The medical payments used in the CompScope™ studies are based on the payment transactions recorded in payors' data systems. As a result, the data reflect the entity that bills for the services provided. The *billing provider* is the medical professional or entity that bills for the services rendered. In some cases, the billing provider and rendering provider are the same. In some cases, the billing provider may have multiple rendering providers.

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Key: ASC: Ambulatory surgery center. PT/OT: Physical/occupational therapist. **Treat./Operating/Recovery:** Treatment/operating/recovery room services.

Definitions: **ASC facility payments:** Include payments to ambulatory surgery centers for both treatment/operating/recovery room services and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information. **Hospital inpatient payments:** Payments made to a hospital for all services related to an inpatient stay. Payments made for professional services are not included if billed separately. **Hospital outpatient payments:** Payments made to the hospital for services that are delivered outside of an inpatient stay. **Hospital providers:** Trauma centers, inpatient, and outpatient treatment facilities. **Nonhospital providers:** Include physicians, chiropractors, physical/occupational therapists, nurses, clinical social workers, and other ancillary practitioners. ASCs are included in the physician category (unless the billing is done through a hospital). See the [Technical Appendix](#) for more details.

Data And Methods In This Study

- Data reasonably representative of state experience
 - 47% of PA indemnity claims; 40–70% across all 18 states
- Meaningful interstate comparisons
 - Definitions harmonized across states and data sources
 - Adjusted for differences in injury/industry mix
 - Adjusted for differences in waiting periods (claims with > 7 days of lost time)
- Trends shown are unadjusted numbers
- Analysis focuses on cases with different maturities (12, 24, and 36 months of experience) to capture phenomena that occur earlier and later in a claim
- See the [Technical Appendix](#) for more detail

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Scope Of CompScope™ Multistate Benchmarks

CompScope™ Medical

- Medical costs
- Medical prices
- Utilization of services
- By provider type
- By service type

CompScope™

- Benefit amounts
- Timeliness
- Medical costs
- Disability duration
- Defense attorney involvement
- Vocational rehabilitation use
- Benefit delivery expenses

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Definitions: **Medical costs:** Average medical payments per claim overall, by provider type, and by service type. **Medical prices:** Actual prices paid (reflects negotiated discounts). **Provider type:** Physician, chiropractor, physical or occupational therapist, hospital, and other. **Service type:** Ten major service categories, such as evaluation and management, radiology, and physical medicine. **Utilization:** (1) Percentage of claims with a specific provider type or service type; (2) utilization per claim is the composite of the number of visits per claim, number of services per visit, and the resource intensity of services provided.

Other WCRI Studies Of Interest For Pennsylvania

- [CompScope™ Benchmarks for Pennsylvania, 17th Edition \(2017\)](#)
- [Comparing Outcomes for Injured Workers in Pennsylvania \(2016\)](#)
- [Payments to Ambulatory Surgery Centers, 2nd Edition \(2016\)](#)
- [Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments, 2nd Edition \(2016\)](#)
- [Longer-Term Dispensing of Opioids, 4th Edition \(2017\)](#)
- [Interstate Variations in Use of Opioids, 4th Edition \(2017\)](#)
- [A Multistate Perspective on Physician Dispensing, 2011–2014 \(2017\)](#)
- [WCRI Medical Price Index, 9th Edition \(2017\)](#)
- [Designing WC Medical Fee Schedules, 2016 \(2016\)](#)
- [Hospital Outpatient Payment Index, 6th Edition \(2017\)](#)
- [Workers' Compensation MCC: National Inventory, 2015 \(2015\)](#)
- [A New Benchmark for WC Fee Schedules: Prices Paid by Commercial Insurers? \(2013\)](#)
- [Comparing WC and Group Health Hospital Outpatient Payments \(2013\)](#)

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DATA AND METHODS

This section contains a short summary of data and methods used in this report. More detail can be found in the [Technical Appendix](#). This analysis uses data from 24 data sources, including a broad array of national and regional insurers, claims administration organizations, state funds, and self-insured employers. The data are collected in the Detailed Benchmark/Evaluation (DBE) database, which presently includes about 7.5 million claims that are reasonably representative of the entire system in each of the 18 states, including all market segments: self-insurance, residual market, voluntary insurance, and state funds. These data include 47 percent of Pennsylvania indemnity claims in 2015/2016 (40 to 70 percent of the claims from each state). Note that 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, with experience through March 31, 2016—an average of 12 months' maturity.

We used a variety of techniques to increase the comparability of the measures from state to state, including (1) standardizing definitions of variables that state regulators might have defined differently from state to state, (2) standardizing the reporting on cases with more than seven days of lost time to control for differences in state waiting periods for income benefits, and (3) adjusting for interstate differences in injury and industry mix. The interstate differences in the performance measures presented in this report, therefore, should largely reflect variations in system features and in the practices and behavior of system participants across states.

DATA LIMITATIONS

Some limitations remain in the data, and we highlight the major ones here. The data come from the medical bill review systems of data contributors. Not all claims contain complete bill review information, and claims with a substantial amount of missing bills were excluded from the analysis. The remaining claims were screened for bias, and data from entire data sources were dropped from specific metrics if the data were biased on that measure.

To assess the representativeness of the large samples used in the analysis for each state, we compared the cost measures from the samples with the cost measures reported by rating bureaus in each state. We also compared selected metrics with measures reported by the National Academy of Social Insurance (NASI). Because some data sources were dropped due to specific bias in certain medical price or utilization metrics, we also validated the cost measures that resulted after such adjustments in the samples.

In Pennsylvania, the claims with complete bill review data made up 37 percent of the claims in the state for nonhospital metrics and 28 percent of claims for hospital metrics. However, we found that those claims are a good representation of the entire group of claims in Pennsylvania.

The services used in the price and utilization index values generally account for 80 percent of payments overall. For a few important services, the data do not allow us to break the payments into price and utilization metrics because the units of services are not consistently reported or the group of services is inherently heterogeneous. Where we encountered this data problem, we report the average payment per visit instead of separating out price and utilization. The most important such services are anesthesia, supplies and equipment, special reports, miscellaneous other, and unknown services.

IS THE MEDIAN COMPSCOPE™ MEDICAL BENCHMARKS STATE TYPICAL OF ALL STATES IN THE NATION?

This CompScope™ Medical Benchmarks report frequently compares the value for the state being analyzed with the median, or *typical*, state in the study. For the report to be most useful, it must meet two conditions. First, the states included should span the full range of states that have higher, lower, and medium average medical costs per claim. Second, the cost measures in the median report state should be similar to those in the median state nationwide.

We chose the 18 states included in the study in part because they are geographically diverse. Together they represent over 60 percent of total workers' compensation benefits paid nationally, a significant share of the U.S. population, a wide range of industries, and a variety of benefit structures and other system features. Further, the 18 states represent the full range of states nationally, according to costs per claim. WCRI found that the average developed incurred medical cost per claim in the median of the CompScope™ states was very similar to the national median—0.3 percent lower than the median of all states reported by the National Council on Compensation Insurance, Inc. (NCCI) in its *Annual Statistical Bulletin* (2014–2016, Exhibit XI). As a result, when this benchmarking report presents comparisons between the average medical cost per claim and the median of the CompScope™ states, they are substantially similar to comparisons with the national median.

STATES WITH AND WITHOUT WORKERS' COMPENSATION MEDICAL FEE SCHEDULES

As of the period covered by this report (through March 2016), 43 states nationally and the District of Columbia had medical provider (nonfacility) fee schedules in place. Separate studies may directly analyze the impact of a fee schedule on various workers' compensation measures. In this edition of the CompScope™ Medical Benchmarks study, which covers medical services delivered through the first quarter of 2016, 5 of the 18 states did not have traditional provider fee schedules—a higher proportion of states than is found nationally.¹ Of the 13 states with fee schedules as of March 2016, 5 states (Georgia, Illinois, Kentucky, Minnesota, and Texas) set fees higher than the median of all fee schedules, 2 states (Arkansas and North Carolina) set fees that were fairly close to the median, and the rest (California, Florida, Louisiana, Massachusetts, Michigan, and Pennsylvania) set fees lower than the median of all fee schedules.²

[Table 7](#) shows the workers' compensation fee schedule as a percentage above the state Medicare fee schedule (premium over Medicare) for the states with fee schedules as of March 2016 (Fomenko and Liu, 2016). States included in this study are highlighted in bold. As of March 2016, 13 of the study states had workers' compensation fee schedules, ranging from 2 percent below Medicare in Florida and Massachusetts to 76 percent above Medicare in Georgia. In California, the fee schedule was 21 percent above Medicare. In Michigan, the fee schedule was 34 percent above Medicare, and the fee schedule was 37 percent above

¹ One of those five, Wisconsin, uses a database of charges. Indiana, Iowa, New Jersey, and Virginia are the other states without nonfacility fee schedules.

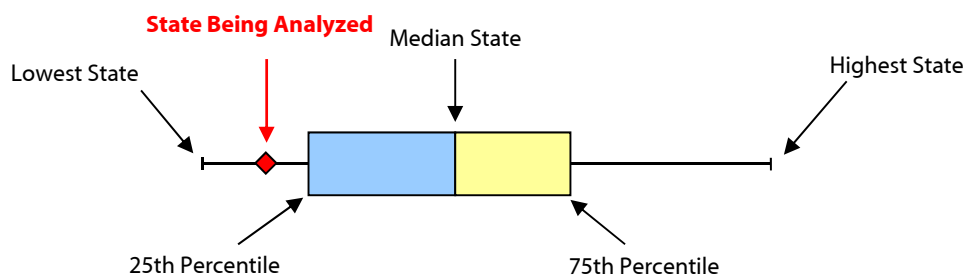
² Note that the median of overall fee schedule rates is based on 42 states with fee schedules and the District of Columbia. Rhode Island has different billing codes for physical medicine that we are unable to crosswalk to commonly used Current Procedural Terminology (CPT®) codes. Therefore, an overall rate is not established for Rhode Island, as physical medicine is the largest component of the marketbasket and excluding it significantly biases the results. For more detail, see [Table 7](#) and the technical appendix in Fomenko and Liu (2016).

Medicare in Pennsylvania. In Louisiana, the fee schedule was 42 percent above Medicare, and the fee schedule was 49 percent above Medicare in Arkansas. In North Carolina, the fee schedule was 52 percent above Medicare. In Kentucky, Texas, and Minnesota, the fee schedules ranged from 64 to 67 percent above Medicare. The Illinois fee schedule was 74 percent above Medicare.³ In all the states in Table 7, including the 13 CompScope™ Medical Benchmarks study states with fee schedules, the premiums over Medicare varied significantly across service categories. Twelve states—California, Hawaii, Maine, Maryland, Michigan, Montana, North Dakota, South Carolina, Texas, Utah, Washington, and West Virginia—and the District of Columbia set rates that resulted in similar premiums over Medicare for each of the service groups.

READING BOX PLOTS

This document uses a powerful presentation tool called a box plot. Although it might initially look complicated, the box plot is relatively easy to read and very informative. The box plots divide the data into quartiles, or fourths. This section explains how to read a box plot. A box plot presents a large amount of comparative information and allows the reader to see relationships among measures when several box plots appear on a page. The diagram below shows the six pieces of information contained in a box plot. The *whisker*—the horizontal line extending from the left and right sides of the box—shows the full range of values (for example, average total cost per claim) in the 18 study states, from the lowest state on the left to the highest state on the right. The vertical line inside the box represents the 18-state median (between the 9th and 10th state); in other words, an equal number of study states (9) appear above and below that value. The left edge of the box represents the 25th percentile (the 5th state). The right edge of the box represents the 75th percentile (the 14th state). The 4 states whose values are the lowest among the 18 states are on the left end of the whisker (the line extending from the left edge of the box). The 4 states whose values are in the second-lowest group are between the median and the left edge of the box. Similarly, the 4 states whose values are the highest among the 18 states are on the right end of the whisker (the line extending from the right edge of the box). The 4 states that are in the second-highest group are between the median and the right edge of the box. The diamond, representing the value for the state being analyzed, shows where that state lies relative to other states in the study.

Understanding a Box Plot

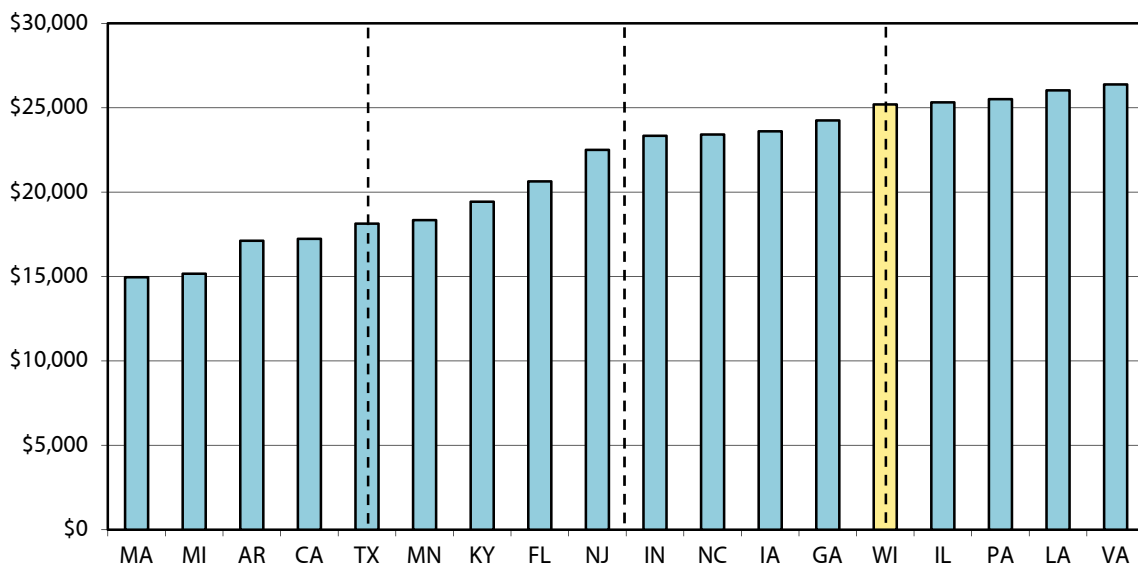


³ In Illinois, fee schedule revisions effective for services delivered on or after September 1, 2011, reduced reimbursement by 30 percent and (effective January 1, 2012) reduced the number of geozip areas from 29 to 4 for nonhospital providers and to 14 for hospital providers.

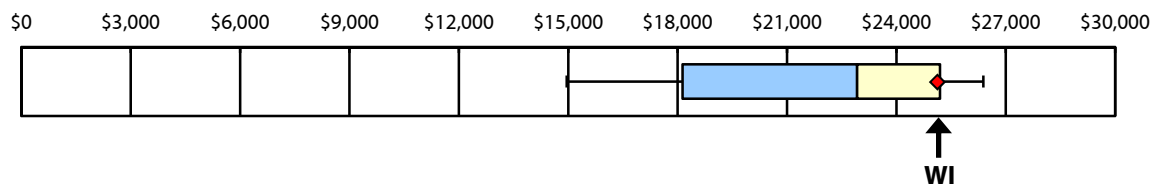
Some readers may find it useful to see how information in a typical bar chart is translated into a box plot. The bar chart below shows the average benefit payment per claim with more than seven days of lost time. The dotted vertical lines appearing from left to right represent the 25th percentile, the median, and the 75th percentile, respectively. The box plot underneath the bar chart illustrates the same information as the bar chart does, presented as it would appear for a report focusing on Wisconsin. Notice the following:

- The lowest state, Massachusetts, is at the left end of the whisker.
- The highest state, Virginia, is at the right end of the whisker.
- The median falls between New Jersey and Indiana.
- The state at the 25th percentile is Texas.
- The state at the 75th percentile is Wisconsin.
- The diamond is Wisconsin, which is at the 75th percentile.

Average Benefit Payment per Claim with More Than 7 Days of Lost Time, 2015/2016



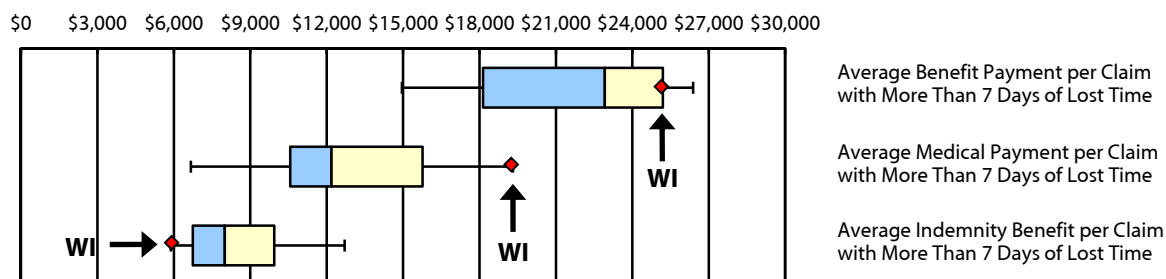
Average Benefit Payment per Claim with More Than 7 Days of Lost Time, 2015/2016



Box plots are particularly useful in showing relationships among various performance measures. The set of box plots on the next page, for example, shows that Wisconsin is at the 75th percentile and among the highest of the 18 states for the average paid benefit per claim with more than seven days of lost time (the top box plot). We also see that this result occurs because underlying measures counterbalance each other. Wisconsin had an average paid medical benefit per claim with more than seven days of lost time that was the highest of the

18 study states (the middle box plot). However, the average indemnity benefit per claim with more than seven days of lost time in Wisconsin was the lowest of the 18 states (the bottom box plot).

Multiple Box Plots Help to Show Relationships among Measures



Box plots also show clearly how much variability there is across states—the longer the whisker or the box associated with a given measure, the greater the variability for that measure. A state that is a marked outlier (positioned at or close to the end of a long whisker) on a performance measure for which there is otherwise little variability (i.e., showing a narrow box and a short opposite whisker) may be especially noteworthy.

[Figure 1](#) depicts the overall structure and format of the information provided in this report. The measures in the figure are further broken down by provider type, including hospital and nonhospital providers, and by major service group. A detailed list of the service groups can be found in the [Technical Appendix](#). The utilization of medical services per claim shown in Figure 1 is broken down into the components of volume of services billed and resource intensity. Likewise, the figure shows the volume of services as measured by the number of visits per claim and services per visit. Another component of utilization, the percentage of involvement of a given provider and/or service, is shown separately.

Interstate comparisons of prices paid and price trends are based on comparisons of specific service prices paid across states and over time rather than comparisons of average prices paid within service or provider groups. These measures are accurate depictions of price trends and level comparisons that are unaffected by differences in service mix. The prices paid for nonhospital services are quite precise because they are based on individual Current Procedural Terminology (CPT®)⁴ code payments. Price comparisons for hospital outpatient services, however, are less precise because they use coding structures that are more broadly defined. For example, a hospital outpatient physical medicine service may be one modality or procedure, or a set of modalities or procedures, so we report an average payment per service for hospital outpatient services.

We also report the percentages of claims that involve specific providers and/or services. This is one distinct measure of utilization. However, the utilization index is an index of *utilization per claim*. It is composed of both the volume of services billed per claim and the resource intensity of those services. We therefore assign weights to services based on the relative resources associated with delivering those services. The benchmark comparisons of both price and utilization are defined as indices in which the median state is 100. An index of 120 means that the state's utilization or prices paid are 20 percent higher than the median state, and an index of 80 means the state's utilization or prices paid are 20 percent lower than the median

⁴ CPT® is a registered trademark of the American Medical Association.

state.

We have categorized hospital services as either inpatient or outpatient. We conducted detailed analyses of payments per service and services per claim for outpatient hospital services. For inpatient services, we measured payments per inpatient episode. Further information on the methods we used to create these measures is provided in the [Technical Appendix](#).

TERMS WE USE TO DESCRIBE PERFORMANCE

In characterizing an individual state's performance with respect to the median of the study states, we often use the terms *higher*, *lower*, and *typical of or close to*. *Higher* means more than 10 percent above the median of the 18 states, *lower* means more than 10 percent below the median of the 18 states, and *typical of or close to* means within 10 percent above or below the median of the 18 states.

When describing trends, or how the performance in a state has changed over time, we typically report annual average changes—percentage changes for cost measures and percentage point changes for other measures that are themselves expressed as percentages, such as chiropractic claims as a percentage of claims with more than seven days of lost time. To avoid unnecessarily subjective characterizations, we use consistent criteria for selecting adjectives that describe growth trends. [Table 1](#) shows the categories and terms we use throughout the study. We recognize that the criteria and terms we use reflect judgement. However, we believe that it is important to use a consistent approach, and adhering to a disclosed framework helps us to accomplish that.

NAMING CONVENTION FOR ANALYSIS SETS OF CLAIMS

We applied a naming convention for pairs of accident years and evaluation dates to uniquely describe the set of claims used in our analysis. The first year is the year in which the injury occurred, and the second year is the maturity of the claim. For example, 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, with experience through March 31, 2016—an average of 12 months' maturity. We denote other injury year/evaluations similarly. The injury year for the CompScope™ benchmarking reports includes claims from the fourth quarter of the prior year and the first, second, and third quarters of the named injury year. For example, injury year 2015 includes claims arising from October 1, 2014, through September 30, 2015.

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INFORMATION FOR FIRST-TIME USERS

This section is intended to provide detail about the key benchmarks we analyze, the data we use and adjustments we make, and some presentational issues for new CompScope™ Medical Benchmarks users. This background information should help those who have not used the study before to better understand the objectives and scope of the report, what it contains and why, how the measures are constructed, and how the information this study contains can be used.

THE COMPSCOPE™ MEDICAL BENCHMARKS

Benchmarks of system performance can be powerful tools for public officials and system stakeholders working to maintain and/or improve their systems, because the tools can be used to monitor the effects of legislative, regulatory, judicial, and behavioral changes. We present various measures in several areas:

- Average medical payments per claim and by provider type and service category
- Medical prices paid
- Utilization of services and the components—visits per claim, services per visit, and resource intensity of services provided

These measures offer policymakers and stakeholders a comprehensive look at key aspects of medical costs in the workers' compensation system on a consistent and regular basis.

The unit of analysis in the CompScope™ benchmarking series is the individual workers' compensation claim, so most results are reported on a per claim basis. Costs per claim are a function of the overall costs divided by the number of claims. Therefore, claim frequency does not directly factor into the measures we report. As reported by rating bureaus, however, claim frequency in many states has been steadily declining for well over a decade. At the same time, injury severity appears to have increased, as indicated by a steady rise in the average cost per claim in many study states. In some states, insurance rates have declined while the average cost per claim has been growing. Generally this results from the fact that total workers' compensation system dollars are lower because of the decline in the number of claims, but the average cost per claim is increasing. The insurance premium rates factor in the decline in frequency.

The results of the key performance measures are provided for several claims bases. These include all claims, claims with more than seven days of lost time, and claims with specific types of services (e.g., physical medicine). Each measure may be useful for addressing different questions. For example, the broadest measure—the average total medical cost per all paid claims (total medical costs per claim)—is the composite of all of the underlying cost components and offers an overall characterization of a state's medical costs as higher than, lower than, or typical of the study states as a group. However, we focus much of our analysis on claims with more than seven days of lost time for several reasons. Using a subset of claims with more than seven days of lost time offers more appropriate and meaningful interstate comparisons because it adjusts for the cost impact of different waiting periods for income benefits across states. Also, these claims account for the great majority of system costs and are the focus of much of the public policy debate.

DATA USED IN THIS REPORT

We chose the states included in the study for a variety of reasons, including (1) representation of higher, lower, and medium costs per claim; (2) larger-than-average populations; (3) diverse benefit structures and other system features; (4) availability of funding sources within each state; and (5) geographic diversity. The states included in the study represent more than 60 percent of all workers' compensation benefits paid nationwide.

The sample data for this 18th edition include about 7.5 million claims from the systems of 24 data sources (national and regional insurance companies, claims administration organizations, and state funds) in the 18 study states. Along with information on the injured worker and claim characteristics, we received information on all payment transactions for each claim, including the amount paid, date paid, period covered, what the payment was for, and to whom the payment was made (for example, the worker or a medical provider). The data were provided to us under an agreement which limits WCRI use of the data to specified research purposes. The data remain the property of the data provider. We employed a variety of safeguards to maintain the security and confidentiality of the data, including encrypting all worker- and employer-identifying information.

The sample data include claims from all market segments in each state, including the voluntary market, residual market, self-insurers, and state funds (where applicable). To insure that the sample data are representative of the full insurance market, we weighted our sample claims to represent the population proportions of the insurance market segments in each state. The state datasets contain substantial portions of the claims in the population of all study states and are large enough to support detailed analysis. For example, for 2014, the [database contains 40 to 70 percent of the indemnity claims in each state](#), 27 to 60 percent in the medical dataset.

Given that workers' compensation claims typically change in terms of costs and/or characteristics, or *develop* over several years, the CompScope™ benchmarks provide snapshots of system performance at various points in time to address the trade-off between timely information and complete information. Generally, the multistate comparisons for medical costs focus on claims at an average 12 months of experience. But for hospital inpatient payments and surgery, we show claims at an average 24 months of experience because this provides a more meaningful comparison. For most measures, we show trends for claims at an average 12 months of experience to show the results for the most recent year. The injury year for the CompScope™ benchmarks includes claims from the fourth quarter of the prior year and the first, second, and third quarters of the named injury year. For example, injury year 2015 includes claims arising from October 1, 2014, through September 30, 2015.

COMPARABILITY OF COMPSCOPE™ BENCHMARKING MEASURES

We use a number of adjustments to make the medical data meaningful for interstate comparisons. Our goal is to create a similar set of claims for analysis to reduce the differences across states that have affected some interstate comparisons. To do that, we standardized the data using common terms to classify them, created a subset of claims with more than seven days of lost time, and controlled for injury and industry mix. Those adjustments yield performance measures that are much more likely to reflect differences across states in system design or implementation, or differences in the behavior of system participants—those elements that must change in order to effect change in the performance results we observe. More detailed discussion of each

of these adjustments summarized below can be found in the [Technical Appendix](#), along with estimations of the effects of the various adjustments.

To ensure valid comparisons across states and over time, we constructed variables that, to the fullest extent possible, reflect definitions common to the data sources and across states. To accomplish this, we mapped definitions from data sources or states to a set of standard definitions for payment transactions, injury groups, and industry categories.

Differences in the waiting period for indemnity benefits across states directly affect the ratio of medical-only to indemnity claims and measures of claim frequency, and thus affect the comparability of the measures. Waiting periods in the 18 states we studied vary from three days to five days to seven days. To increase the validity of the interstate comparisons, we focused much of our analysis on the subset of claims with more than seven days of lost time.

We enhanced the comparability of the performance measures for interstate comparisons by applying adjustments to control for the state differences in injury and industry mix—also referred to as case-mix adjustment. Workers in certain industries are at a greater or lesser risk of injuries, and those injuries are more or less likely to be severe. Based on our classifications of 12 injury groups and 7 industry categories, we adjusted the sample of claims in each state so that the claim distribution across injury and industry categories looks the same across the states. To accomplish this, we (1) determined the distribution of claims by injury and industry category for the pooled sample of all 18 states and for the sample claims in each state, (2) compared the sample distribution in each state with the pooled state distribution and calculated a unique set of injury and industry weights for each state, and (3) used those weights to adjust the sample claims in each state in calculating the performance measures so that the measures reflect a constant injury and industry mix across the states.

OTHER DEFINITIONAL/PRESENTATIONAL ISSUES

We often compare an individual state's performance with that of the median of the study states. We use the median of the 18 states rather than the mean (average) because it offers a comparison in which 50 percent of the states are always equal to or higher than the median and 50 percent of the states are always equal to or lower than the median. The mean is more sensitive to extreme high or low values than is the median.

Lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. To achieve consistency in the treatment of lump-sum payments among the data sources and to develop measures that are comparable across states, we grouped the lump-sum medical payments with other lump-sum payments, reporting them in total as indemnity payments. The current requirements of Medicare Set-Aside Arrangements might suggest that companies are, or will become, increasingly able to extract the medical component of settlements. We will continue to monitor any changes in data reporting that allow us to modify our current approach in constructing the lump-sum settlement measure.

The trends we report are based on data weighted to represent the full insurance market in the state. However, we did not adjust the trends for the interstate differences in injury and industry mix. The unadjusted numbers used in the trend analysis provide the most relevant information on how the system performance changed in each state over time. We do recognize, however, that many study states have experienced considerable changes in injury and industry mix over time. We factored these into our trend analysis whenever we believed the effect of these changes in the external factors could be a significant part of

the trends.

Further, we have not adjusted the trends for changes in wages. Some researchers use a wage growth approach or a general index approach to control for inflation. However, because we focus more narrowly on workers' compensation medical costs and services, we have taken a different approach. Our medical price index reflects the change in prices paid for a marketbasket of nonhospital services specific to workers' compensation and reflects inflation to some extent. These nonhospital services are provided in the majority of cases and typically represent at least half of the overall medical dollars. When we observed little change in prices paid, we factored that into any discussion of a change in medical payments per claim.

The trend figures in the report show the cumulative change in the levels for each year (relative to the base year), rather than showing the actual levels for a measure. For the state which is the focus of a report, we connect the change points for each year with a line. The downward or upward lines show declines or acceleration in growth relative to the base year. A change point below zero on the vertical axis indicates a decrease. Similarly, a change point above zero means an increase. The tables accompanying each trend figure also show the year-to-year percentage change, in addition to the cumulative change for the measure.

MEDICAL COST CONTAINMENT STRATEGIES IN 2017

One factor that can influence medical payments per claim is the regulated use of various tools to help control medical costs, such as choice of provider, medical fee schedules, utilization review, and treatment guidelines. [Tables 5](#) and [6](#) summarize the medical cost containment strategies in place in each state in 2017. In Pennsylvania, for example, the employer can direct the choice of medical provider for the first 90 days by posting a list of six or more designated health care providers. The worker can choose the provider if no panel is posted or the needed specialty is not on the list. The worker can change providers without restriction after 90 days (if a panel is posted) or at any time (if no panel is posted). Medical prices, including pharmacy, are regulated. Utilization review is mandated only for coordinated care organizations. Treatment guidelines have not been adopted.

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QUICK REFERENCE GUIDE TO FIGURES AND TABLES

PART 1: INTERSTATE COMPARISONS

PART 2: INTRASTATE TRENDS

PART 1: INTERSTATE COMPARISONS

(FIGURES ARE FOR CLAIMS WITH 12 MONTHS OF MATURITY; FIGURES FOR CLAIMS WITH 24 OR 36 MONTHS OF MATURITY ARE NOTED)

Measures	Overall	Nonhospital Providers (physicians, chiropractors and PT/OTs)			Hospital Providers		
		Overall	By Provider Type	By Service Group	Overall	Hospital Outpatient Services	
						Overall	By Service Group
Average medical payment per claim	Figure 2 Figure 3 (36 mos.)	Figure 4	Figure 5	Figure 9	Figure 4 Figure 17	Figure 17 Figure 18	Figure 18 Figure 17
Percentage of claims		Figure 4	Figure 5	Figure 10	Figure 4	Figure 17	Figure 19 Figure 17
Percentage of medical payments		Figure 4	Figure 5	Figure 11	Figure 4		Figure 20
Average price/payment per service		Figure 6	Figure 6	Figure 12		Figure 21	Figure 22
Utilization/services per claim		Figure 6	Figure 6	Figure 13		Figure 21	Figure 23
Visits per claim		Figure 7	Figure 7	Figure 14			Figure 24
Services per visit		Figure 7	Figure 7	Figure 15			Figure 25
Resource intensity		Figure 7	Figure 7	Figure 16			
Payments for network care	Figure 29	Figure 29	Figure 29		Figure 29		

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Average Total Medical Payment per Episode for Surgical Low Back Cases with Disc Conditions	Figure 28 (24 months)
Criteria for Characterizations of Performance Used in This Report	Table 1
Comparing Pennsylvania with Other States: Selected Performance Measures, 2015/2016 Claims with More Than 7 Days of Lost Time	Table 2
Percentage of Overall Medical Payments by Provider and Service Type for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)	Table 4
Summary of Medical Cost Containment Strategies, 2017	Table 5
Medical Cost Containment Strategies in Use as of January 1, 2017	Table 6
Workers' Compensation Premiums over Medicare by Service Group, March 2016	Table 7
Percentage of Services and Average Prices for New and Established Patient Office Visit CPT Codes in All States, Calendar Year 2015	Table 8
Average Payment per Claim and Other Metrics for Physical Medicine by All Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)	Table 9
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Selected Measures for ASC Facility Payments for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)	Table 11
Selected Measures for Prescription Payments for Claims with More Than 7 Days of Lost Time, 2014/2016 (24 months)	Table 14

continued

Average Medical Payment per Claim with More Than 7 Days of Lost Time at 12, 36, and 60 Months' Maturity	Table 16
Percentage of Claims by Type of Provider and Type of Service for Claims with More Than 7 Days of Lost Time, 2015/2016	Table 17
Selected Measures for Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016	Table 18
Average Medical Payment Per Claim to Physicians for Claims with More Than 7 Days of Lost Time, 2015/2016	Table 19
Percentage Change from 2010 to 2015 in Selected Measures for Major Surgery for Claims with More Than 7 Days of Lost Time and 12 and 36 Months of Experience	Table 20
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Selected Measures for ASC Facility Payments for Claims with More Than 7 Days of Lost Time, 2015/2016	Table 22
Selected Measures for Physical Medicine by Type of Provider, Claims with More Than 7 Days of Lost Time, 2015/2016	Table 23
Selected Measures for Physical Medicine for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2015/2016 and 2013/2016	Table 24

PART 2: INTRASTATE TRENDS

Measures	All Providers, All Services	Nonhospital Providers (physicians, chiropractors and PT/OTs)	Hospital Providers		
			Overall	Outpatient	Inpatient
Average medical payment per claim, all paid claims	Figure 30				
Claims with more than 7 days of lost time					
Average medical payment per claim, percentage of claims, and percentage of payments	Figure 31	Figure 32	Figure 33	Figure 73	Figure 72
Prices/payments per service		Figure 34		Figure 73	
Utilization/services per claim and components		Figure 35		Figure 73	
Average medical payment per claim, prices, utilization, and components, by provider type					
Physician		Figures 36–41			
Chiropractor		Figures 42–47			
Physical/occupational therapist		Figures 48–53			
Average medical payment per claim, prices/payments per service, utilization/services per claim, and components, by service group					
Evaluation and management		Figures 54–56		Figure 79	
Major radiology		Figures 57–59		Figure 75	
Minor radiology		Figures 60–62		Figure 76	
Pain management injections		Figures 63–65			
Physical medicine		Figures 66–68		Figure 78	
Major surgery		Figures 69–71			
Treatment/operating/recovery room				Figure 74	
Laboratory/pathology				Figure 77	
Emergency				Figure 80	
Payments for network care	Figure 81	Figure 81	Figure 81		

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Trend of Selected Measures for ASC Facility Payments for Claims with More Than 7 Days of Lost Time (12 months) [Table 12](#)

Annual Percentage Change of Neurological/Neuromuscular Testing Average Payment per Claim and Other Selected Measures for Claims with More Than 7 Days of Lost Time (12 months) [Table 13](#)

Trend of Selected Measures for Prescription Payments for Claims with More Than 7 Days of Lost Time (at 24 months of experience) [Table 15](#)

Annual Average Percentage Change from 2010/2011 to 2015/2016 in Prices, Utilization, and Medical Payments for Nonhospital and Hospital Services, Claims With More Than 7 Days of Lost Time at 12 Months of Experience [Table 25](#)

Percentage Change from 2010 to 2015 in Selected Measures for Major Surgery for Claims with More Than 7 Days of Lost Time and 12 and 36 Months of Experience [Table 26](#)

Percentage Change from 2010/2011 to 2015/2016 in Selected Measures for Facility Services (ASC and hospital outpatient) for Claims with More Than 7 Days of Lost Time and 12 Months of Experience [Table 27](#)

Percentage Change from 2010 to 2015 in Selected Measures for Hospital Inpatient Services for Claims with More Than 7 Days of Lost Time and 12 and 36 Months of Experience [Table 28](#)

Notes: The number of states included in the calculation of the median state can vary for different measures due to exclusion of the data for some states. Data for certain states can be excluded if the data are not sufficiently representative of a state's trends or cannot support an interstate comparison, or if the underlying data show extreme volatility for a specific measure, among other reasons. The footnotes for each table provide details regarding the calculation of the median state for a specific measure.

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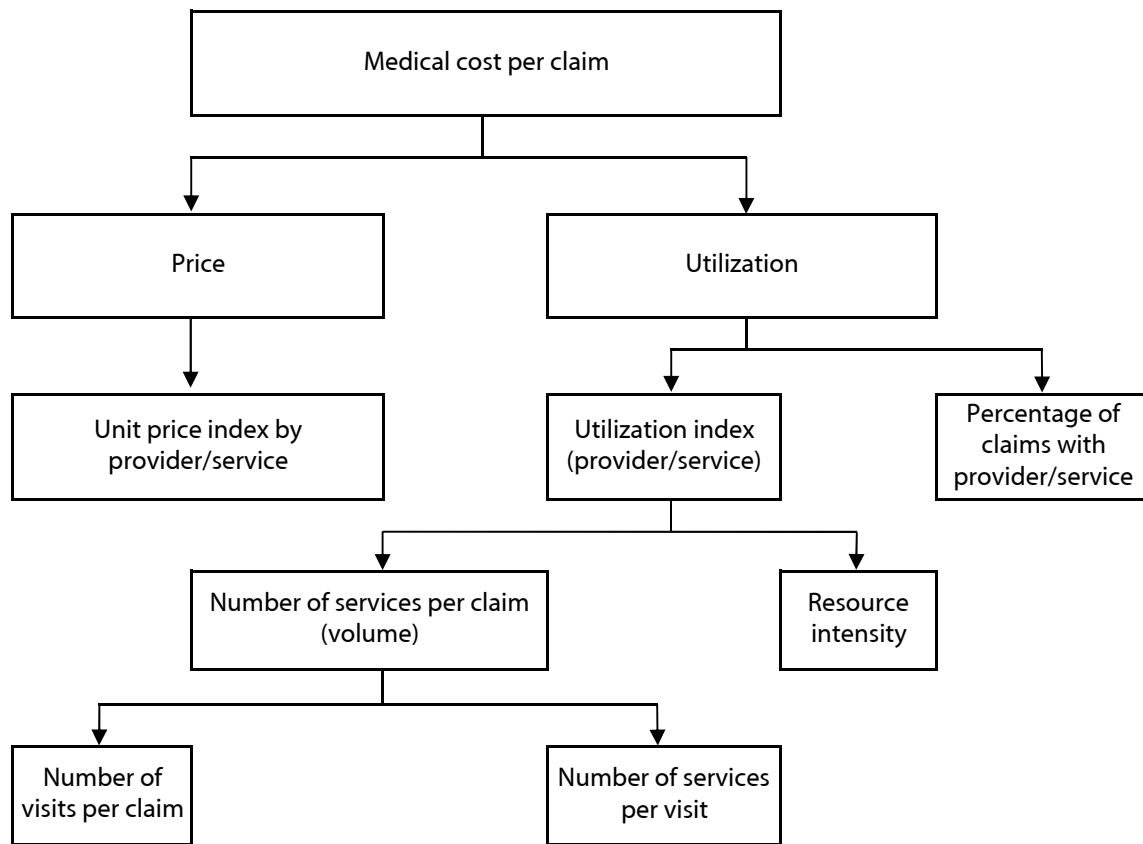
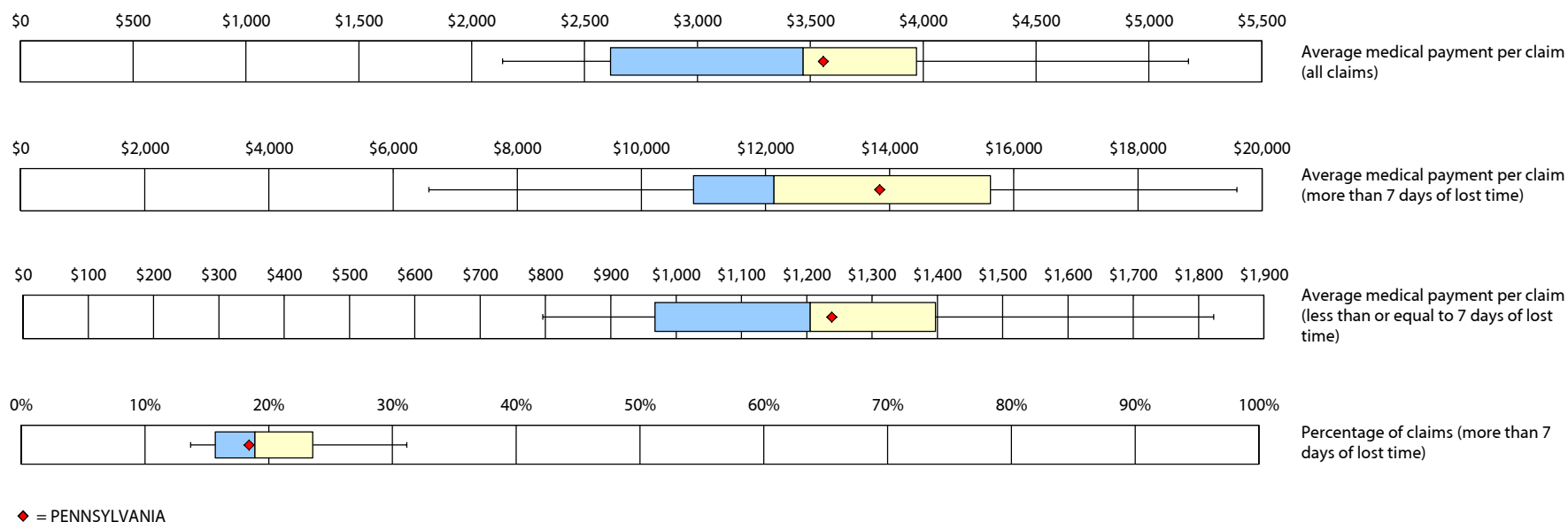
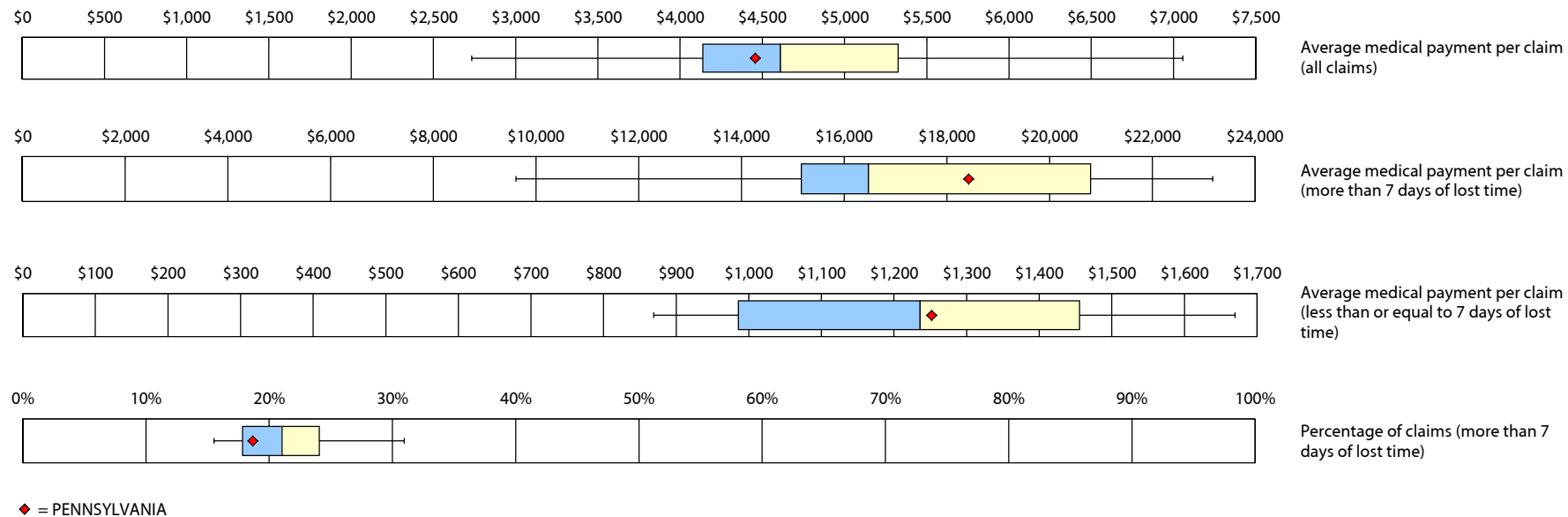
Figure 1 Medical Price and Utilization: Analytic Framework

Figure 2 Average Medical Payment per Claim, 2015/2016 (12 months)**Table for Figure 2: Average Medical Payment per Claim, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average medical payment per claim (all claims)	\$2,325	\$2,615	\$3,726	\$3,381	\$3,971	\$4,972	\$3,555	\$2,572	\$4,748	\$2,597	\$2,137	\$3,062	\$2,743	\$5,175	\$3,557	\$3,238	\$3,958	\$5,064	\$3,468
Average medical payment per claim (more than 7 days of lost time)	\$10,919	\$7,178	\$12,478	\$11,794	\$16,279	\$15,542	\$17,143	\$11,524	\$15,407	\$6,578	\$9,121	\$11,418	\$10,841	\$15,624	\$13,838	\$10,261	\$17,491	\$19,594	\$12,136
Average medical payment per claim (less than or equal to 7 days of lost time)	\$826	\$990	\$1,312	\$1,173	\$1,321	\$1,247	\$1,397	\$967	\$1,469	\$796	\$837	\$1,144	\$830	\$1,484	\$1,238	\$1,075	\$1,506	\$1,823	\$1,205
Percentage of claims (more than 7 days of lost time)	15%	26%	22%	21%	18%	26%	14%	15%	24%	31%	16%	19%	19%	26%	18%	24%	15%	18%	19%
Percentage of claims (less than or equal to 7 days of lost time)	85%	74%	78%	79%	82%	74%	86%	85%	76%	69%	84%	81%	81%	74%	82%	76%	85%	82%	81%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

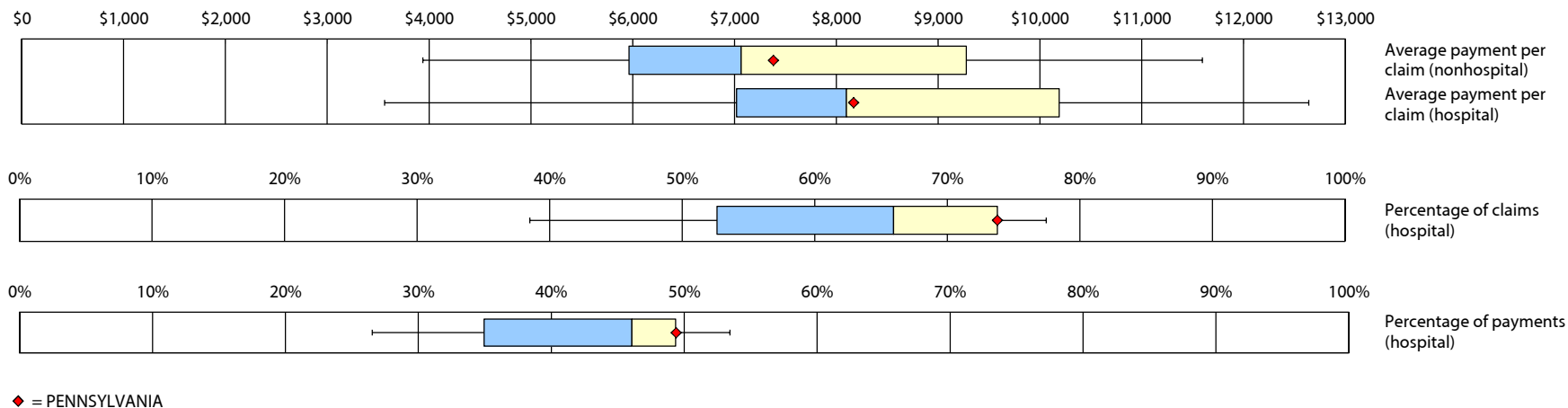
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 3 Average Medical Payment per Claim, 2013/2016 (36 months)**Table for Figure 3: Average Medical Payment per Claim, 2013/2016 (36 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average medical payment per claim (all claims)	\$3,369	\$4,758	\$4,699	\$4,522	\$5,047	\$6,931	\$4,870	\$2,948	\$6,290	\$3,576	\$2,732	\$4,138	\$4,452	\$7,057	\$4,457	\$4,522	\$5,325	\$5,471	\$4,611
Average medical payment per claim (more than 7 days of lost time)	\$15,259	\$13,517	\$15,546	\$16,271	\$20,800	\$20,354	\$23,176	\$13,193	\$21,921	\$9,612	\$11,226	\$15,917	\$16,672	\$19,681	\$18,422	\$15,163	\$23,143	\$22,704	\$16,472
Average medical payment per claim (less than or equal to 7 days of lost time)	\$1,037	\$985	\$1,344	\$1,227	\$1,271	\$1,245	\$1,503	\$899	\$1,536	\$869	\$900	\$1,163	\$902	\$1,538	\$1,252	\$1,151	\$1,456	\$1,670	\$1,236
Percentage of claims (more than 7 days of lost time)	16%	30%	24%	22%	19%	30%	16%	17%	23%	31%	18%	20%	23%	30%	19%	24%	18%	18%	21%
Percentage of claims (less than or equal to 7 days of lost time)	84%	70%	76%	78%	81%	70%	84%	83%	77%	69%	82%	80%	77%	70%	81%	76%	82%	82%	79%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

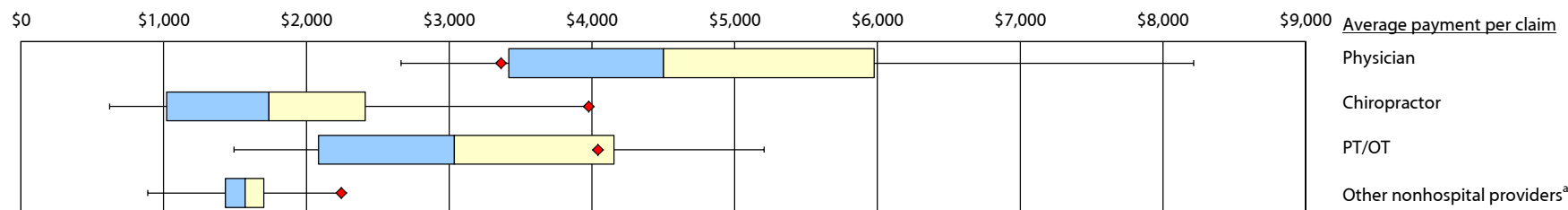
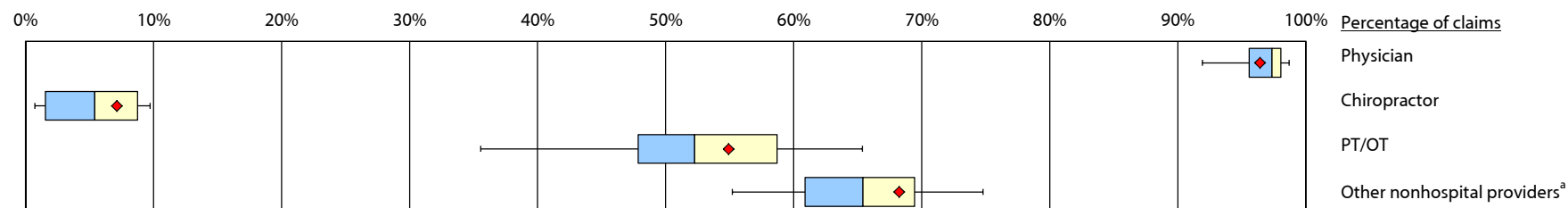
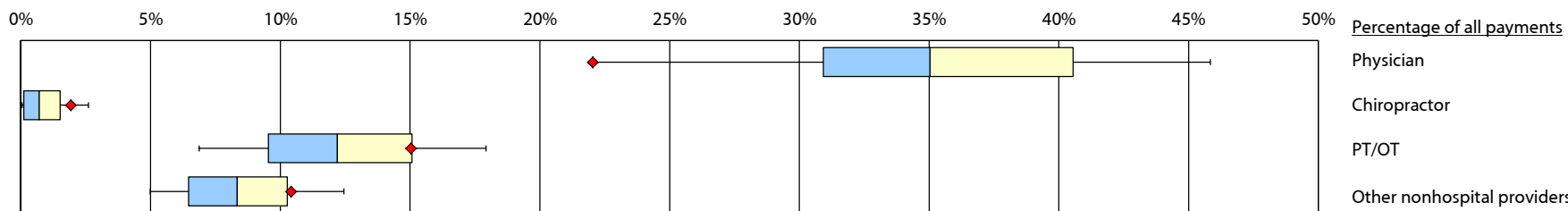
Figure 4 Payments to Hospital and Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 4: Payments to Hospital and Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim (nonhospital)	\$5,258	\$5,460	\$6,749	\$8,583	\$7,525	\$10,918	\$11,597	\$6,088	\$7,933	\$3,939	\$5,114	\$5,964	\$6,111	\$10,806	\$7,382	\$6,470	\$9,277	\$10,837	\$7,066
Average payment per claim (hospital)	\$7,020	\$4,643	\$12,021	\$7,376	\$11,163	\$8,416	\$8,026	\$6,808	\$10,189	\$3,563	\$5,411	\$8,361	\$7,696	\$9,107	\$8,171	\$7,107	\$12,091	\$12,642	\$8,099
Percentage of claims (hospital)	65%	38%	46%	45%	75%	65%	66%	75%	67%	77%	72%	67%	56%	53%	74%	52%	65%	76%	66%
Percentage of payments (hospital)	50%	27%	47%	32%	53%	35%	32%	50%	47%	43%	45%	49%	42%	33%	49%	37%	47%	48%	46%
Percentage of claims (nonhospital)	99%	99%	99%	99%	98%	97%	99%	99%	99%	97%	98%	96%	99%	99%	99%	99%	99%	98%	99%
Percentage of payments (nonhospital)	49%	73%	52%	67%	46%	65%	67%	49%	52%	56%	54%	50%	57%	66%	49%	61%	53%	52%	53%
Average payment per claim (unclassified provider) ^b	\$745	\$353	\$676	\$487	\$509	\$610	\$344	\$528	\$833	\$406	\$493	\$445	\$528	\$514	\$857	\$540	\$699	\$535	\$528
Percentage of claims (unclassified provider) ^b	17%	20%	21%	16%	12%	13%	13%	18%	21%	5%	17%	22%	21%	14%	18%	18%	16%	9%	17%
Percentage of payments (unclassified provider) ^b	1%	1%	1%	1%	0%	0%	0%	1%	1%	0%	1%	1%	1%	1%	1%	2%	1%	0%	1%

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. The average payment per claim reported by type of provider or service group is computed based on claims having that provider or receiving that service.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b Five to twenty-two percent of claims involve at least one payment to providers that could not be classified because of missing data. Payments to unclassified providers typically make up only between 0 and 2 percent of medical payments.

Figure 5a Payments to Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Figure 5b Percentage of Claims with Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)****Figure 5c Percentage of Payments to Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

♦ = PENNSYLVANIA

continued

Table for Figures 5a–c: Payments, Percentage of Claims, and Percentage of Payments to Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR ^b	CA	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	18-State Median ^c
Physician																			
Average payment per claim	\$3,217	\$3,527	\$4,543	\$5,487	\$5,211	\$7,008	\$7,451	\$3,691	\$4,851	\$2,799	\$2,663	\$4,463	\$3,418	\$7,261	\$3,364	\$3,825	\$5,977	\$8,215	\$4,503
Percentage of claims	98%	98%	99%	98%	96%	95%	98%	97%	97%	93%	95%	92%	98%	98%	96%	97%	98%	96%	97%
Percentage of all payments	29.5%	45.8%	34.6%	42.6%	31.3%	40.5%	42.8%	29.3%	30.9%	38.7%	27.3%	35.7%	31.5%	44.3%	22.0%	35.5%	33.6%	38.0%	35.0%
Chiropractor^d																			
Average payment per claim	n/a	\$1,037	\$820	n/a	\$622	\$3,554	n/a	\$1,699	\$1,981	\$1,010	\$1,033	\$2,014	n/a	\$1,989	\$3,977	\$2,810	n/a	\$1,738	\$1,738
Percentage of claims	n/a	9%	1%	n/a	2%	6%	n/a	4%	4%	5%	1%	10%	n/a	1%	7%	10%	n/a	8%	5%
Percentage of all payments	n/a	1.3%	0.1%	n/a	0.1%	1.3%	n/a	0.5%	0.5%	0.8%	0.1%	1.7%	n/a	0.1%	1.9%	2.6%	n/a	0.7%	0.7%
PT/OT																			
Average payment per claim	\$2,042	\$1,493	\$1,687	\$2,473	\$3,425	\$4,693	\$5,206	\$2,896	\$3,277	\$1,673	\$3,176	\$2,085	\$2,653	\$4,427	\$4,042	\$2,368	\$4,155	\$4,596	\$3,036
Percentage of claims	49%	62%	64%	65%	45%	53%	59%	49%	50%	38%	48%	38%	61%	65%	55%	52%	56%	36%	52%
Percentage of all payments	9.3%	13.0%	8.3%	12.7%	9.7%	15.1%	17.9%	11.7%	10.8%	9.5%	16.3%	6.9%	15.2%	15.4%	15.0%	11.7%	13.3%	7.9%	12.2%
Other nonhospital providers^a																			
Average payment per claim	\$1,462	\$1,308	\$1,625	\$2,067	\$1,236	\$2,166	\$1,621	\$1,521	\$2,038	\$889	\$1,433	\$1,126	\$1,488	\$1,702	\$2,245	\$1,573	\$1,568	\$1,622	\$1,570
Percentage of claims	72%	68%	69%	71%	61%	58%	67%	63%	67%	56%	64%	55%	72%	60%	68%	75%	63%	61%	65%
Percentage of all payments	9.9%	12.5%	8.9%	12.1%	5.1%	7.6%	6.5%	7.8%	9.4%	7.4%	9.9%	5.5%	10.3%	6.7%	10.4%	11.4%	5.7%	5.0%	8.3%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

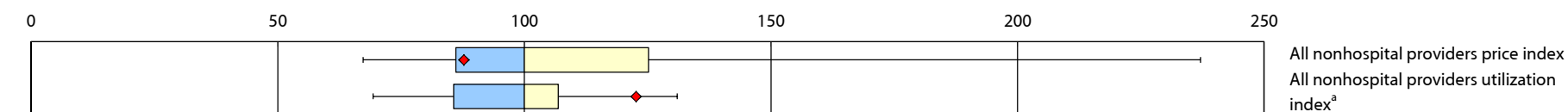
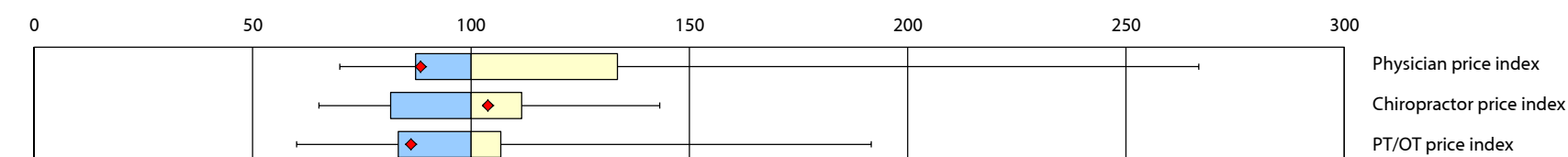
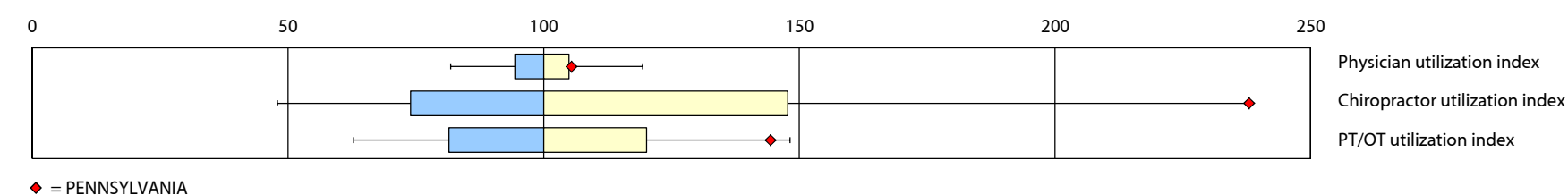
^a Other nonhospital providers include nurses and other ancillary providers (such as psychologists, social workers, acupuncture, etc.), medical equipment suppliers and pharmacies, diagnostic centers (such as MRI and imaging facilities), etc.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^d The numbers shown in the noted service and/or provider groups in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: MRI: magnetic resonance imaging; n/a: not available; PT/OT: physical/occupational therapist.

Figure 6a Price and Utilization Indices^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

Figure 6b Price Index for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, Calendar Year 2015

Figure 6c Utilization Index^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

Table for Figures 6a–c: Price and Utilization Indices^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR ^b	CA ^c	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	18-State Median ^d
All nonhospital providers																			
Price index	86	76	67	106	126	125	159	100	98	87	85	111	83	132	88	100	125	237	100
Utilization index	79	98	105	102	86	131	108	89	102	76	98	69	105	115	123	97	107	76	100
Physician																			
Price index	87	77	70	114	133	138	166	97	98	102	80	114	86	149	88	96	134	267	100
Utilization index	87	109	104	101	88	119	107	95	104	82	97	82	97	104	105	105	99	94	100
Chiropractor^e																			
Price index	n/a	79	68	n/a	91	106	n/a	107	116	65	85	101	n/a	103	104	122	n/a	143	103
Utilization index	n/a	68	74	n/a	48	192	n/a	107	110	98	73	139	n/a	103	238	156	n/a	91	100
PT/OT																			
Price index	83	72	61	92	114	105	152	105	97	60	92	103	76	107	86	105	111	192	100
Utilization index	82	69	97	91	103	148	108	94	109	94	120	63	110	132	144	76	124	79	100
Other nonhospital providers^f																			
Price index	85	79	73	98	143	127	143	105	107	82	82	114	96	101	99	92	131	286	100
Utilization index	90	142	116	110	96	112	86	164	106	79	81	93	86	104	118	281	84	70	100

continued

Table for Figures 6a–c: Price and Utilization Indices^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)
(continued)

Notes: The price index is based on calendar year 2015 prices. The utilization index is based on 2015/2016 claims. 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a Throughout the report, the utilization indices measure the volume and resource intensity of services provided per claim involving a given provider or service. Another component of utilization, the percentage of claims involving a given provider or service, is discussed separately. The price and utilization indices do not include comparisons of some nonhospital services, such as anesthesia, special reports, laboratory, supplies and equipment, unclassified services, and other services such as ambulance, home health care, etc., because billing codes are too broadly defined to make accurate price and utilization comparisons. The price and utilization indices are based on the service groups listed in the tables for Figures 12 and 13, which together make up 43–87 percent of the nonhospital payments, depending on the state.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c For California, the number of services per visit for providers of physical medicine may be somewhat understated, and prices somewhat overstated, relative to other states because some physical medicine services are billed in 30-minute increments rather than the standard 15 minutes.

^d 100 is the median state. An index of 120 means the state's price or utilization is 20 percent higher than the median state. An index of 80 means the state's price or utilization is 20 percent lower than the median state.

^e The numbers shown for chiropractic measures in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^f We do not graphically display a price and utilization index for other nonhospital providers because they are made up of a mix of vastly different provider types, such as nurses, psychologists, etc.

Key: CPT: Current Procedural Terminology; n/a: not available; PT/OT: physical/occupational therapist.

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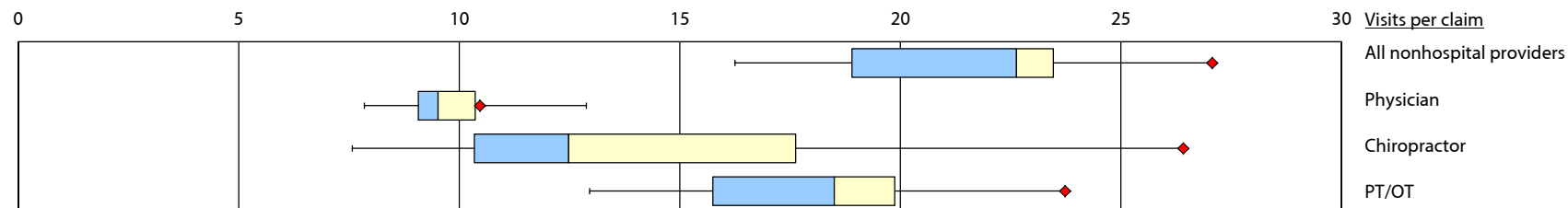
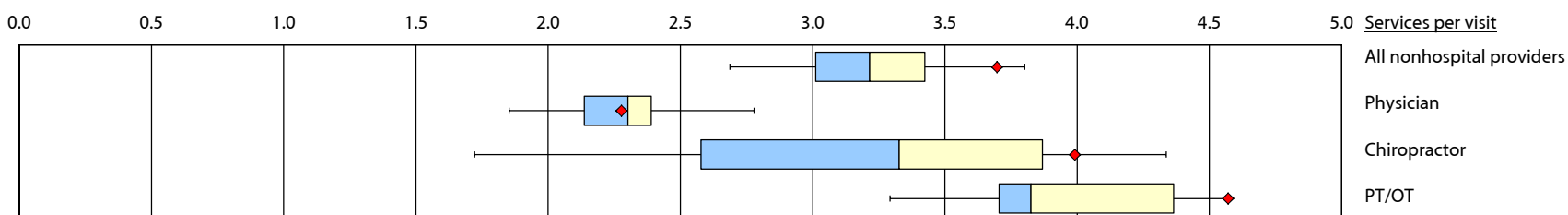
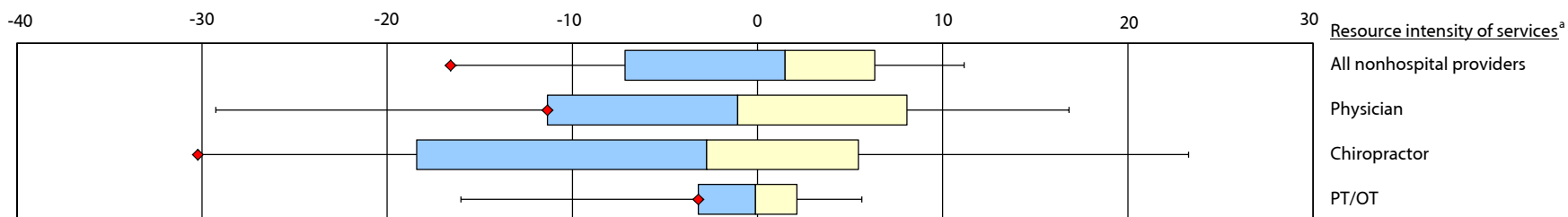
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Figure 7a Visits per Claim for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Figure 7b Services per Visit for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)****Figure 7c Resource Intensity of Services^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

♦ = PENNSYLVANIA

continued

Table for Figures 7a–c: Visits per Claim, Services per Visit, and Resource Intensity of Services^a for Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR ^b	CA ^c	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	18-State Median ^d
All nonhospital providers																			
Number of visits per claim	18.4	23.5	22.9	23.9	18.9	26.3	22.7	20.2	22.6	17.0	20.8	16.3	23.1	23.8	27.1	22.1	22.7	17.4	22.6
Number of services per visit	3.1	3.2	3.3	3.2	3.0	3.8	3.3	3.0	3.4	2.7	3.4	2.9	3.2	3.5	3.7	3.1	3.5	2.8	3.2
Resource intensity of services ^a (percentage points)	1.1	6.3	4.9	1.9	4.3	-14.6	-0.1	6.2	-7.7	8.5	-5.5	9.7	-0.4	-7.2	-16.6	11.2	-9.4	11.0	
Physician																			
Number of visits per claim	9.1	12.9	9.7	10.4	8.2	11.4	9.7	9.2	9.7	7.8	9.6	8.2	8.9	9.5	10.5	11.9	9.3	9.4	9.5
Number of services per visit	2.4	2.5	2.4	2.3	2.1	2.8	2.3	2.2	2.3	1.9	2.4	2.3	2.1	2.1	2.3	2.4	2.3	2.1	2.3
Resource intensity of services ^a (percentage points)	-9.9	-11.9	12.8	-4.8	8.8	-29.3	3.6	2.6	-2.0	8.1	-15.3	6.9	10.7	16.8	-11.3	-13.9	-4.8	-0.2	
Chiropractor^e																			
Number of visits per claim	n/a	7.6	8.3	n/a	10.1	19.5	n/a	12.5	14.5	16.2	12.0	19.0	n/a	10.5	26.4	12.3	n/a	14.3	12.5
Number of services per visit ^g	n/a	3.3	3.5	n/a	1.7	4.3	n/a	3.8	3.5	2.4	2.2	3.3	n/a	3.3	4.0	4.0	n/a	2.7	3.3
Resource intensity of services ^a (percentage points)	n/a	5.0	0.6	n/a	4.1	-21.4	n/a	-13.6	-21.3	-2.7	5.9	-15.5	n/a	12.8	-30.2	23.3	n/a	-7.9	
PT/OT																			
Number of visits per claim	15.7	13.0	17.7	16.9	19.4	22.7	18.9	17.7	19.4	18.1	19.9	13.7	19.0	23.2	23.7	13.7	20.2	15.5	18.5
Number of services per visit ^f	3.9	3.8	3.8	3.7	3.8	4.5	4.2	3.7	4.5	3.5	4.3	3.3	4.1	4.4	4.6	3.7	4.5	3.6	3.8
Resource intensity of services ^a (percentage points)	-5.0	0.5	1.3	2.7	-1.3	1.9	-3.2	2.1	-16.0	3.7	-1.7	2.6	0.0	-11.3	-3.2	5.6	-6.2	-0.3	
Other nonhospital providers^g																			
Number of visits per claim	5.1	6.6	6.5	7.8	5.2	6.1	6.3	5.9	7.2	4.9	5.7	4.7	7.1	5.8	6.6	6.0	6.4	5.2	6.1
Number of services per visit	1.7	2.0	1.9	2.0	1.7	2.1	1.6	1.7	1.8	1.6	1.7	1.7	1.7	2.0	1.9	1.9	1.7	1.6	1.7
Resource intensity of services ^a (percentage points)	18.8	-59.3	-14.7	8.1	-22.4	-13.8	23.3	16.9	7.6	1.5	-0.8	-18.1	22.9	21.8	-28.7	110.0	21.3	-1.0	

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c For California, the number of services per visit for providers of physical medicine may be somewhat understated, and prices somewhat overstated, relative to other states because some physical medicine services are billed in 30-minute increments rather than the standard 15 minutes.

^d The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

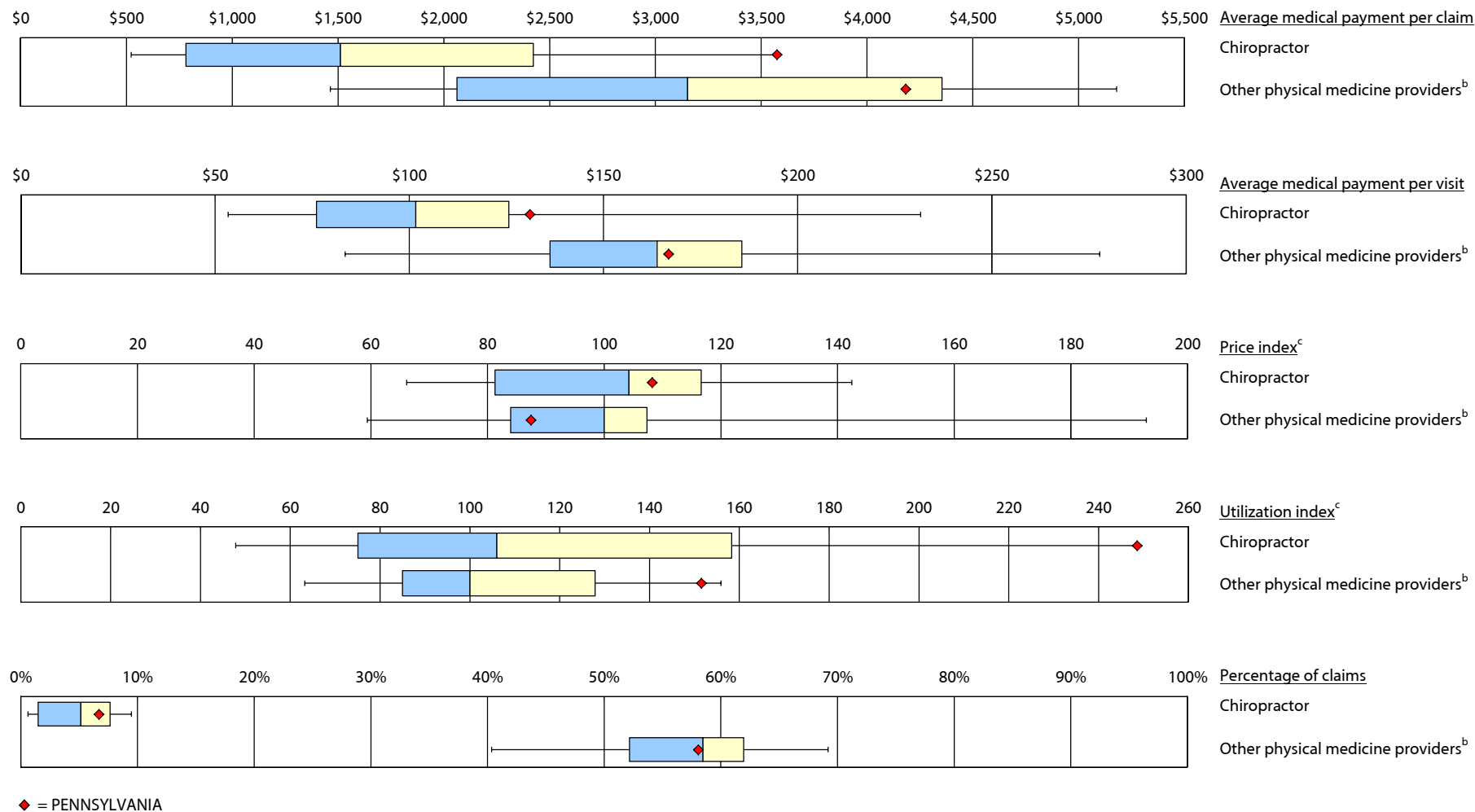
^e The numbers shown in the noted service and/or provider groups in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^f This includes billing for hot and/or cold packs (97010), which are not necessarily reimbursed in all states.

^g We do not graphically display visits and services for other nonhospital providers because they are made up of vastly different provider types, such as nurses and other ancillary providers (such as psychologists, social workers, acupuncture, etc.), medical equipment suppliers and pharmacies, diagnostic centers (such as MRI and imaging facilities), etc.

Key: CPT: Current Procedural Terminology; MRI: magnetic resonance imaging; n/a: not available; PT/OT: physical/occupational therapist; RVU: relative value unit.

Figure 8 Comparison of Physical Medicine Providers^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)



continued

Table for Figure 8: Comparison of Physical Medicine Providers^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR ^d	CA	FL	GA ^d	IA	IL	IN ^d	KY	LA	MA	MI	MN	NC ^d	NJ	PA	TX	VA ^d	WI	18-State Median ^e
Average medical payment per claim																			
Chiropractor ^f	n/a	\$703	\$697	n/a	\$522	\$3,112	n/a	\$1,492	\$1,800	\$859	\$924	\$1,845	n/a	\$1,533	\$3,574	\$3,001	n/a	\$1,511	\$1,511
Other physical medicine providers ^b	\$2,062	\$1,464	\$1,641	\$2,558	\$3,461	\$4,944	\$5,180	\$3,008	\$3,297	\$1,563	\$3,357	\$2,042	\$2,683	\$4,372	\$4,183	\$2,426	\$4,354	\$4,882	\$3,153
Average medical payment per visit																			
Chiropractor ^f	n/a	\$90	\$79	n/a	\$54	\$159	n/a	\$120	\$118	\$53	\$73	\$97	n/a	\$111	\$131	\$232	n/a	\$102	\$102
Other physical medicine providers ^b	\$123	\$106	\$92	\$143	\$173	\$198	\$262	\$163	\$164	\$83	\$156	\$142	\$136	\$186	\$167	\$172	\$204	\$278	\$164
Price index^c																			
Chiropractor ^f	n/a	78	69	n/a	93	108	n/a	111	122	66	85	102	n/a	104	108	133	n/a	142	104
Other physical medicine providers ^b	84	72	61	93	114	105	153	107	98	59	92	102	75	107	87	104	111	193	100
Utilization index^c																			
Chiropractor ^f	n/a	66	76	n/a	48	194	n/a	106	107	94	74	143	n/a	140	249	174	n/a	91	106
Other physical medicine providers ^b	84	71	95	95	104	156	109	96	110	94	128	63	112	132	152	80	128	85	100
Percentage of claims																			
Chiropractor ^f	n/a	7%	1%	n/a	2%	6%	n/a	4%	3%	5%	1%	9%	n/a	1%	7%	8%	n/a	8%	5%
Other physical medicine providers ^b	55%	69%	67%	69%	49%	60%	64%	54%	54%	41%	52%	43%	62%	67%	58%	60%	59%	40%	58%

Notes: The price index is based on calendar year 2015. The utilization index is based on 2015/2016 claims. 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The data reported here include services billed primarily under Current Procedural Terminology (CPT) codes 97xxx and/or chiropractic or osteopathic manipulations billed under 98xxx.

^b Other physical medicine providers include other nonhospital providers, such as medical doctors, doctors of osteopathy, and physical/occupational therapists providing or billing for services.

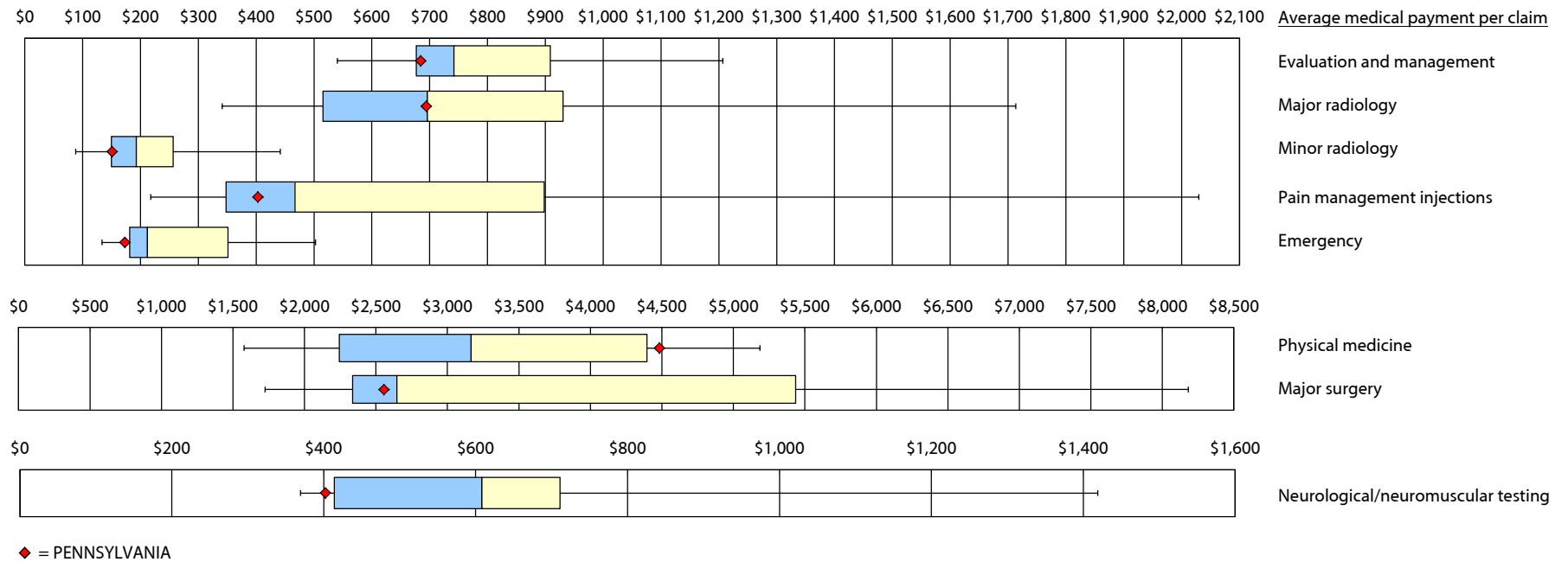
^c 100 is the median state. An index of 120 means the state's price or utilization is 20 percent higher than the median state. An index of 80 means the state's price or utilization is 20 percent lower than the median state.

^d The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^e The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^f The numbers shown in the noted service and/or provider groups in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: CPT: Current Procedural Terminology; n/a: not available.

Figure 9 Payments for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 9: Payments for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average medical payment per claim																			
Evaluation and management	\$579	\$1,186	\$670	\$909	\$775	\$682	\$847	\$677	\$691	\$540	\$709	\$917	\$655	\$859	\$684	\$1,099	\$880	\$1,207	\$742
Major radiology	\$494	\$511	\$622	\$697	\$1,070	\$942	\$1,159	\$586	\$839	\$516	\$341	\$654	\$757	\$725	\$694	\$461	\$930	\$1,714	\$696
Minor radiology	\$165	\$146	\$190	\$235	\$255	\$294	\$350	\$150	\$245	\$88	\$127	\$196	\$160	\$256	\$151	\$135	\$276	\$442	\$193
Pain management injections	\$435	\$218	\$426	\$573	\$731	\$947	\$1,016	\$368	\$898	\$500	\$258	\$348	\$317	\$1,164	\$403	\$287	\$849	\$2,030	\$467
Emergency	\$189	\$148	\$156	\$204	\$351	\$243	\$503	\$203	\$220	\$134	\$187	\$248	\$181	\$407	\$173	\$229	\$398	\$492	\$212
Physical medicine	\$2,055	\$1,577	\$1,670	\$2,593	\$3,511	\$5,041	\$5,186	\$3,018	\$3,314	\$1,586	\$3,370	\$2,243	\$2,689	\$4,395	\$4,482	\$2,827	\$4,384	\$4,613	\$3,166
Major surgery	\$1,975	\$1,828	\$2,376	\$3,401	\$3,965	\$5,799	\$5,435	\$2,140	\$2,738	\$5,585	\$1,725	\$2,540	\$2,338	\$8,124	\$2,557	\$2,403	\$4,273	\$8,181	\$2,647
Neurological/neuromuscular testing ^b	\$369	\$456	\$508	\$550	\$653	\$729	\$699	\$403	\$746	\$668	\$414	\$563	\$376	\$1,026	\$402	\$694	\$711	\$1,419	\$608

continued

Table for Figure 9: Payments for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months) (continued)

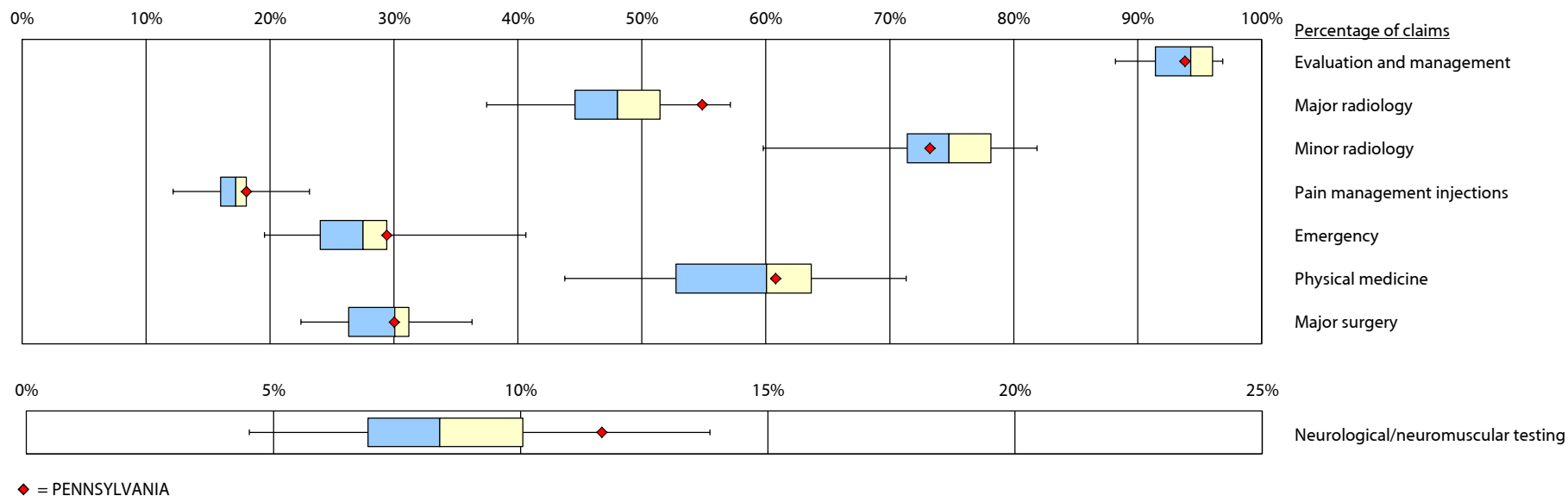
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology.

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Figure 10 Percentage of Claims with Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 10: Percentage of Claims with Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of claims																			
Evaluation and management	94%	97%	97%	97%	90%	91%	95%	94%	94%	89%	91%	88%	95%	96%	94%	96%	94%	94%	94%
Major radiology	48%	44%	57%	51%	47%	45%	52%	52%	48%	37%	45%	41%	50%	51%	55%	46%	48%	44%	48%
Minor radiology	80%	77%	81%	82%	69%	71%	75%	73%	80%	60%	73%	62%	78%	75%	73%	76%	78%	71%	75%
Pain management injections	18%	12%	17%	21%	17%	16%	23%	18%	20%	14%	18%	16%	21%	17%	18%	15%	18%	16%	17%
Emergency	27%	20%	34%	23%	24%	29%	28%	34%	27%	29%	27%	24%	24%	28%	29%	21%	41%	32%	27%
Physical medicine	56%	71%	68%	70%	50%	64%	64%	56%	56%	44%	53%	49%	62%	68%	61%	63%	59%	46%	60%
Major surgery ^b	33%	22%	26%	29%	34%	31%	36%	32%	30%	23%	31%	26%	31%	30%	30%	26%	28%	31%	30%
Neurological/neuromuscular testing ^c	6%	14%	9%	10%	7%	8%	10%	7%	8%	5%	8%	6%	10%	7%	12%	11%	9%	6%	8%
Percentage of claims with other nonhospital services (not displayed) ^d	91%	97%	95%	93%	84%	85%	91%	86%	88%	71%	88%	81%	89%	87%	88%	96%	85%	83%	88%

continued

Table for Figure 10: Percentage of Claims with Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months) (continued)

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b The percentage of claims with surgery is based on nonhospital providers (surgeons) billing the surgery.

^c In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^d Other nonhospital services mainly include anesthesia, drugs, legal and special reports, supplies and equipment, miscellaneous services billed by stand-alone ambulatory surgery centers, and other miscellaneous defined medical and/or diagnostic services and testing.

Key: CPT: Current Procedural Terminology.

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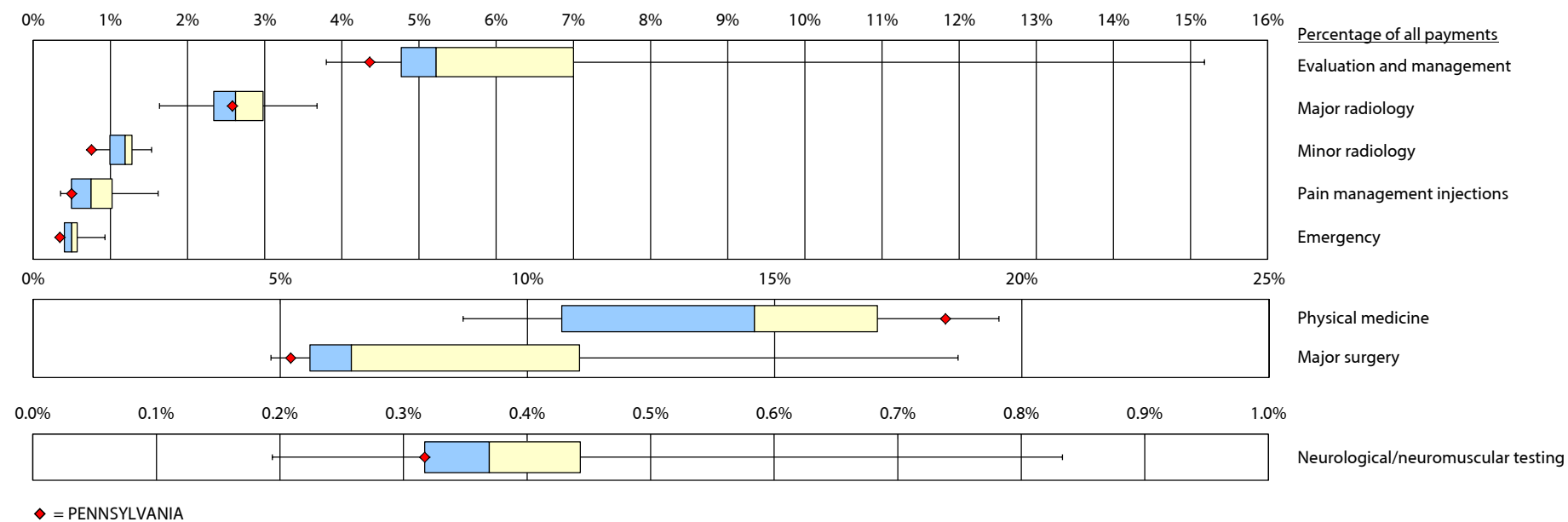
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Figure 11 Percentage of Medical Payments Made for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 11: Percentage of Medical Payments Made for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of all payments																			
Evaluation and management	5.1%	15.2%	5.0%	7.0%	4.4%	3.8%	4.8%	5.2%	4.3%	7.1%	6.9%	7.0%	5.9%	5.3%	4.4%	10.1%	4.8%	5.5%	5.2%
Major radiology	2.2%	3.0%	2.7%	2.8%	3.1%	2.6%	3.5%	2.5%	2.7%	2.9%	1.6%	2.3%	3.6%	2.3%	2.6%	2.0%	2.5%	3.7%	2.6%
Minor radiology	1.2%	1.5%	1.2%	1.5%	1.1%	1.3%	1.5%	0.9%	1.3%	0.8%	1.0%	1.1%	1.2%	1.2%	0.8%	1.0%	1.2%	1.5%	1.2%
Pain management injections	0.7%	0.4%	0.6%	0.9%	0.8%	0.9%	1.4%	0.5%	1.2%	1.0%	0.5%	0.5%	0.6%	1.2%	0.5%	0.4%	0.9%	1.6%	0.7%
Emergency	0.5%	0.4%	0.4%	0.4%	0.5%	0.4%	0.8%	0.6%	0.4%	0.6%	0.6%	0.5%	0.4%	0.7%	0.3%	0.5%	0.9%	0.8%	0.5%
Physical medicine	10.7%	15.1%	8.7%	14.3%	11.0%	19.5%	19.4%	13.9%	12.3%	10.3%	19.1%	9.5%	15.9%	15.8%	18.5%	17.1%	14.9%	10.3%	14.6%
Major surgery	6.1%	5.4%	4.8%	7.7%	8.5%	11.0%	11.6%	5.6%	5.4%	18.7%	5.7%	5.8%	6.8%	15.1%	5.2%	6.0%	7.2%	12.4%	6.4%
Neurological/neuromuscular testing^b																			
Neurological/neuromuscular testing ^b	0.2%	0.8%	0.3%	0.4%	0.3%	0.4%	0.4%	0.2%	0.4%	0.4%	0.4%	0.3%	0.4%	0.5%	0.3%	0.7%	0.4%	0.4%	0.4%
Percentage of all payments for other nonhospital services (not displayed)^c																			
Percentage of all payments for other nonhospital services (not displayed) ^c	22%	31%	28%	28%	16%	25%	24%	20%	24%	15%	18%	23%	22%	24%	17%	24%	20%	15%	22.5%

continued

Table for Figure 11: Percentage of Medical Payments Made for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months) (continued)

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^c Other nonhospital services mainly include anesthesia, drugs, legal and special reports, supplies and equipment, miscellaneous services billed by stand-alone ambulatory surgery centers, and other miscellaneous defined medical and/or diagnostic services and testing.

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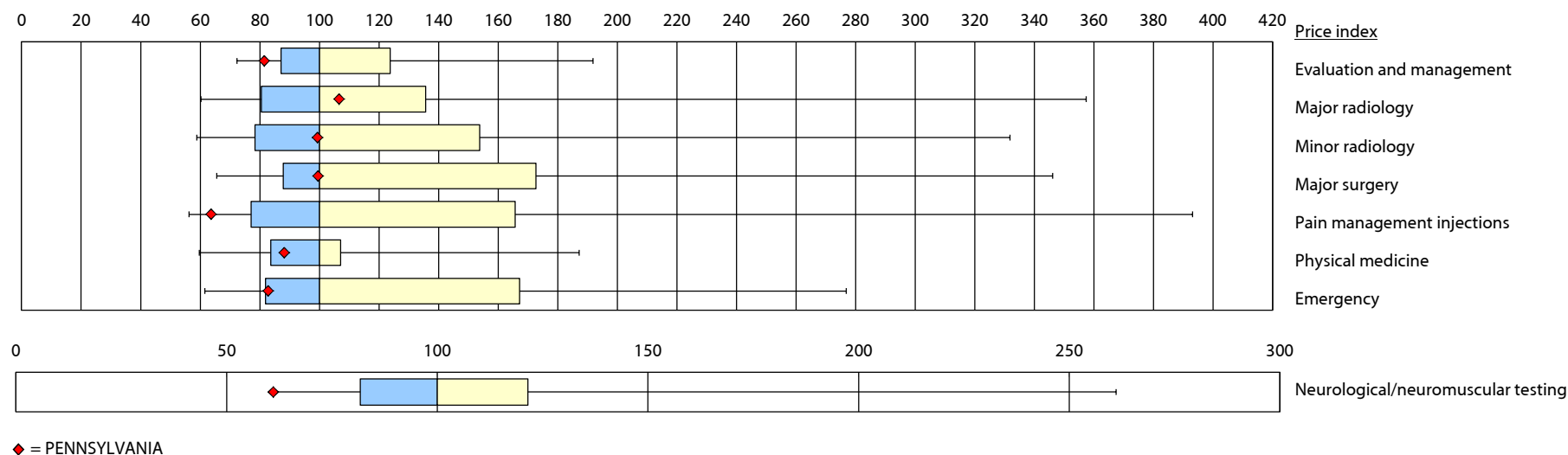
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Figure 12 Price Index for Nonhospital Services, Calendar Year 2015**Table for Figure 12: Price Index for Nonhospital Services, Calendar Year 2015**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Price index																			
All nonhospital services ^b	86	76	67	106	126	125	159	100	98	87	85	111	83	132	88	100	125	237	100
Evaluation and management	97	94	72	113	125	87	126	103	86	75	104	148	90	94	81	122	124	192	100
Major radiology	74	66	74	93	188	144	156	100	126	95	60	101	100	90	107	62	136	357	100
Minor radiology	93	78	59	122	154	159	208	78	101	64	72	108	87	117	99	79	168	332	100
Major surgery	85	70	75	141	130	215	218	95	100	173	66	91	89	262	100	88	142	346	100
Pain management injections	101	56	72	93	172	166	218	99	164	101	59	88	81	176	64	77	161	393	100
Physical medicine	84	72	62	93	113	105	151	107	98	60	91	102	75	107	88	106	111	187	100
Emergency	78	74	67	93	167	146	265	99	104	62	82	119	90	213	83	101	224	277	100
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Neurological/neuromuscular testing ^c	69	82	84	91	122	126	138	71	119	111	70	104	85	142	61	96	119	261	100

continued

Table for Figure 12: Price Index for Nonhospital Services, Calendar Year 2015 (continued)

Note: The price index is based on calendar year 2015 prices.

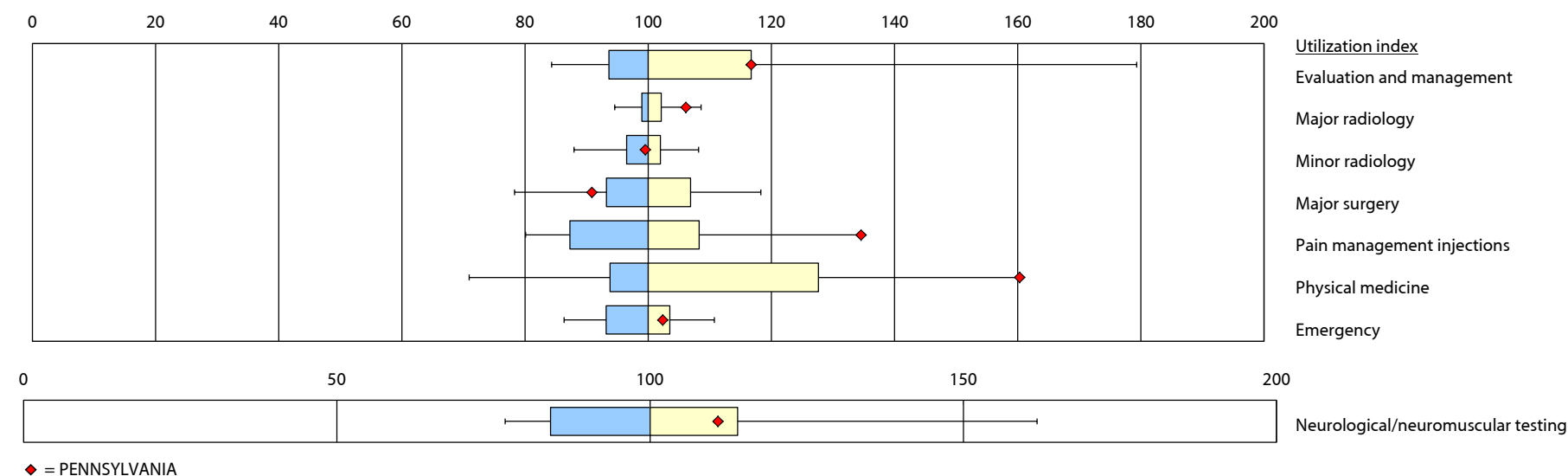
^a 100 is the median state. An index of 120 means the state's price is 20 percent higher than the median state. An index of 80 means the state's price is 20 percent lower than the median state.

^b The price index does not include comparisons of some nonhospital services, such as anesthesia, special reports, laboratory, supplies and equipment, unclassified services, and other services (such as ambulance, home health care, etc.), because billing codes are too broadly defined to make accurate price and utilization comparisons. The price index is based on service groups that together make up 51–74 percent of the nonhospital payments, depending on the state.

^c In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology.

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Figure 13 Utilization Index for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 13: Utilization Index for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Utilization index																			
All nonhospital services ^b	79	98	105	102	86	131	108	89	102	76	98	69	105	115	123	97	107	76	100
Evaluation and management	86	179	126	116	84	107	98	94	111	97	98	87	102	122	117	130	98	90	100
Major radiology	109	100	103	96	100	99	99	103	101	95	95	101	99	101	106	99	99	102	100
Minor radiology	101	97	108	101	98	106	99	100	108	88	102	88	101	98	100	90	103	95	100
Major surgery	78	86	107	93	93	117	107	95	105	118	88	96	104	117	91	99	110	101	100
Pain management injections	99	81	106	108	80	127	101	82	112	93	94	87	96	118	135	84	108	106	100
Physical medicine	83	75	96	96	103	158	109	97	110	94	128	71	112	132	160	94	128	83	100
Emergency	103	98	96	104	98	86	102	105	108	93	107	90	103	96	102	111	91	93	100
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Neurological/neuromuscular testing ^c	77	102	162	111	84	98	84	95	160	148	93	83	79	143	111	114	103	84	100

continued

Table for Figure 13: Utilization Index for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

Notes: The utilization index is based on 2015/2016 claims. 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

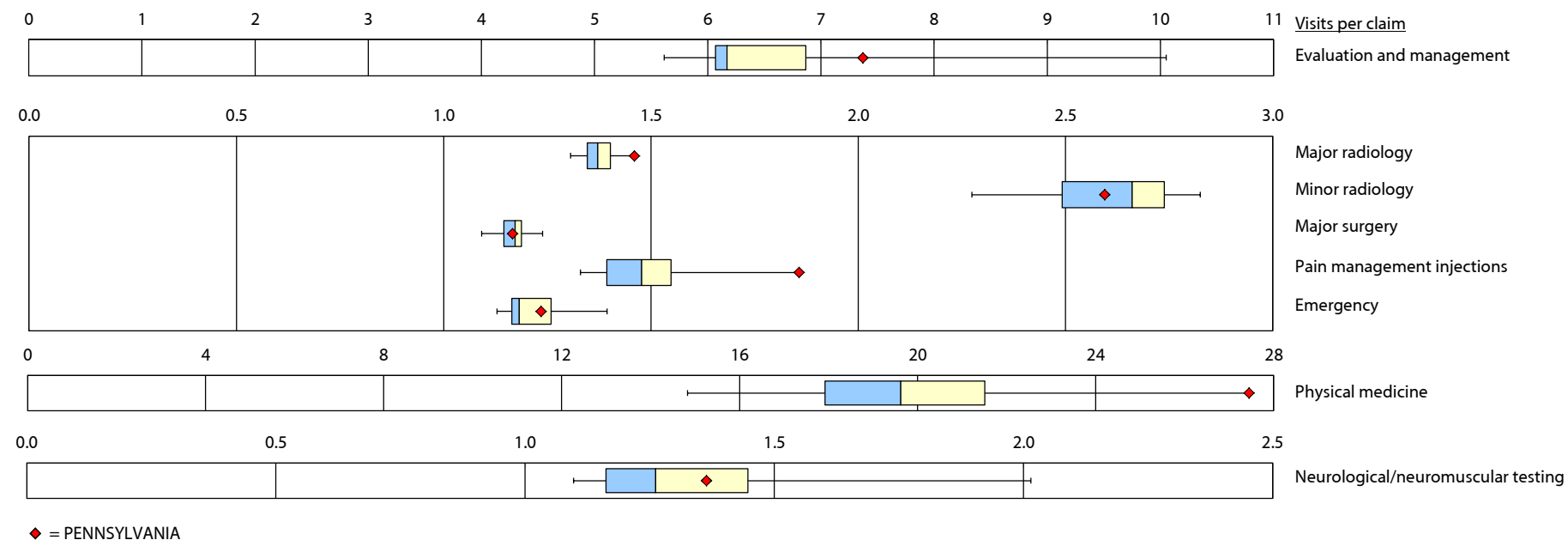
^a 100 is the median state. An index of 120 means the state's utilization is 20 percent higher than the median state. An index of 80 means the state's utilization is 20 percent lower than the median state.

^b The utilization index does not include comparisons of some nonhospital services, such as anesthesia, special reports, laboratory, supplies and equipment, unclassified services, and other services (such as ambulance, home health care, etc.), because billing codes are too broadly defined to make accurate price and utilization comparisons. The utilization index is based on service groups that together make up 43–87 percent of the nonhospital payments, depending on the state.

^c In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology.

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Figure 14 Visits per Claim for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 14: Visits per Claim for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Visits per claim																			
Evaluation and management	5.6	10.1	6.8	6.9	5.6	6.8	6.1	6.1	6.7	6.2	6.1	5.7	6.1	7.1	7.4	8.5	6.2	6.0	6.2
Major radiology	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.3	1.3	1.4	1.4	1.4	1.5	1.3	1.4	1.4	1.4
Minor radiology	2.8	2.3	2.8	2.7	2.7	2.7	2.7	2.7	2.8	2.3	2.7	2.3	2.8	2.6	2.6	2.4	2.7	2.5	2.7
Major surgery	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.2
Pain management injections	1.5	1.3	1.6	1.6	1.4	1.5	1.5	1.3	1.5	1.4	1.5	1.4	1.5	1.5	1.9	1.3	1.5	1.5	1.5
Physical medicine	16.6	14.8	17.9	18.1	20.2	25.8	19.8	18.7	20.4	19.5	21.7	16.8	19.7	23.7	27.5	15.2	21.5	18.2	19.6
Emergency	1.3	1.2	1.4	1.3	1.2	1.4	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.3	1.2	1.2
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Neurological/neuromuscular testing ^b	1.1	1.5	1.2	1.3	1.2	1.4	2.0	1.2	1.2	1.2	1.2	1.3	1.7	1.2	1.4	1.5	1.3	1.2	1.3

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Table for Figure 14: Visits per Claim for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months) (continued)

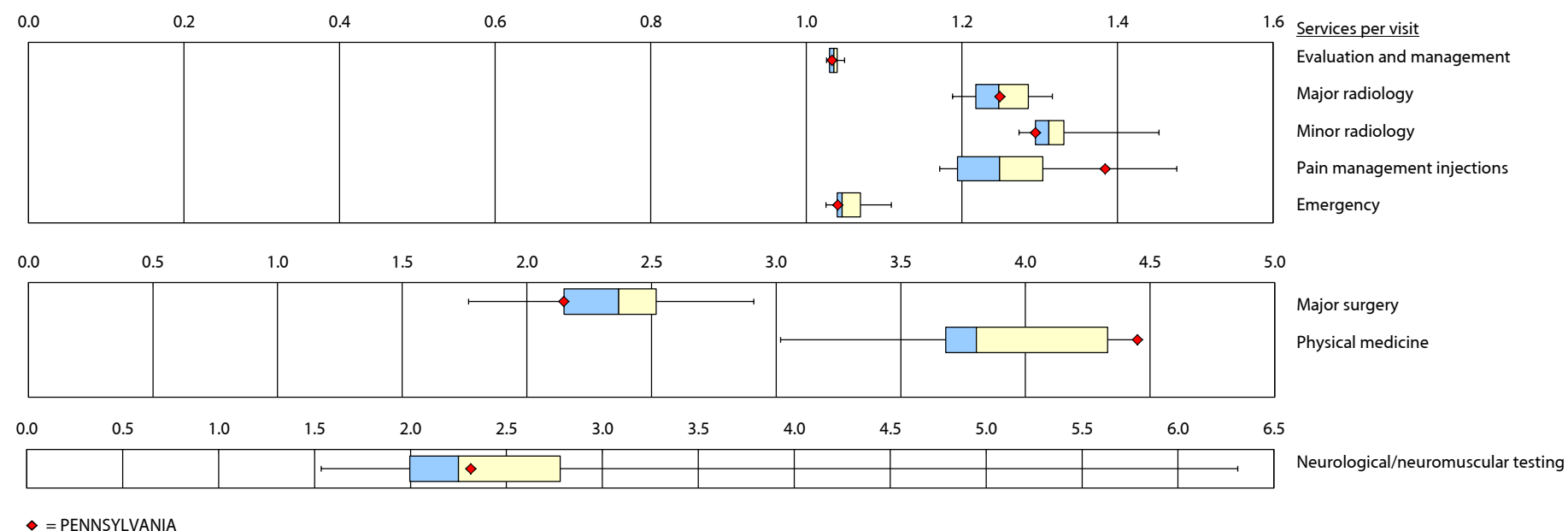
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology.

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Figure 15 Services per Visit for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 15: Services per Visit for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA ^a	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Evaluation and management	1.03	1.04	1.05	1.03	1.04	1.03	1.04	1.04	1.03	1.03	1.04	1.03	1.04	1.04	1.03	1.03	1.04	1.04	1.04
Major radiology	1.32	1.22	1.22	1.19	1.30	1.22	1.21	1.30	1.28	1.25	1.22	1.29	1.24	1.21	1.25	1.28	1.25	1.29	1.25
Minor radiology	1.29	1.45	1.32	1.29	1.31	1.32	1.27	1.32	1.35	1.33	1.30	1.32	1.27	1.31	1.29	1.33	1.31	1.34	1.31
Pain management injections	1.19	1.36	1.35	1.27	1.17	1.48	1.25	1.17	1.30	1.25	1.20	1.19	1.17	1.30	1.38	1.23	1.23	1.27	1.25
Emergency	1.04	1.04	1.03	1.04	1.11	1.05	1.08	1.05	1.05	1.04	1.08	1.07	1.05	1.05	1.04	1.06	1.04	1.07	1.05
Major surgery	1.77	2.11	2.52	2.30	2.27	2.66	2.45	2.11	2.52	2.91	2.10	2.33	2.51	2.70	2.15	2.20	2.55	2.41	2.37
Physical medicine ^c	3.80	3.66	3.75	3.68	3.69	4.35	4.04	3.68	4.42	3.34	4.25	3.02	4.04	4.33	4.45	3.81	4.46	3.32	3.80
Neurological/neuromuscular testing^d																			
Neurological/neuromuscular testing ^d	2.09	2.27	6.31	2.22	2.11	2.00	1.54	2.31	5.56	3.48	2.34	1.94	1.68	2.78	2.31	3.29	1.99	2.08	2.25

continued

Table for Figure 15: Services per Visit for Each Nonhospital Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months) (continued)

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a In California, a maximum of four individual services per visit are reimbursed. In addition, some procedures are defined in 30-minute increments, rather than the more standard 15 minutes.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^c This includes billing for hot and/or cold packs (97010), which are not necessarily reimbursed in all states.

^d In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology.

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Figure 16 Resource Intensity^a for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

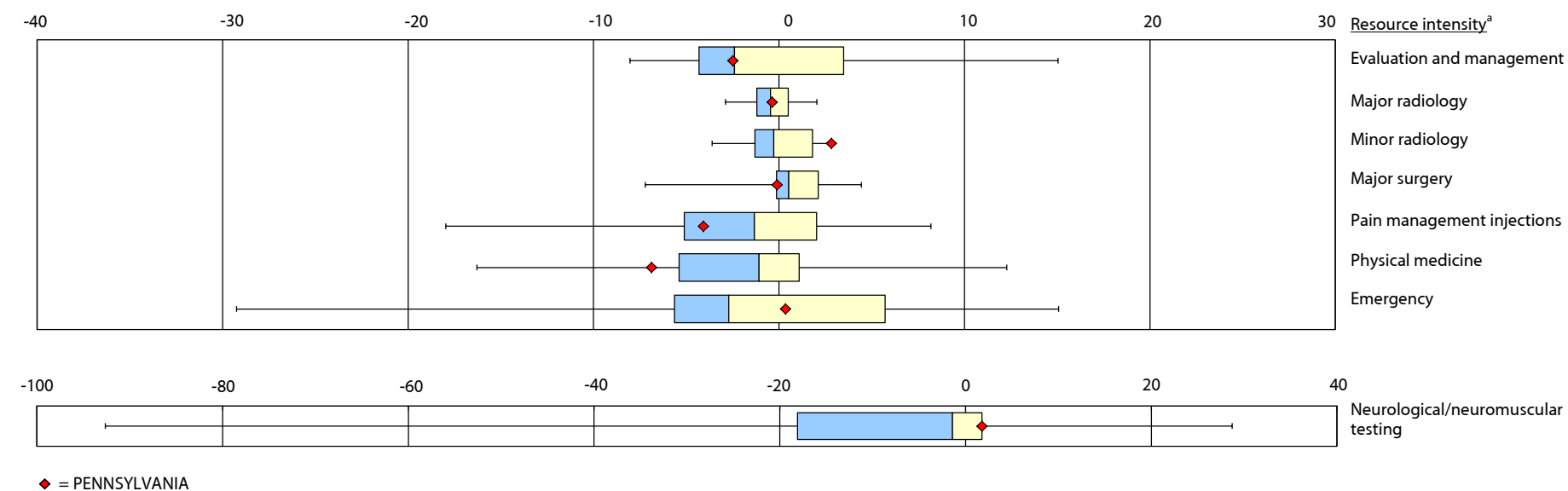


Table for Figure 16: Resource Intensity^a for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR	CA ^b	FL	GA	IA	IL	IN	KY	LA ^c	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Evaluation and management	-4	15	14	5	-7	-4	-2	-5	3	-3	-1	-4	3	6	-2	-7	-2	-8
Major radiology	-2	0	-1	1	2	0	-1	1	-3	-2	-2	0	-1	-1	0	0	-1	1
Minor radiology	-4	-1	2	0	-1	2	-1	0	-2	0	2	1	-2	-1	3	-3	3	-1
Major surgery	4	-4	0	-7	2	0	2	3	-3	1	0	4	1	0	0	0	1	2
Pain management injections	1	-18	-8	1	-8	5	0	-5	6	-5	-3	-3	0	8	-4	-5	2	3
Physical medicine	-5	-1	1	3	-1	0	-4	1	-16	2	-2	0	0	-11	-7	12	-6	-3
Emergency	-6	-5	-15	-2	-2	-29	-3	9	10	-5	7	-7	6	-2	0	15	-13	-4
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Neurological/neuromuscular testing ^c	-3	-15	-93	10	1	-2	-22	2	-78	9	-1	-6	-18	29	2	-59	14	1

continued

Table for Figure 16: Resource Intensity^a for Nonhospital Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

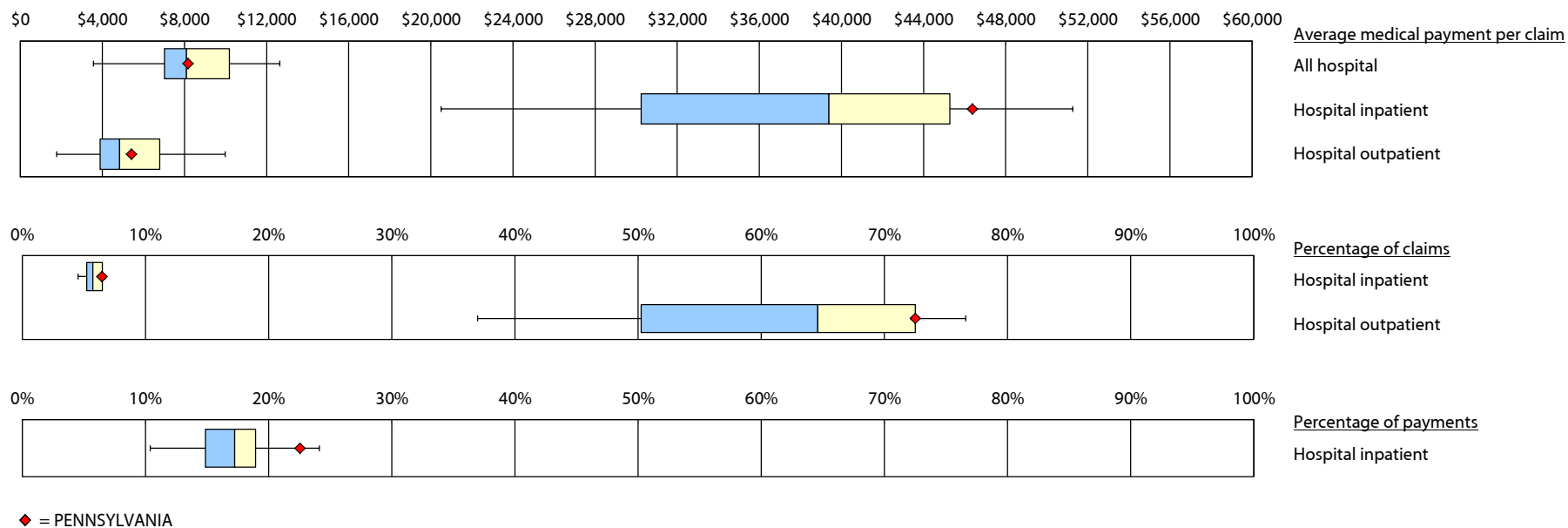
^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix, as indicated by whether the value reported on this measure for each service type is above or below zero. The resource intensity value reported for each state is the difference between the state's utilization index and the state's unweighted volume of services. A state's utilization index is computed as the number of services per claim weighted by RVUs. A state's unweighted volume of services is measured as the number of services per claim. Both the utilization index and volume for a state are calculated by holding the 18-state median at 100. We do not report 18-state median values on resource intensity because this measure reflects the difference between the two indices. A positive value in resource intensity indicates that the mix of services in a state is more resource intensive relative to the median study state. A negative value in resource intensity indicates that the mix of services in a state is less resource intensive relative to the median study state. For example, if the utilization index for a type of service in a state is 120 and the volume index is 102, then the resource intensity value is 18. This suggests that when the relative intensity of resources involved in these services is not considered, the volume of these services in this state is similar to the median study state. However, when the relative intensity of resources is taken into consideration, the utilization of the services in this state is higher than the median study state. The factor that contributed to higher utilization in this state is the higher resource intensity of the services provided or billed. The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b In California, a maximum of four individual services per visit are reimbursed. In addition, some procedures are defined in 30-minute increments rather than the more standard 15 minutes.

^c In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology; RVU: resource value unit.

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Figure 17 Payments for Hospital Inpatient and Outpatient^a Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 17: Payments for Hospital Inpatient and Outpatient^a Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR ^b	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^c
Average medical payment per claim (all hospital)	\$7,020	\$4,643	\$12,021	\$7,376	\$11,163	\$8,416	\$8,026	\$6,808	\$10,189	\$3,563	\$5,411	\$8,361	\$7,696	\$9,107	\$8,171	\$7,107	\$12,091	\$12,642	\$8,099
Average medical payment per claim (hospital inpatient)	n/a	\$29,293	\$45,353	\$43,050	\$43,617	\$39,391	\$39,842	\$35,469	\$20,507	\$21,781	\$23,084	\$37,969	\$34,125	\$45,208	\$46,378	\$31,188	\$50,596	\$51,259	\$39,391
Average medical payment per claim (hospital outpatient)	\$3,384	\$1,773	\$6,793	\$3,421	\$7,704	\$5,688	\$4,798	\$4,884	\$8,575	\$2,424	\$3,895	\$5,628	\$4,533	\$4,340	\$5,423	\$4,241	\$8,248	\$9,985	\$4,841
Percentage of claims (hospital inpatient)	n/a	5%	7%	6%	7%	5%	6%	6%	7%	5%	6%	5%	6%	7%	6%	6%	6%	5%	6%
Percentage of claims (hospital outpatient)	63%	37%	43%	43%	73%	64%	65%	74%	66%	77%	71%	65%	55%	50%	73%	50%	64%	75%	65%
Percentage of payments (hospital inpatient)	n/a	18%	24%	20%	18%	13%	14%	17%	10%	16%	16%	17%	18%	19%	23%	17%	16%	12%	17%

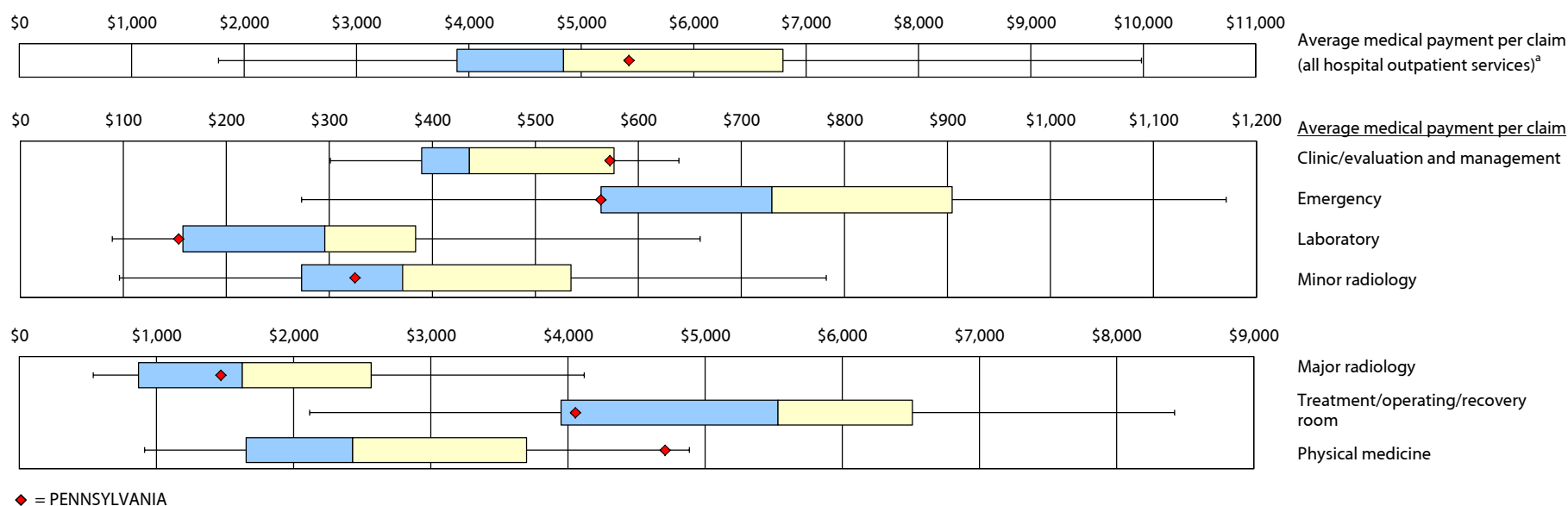
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b The cell sizes underlying the data in Arkansas for hospital inpatient measures are too small to support an interstate comparison.

^c The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 18 Payments for Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 18: Payments for Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average medical payment per claim																			
All hospital outpatient services ^a	\$3,384	\$1,773	\$6,793	\$3,421	\$7,704	\$5,688	\$4,798	\$4,884	\$8,575	\$2,424	\$3,895	\$5,628	\$4,533	\$4,340	\$5,423	\$4,241	\$8,248	\$9,985	\$4,841
Clinic/evaluation and management ^c	n/a	\$399	\$434	\$581	\$549	\$392	\$436	\$421	\$388	\$301	\$353	\$634	\$317	\$530	\$572	\$637	\$489	\$639	\$436
Emergency	\$273	\$382	\$998	\$608	\$905	\$830	\$656	\$516	\$957	\$587	\$509	\$833	\$789	\$1,171	\$564	\$670	\$1,154	\$901	\$730
Laboratory	\$158	\$89	\$660	\$187	\$384	\$336	\$221	\$225	\$362	\$127	\$117	\$315	\$331	\$384	\$154	\$276	\$422	\$385	\$296
Minor radiology	\$157	\$96	\$747	\$309	\$528	\$403	\$315	\$404	\$535	\$205	\$237	\$339	\$426	\$543	\$325	\$273	\$782	\$655	\$371
Major radiology	\$870	\$540	\$4,118	\$830	\$2,725	\$2,099	\$777	\$1,574	\$2,564	\$1,006	\$1,152	\$1,935	\$1,676	\$2,285	\$1,469	\$762	\$3,243	\$3,498	\$1,625
Treatment/operating/recovery room	\$2,445	\$3,410	\$6,511	\$4,900	\$6,567	\$6,157	\$5,714	\$3,949	\$8,422	\$2,117	\$3,177	\$5,767	\$5,349	\$4,880	\$4,055	\$6,156	\$8,186	\$7,984	\$5,532
Physical medicine	\$1,986	\$914	\$1,531	\$1,624	\$3,079	\$3,698	\$2,477	\$2,907	\$4,148	\$1,160	\$2,343	\$2,383	\$1,653	\$2,706	\$4,708	\$1,748	\$4,454	\$4,886	\$2,430
Average medical payment per claim for other hospital outpatient services (not displayed) ^d	\$1,705	\$522	\$2,666	\$1,154	\$2,695	\$1,727	\$1,334	\$1,635	\$3,038	\$715	\$1,178	\$2,206	\$1,915	\$1,524	\$2,360	\$1,018	\$3,229	\$2,566	\$1,716

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

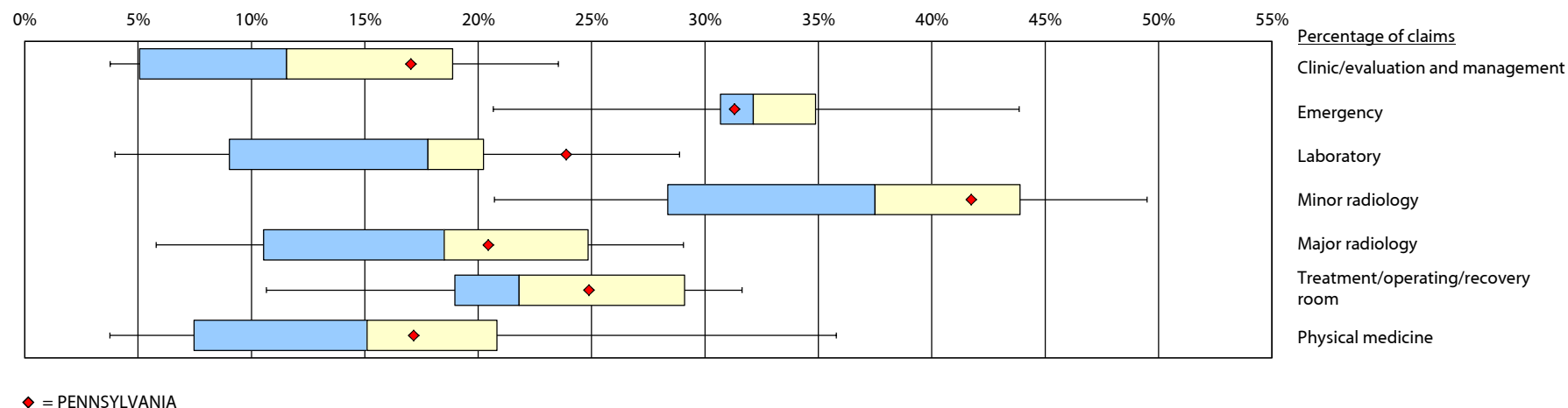
^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^c The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^d Other hospital outpatient services mainly include miscellaneous hospital ambulatory surgical care, supplies and equipment, hospital outpatient service undefined, hospital drugs/pharmaceuticals, and other miscellaneous defined medical and/or diagnostic services and testing.

Key: n/a: not available.

Figure 19 Percentage of Claims with Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 19: Percentage of Claims with Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of claims																			
All hospital outpatient services ^b	63.4%	37.0%	43.4%	43.5%	73.5%	64.1%	65.1%	73.6%	65.7%	76.6%	70.6%	65.4%	54.7%	50.2%	72.5%	50.1%	63.6%	75.0%	64.6%
Clinic/evaluation and management ^c	n/a	3.9%	6.9%	4.7%	21.7%	19.5%	11.6%	11.6%	3.8%	23.5%	13.9%	21.9%	8.0%	5.4%	17.0%	4.7%	9.6%	18.3%	11.6%
Emergency	34.9%	20.7%	30.8%	26.8%	32.7%	30.9%	30.5%	40.2%	35.4%	43.9%	34.9%	32.4%	30.7%	31.8%	31.3%	25.8%	38.3%	34.4%	32.1%
Laboratory	20.2%	8.4%	14.1%	5.4%	19.5%	18.8%	7.2%	28.9%	27.8%	18.4%	21.5%	14.3%	8.8%	16.0%	23.9%	4.0%	19.3%	17.2%	17.8%
Minor radiology	35.2%	20.7%	28.8%	20.8%	46.0%	40.0%	26.7%	45.1%	39.8%	49.5%	43.9%	33.3%	28.4%	29.6%	41.7%	21.6%	40.3%	44.4%	37.5%
Major radiology	24.9%	5.8%	9.7%	9.2%	24.8%	17.6%	16.2%	25.1%	19.7%	18.8%	29.0%	18.2%	10.5%	7.9%	20.4%	12.7%	19.2%	28.9%	18.5%
Treatment/operating/recovery room	22.7%	10.7%	13.6%	15.5%	29.3%	20.7%	31.0%	31.6%	28.6%	26.1%	29.1%	19.0%	20.8%	12.1%	24.9%	20.9%	20.4%	31.5%	21.8%
Physical medicine	16.7%	4.3%	3.8%	4.6%	27.5%	15.3%	14.9%	18.5%	11.6%	24.6%	20.8%	25.4%	6.6%	7.5%	17.2%	12.8%	11.6%	35.8%	15.1%
Percentage of claims for other hospital outpatient services (not displayed) ^d	45.9%	17.1%	34.3%	25.6%	52.8%	49.3%	35.9%	59.3%	50.6%	50.5%	52.9%	47.1%	33.0%	35.9%	n/a	21.8%	46.9%	54.0%	46.9%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

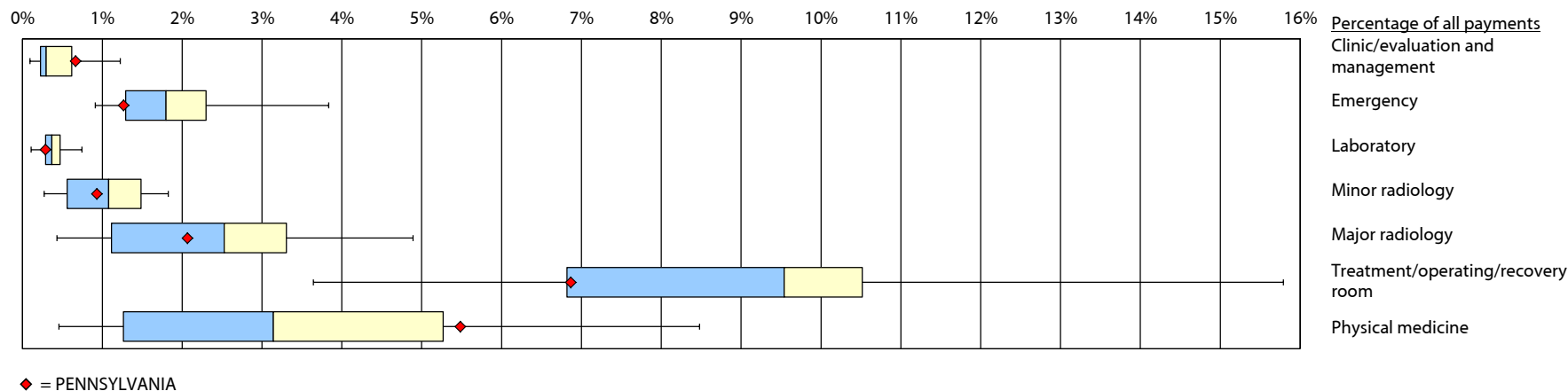
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^c The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^d Other hospital outpatient services mainly include miscellaneous hospital ambulatory surgical care, supplies and equipment, hospital outpatient service undefined, hospital drugs/pharmaceuticals, and other miscellaneous defined medical and/or diagnostic services and testing.

Key: n/a: not available.

Figure 20 Percentage of Medical Payments Made for Each Hospital Outpatient Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 20: Percentage of Medical Payments Made for Each Hospital Outpatient Service Group for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of all payments																			
All hospital outpatient services ^b	20.3%	8.8%	23.0%	12.1%	35.4%	22.3%	18.3%	32.8%	36.9%	27.6%	29.7%	32.1%	23.4%	13.5%	26.9%	19.9%	30.3%	36.3%	25.2%
Clinic/evaluation and management ^c	n/a	0.2%	0.2%	0.2%	0.8%	0.5%	0.3%	0.4%	0.1%	1.1%	0.5%	1.2%	0.2%	0.2%	0.7%	0.3%	0.3%	0.6%	0.3%
Emergency	0.9%	1.1%	2.4%	1.3%	1.8%	1.6%	1.2%	1.7%	2.3%	3.8%	1.9%	2.4%	2.3%	2.3%	1.3%	1.6%	2.5%	1.5%	1.8%
Laboratory	0.4%	0.1%	0.7%	0.1%	0.5%	0.4%	0.1%	0.7%	0.7%	0.3%	0.3%	0.4%	0.3%	0.4%	0.3%	0.1%	0.5%	0.4%	0.4%
Minor radiology	0.5%	0.3%	1.7%	0.5%	1.5%	1.0%	0.5%	1.5%	1.4%	1.5%	1.1%	1.0%	1.2%	1.0%	0.9%	0.6%	1.8%	1.4%	1.1%
Major radiology	2.0%	0.4%	3.1%	0.6%	4.2%	2.3%	0.7%	3.2%	3.3%	2.8%	3.6%	3.1%	1.7%	1.1%	2.1%	0.9%	3.6%	4.9%	2.5%
Treatment/operating/recovery room	5.2%	4.8%	6.8%	6.0%	12.0%	7.7%	10.4%	10.4%	15.8%	8.2%	9.9%	9.5%	10.5%	3.6%	6.9%	12.1%	9.6%	12.2%	9.5%
Physical medicine	3.1%	0.6%	0.5%	0.6%	5.3%	3.5%	2.2%	4.4%	3.2%	4.2%	5.3%	5.3%	1.0%	1.3%	5.5%	2.1%	3.0%	8.5%	3.1%
Percentage of all payments for other hospital outpatient services (not displayed) ^d	7.8%	1.3%	7.6%	2.6%	9.2%	5.5%	3.0%	10.4%	10.2%	5.7%	7.0%	9.3%	6.2%	3.6%	9.3%	2.2%	9.1%	6.9%	7.0%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

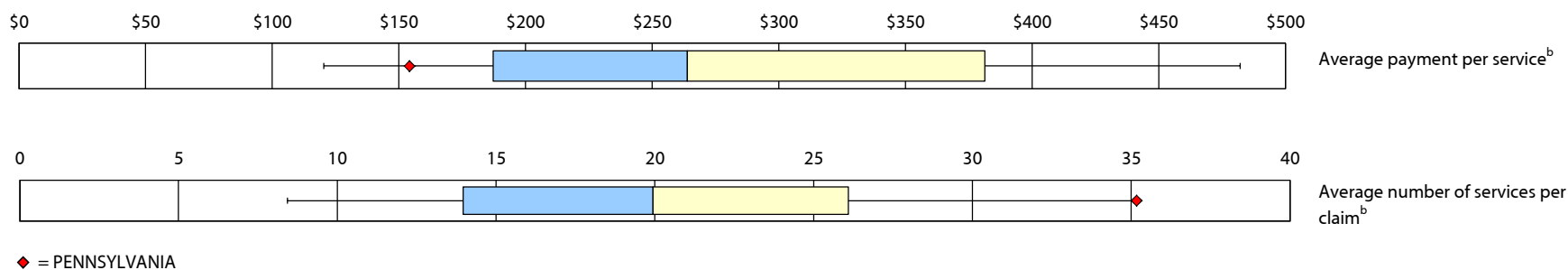
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^c The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^d Other hospital outpatient services mainly include miscellaneous hospital ambulatory surgical care, supplies and equipment, hospital outpatient service undefined, hospital drugs/pharmaceuticals, and other miscellaneous defined medical and/or diagnostic services and testing.

Key: n/a: not available.

Figure 21 Average Payment per Service and Average Number of Services per Claim for Hospital Outpatient Services^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 21: Average Payment per Service and Average Number of Services per Claim for Hospital Outpatient Services^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

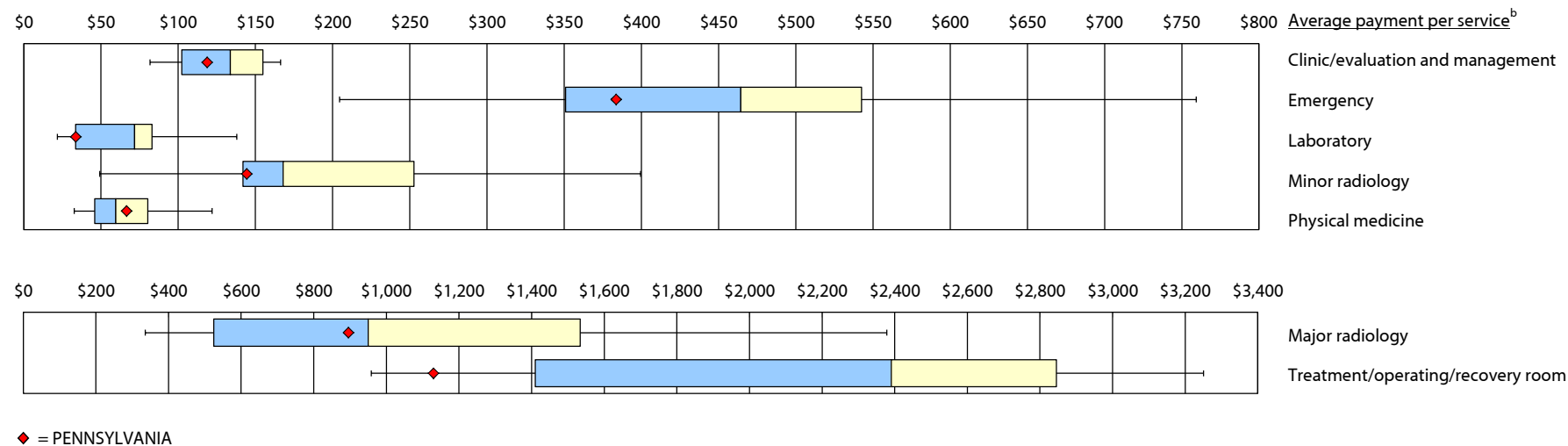
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^c
Average payment per service ^b	\$139	\$210	\$482	\$381	\$279	\$249	\$344	\$187	\$442	\$120	\$145	\$243	\$417	\$220	\$154	\$316	\$452	\$326	\$264
Average number of services per claim ^b	24.3	8.4	14.1	9.0	27.6	22.8	14.0	26.1	19.4	20.1	26.8	23.2	10.9	19.7	35.2	13.4	18.2	30.6	19.9

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services, we report average payment per service and number of services per claim. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition* for more details.

^c The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 22 Average Payment per Service for Hospital Outpatient Services,^a 2015/2016 (12 months)**Table for Figure 22: Average Payment per Service for Hospital Outpatient Services,^a 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^c
Average payment per service^b																			
Clinic/evaluation and management ^d	n/a	\$94	\$140	\$150	\$143	\$105	\$131	\$99	\$134	\$82	\$94	\$160	\$121	\$164	\$119	\$166	\$149	\$164	\$134
Emergency	\$205	\$303	\$690	\$453	\$477	\$490	\$476	\$315	\$562	\$351	\$280	\$430	\$514	\$759	\$384	\$447	\$696	\$543	\$464
Laboratory	\$34	\$22	\$138	\$66	\$70	\$77	\$65	\$45	\$79	\$27	\$25	\$75	\$87	\$74	\$34	\$79	\$95	\$87	\$72
Major radiology	\$501	\$336	\$2,116	\$494	\$1,804	\$1,310	\$525	\$898	\$1,534	\$656	\$721	\$1,220	\$1,002	\$1,246	\$895	\$473	\$2,105	\$2,378	\$950
Minor radiology	\$76	\$49	\$373	\$160	\$223	\$198	\$168	\$168	\$253	\$95	\$101	\$162	\$219	\$279	\$144	\$142	\$399	\$299	\$168
Treatment/operating/recovery room	\$1,042	\$2,212	\$2,467	\$2,780	\$2,647	\$2,375	\$2,891	\$1,410	\$2,846	\$959	\$1,197	\$2,406	\$2,360	\$2,219	\$1,130	\$3,211	\$3,250	\$3,116	\$2,390
Physical medicine	\$40	\$33	\$46	\$53	\$81	\$79	\$68	\$65	\$99	\$35	\$49	\$80	\$54	\$37	\$67	\$51	\$114	\$122	\$60

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

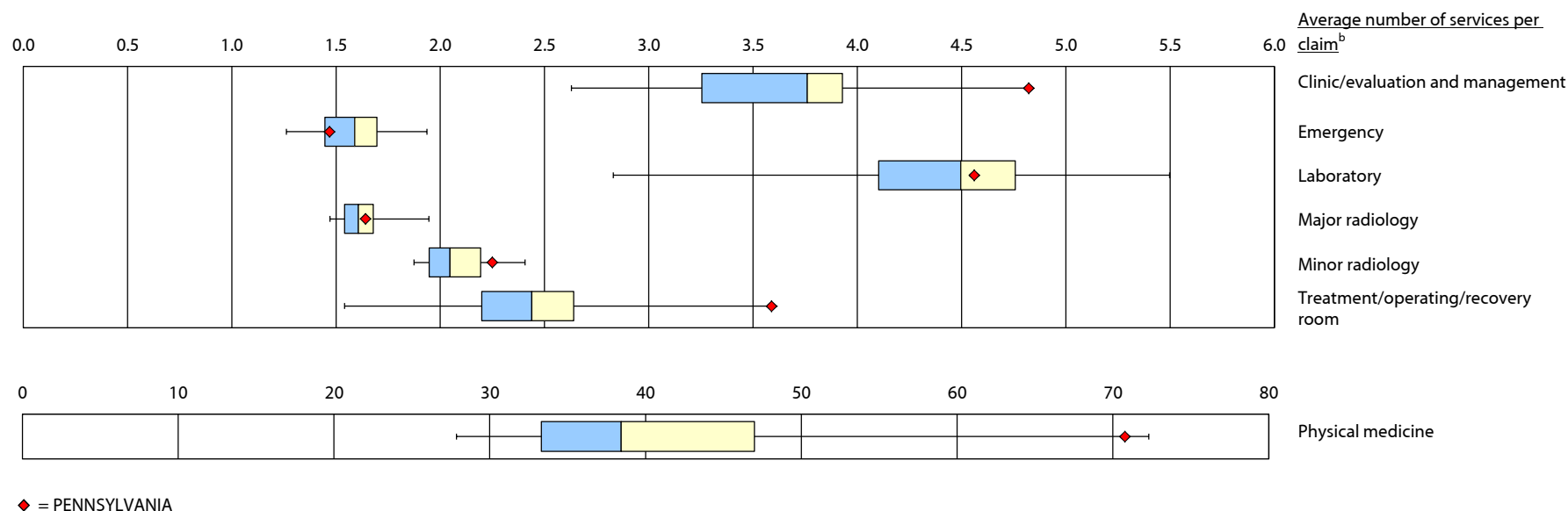
^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services, we report average payment per service. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition* for more details.

^c The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^d The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: n/a: not available.

Figure 23 Average Number of Services per Claim for Hospital Outpatient Services^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 23: Average Number of Services per Claim for Hospital Outpatient Services^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^c
Average number of services per claim^b																			
Clinic/evaluation and management ^d	n/a	4.3	3.1	3.9	3.8	3.7	3.3	4.2	2.9	3.7	3.8	4.0	2.6	3.2	4.8	3.8	3.3	3.9	3.8
Emergency	1.3	1.3	1.4	1.3	1.9	1.7	1.4	1.6	1.7	1.7	1.8	1.9	1.5	1.5	1.5	1.5	1.7	1.7	1.6
Laboratory	4.7	4.1	4.8	2.8	5.5	4.4	3.4	5.0	4.6	4.6	4.8	4.2	3.8	5.2	4.6	3.5	4.4	4.4	4.5
Major radiology	1.7	1.6	1.9	1.7	1.5	1.6	1.5	1.8	1.7	1.5	1.6	1.6	1.7	1.8	1.6	1.6	1.5	1.5	1.6
Minor radiology	2.1	2.0	2.0	1.9	2.4	2.0	1.9	2.4	2.1	2.2	2.3	2.1	1.9	1.9	2.2	1.9	2.0	2.2	2.0
Treatment/operating/recovery room	2.3	1.5	2.6	1.8	2.5	2.6	2.0	2.8	3.0	2.2	2.7	2.4	2.3	2.2	3.6	1.9	2.5	2.6	2.4
Physical medicine	49.6	27.9	33.3	30.5	37.9	47.0	36.2	44.5	41.9	33.5	47.6	29.7	30.6	72.3	70.8	34.3	39.0	40.1	38.4

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

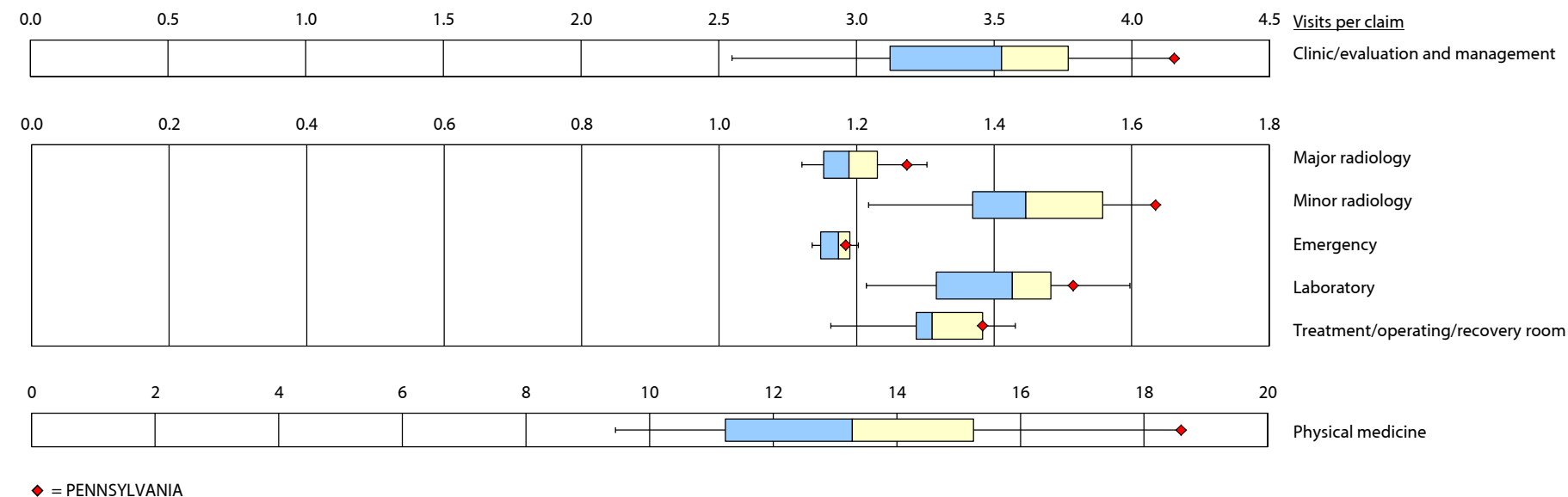
^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust estimate of the relative intensity of services, we report number of services per claim. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition* for more details.

^c The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^d The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: n/a: not available.

Figure 24 Visits per Claim for Each Hospital Outpatient Service Group^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 24: Visits per Claim for Each Hospital Outpatient Service Group^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Visits per claim																			
Clinic/evaluation and management ^c	n/a	4.16	3.01	3.74	3.74	3.45	3.22	3.93	2.85	3.49	3.69	3.80	2.55	3.11	4.15	3.53	3.13	3.71	3.53
Major radiology	1.30	1.13	1.15	1.14	1.16	1.22	1.19	1.29	1.23	1.19	1.25	1.21	1.12	1.12	1.27	1.19	1.16	1.21	1.19
Minor radiology	1.45	1.37	1.22	1.30	1.63	1.43	1.44	1.63	1.48	1.55	1.56	1.52	1.34	1.28	1.63	1.42	1.40	1.63	1.45
Emergency	1.14	1.17	1.20	1.17	1.16	1.14	1.14	1.19	1.20	1.19	1.19	1.19	1.18	1.14	1.18	1.15	1.19	1.16	1.17
Laboratory	1.59	1.28	1.39	1.21	1.60	1.45	1.31	1.59	1.46	1.42	1.47	1.48	1.32	1.42	1.51	1.27	1.40	1.43	1.43
Treatment/operating/recovery room	1.29	1.16	1.26	1.23	1.41	1.32	1.30	1.42	1.43	1.29	1.34	1.30	1.29	1.21	1.38	1.34	1.32	1.43	1.31
Physical medicine	15.2	9.4	10.0	10.2	14.9	15.4	13.1	13.6	12.9	13.5	15.4	11.6	10.2	17.4	18.6	11.2	12.7	15.2	13.3

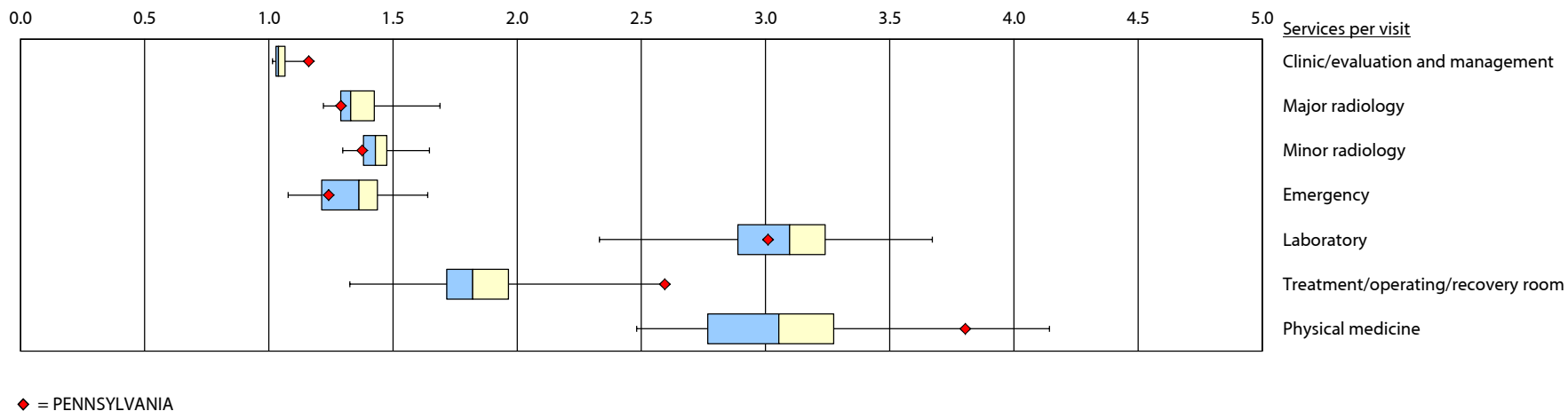
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^c The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: n/a: not available.

Figure 25 Services per Visit for Each Hospital Outpatient Service Group^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 25: Services per Visit for Each Hospital Outpatient Service Group^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Clinic/evaluation and management ^c	n/a	1.02	1.03	1.04	1.03	1.08	1.04	1.08	1.01	1.05	1.02	1.04	1.03	1.04	1.16	1.08	1.05	1.05	1.04
Major radiology	1.33	1.42	1.69	1.47	1.31	1.31	1.25	1.36	1.36	1.29	1.28	1.31	1.49	1.64	1.29	1.36	1.32	1.22	1.33
Minor radiology	1.42	1.43	1.65	1.48	1.46	1.43	1.30	1.48	1.43	1.39	1.50	1.38	1.45	1.52	1.38	1.35	1.40	1.35	1.43
Emergency	1.17	1.08	1.20	1.15	1.64	1.48	1.21	1.38	1.42	1.41	1.52	1.63	1.30	1.35	1.24	1.31	1.39	1.44	1.36
Laboratory	2.96	3.21	3.44	2.33	3.44	3.04	2.61	3.16	3.11	3.26	3.24	2.84	2.89	3.67	3.01	2.76	3.16	3.08	3.10
Treatment/operating/recovery room	1.82	1.33	2.10	1.43	1.76	1.96	1.53	1.97	2.07	1.72	1.98	1.85	1.76	1.82	2.59	1.43	1.90	1.80	1.82
Physical medicine	3.27	2.95	3.34	2.98	2.55	3.05	2.77	3.28	3.24	2.48	3.10	2.56	3.01	4.14	3.80	3.06	3.06	2.63	3.05

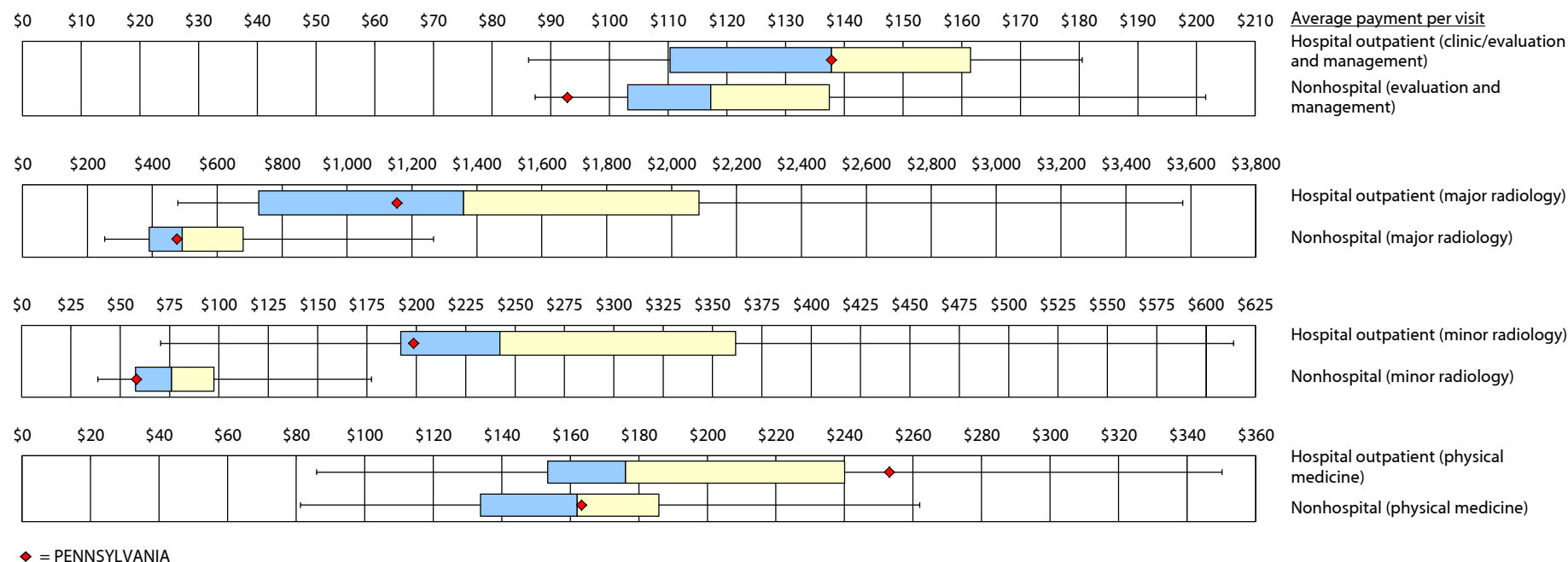
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a It is important to note that these are outpatient services where the provider is defined as a hospital. For the most part, hospital outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^c The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: n/a: not available.

Figure 26 Average Payment per Visit for Nonhospital and Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**Table for Figure 26: Average Payment per Visit for Nonhospital and Hospital Outpatient Services for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)**

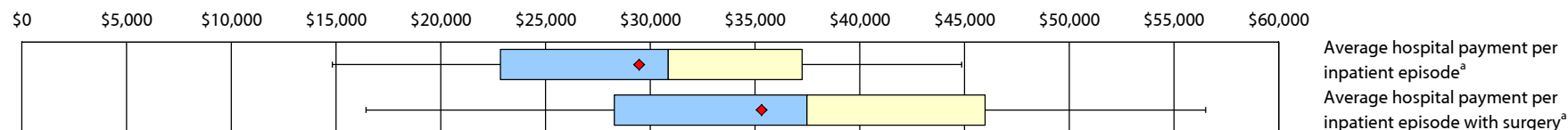
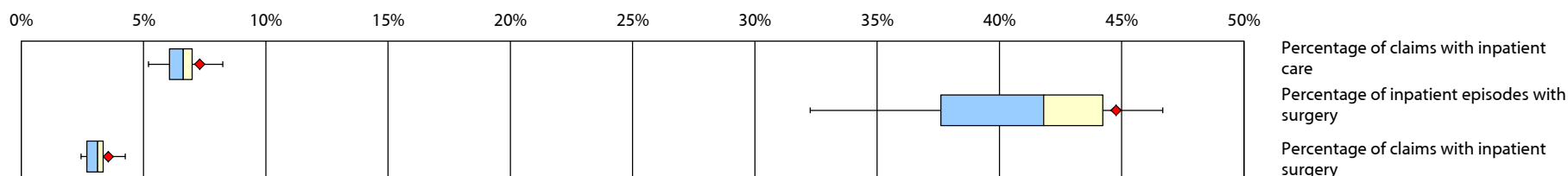
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per visit, hospital outpatient																			
Clinic/evaluation and management ^b	n/a	\$96	\$144	\$155	\$147	\$113	\$135	\$107	\$136	\$86	\$96	\$167	\$125	\$170	\$138	\$181	\$156	\$172	\$138
Major radiology	\$668	\$479	\$3,575	\$728	\$2,358	\$1,721	\$653	\$1,223	\$2,084	\$846	\$923	\$1,597	\$1,494	\$2,039	\$1,154	\$642	\$2,788	\$2,902	\$1,359
Minor radiology	\$108	\$70	\$614	\$237	\$325	\$283	\$218	\$247	\$362	\$132	\$152	\$223	\$317	\$424	\$199	\$192	\$559	\$402	\$242
Physical medicine	\$131	\$97	\$153	\$159	\$207	\$240	\$189	\$214	\$321	\$86	\$153	\$206	\$163	\$155	\$253	\$156	\$350	\$321	\$176
Average payment per visit, nonhospital																			
Evaluation and management	\$103	\$118	\$98	\$132	\$137	\$100	\$138	\$112	\$103	\$87	\$117	\$160	\$108	\$121	\$93	\$129	\$143	\$202	\$117
Major radiology	\$344	\$366	\$429	\$511	\$819	\$680	\$827	\$439	\$609	\$390	\$254	\$482	\$549	\$502	\$476	\$348	\$683	\$1,267	\$492
Minor radiology	\$59	\$63	\$68	\$86	\$96	\$108	\$128	\$56	\$87	\$39	\$48	\$84	\$58	\$97	\$58	\$56	\$103	\$177	\$76
Physical medicine	\$124	\$106	\$93	\$143	\$174	\$196	\$262	\$162	\$163	\$81	\$155	\$134	\$136	\$186	\$163	\$186	\$204	\$254	\$162

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

^b The numbers shown for clinic/evaluation and management in hospital outpatient settings in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in hospital outpatient settings in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: n/a: not available.

Figure 27a Payments for Hospital Inpatient Episodes for Claims with More Than 7 Days of Lost Time, 2014/2016 (24 months)**Figure 27b Percentage of Claims with Hospital Inpatient Episodes for Claims with More Than 7 Days of Lost Time, 2014/2016 (24 months)**

♦ = PENNSYLVANIA

Table for Figures 27a and 27b: Payments for Hospital Inpatient Episodes and Percentage of Claims with Hospital Inpatient Episodes for Claims with More Than 7 Days of Lost Time, 2014/2016 (24 months)

	AR ^b	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	17-State Median ^c
Average hospital payment per inpatient episode ^a	n/a	\$23,699	\$37,427	\$30,865	\$37,079	\$28,764	\$43,531	\$21,990	\$18,384	\$21,330	\$14,819	\$32,014	\$32,797	\$33,385	\$29,479	\$23,865	\$44,867	\$41,033	\$30,865
Average hospital payment per inpatient episode with surgery ^a	n/a	\$27,629	\$49,216	\$38,104	\$42,745	\$34,995	\$56,514	\$28,934	\$19,797	\$27,158	\$16,436	\$39,306	\$37,727	\$37,476	\$35,314	\$29,136	\$55,652	\$51,234	\$37,476
Percentage of claims with inpatient care	n/a	5.2%	6.8%	6.4%	6.6%	6.1%	6.7%	6.5%	8.2%	5.7%	7.0%	6.5%	6.0%	7.2%	7.3%	6.7%	7.0%	5.3%	6.6%
Percentage of inpatient episodes with surgery	n/a	42%	34%	42%	42%	45%	40%	34%	44%	47%	40%	36%	40%	45%	45%	32%	43%	42%	42%
Percentage of claims with inpatient surgery	n/a	2.4%	2.7%	3.1%	3.2%	3.2%	3.3%	2.5%	4.2%	2.9%	3.2%	2.8%	2.8%	3.7%	3.6%	2.7%	3.4%	2.5%	3.1%

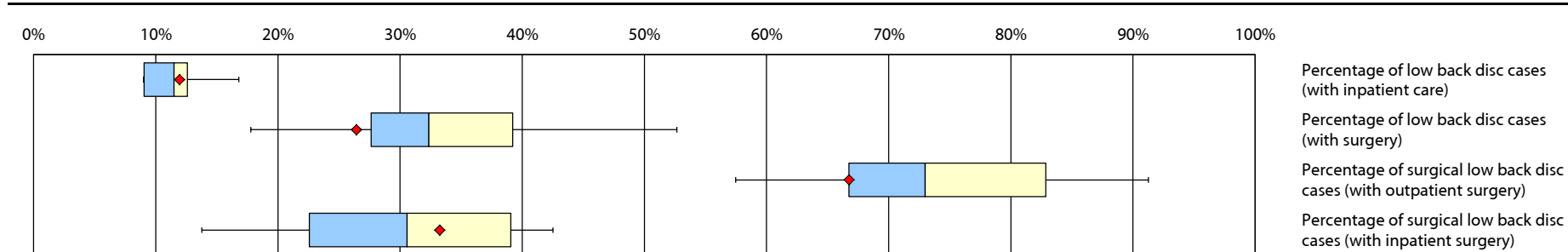
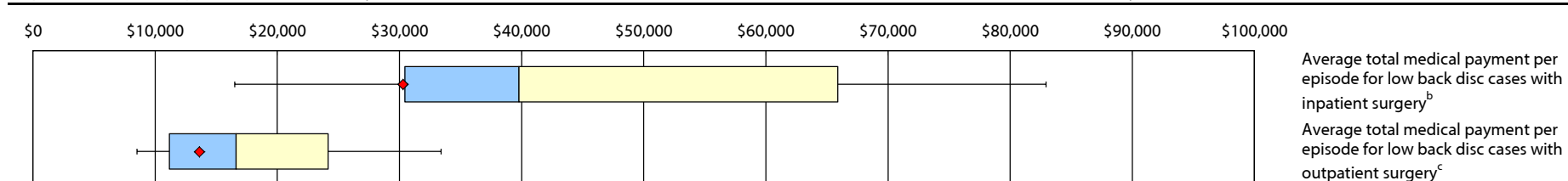
Note: 2014/2016 refers to claims arising from October 1, 2013, through September 30, 2014, evaluated as of March 30, 2016.

^a In this report we identify hospital inpatient stays using revenue codes for room and board. We then use the service dates to construct hospital inpatient episodes, which include one day before and one day after the hospital inpatient stay, and capture all hospital services provided during the inpatient episode. The payments captured include only the payments made to the hospital provider for services rendered during the inpatient stay (i.e., it excludes payments to surgeons, etc., billing separately from the hospital).

^b The cell sizes underlying the data in Arkansas for hospital inpatient measures are too small to support an interstate comparison.

^c The 17-state median is the the state ranked 9th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 28a Percentage of Low Back Cases with Disc Conditions^a with Surgery (inpatient and outpatient) and More Than 7 Days of Lost Time, 2014/2016 (24 months)**Figure 28b Average Total Medical Payment per Episode for Low Back Cases with Disc Conditions^a with More Than 7 Days of Lost Time, 2014/2016 (24 months)**

♦ = PENNSYLVANIA

Table for Figures 28a and 28b: Percentage of Low Back Cases with Disc Conditions^a with Surgery (inpatient and outpatient) and Average Total Medical Payment per Episode for Surgical Low Back Cases with Disc Conditions with More Than 7 Days of Lost Time, 2014/2016 (24 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	16-State Median ^d
Low back cases with disc conditions^{a,e}																			
Percentage of cases (with inpatient care)	n/a	10%	11%	12%	n/a	13%	n/a	n/a	n/a	10%	17%	11%	9%	15%	12%	10%	12%	n/a	12%
Percentage of cases (with surgery)	n/a	18%	23%	28%	53%	28%	41%	43%	30%	20%	34%	39%	41%	32%	26%	31%	39%	35%	32%
Percentage of surgical cases (with outpatient surgery)	n/a	61%	72%	72%	83%	67%	86%	89%	n/a	57%	59%	82%	84%	65%	67%	74%	81%	91%	73%
Percentage of surgical cases (with inpatient surgery)	n/a	39%	28%	28%	n/a	33%	14%	n/a	n/a	43%	41%	n/a	16%	35%	33%	26%	19%	n/a	31%
Average total medical payment per episode for disc cases with inpatient surgery ^b	n/a	\$29,971	\$44,972	\$36,768	n/a	\$65,877	\$71,269	n/a	n/a	\$36,633	\$16,523	n/a	\$41,380	\$82,943	\$30,295	\$38,198	\$76,143	n/a	\$39,789
Average total medical payment per episode for disc cases with outpatient surgery ^c	n/a	\$9,242	\$19,393	\$14,098	\$21,590	\$24,666	\$19,149	\$9,951	n/a	\$10,903	\$8,519	\$19,330	\$13,074	\$33,412	\$13,626	\$13,721	\$24,158	\$26,144	\$16,624
Average hospital payment per episode for disc cases with inpatient surgery ^f	n/a	\$23,906	\$38,471	\$28,312	n/a	\$33,152	\$47,422	n/a	n/a	\$22,868	\$11,892	n/a	\$32,806	\$36,815	\$21,383	\$29,453	\$55,629	n/a	\$31,130

continued

Table for Figures 28a and 28b: Percentage of Low Back Cases with Disc Conditions^a with Surgery (inpatient and outpatient) and Average Total Medical Payment per Episode for Surgical Low Back Cases with Disc Conditions with More Than 7 Days of Lost Time, 2014/2016 (24 months) (continued)

Note: 2014/2016 refers to claims arising from October 1, 2013, through September 30, 2014, evaluated as of March 30, 2016.

^a Low back cases with disc conditions are defined as low back claims with at least half of the medical dollars spent on a set of specific disc-related ICD-9/ICD-10 codes; the most frequent codes included are ICD-9 code 722.10 (displacement of lumbar intervertebral disc without myelopathy) and ICD-9 code 724.40 (thoracic or lumbosacral neuritis or radiculitis, unspecified) and their ICD-10 equivalents – M51.26, M51.27 (intervertebral disc displacement, lumbar region and lumbosacral region). The surgery is identified by a list of CPT codes for treating low back-related conditions; the most common surgery provided for those cases is a laminotomy (CPT code 63030). A surgical episode is defined around the date of the low back surgery, including one day before and one day after the surgery date.

^b This is the cost of the surgical episode, including payments made to the hospital as well as to the surgeon or other nonhospital providers for services rendered during the inpatient stay.

^c This includes payments made to the hospital and nonhospital providers for services rendered during the outpatient surgical episode.

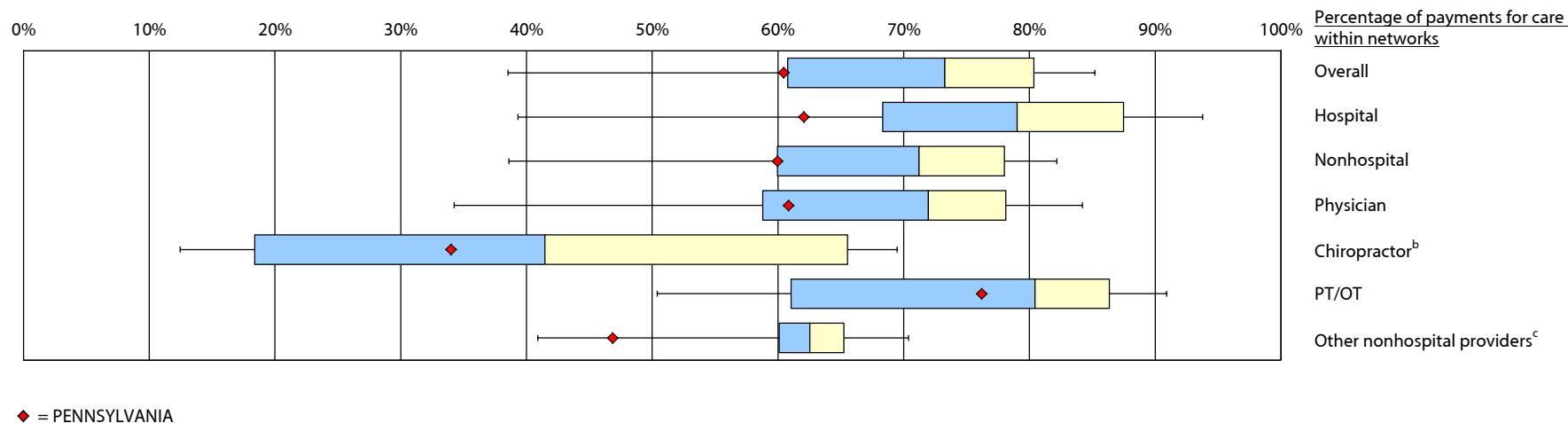
^d The 16-state median is the average of the states ranked 8th and 9th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure. We show a 12-state median for the percentage of cases (with inpatient care), percentage of surgical cases (with inpatient surgery), average total medical payment per episode for disc cases with inpatient surgery, and average hospital payment per episode for disc cases with inpatient surgery, and a 17-state median for the percentage of cases (with surgery).

^e We have excluded numbers for Arkansas from all low back cases with disc conditions measures due to very small cell sizes. Indiana, Iowa, Kentucky, Louisiana, and Wisconsin have been excluded for the percentage of cases with inpatient care due to very small cell sizes. Florida, Georgia, Massachusetts, Michigan, Minnesota, North Carolina, and Virginia should be used with caution for this measure. Kentucky, Louisiana, and Massachusetts should be used with caution for the percentage of cases with surgery. Iowa, Kentucky, Louisiana, Minnesota, and Wisconsin are excluded from percentage of surgical cases with inpatient surgery, average total medical payment per episode for disc cases with inpatient surgery, and average hospital payment per episode for disc cases with inpatient surgery. Georgia, Indiana, Massachusetts, North Carolina, and Virginia should be used with caution for these measures. Louisiana is excluded from the percentage of surgical cases with outpatient surgery and average total medical payment per episode for disc cases with outpatient surgery due to small cell sizes. Georgia, Kentucky, Massachusetts, and Michigan should be used with caution for these measures.

^f This includes only the cost of the surgical episode paid to the hospital for services rendered during the inpatient stay.

Key: CPT: Current Procedural Terminology; ICD-9: International Classification of Diseases, 9th Revision; n/a: not available.

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Figure 29 Percentage of Medical Payments for Care Rendered in Networks^a in Calendar Year 2015**Table for Figure 29: Percentage of Medical Payments for Care Rendered in Networks^a in Calendar Year 2015**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^d
Percentage of medical payments for care within networks																			
Overall	82%	72%	80%	79%	84%	69%	80%	82%	42%	46%	68%	61%	71%	85%	60%	39%	80%	75%	73%
Hospital	90%	79%	91%	76%	87%	86%	82%	89%	41%	50%	73%	69%	68%	94%	62%	39%	93%	80%	79%
Nonhospital	77%	71%	74%	80%	80%	62%	79%	78%	43%	44%	65%	55%	74%	82%	60%	39%	71%	71%	71%
Physician	81%	72%	73%	82%	84%	59%	76%	78%	34%	36%	64%	54%	71%	81%	61%	38%	72%	75%	72%
Chiropractor ^b	n/a	66%	69%	n/a	65%	14%	n/a	66%	12%	22%	41%	31%	n/a	58%	34%	15%	n/a	44%	41%
PT/OT	86%	85%	88%	90%	80%	81%	90%	85%	52%	56%	71%	60%	85%	91%	76%	50%	77%	61%	80%
Other nonhospital providers ^c	64%	60%	64%	67%	65%	51%	67%	70%	55%	61%	59%	59%	69%	70%	47%	41%	62%	63%	63%

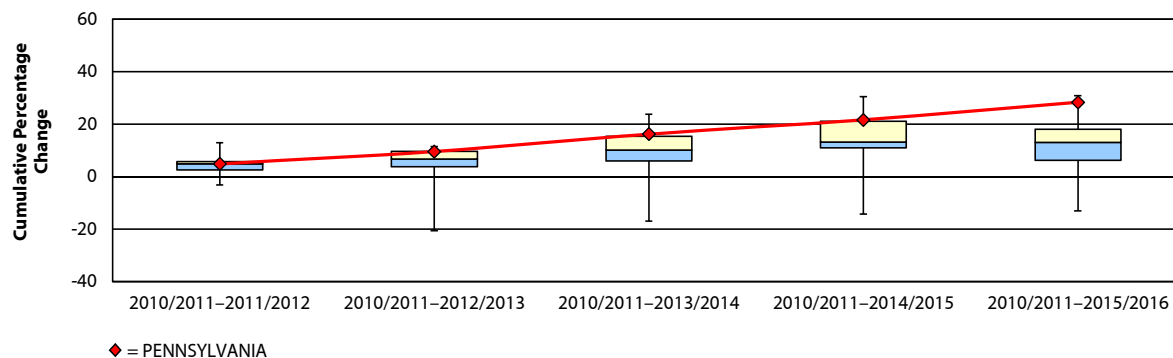
^a The percentage of medical payments to different types of health care providers for care rendered within networks is based on identification of network care provided by the data sources.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c Other nonhospital providers include nurses and other ancillary providers (such as psychologists, social workers, acupuncture, etc.), medical equipment suppliers and pharmacies, diagnostic centers (such as MRI and imaging facilities), etc.

^d The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

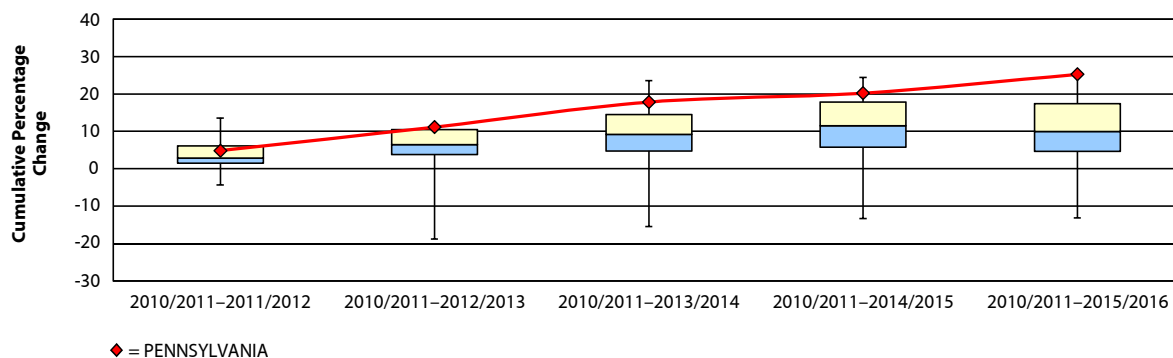
Key: MRI: magnetic resonance imaging; n/a: not available; PT/OT: physical/occupational therapist.

Figure 30 Trend of Average Medical Payment for All Paid Claims (12 months)**Table for Figure 30: Trend of Average Medical Payment for All Paid Claims (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	4.3	3.6	5.0	5.1	13.0	-3.1	6.7	2.9	10.5	0.6	5.5	0.1	1.5	4.9	4.9	6.2	2.6	5.7	4.9
2012/2013	2.8	5.8	7.7	5.8	10.1	-20.6	7.6	9.7	9.7	2.8	4.1	3.8	0.7	8.1	9.6	5.5	11.4	9.6	6.7
2013/2014	6.0	3.1	9.2	12.4	23.8	-16.9	17.0	2.5	15.4	10.3	9.7	9.9	1.8	11.2	16.2	9.9	11.5	19.6	10.1
2014/2015	4.6	3.3	15.7	15.9	24.5	-14.2	21.9	12.3	21.1	11.9	11.4	11.0	-0.6	14.2	21.7	11.6	16.4	30.5	13.2
2015/2016	-2.5	1.4	15.3	13.5	30.8	-13.0	7.7	16.5	25.9	12.6	6.3	10.9	-6.7	13.9	28.4	6.7	18.1	28.5	13.0
Annual percentage change:																			
2010/2011 to 2011/2012	4.3	3.6	5.0	5.1	13.0	-3.1	6.7	2.9	10.5	0.6	5.5	0.1	1.5	4.9	4.9	6.2	2.6	5.7	4.9
2011/2012 to 2012/2013	-1.5	2.2	2.6	0.6	-2.5	-18.0	0.9	6.7	-0.7	2.2	-1.3	3.8	-0.7	3.0	4.5	-0.7	8.6	3.7	1.6
2012/2013 to 2013/2014	3.1	-2.6	1.4	6.3	12.4	4.6	8.7	-6.6	5.2	7.3	5.5	5.9	1.0	2.9	6.0	4.2	0.0	9.0	4.9
2013/2014 to 2014/2015	-1.3	0.2	5.9	3.1	0.6	3.2	4.2	9.6	4.9	1.4	1.5	1.0	-2.4	2.7	4.7	1.5	4.4	9.1	2.9
2014/2015 to 2015/2016	-6.8	-1.9	-0.4	-2.1	5.1	1.4	-11.7	3.8	4.0	0.7	-4.6	-0.1	-6.2	-0.3	5.5	-4.4	1.5	-1.5	-0.3

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

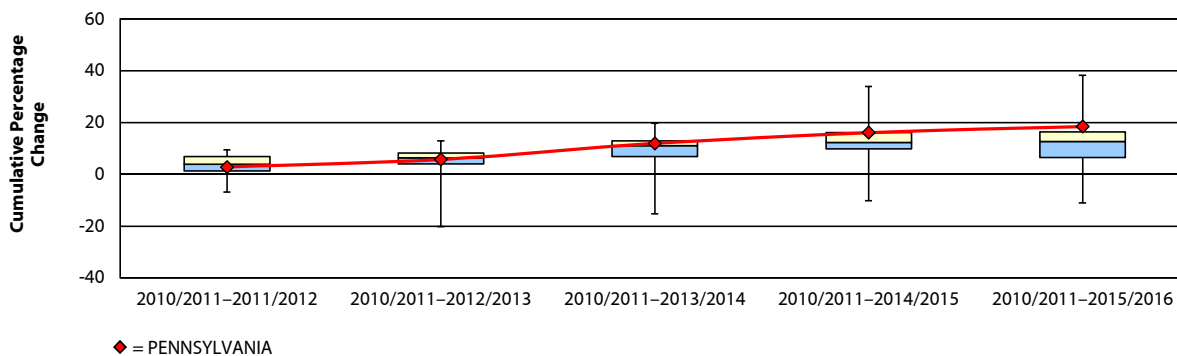
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 31 Trend of Average Medical Payment per Claim with More Than 7 Days of Lost Time (12 months)**Table for Figure 31: Trend of Average Medical Payment per Claim with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.3	1.1	2.7	3.0	13.5	-4.4	6.1	1.8	10.5	2.1	5.0	-2.3	1.4	1.5	4.8	7.3	2.5	3.0	2.9
2012/2013	6.1	1.8	7.8	3.8	11.3	-18.8	7.5	6.7	10.6	3.8	4.1	1.8	-0.5	4.2	11.1	10.4	11.6	7.8	6.4
2013/2014	10.9	-2.9	8.6	9.3	23.6	-15.5	14.4	0.7	13.5	9.1	10.8	6.2	-1.6	4.7	17.8	18.7	8.9	14.6	9.2
2014/2015	10.5	-5.0	16.0	7.3	24.4	-13.4	17.2	6.7	17.8	8.1	12.4	5.5	-5.8	5.8	20.2	18.9	14.5	22.4	11.5
2015/2016	4.0	-7.3	15.5	4.6	25.7	-11.0	5.6	11.0	21.6	8.8	11.6	4.8	-13.2	6.9	25.2	14.5	17.4	21.0	9.9
Annual percentage change:																			
2010/2011 to 2011/2012	7.3	1.1	2.7	3.0	13.5	-4.4	6.1	1.8	10.5	2.1	5.0	-2.3	1.4	1.5	4.8	7.3	2.5	3.0	2.9
2011/2012 to 2012/2013	-1.1	0.7	5.0	0.7	-1.9	-15.1	1.3	4.9	0.1	1.7	-0.9	4.3	-1.9	2.7	6.0	2.9	8.9	4.6	1.5
2012/2013 to 2013/2014	4.5	-4.6	0.7	5.3	11.0	4.0	6.5	-5.7	2.6	5.0	6.5	4.3	-1.1	0.5	6.0	7.5	-2.4	6.3	4.4
2013/2014 to 2014/2015	-0.4	-2.2	6.9	-1.8	0.7	2.5	2.4	6.0	3.8	-0.8	1.5	-0.7	-4.3	1.0	2.0	0.2	5.1	6.9	1.2
2014/2015 to 2015/2016	-5.9	-2.4	-0.5	-2.5	1.1	2.8	-9.9	4.0	3.2	0.7	-0.7	-0.6	-7.8	1.1	4.2	-3.7	2.5	-1.2	-0.5

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

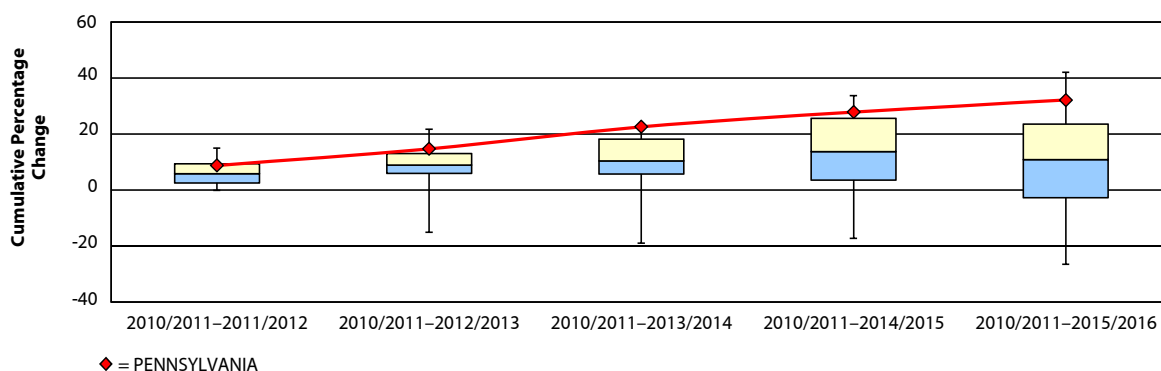
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 32 Trend of Average Payment per Claim to Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 32: Trend of Average Payment per Claim to Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	6.9	2.1	4.0	5.7	7.5	-6.9	9.5	1.3	7.9	0.6	5.9	-1.2	0.3	4.0	2.8	8.1	3.8	2.4	3.9
2012/2013	6.0	4.5	8.1	10.2	4.0	-20.2	11.6	9.3	7.9	4.0	1.1	5.2	2.0	6.8	5.8	8.2	12.9	7.0	6.4
2013/2014	14.5	-3.5	6.9	19.0	14.8	-15.2	19.7	7.6	9.4	4.7	12.7	10.6	5.2	8.3	12.0	12.5	11.5	13.0	11.1
2014/2015	12.3	-5.2	12.3	16.0	22.6	-10.2	34.0	11.2	13.7	4.6	13.6	9.9	4.1	11.1	16.1	10.5	18.3	23.4	12.3
2015/2016	6.5	-8.6	7.0	17.5	15.9	-11.0	38.3	17.9	14.1	7.5	13.9	10.9	-1.3	11.4	18.5	3.2	16.4	16.2	12.7
Annual percentage change:																			
2010/2011 to 2011/2012	6.9	2.1	4.0	5.7	7.5	-6.9	9.5	1.3	7.9	0.6	5.9	-1.2	0.3	4.0	2.8	8.1	3.8	2.4	3.9
2011/2012 to 2012/2013	-0.8	2.3	3.9	4.3	-3.2	-14.3	2.0	7.9	0.0	3.3	-4.5	6.5	1.7	2.8	2.8	0.1	8.8	4.4	2.5
2012/2013 to 2013/2014	8.0	-7.7	-1.1	8.0	10.3	6.2	7.3	-1.6	1.3	0.7	11.5	5.1	3.1	1.4	5.9	3.9	-1.2	5.6	4.5
2013/2014 to 2014/2015	-1.9	-1.8	5.0	-2.6	6.8	5.9	11.9	3.4	4.0	-0.1	0.7	-0.6	-1.0	2.6	3.7	-1.7	6.0	9.2	3.0
2014/2015 to 2015/2016	-5.2	-3.5	-4.7	1.3	-5.4	-0.9	3.2	6.0	0.3	2.8	0.3	0.9	-5.2	0.3	2.0	-6.6	-1.6	-5.8	-0.3

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 33 Trend of Average Payment per Claim to Hospitals for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 33: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Hospitals for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	11.2	5.5	9.4	3.8	15.0	0.0	12.0	8.5	11.4	2.6	6.3	3.0	1.6	0.9	8.8	7.1	1.7	2.6	5.9
2012/2013	13.7	6.6	21.7	1.7	11.6	-15.0	13.1	11.0	14.4	2.0	6.7	-0.2	6.0	6.6	14.7	9.5	11.4	8.4	9.0
2013/2014	9.9	7.5	20.2	13.7	23.2	-18.9	18.2	-1.9	8.9	5.2	6.0	5.8	-6.9	11.0	22.6	19.5	15.3	15.1	10.5
2014/2015	25.6	4.8	33.7	12.6	25.9	-17.3	11.9	3.6	20.7	14.8	4.9	-1.0	-10.2	2.4	27.8	26.5	16.1	22.1	13.7
2015/2016	-3.2	7.5	42.0	7.5	25.6	-12.7	-23.3	11.7	18.9	14.1	2.0	-2.8	-26.4	10.1	32.2	26.9	14.1	23.6	10.9
Annual percentage change:																			
2010/2011 to 2011/2012	11.2	5.5	9.4	3.8	15.0	0.0	12.0	8.5	11.4	2.6	6.3	3.0	1.6	0.9	8.8	7.1	1.7	2.6	5.9
2011/2012 to 2012/2013	2.3	1.1	11.3	-2.0	-3.0	-15.0	0.9	2.3	2.7	-0.6	0.4	-3.1	4.3	5.6	5.5	2.2	9.5	5.7	2.2
2012/2013 to 2013/2014	-3.4	0.8	-1.2	11.8	10.4	-4.6	4.5	-11.6	-4.8	3.2	-0.7	6.0	-12.1	4.1	6.9	9.1	3.5	6.2	3.3
2013/2014 to 2014/2015	14.3	-2.5	11.2	-1.0	2.2	2.0	-5.3	5.6	10.8	9.1	-1.1	-6.4	-3.6	-7.8	4.3	5.8	0.7	6.1	2.1
2014/2015 to 2015/2016	-22.9	2.5	6.2	-4.5	-0.3	5.5	-31.4	7.8	-1.5	-0.6	-2.7	-1.8	-18.1	7.5	3.4	0.3	-1.7	1.2	-0.4
Percentage of claims with hospital provider involvement																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	3.9	-0.9	-1.2	-0.6	-0.3	1.1	1.4	1.9	0.2	1.1	-1.0	1.0	0.5	-0.9	-1.3	1.5	-3.9	0.4	0.3
2012/2013	2.5	-3.5	-1.2	-3.7	-1.5	-0.2	0.5	0.3	-0.5	0.0	-1.2	0.3	-2.2	-1.4	-0.2	0.9	-3.8	0.2	-0.3
2013/2014	0.7	-5.1	-1.8	-7.1	-0.2	-1.4	-0.9	-1.8	-2.1	-1.5	-2.1	-0.9	-5.1	-2.7	-1.2	0.4	-5.6	1.1	-1.6
2014/2015	-2.5	-6.6	-2.4	-8.8	-0.4	-1.9	-2.4	-3.2	0.1	-1.3	-2.6	-0.5	-6.2	-2.4	-1.7	0.3	-4.5	2.7	-2.4
2015/2016	-0.4	-8.3	-3.9	-11.9	-4.0	-2.8	-2.3	-4.4	-2.0	-3.3	-3.4	-1.6	-7.7	-5.7	-4.5	-1.0	-6.1	2.9	-3.7
Annual percentage point change:																			
2010/2011 to 2011/2012	3.9	-0.9	-1.2	-0.6	-0.3	1.1	1.4	1.9	0.2	1.1	-1.0	1.0	0.5	-0.9	-1.3	1.5	-3.9	0.4	0.3
2011/2012 to 2012/2013	-1.3	-2.7	0.0	-3.1	-1.1	-1.3	-0.9	-1.6	-0.7	-1.0	-0.2	-0.7	-2.6	-0.5	1.1	-0.6	0.1	-0.2	-0.8
2012/2013 to 2013/2014	-1.8	-1.5	-0.6	-3.4	1.3	-1.3	-1.4	-2.1	-1.6	-1.5	-0.9	-1.2	-2.9	-1.2	-1.1	-0.6	-1.9	0.9	-1.3
2013/2014 to 2014/2015	-3.2	-1.5	-0.6	-1.7	-0.2	-0.5	-1.6	-1.4	2.3	0.1	-0.5	0.3	-1.1	0.3	-0.4	-0.1	1.1	1.6	-0.5
2014/2015 to 2015/2016	2.1	-1.8	-1.5	-3.1	-3.6	-0.8	0.1	-1.2	-2.1	-2.0	-0.9	-1.0	-1.5	-3.3	-2.8	-1.2	-1.6	0.2	-1.5

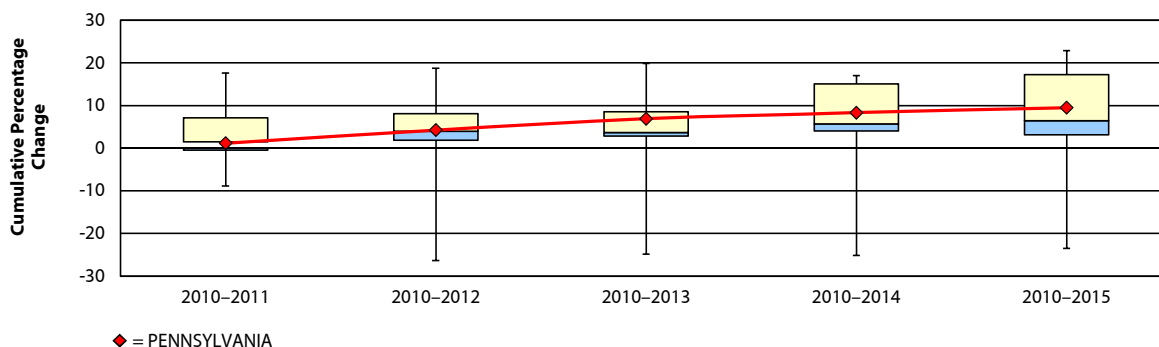
continued

Table for Figure 33: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Hospitals for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made to hospital providers																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-1.2	1.6	2.2	-0.1	3.4	2.3	0.1	1.8	0.5	1.4	0.2	1.8	0.6	-0.5	-1.3	-0.2	-2.1	0.2	0.4
2012/2013	-0.9	-0.7	4.3	-3.4	2.1	1.5	1.3	-0.2	1.9	0.7	1.3	-0.4	0.6	0.3	1.0	0.5	-2.2	0.9	0.6
2013/2014	-1.3	0.7	2.5	-1.5	3.8	-1.9	-1.2	-2.4	-1.1	0.0	-1.7	2.1	-4.7	-1.1	0.5	1.3	-0.6	1.0	-0.8
2014/2015	-0.4	-1.2	4.6	-3.8	0.6	-2.5	-4.8	-3.1	1.6	3.3	-2.6	-1.1	-6.1	-3.5	-0.6	2.9	-2.5	1.8	-1.1
2015/2016	-4.2	-0.6	7.5	-4.3	0.9	-1.3	-14.7	-0.9	1.3	0.1	-2.8	-3.3	-10.6	-2.5	1.0	3.2	-2.8	3.1	-1.1
Annual percentage point change:																			
2010/2011 to 2011/2012	-1.2	1.6	2.2	-0.1	3.4	2.3	0.1	1.8	0.5	1.4	0.2	1.8	0.6	-0.5	-1.3	-0.2	-2.1	0.2	0.4
2011/2012 to 2012/2013	0.3	-2.3	2.1	-3.3	-1.2	-0.8	1.2	-1.9	1.4	-0.7	1.1	-2.3	-0.1	0.8	2.3	0.7	-0.1	0.7	0.1
2012/2013 to 2013/2014	-0.4	1.4	-1.8	2.0	1.7	-3.4	-2.5	-2.2	-3.0	-0.7	-3.0	2.6	-5.3	-1.5	-0.5	0.8	1.7	0.1	-0.6
2013/2014 to 2014/2015	0.9	-1.9	2.1	-2.3	-3.2	-0.6	-3.6	-0.7	2.7	3.3	-0.9	-3.2	-1.4	-2.3	-1.0	1.6	-2.0	0.8	-1.0
2014/2015 to 2015/2016	-3.8	0.5	2.9	-0.5	0.3	1.2	-9.9	2.3	-0.3	-3.1	-0.3	-2.2	-4.5	1.0	1.6	0.3	-0.3	1.3	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

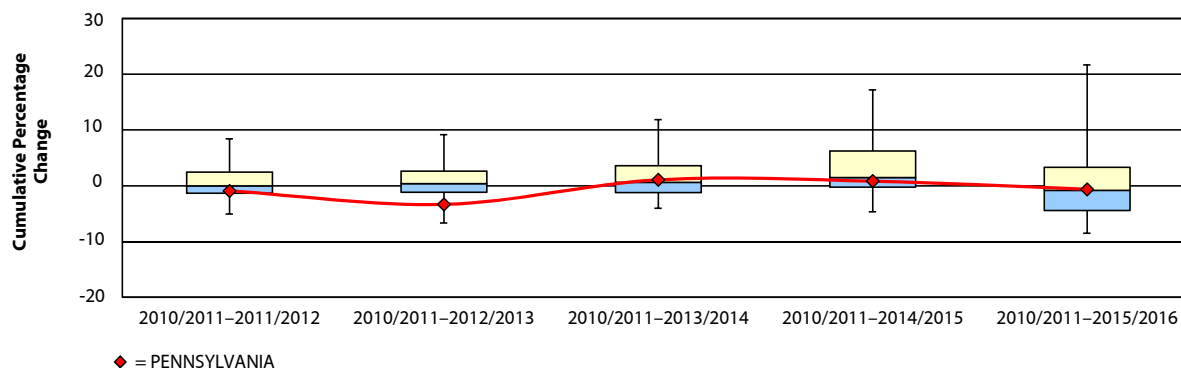
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 34 Trend of Prices for Nonhospital Providers**Table for Figure 34: Trend of Prices for Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	6.1	0.7	-0.8	8.4	6.0	-8.9	0.5	3.9	0.9	0.2	0.5	-0.4	-0.4	4.2	1.2	17.2	4.3	3.6	1.0
2012	6.3	0.1	-1.4	13.3	4.3	-26.3	4.6	3.7	1.6	0.2	-0.5	1.8	0.2	7.0	4.3	18.8	7.6	7.9	4.0
2013	6.8	-0.4	-1.8	15.5	3.6	-24.9	3.7	3.7	1.7	-1.2	0.6	3.6	6.4	-3.6	6.9	19.9	8.4	11.2	3.6
2014	3.0	6.2	-0.1	15.0	5.3	-25.2	9.3	13.3	3.1	-0.4	1.1	4.5	7.0	-1.1	8.3	15.1	15.2	17.0	5.7
2015	1.3	7.6	-1.0	15.0	5.3	-23.5	16.0	22.9	3.2	0.6	-3.9	4.2	13.6	2.1	9.5	14.2	15.0	19.5	6.5
Annual percentage change:																			
2010 to 2011	6.1	0.7	-0.8	8.4	6.0	-8.9	0.5	3.9	0.9	0.2	0.5	-0.4	-0.4	4.2	1.2	17.2	4.3	3.6	1.0
2011 to 2012	0.3	-0.6	-0.5	4.5	-1.6	-19.1	4.1	-0.1	0.7	-0.1	-1.1	2.2	0.6	2.7	3.0	1.4	3.2	4.2	0.7
2012 to 2013	0.4	-0.6	-0.5	1.9	-0.6	2.0	-0.9	0.0	0.1	-1.3	1.1	1.8	6.2	-10.0	2.5	0.9	0.8	3.1	0.6
2013 to 2014	-3.6	6.6	1.7	-0.4	1.6	-0.4	5.4	9.3	1.4	0.7	0.5	0.9	0.5	2.7	1.3	-4.0	6.3	5.2	1.4
2014 to 2015	-1.6	1.4	-0.9	0.0	0.0	2.2	6.2	8.5	0.0	1.0	-5.0	-0.2	6.2	3.2	1.1	-0.8	-0.2	2.1	0.5

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 35 Trend of Utilization of Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 35: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a of Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-2.0	1.0	2.4	1.9	4.6	0.0	8.4	-5.1	3.6	0.7	3.6	-1.7	-0.9	0.0	-0.9	-3.0	0.0	-1.3	0.0
2012/2013	-6.6	1.5	2.9	3.0	-0.2	0.4	9.2	-1.6	-1.2	3.7	2.5	0.4	-0.9	-0.7	-3.3	-5.5	2.6	2.4	0.4
2013/2014	-2.2	-0.6	-0.5	5.4	8.0	0.1	11.9	-1.5	1.8	3.6	10.3	-0.7	-1.7	2.6	1.1	-4.1	-1.2	3.1	0.6
2014/2015	1.3	-0.2	1.2	0.4	11.3	1.7	17.2	-4.7	2.9	6.2	8.3	-3.9	-3.3	1.8	0.8	-4.3	1.8	6.7	1.5
2015/2016	-5.6	-3.5	-1.0	-3.1	6.8	0.5	21.7	-4.5	3.3	4.4	9.6	-5.5	-4.7	3.1	-0.6	-8.5	-1.9	-0.7	-0.8
Annual percentage change:																			
2010/2011 to 2011/2012	-2.0	1.0	2.4	1.9	4.6	0.0	8.4	-5.1	3.6	0.7	3.6	-1.7	-0.9	0.0	-0.9	-3.0	0.0	-1.3	0.0
2011/2012 to 2012/2013	-4.7	0.4	0.4	1.1	-4.6	0.4	0.7	3.6	-4.6	3.0	-1.1	2.1	0.0	-0.7	-2.4	-2.6	2.6	3.8	0.4
2012/2013 to 2013/2014	4.7	-2.1	-3.3	2.3	8.2	-0.3	2.5	0.2	3.0	-0.1	7.6	-1.1	-0.8	3.3	4.6	1.5	-3.7	0.7	1.1
2013/2014 to 2014/2015	3.6	0.4	1.6	-4.8	3.0	1.5	4.8	-3.3	1.1	2.6	-1.8	-3.2	-1.6	-0.7	-0.2	-0.3	3.1	3.5	0.7
2014/2015 to 2015/2016	-6.8	-3.3	-2.1	-3.5	-4.0	-1.1	3.8	0.2	0.4	-1.7	1.2	-1.7	-1.5	1.2	-1.4	-4.4	-3.6	-6.9	-1.7
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	0.2	0.8	0.8	1.1	4.3	-0.2	5.6	-6.1	4.4	3.3	1.7	-2.8	-1.3	-1.1	-1.4	-3.0	2.0	-3.8	0.5
2012/2013	-5.3	1.5	1.7	4.0	1.3	-2.3	3.9	-2.4	0.8	5.3	1.0	-2.0	-1.2	-2.4	-2.8	-3.9	5.1	-2.1	-0.2
2013/2014	0.1	-1.1	-2.3	8.1	7.2	-2.6	6.5	-4.8	-1.0	4.7	8.2	-3.0	-3.0	1.3	1.2	-2.6	0.6	0.0	0.1
2014/2015	0.0	-2.5	-1.2	0.8	8.4	-1.6	9.4	-8.6	-2.6	7.3	6.8	-6.1	-3.8	2.6	0.5	-2.8	3.6	3.3	0.2
2015/2016	-5.0	-6.6	-3.2	1.3	2.9	-3.4	11.8	-8.1	-5.6	3.6	6.1	-7.3	-5.7	2.9	0.0	-5.0	-1.5	-3.2	-3.2
Annual percentage change:																			
2010/2011 to 2011/2012	0.2	0.8	0.8	1.1	4.3	-0.2	5.6	-6.1	4.4	3.3	1.7	-2.8	-1.3	-1.1	-1.4	-3.0	2.0	-3.8	0.5
2011/2012 to 2012/2013	-5.5	0.6	0.8	2.9	-2.9	-2.1	-1.7	3.9	-3.5	2.0	-0.7	0.8	0.0	-1.3	-1.4	-0.8	3.1	1.8	-0.3
2012/2013 to 2013/2014	5.7	-2.5	-3.9	3.9	5.8	-0.4	2.5	-2.4	-1.7	-0.6	7.1	-1.0	-1.8	3.8	4.1	1.3	-4.4	2.1	0.5
2013/2014 to 2014/2015	-0.1	-1.4	1.1	-6.8	1.1	1.0	2.7	-4.0	-1.6	2.5	-1.3	-3.2	-0.8	1.3	-0.7	-0.2	3.0	3.3	-0.2
2014/2015 to 2015/2016	-4.9	-4.2	-2.1	0.5	-5.1	-1.8	2.2	0.5	-3.1	-3.5	-0.7	-1.3	-1.9	0.3	-0.6	-2.3	-4.9	-6.3	-2.0

continued

Table for Figure 35: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a of Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

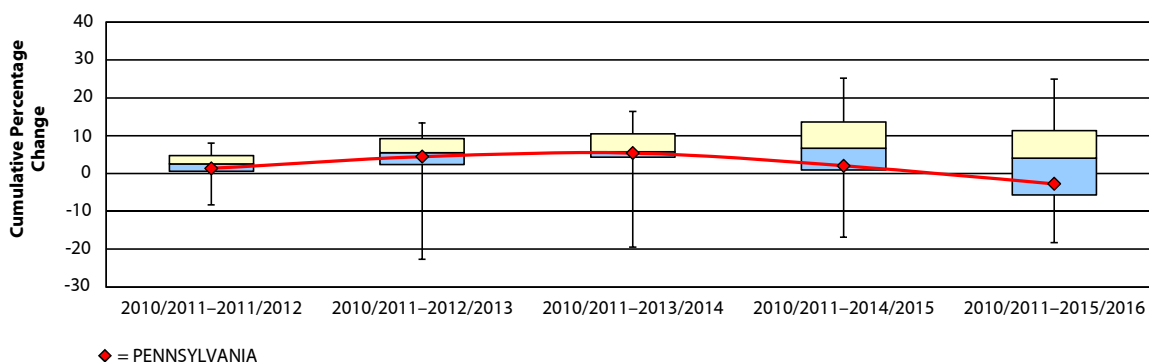
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-2.4	0.2	1.7	-0.3	4.2	2.1	4.3	-1.9	2.9	-1.7	2.4	0.3	1.5	3.2	0.8	0.1	-0.5	3.8	1.1
2012/2013	-1.0	1.3	0.5	-0.2	4.5	4.0	5.5	0.2	2.5	-0.8	3.0	-1.8	2.6	5.3	-0.1	-0.4	-0.1	6.0	0.9
2013/2014	-0.3	1.4	0.4	-0.6	6.4	3.0	5.8	1.6	2.8	-2.5	4.1	-1.5	3.5	6.2	-0.3	1.4	-1.0	4.7	1.5
2014/2015	3.1	-1.6	-0.7	-0.3	8.0	4.9	8.3	1.0	1.5	-1.6	3.1	-2.9	2.1	3.2	0.4	0.3	-0.7	6.5	1.2
2015/2016	-0.1	-3.1	-1.4	-2.0	7.1	4.5	8.9	0.0	-0.6	-3.4	6.2	-2.6	-0.5	4.7	1.2	-5.5	1.9	3.4	0.0
Annual percentage change:																			
2010/2011 to 2011/2012	-2.4	0.2	1.7	-0.3	4.2	2.1	4.3	-1.9	2.9	-1.7	2.4	0.3	1.5	3.2	0.8	0.1	-0.5	3.8	1.1
2011/2012 to 2012/2013	1.4	1.2	-1.2	0.2	0.3	1.9	1.1	2.1	-0.4	0.9	0.5	-2.1	1.2	2.0	-0.9	-0.5	0.4	2.2	0.7
2012/2013 to 2013/2014	0.7	0.0	-0.1	-0.5	1.8	-1.0	0.3	1.5	0.3	-1.7	1.1	0.3	0.8	0.8	-0.2	1.8	-0.9	-1.3	0.3
2013/2014 to 2014/2015	3.4	-2.9	-1.1	0.3	1.5	1.9	2.4	-0.6	-1.3	0.9	-1.0	-1.4	-1.3	-2.8	0.7	-1.1	0.3	1.7	-0.2
2014/2015 to 2015/2016	-3.1	-1.5	-0.7	-1.7	-0.9	-0.4	0.5	-0.9	-2.1	-1.8	3.0	0.3	-2.6	1.4	0.8	-5.8	2.7	-2.8	-0.9
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	3.9	-0.2	-0.8	0.0	-5.3	-1.0	-3.5	2.7	-4.9	-0.4	-1.9	0.9	-2.2	-3.0	-0.6	-0.1	-1.5	-2.3	
2012/2013	-1.7	-1.4	-0.8	-2.7	-7.2	-0.5	-4.0	-0.6	-4.1	-1.3	-4.5	2.1	-4.3	-4.0	0.8	-0.7	-2.5	-3.6	
2013/2014	-5.3	-2.8	-0.1	-4.5	-9.2	0.5	-5.5	-3.5	-1.4	0.3	-6.7	0.9	-5.8	-6.6	-0.4	-2.8	-0.3	-3.6	
2014/2015	-5.6	-4.8	0.1	-4.7	-12.3	-0.8	-8.0	-2.7	2.2	-0.3	-6.8	1.9	-6.0	-4.9	-1.1	-2.2	-1.5	-6.8	
2015/2016	-5.7	-4.8	-2.2	-7.1	-11.5	-0.7	-11.0	-4.5	4.8	2.3	-10.1	-0.2	-3.7	-6.8	-3.2	0.0	-4.2	-4.0	
Annual percentage point change:																			
2010/2011 to 2011/2012	3.9	-0.2	-0.8	0.0	-5.3	-1.0	-3.5	2.7	-4.9	-0.4	-1.9	0.9	-2.2	-3.0	-0.6	-0.1	-1.5	-2.3	
2011/2012 to 2012/2013	-5.7	-1.1	0.0	-2.6	-2.0	0.5	-0.4	-3.8	0.6	-0.9	-2.4	1.2	-2.1	-1.0	1.4	-0.6	-0.9	-1.2	
2012/2013 to 2013/2014	-3.7	-1.4	0.7	-1.6	-1.3	1.1	-1.3	-2.9	2.7	1.5	-1.7	-1.2	-1.4	-2.3	-1.3	-2.2	2.0	0.1	
2013/2014 to 2014/2015	-0.1	-2.0	0.2	-0.4	-2.4	-1.4	-1.9	0.7	3.6	-0.5	-0.3	1.1	-0.3	1.5	-0.7	0.6	-1.2	-2.9	
2014/2015 to 2015/2016	-0.4	-0.2	-2.3	-2.5	0.2	0.1	-2.1	-1.9	2.6	2.4	-2.8	-2.2	2.1	-1.6	-2.1	2.1	-2.6	2.0	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 36 Trend of Average Payment per Claim to Physicians for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 36: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Physicians for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	4.7	0.5	5.8	5.9	4.3	-8.3	8.1	1.4	4.2	-2.9	2.2	-1.4	1.1	2.8	1.4	7.8	3.6	0.6	2.5
2012/2013	2.3	3.1	10.8	9.2	1.2	-22.7	11.8	8.8	7.7	0.7	-2.6	7.7	3.5	6.5	4.4	9.2	13.4	4.0	5.5
2013/2014	4.3	-7.3	10.0	16.4	7.8	-19.5	16.2	4.8	5.5	0.6	1.9	10.5	6.0	4.7	5.4	10.6	11.8	7.2	5.8
2014/2015	0.3	-12.6	15.8	11.9	16.4	-16.8	25.2	8.5	6.6	-1.9	0.9	12.2	1.2	3.5	2.0	6.8	13.7	18.6	6.7
2015/2016	-6.7	-15.6	9.5	11.4	6.7	-18.2	24.9	14.2	10.4	1.4	-5.7	12.0	-15.4	-0.8	-2.7	0.8	11.4	8.3	4.0
Annual percentage change:																			
2010/2011 to 2011/2012	4.7	0.5	5.8	5.9	4.3	-8.3	8.1	1.4	4.2	-2.9	2.2	-1.4	1.1	2.8	1.4	7.8	3.6	0.6	2.5
2011/2012 to 2012/2013	-2.3	2.6	4.7	3.2	-3.0	-15.7	3.5	7.3	3.3	3.6	-4.7	9.2	2.4	3.5	3.0	1.3	9.4	3.4	3.2
2012/2013 to 2013/2014	1.9	-10.2	-0.7	6.6	6.5	4.1	3.9	-3.7	-2.0	0.0	4.7	2.6	2.4	-1.6	0.9	1.3	-1.4	3.1	1.6
2013/2014 to 2014/2015	-3.8	-5.7	5.3	-3.9	8.0	3.3	7.7	3.5	1.0	-2.5	-1.0	1.6	-4.5	-1.2	-3.2	-3.4	1.7	10.6	0.0
2014/2015 to 2015/2016	-7.0	-3.5	-5.5	-0.4	-8.4	-1.7	-0.2	5.2	3.6	3.4	-6.6	-0.2	-16.4	-4.2	-4.7	-5.6	-2.0	-8.7	-3.8
Percentage of claims with physician involvement																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-0.6	0.0	0.6	0.1	1.1	-0.1	0.1	-0.5	0.0	-0.3	1.5	-1.9	-0.4	0.4	-0.3	0.0	0.1	0.3	0.0
2012/2013	0.1	-0.1	1.0	0.4	0.5	-0.1	0.0	-1.3	0.0	0.5	0.1	-2.1	-0.4	0.5	-0.4	0.0	0.2	-0.3	0.0
2013/2014	0.0	0.1	1.1	0.1	0.6	0.5	0.3	-0.5	0.3	-0.2	1.0	-0.6	-0.3	1.0	0.0	0.1	0.1	0.3	0.1
2014/2015	0.0	0.1	1.0	0.3	0.6	0.3	0.6	-0.2	0.4	-0.3	0.9	-2.2	-0.9	1.0	-0.1	-0.5	0.0	0.1	0.1
2015/2016	-0.6	-0.2	1.0	0.0	0.7	-0.3	0.3	-0.7	0.0	0.4	1.6	-2.5	-0.5	0.8	-0.1	0.0	0.0	-0.1	0.0
Annual percentage point change:																			
2010/2011 to 2011/2012	-0.6	0.0	0.6	0.1	1.1	-0.1	0.1	-0.5	0.0	-0.3	1.5	-1.9	-0.4	0.4	-0.3	0.0	0.1	0.3	0.0
2011/2012 to 2012/2013	0.7	0.0	0.4	0.4	-0.7	0.0	-0.1	-0.8	0.0	0.8	-1.4	-0.1	0.0	0.2	-0.1	-0.1	0.2	-0.6	0.0
2012/2013 to 2013/2014	-0.1	0.1	0.1	-0.3	0.1	0.6	0.3	0.8	0.3	-0.7	0.9	1.4	0.1	0.4	0.5	0.1	-0.1	0.6	0.2
2013/2014 to 2014/2015	0.0	0.0	-0.1	0.2	0.0	-0.2	0.2	0.3	0.1	-0.1	-0.2	-1.6	-0.7	0.0	-0.1	-0.6	-0.1	-0.2	-0.1
2014/2015 to 2015/2016	-0.5	-0.3	0.0	-0.3	0.1	-0.6	-0.3	-0.5	-0.4	0.7	0.7	-0.3	0.4	-0.2	0.1	0.5	0.0	-0.2	-0.2

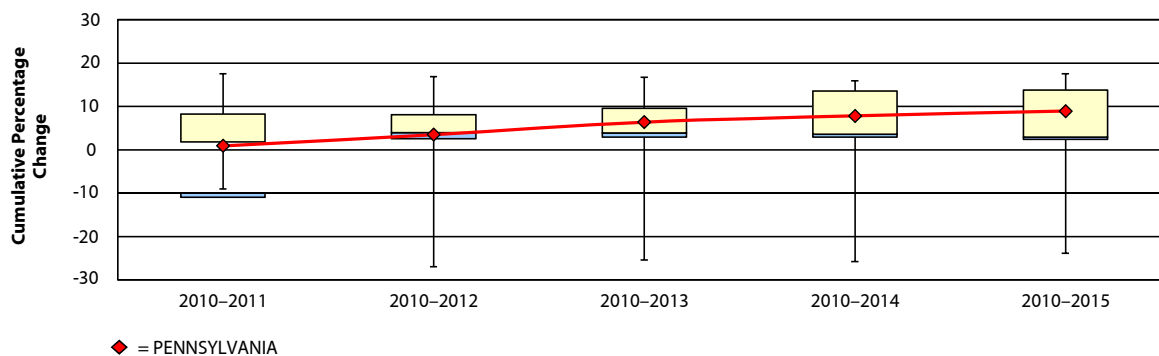
continued

Table for Figure 36: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Physicians for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made to physicians																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.8	-2.0	-0.7	0.5	-3.1	-2.1	-0.2	-1.1	-1.3	-1.8	-1.0	-1.7	-0.2	-0.1	0.1	0.0	1.3	-0.8	-0.8
2012/2013	0.2	-0.4	-0.7	2.4	-2.4	-2.2	-0.8	-0.1	-0.9	-1.2	-2.0	0.5	0.0	-0.2	-0.9	0.0	1.5	-2.1	-0.6
2013/2014	-1.1	-2.8	0.6	0.2	-4.7	-0.9	-0.2	1.0	-0.1	-1.0	-2.3	-1.6	3.3	-0.4	-2.0	-1.6	0.5	-2.8	-0.9
2014/2015	-2.7	-3.3	-0.3	1.4	-1.9	-1.5	0.9	1.3	-2.6	-4.0	-2.1	1.4	2.6	-0.6	-3.3	-3.4	0.2	-3.0	-1.7
2015/2016	-0.8	-3.6	-2.7	0.6	-3.0	-2.6	5.9	-0.6	-2.0	-1.5	-4.0	2.4	1.2	-3.6	-5.6	-3.2	0.4	-5.0	-2.3
Annual percentage point change:																			
2010/2011 to 2011/2012	0.8	-2.0	-0.7	0.5	-3.1	-2.1	-0.2	-1.1	-1.3	-1.8	-1.0	-1.7	-0.2	-0.1	0.1	0.0	1.3	-0.8	-0.8
2011/2012 to 2012/2013	-0.6	1.5	0.0	1.9	0.7	-0.1	-0.6	1.0	0.4	0.7	-0.9	2.2	0.3	-0.1	-1.0	0.0	0.2	-1.3	0.1
2012/2013 to 2013/2014	-1.3	-2.3	1.3	-2.2	-2.3	1.3	0.5	1.1	0.8	0.2	-0.4	-2.1	3.2	-0.2	-1.2	-1.6	-1.0	-0.7	-0.5
2013/2014 to 2014/2015	-1.6	-0.6	-0.9	1.2	2.8	-0.6	1.1	0.3	-2.5	-3.0	0.2	3.0	-0.6	-0.2	-1.3	-1.7	-0.2	-0.2	-0.4
2014/2015 to 2015/2016	1.9	-0.3	-2.4	-0.7	-1.0	-1.0	5.1	-1.9	0.7	2.4	-1.9	1.0	-1.5	-2.9	-2.3	0.1	0.1	-2.0	-0.9

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

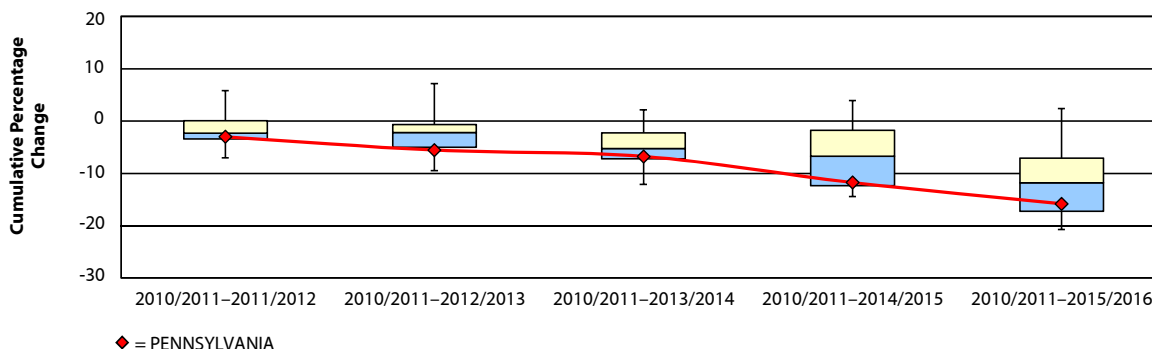
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 37 Trend of Physician Prices**Table for Figure 37: Trend of Physician Prices**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	4.9	0.4	-0.2	9.2	4.4	-9.0	0.2	4.7	-0.1	0.9	0.6	-2.3	-0.5	4.2	0.9	16.6	4.7	3.4	0.9
2012	5.3	0.0	-0.9	13.6	4.6	-26.9	4.7	4.5	0.3	0.4	-1.2	-0.2	0.4	6.9	3.5	16.9	8.7	7.4	4.0
2013	4.9	0.1	-1.1	15.7	5.2	-25.4	3.6	4.2	0.1	-0.9	-0.8	1.6	6.9	-6.4	6.4	16.7	8.2	10.3	3.9
2014	0.7	-0.4	0.5	14.5	5.5	-25.8	5.6	11.1	0.2	-0.2	-0.8	1.6	7.3	-6.7	7.8	11.2	14.7	15.9	3.6
2015	-0.2	-0.1	-1.3	13.9	4.2	-23.9	12.0	17.6	0.7	0.6	-7.9	1.7	8.9	-5.4	8.9	11.1	14.2	16.7	2.9
Annual percentage change:																			
2010 to 2011	4.9	0.4	-0.2	9.2	4.4	-9.0	0.2	4.7	-0.1	0.9	0.6	-2.3	-0.5	4.2	0.9	16.6	4.7	3.4	0.9
2011 to 2012	0.4	-0.5	-0.7	4.1	0.2	-19.7	4.4	-0.2	0.3	-0.5	-1.7	2.1	0.9	2.6	2.6	0.2	3.8	3.9	0.3
2012 to 2013	-0.4	0.2	-0.2	1.9	0.6	2.1	-1.1	-0.3	-0.1	-1.4	0.4	1.7	6.5	-12.4	2.8	-0.1	-0.5	2.7	0.0
2013 to 2014	-4.0	-0.5	1.6	-1.0	0.3	-0.5	2.0	6.6	0.1	0.7	0.0	0.1	0.3	-0.3	1.4	-4.8	6.0	5.1	0.2
2014 to 2015	-0.9	0.3	-1.8	-0.5	-1.3	2.5	6.0	5.9	0.5	0.8	-7.2	0.1	1.5	1.4	1.0	-0.1	-0.4	0.7	0.4

Note: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

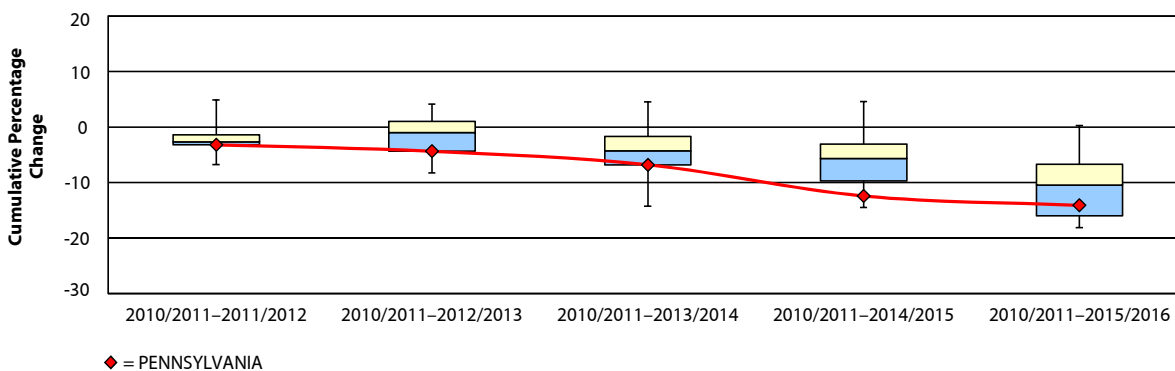
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 38 Trend of Physician Utilization for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 38: Trend of Physician Utilization for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-4.1	-1.2	0.8	-1.7	1.1	-3.2	5.8	-7.0	2.8	-4.0	-0.4	0.1	-1.8	-3.2	-3.0	-3.4	-2.8	-4.7	-2.3
2012/2013	-9.5	-0.7	0.6	-2.6	-5.0	-5.2	7.2	-6.8	-1.8	-1.8	-2.7	2.7	-1.2	-4.0	-5.6	-3.8	-0.2	-1.7	-2.2
2013/2014	-12.0	-5.3	-3.4	-2.4	-6.2	-10.4	2.2	-12.1	-2.2	-4.2	0.7	-0.2	-7.2	-5.6	-6.8	-1.3	-7.2	-5.3	-5.3
2014/2015	-12.4	-12.8	-2.9	-8.7	-6.6	-12.8	3.9	-13.3	-1.6	-4.5	-0.9	-4.0	-14.4	-6.8	-11.7	-1.7	-8.3	-1.4	-6.7
2015/2016	-20.7	-18.0	-7.8	-13.1	-12.4	-15.2	2.4	-17.3	-1.7	-6.1	-6.9	-9.4	-18.2	-11.2	-15.8	-7.1	-17.3	-9.4	-11.8
Annual percentage change:																			
2010/2011 to 2011/2012	-4.1	-1.2	0.8	-1.7	1.1	-3.2	5.8	-7.0	2.8	-4.0	-0.4	0.1	-1.8	-3.2	-3.0	-3.4	-2.8	-4.7	-2.3
2011/2012 to 2012/2013	-5.7	0.6	-0.2	-0.9	-6.1	-2.1	1.3	0.2	-4.5	2.3	-2.3	2.6	0.6	-0.8	-2.6	-0.4	2.6	3.2	-0.3
2012/2013 to 2013/2014	-2.8	-4.6	-4.0	0.2	-1.2	-5.5	-4.7	-5.7	-0.4	-2.5	3.6	-2.8	-6.1	-1.7	-1.3	2.6	-7.0	-3.7	-2.8
2013/2014 to 2014/2015	-0.4	-8.0	0.5	-6.5	-0.4	-2.7	1.7	-1.4	0.6	-0.3	-1.6	-3.8	-7.8	-1.3	-5.3	-0.4	-1.1	4.2	-1.2
2014/2015 to 2015/2016	-9.5	-5.9	-5.0	-4.8	-6.2	-2.7	-1.4	-4.6	-0.1	-1.7	-6.1	-5.7	-4.4	-4.7	-4.6	-5.4	-9.9	-8.1	-4.9

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

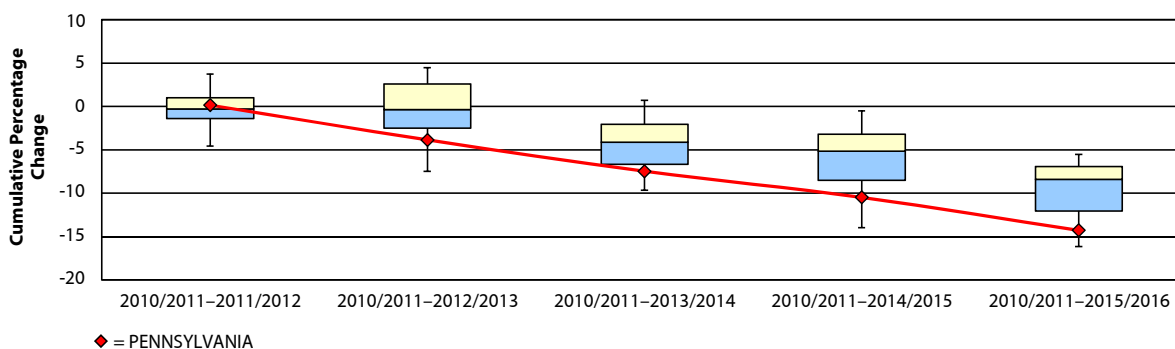
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 39 Trend of Physician Visits per Claim for Claims with More Than 7 Days of Lost Time (12 months)

Table for Figure 39: Trend of Physician Visits per Claim for Claims with More Than 7 Days of Lost Time (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-5.1	-2.6	-1.6	-2.8	4.9	-2.2	2.5	-6.6	4.4	-3.3	-3.1	-2.7	-3.0	-2.5	-3.2	-1.2	-1.4	-6.8	-2.7
2012/2013	-6.9	-1.9	-0.4	0.0	1.9	-4.4	4.2	-8.3	2.8	-1.2	-2.2	-1.2	1.2	-0.7	-4.3	1.0	0.9	-4.5	-1.0
2013/2014	-6.5	-5.2	-6.4	1.9	-1.0	-10.8	-3.2	-14.2	-3.1	-3.0	0.8	-3.4	-6.3	-1.7	-6.8	4.6	-7.3	-8.1	-4.3
2014/2015	-9.7	-7.4	-6.3	-5.5	-4.9	-14.5	-3.1	-14.3	-1.8	-3.6	0.7	-5.8	-12.1	-2.2	-12.4	4.6	-6.9	-3.2	-5.7
2015/2016	-16.3	-11.7	-8.3	-5.8	-10.4	-16.1	-6.7	-16.4	-4.4	-7.6	-7.2	-12.6	-18.1	-6.4	-14.1	0.3	-16.0	-10.5	-10.4
Annual percentage change:																			
2010/2011 to 2011/2012	-5.1	-2.6	-1.6	-2.8	4.9	-2.2	2.5	-6.6	4.4	-3.3	-3.1	-2.7	-3.0	-2.5	-3.2	-1.2	-1.4	-6.8	-2.7
2011/2012 to 2012/2013	-1.9	0.7	1.2	3.0	-2.9	-2.2	1.6	-1.7	-1.6	2.2	1.0	1.5	4.4	1.8	-1.2	2.3	2.4	2.5	1.4
2012/2013 to 2013/2014	0.4	-3.3	-6.0	1.8	-2.9	-6.7	-7.1	-6.5	-5.7	-1.8	3.1	-2.2	-7.4	-1.0	-2.6	3.5	-8.1	-3.8	-3.1
2013/2014 to 2014/2015	-3.4	-2.3	0.1	-7.3	-3.9	-4.1	0.2	-0.1	1.4	-0.6	-0.1	-2.5	-6.1	-0.5	-6.0	0.0	0.4	5.3	-0.6
2014/2015 to 2015/2016	-7.3	-4.7	-2.1	-0.3	-5.7	-2.0	-3.7	-2.5	-2.7	-4.1	-7.8	-7.2	-6.9	-4.2	-1.9	-4.1	-9.8	-7.6	-4.2

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

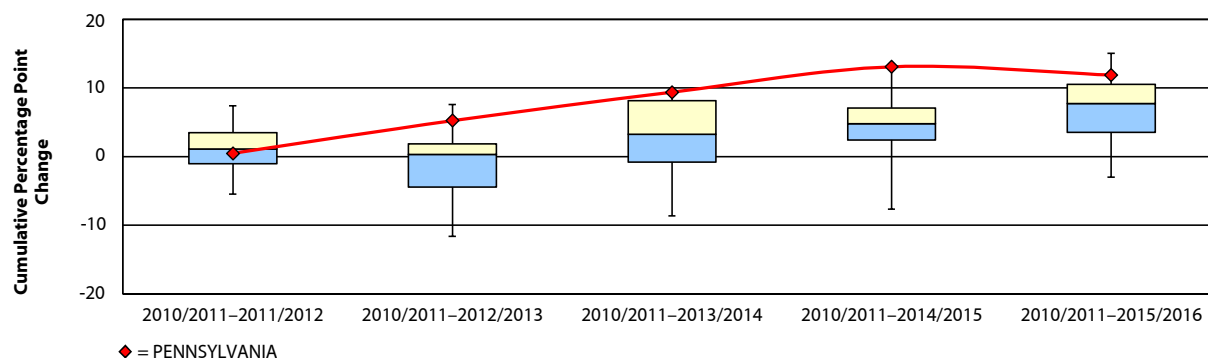
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 40 Trend of Physician Services per Visit for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 40: Trend of Physician Services per Visit for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-2.6	-1.7	1.6	-1.4	0.6	-0.1	3.7	-4.5	2.0	-3.8	-1.2	1.2	0.7	1.0	0.2	-0.5	-1.2	-0.6	-0.3
2012/2013	-5.4	-0.3	2.6	-2.5	-0.6	-0.4	4.4	-3.8	2.7	-7.5	-1.8	-0.3	4.5	3.9	-3.8	-0.1	-0.4	0.6	-0.4
2013/2014	-7.1	-3.5	0.4	-6.3	-6.7	-5.4	-2.3	-6.0	-1.2	-9.7	-2.2	-2.2	-0.5	-2.0	-7.5	0.7	-6.7	-4.7	-4.1
2014/2015	-6.7	-14.0	-2.6	-9.7	-3.7	-5.4	-3.1	-4.9	-5.7	-10.6	-4.3	-3.2	-8.5	-4.9	-10.5	-0.5	-7.3	-2.1	-5.2
2015/2016	-9.2	-16.1	-5.7	-12.1	-8.6	-6.9	-8.2	-9.8	-7.1	-13.8	-8.1	-6.5	-14.9	-7.7	-14.3	-5.5	-10.0	-6.6	-8.4
Annual percentage change:																			
2010/2011 to 2011/2012	-2.6	-1.7	1.6	-1.4	0.6	-0.1	3.7	-4.5	2.0	-3.8	-1.2	1.2	0.7	1.0	0.2	-0.5	-1.2	-0.6	-0.3
2011/2012 to 2012/2013	-2.8	1.4	0.9	-1.1	-1.2	-0.4	0.7	0.8	0.7	-3.9	-0.6	-1.5	3.8	2.9	-4.0	0.4	0.8	1.2	0.5
2012/2013 to 2013/2014	-1.8	-3.2	-2.1	-3.9	-6.1	-5.0	-6.4	-2.3	-3.8	-2.4	-0.4	-1.9	-4.7	-5.8	-3.8	0.8	-6.3	-5.2	-3.8
2013/2014 to 2014/2015	0.5	-10.8	-2.9	-3.6	3.2	0.1	-0.9	1.1	-4.5	-1.0	-2.1	-1.0	-8.1	-2.9	-3.3	-1.2	-0.6	2.7	-1.1
2014/2015 to 2015/2016	-2.7	-2.5	-3.2	-2.6	-5.1	-1.7	-5.3	-5.1	-1.5	-3.6	-4.0	-3.4	-7.0	-3.0	-4.3	-5.0	-2.9	-4.6	-3.5

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

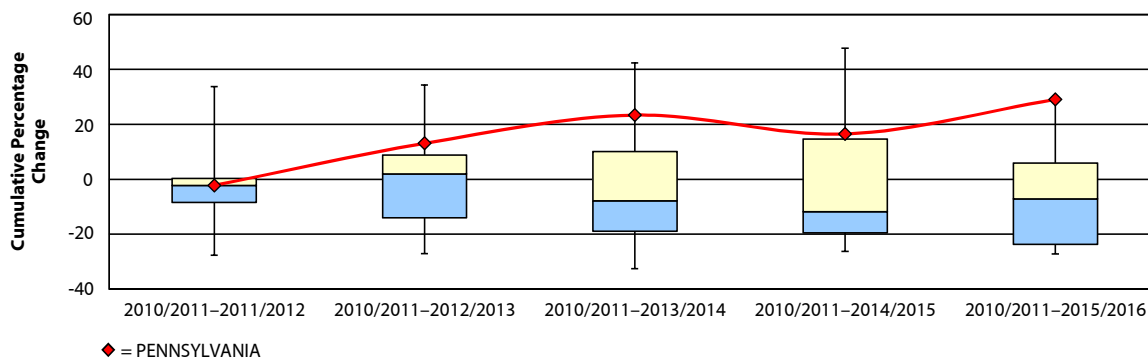
Figure 41 Trend of Physician Resource Intensity^a for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 41: Trend of Physician Resource Intensity^a for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Cumulative percentage point change from 2010/2011 to:																		
2011/2012	7.4	3.3	2.2	3.5	-5.5	1.2	0.0	6.5	-5.4	4.5	4.3	1.0	-1.0	-1.4	0.5	-1.4	0.7	2.8
2012/2013	3.2	1.6	-0.3	0.5	-6.2	1.6	-3.3	7.6	-9.2	6.7	-0.5	1.8	-11.6	-7.4	5.2	-4.4	0.1	1.7
2013/2014	2.6	3.2	3.5	1.3	3.1	8.2	8.2	8.8	-1.3	7.5	-1.2	3.3	-4.4	-0.8	9.4	-8.7	8.7	7.0
2014/2015	5.3	2.6	5.9	4.8	4.7	9.5	9.8	6.9	1.2	10.3	-1.5	3.7	3.0	1.4	13.1	-7.6	7.1	2.4
2015/2016	7.1	2.5	3.4	1.3	8.4	9.4	14.7	9.9	3.5	15.1	4.5	9.4	11.1	4.6	11.9	-3.0	10.5	6.1
Annual percentage point change:																		
2010/2011 to 2011/2012	7.4	3.3	2.2	3.5	-5.5	1.2	0.0	6.5	-5.4	4.5	4.3	1.0	-1.0	-1.4	0.5	-1.4	0.7	2.8
2011/2012 to 2012/2013	-4.3	-1.8	-2.5	-3.1	-1.0	0.5	-3.1	1.2	-3.7	2.3	-4.9	0.8	-10.6	-6.1	5.0	-3.1	-0.6	-1.2
2012/2013 to 2013/2014	-0.6	1.7	3.7	0.8	9.1	7.1	10.3	1.9	7.3	1.1	-0.7	1.5	5.9	6.2	4.7	-4.1	8.6	5.5
2013/2014 to 2014/2015	3.1	-0.4	2.6	3.7	1.8	1.9	1.5	-2.2	2.5	3.2	-0.4	0.5	7.3	2.2	5.0	0.9	-1.8	-5.6
2014/2015 to 2015/2016	2.8	0.1	-2.4	-3.9	4.5	0.2	5.4	4.2	2.5	5.8	5.9	6.4	9.9	3.6	-0.8	4.0	4.9	4.1

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 42 Trend of Average Payment per Claim to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)

Table for Figure 42: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	-5.6	-11.7	n/a	-27.6	-3.8	n/a	-11.2	33.8	-1.7	0.1	-5.0	n/a	0.5	-2.2	13.2	n/a	-0.5	-2.2
2012/2013	n/a	-14.1	-1.0	n/a	6.5	-22.8	n/a	-27.1	-10.0	1.9	-14.0	3.4	n/a	11.1	13.1	4.9	n/a	34.4	1.9
2013/2014	n/a	-22.4	-15.8	n/a	-4.3	-22.0	n/a	-11.9	6.3	-7.9	13.9	1.5	n/a	-32.6	23.4	-8.1	n/a	42.3	-7.9
2014/2015	n/a	-19.9	-11.9	n/a	36.7	-19.3	n/a	-26.3	-16.3	-5.5	12.8	2.5	n/a	-23.4	16.5	-11.9	n/a	47.8	-11.9
2015/2016	n/a	-18.6	-24.0	n/a	-7.2	-27.3	n/a	-23.4	-26.5	-4.6	-19.9	8.0	n/a	3.7	29.1	-3.5	n/a	16.6	-7.2
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	-5.6	-11.7	n/a	-27.6	-3.8	n/a	-11.2	33.8	-1.7	0.1	-5.0	n/a	0.5	-2.2	13.2	n/a	-0.5	-2.2
2011/2012 to 2012/2013	n/a	-9.0	12.1	n/a	47.2	-19.7	n/a	-17.9	-32.7	3.6	-14.1	8.8	n/a	10.6	15.7	-7.4	n/a	35.1	3.6
2012/2013 to 2013/2014	n/a	-9.7	-15.0	n/a	-10.1	1.0	n/a	20.8	18.1	-9.6	32.4	-1.9	n/a	-39.3	9.1	-12.4	n/a	5.9	-1.9
2013/2014 to 2014/2015	n/a	3.3	4.7	n/a	42.8	3.5	n/a	-16.4	-21.3	2.6	-0.9	1.0	n/a	13.6	-5.6	-4.1	n/a	3.8	2.6
2014/2015 to 2015/2016	n/a	1.5	-13.6	n/a	-32.1	-9.9	n/a	4.0	-12.2	0.9	-29.0	5.4	n/a	35.5	10.8	9.4	n/a	-21.1	0.9
Percentage of claims with chiropractor involvement																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	n/a	0.2	0.0	n/a	-0.9	0.0	n/a	0.2	0.5	0.3	-0.4	0.5	n/a	0.1	-0.4	-2.7	n/a	-0.8	0.0
2012/2013	n/a	0.1	-0.1	n/a	-1.1	-0.7	n/a	1.5	1.1	-0.2	-0.3	-0.5	n/a	-0.1	-0.4	-3.9	n/a	0.3	-0.2
2013/2014	n/a	-1.0	-0.4	n/a	-1.2	-0.9	n/a	0.1	0.5	-0.5	-0.7	-0.2	n/a	-0.1	-0.7	-2.8	n/a	-0.7	-0.7
2014/2015	n/a	-1.2	-0.5	n/a	-1.8	-1.7	n/a	-0.2	0.3	-0.6	-0.9	-0.8	n/a	-0.1	-1.0	-4.0	n/a	-0.7	-0.8
2015/2016	n/a	-2.0	-0.5	n/a	-2.0	-1.8	n/a	0.9	0.7	-0.8	-1.1	-1.1	n/a	-0.3	-0.7	-4.6	n/a	-1.4	-1.1
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	0.2	0.0	n/a	-0.9	0.0	n/a	0.2	0.5	0.3	-0.4	0.5	n/a	0.1	-0.4	-2.7	n/a	-0.8	0.0
2011/2012 to 2012/2013	n/a	-0.1	-0.1	n/a	-0.2	-0.6	n/a	1.3	0.6	-0.5	0.1	-1.0	n/a	-0.2	0.0	-1.2	n/a	1.2	-0.1
2012/2013 to 2013/2014	n/a	-1.1	-0.3	n/a	-0.2	-0.3	n/a	-1.4	-0.6	-0.3	-0.3	0.3	n/a	0.1	-0.3	1.1	n/a	-1.0	-0.3
2013/2014 to 2014/2015	n/a	-0.3	-0.1	n/a	-0.5	-0.8	n/a	-0.3	-0.2	-0.2	-0.2	-0.7	n/a	-0.1	-0.2	-1.2	n/a	-0.1	-0.2
2014/2015 to 2015/2016	n/a	-0.8	0.0	n/a	-0.2	-0.1	n/a	1.1	0.4	-0.2	-0.2	-0.3	n/a	-0.2	0.2	-0.6	n/a	-0.7	-0.2

continued

Table for Figure 42: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Percentage of medical payments made to chiropractors																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	n/a	-0.1	0.0	n/a	-0.1	0.0	n/a	-0.1	0.3	0.0	-0.1	-0.1	n/a	0.0	-0.2	-0.6	n/a	-0.1	-0.1
2012/2013	n/a	-0.3	0.0	n/a	-0.1	-0.3	n/a	0.0	0.0	-0.1	-0.1	-0.1	n/a	0.0	0.0	-1.3	n/a	0.2	-0.1
2013/2014	n/a	-0.5	-0.1	n/a	-0.1	-0.4	n/a	-0.1	0.1	-0.2	-0.1	-0.3	n/a	-0.1	0.0	-1.5	n/a	0.1	-0.1
2014/2015	n/a	-0.4	-0.1	n/a	-0.1	-0.6	n/a	-0.2	-0.2	-0.2	-0.1	-0.2	n/a	0.0	-0.2	-1.9	n/a	0.0	-0.2
2015/2016	n/a	-0.5	-0.1	n/a	-0.1	-0.7	n/a	-0.1	-0.2	-0.2	-0.2	-0.1	n/a	0.0	-0.1	-1.7	n/a	-0.1	-0.1
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	-0.1	0.0	n/a	-0.1	0.0	n/a	-0.1	0.3	0.0	-0.1	-0.1	n/a	0.0	-0.2	-0.6	n/a	-0.1	-0.1
2011/2012 to 2012/2013	n/a	-0.2	0.0	n/a	0.0	-0.3	n/a	0.1	-0.3	-0.1	0.0	0.0	n/a	0.0	0.1	-0.6	n/a	0.3	0.0
2012/2013 to 2013/2014	n/a	-0.2	0.0	n/a	0.0	-0.1	n/a	-0.1	0.1	-0.1	0.0	-0.2	n/a	0.0	0.0	-0.2	n/a	-0.1	-0.1
2013/2014 to 2014/2015	n/a	0.1	0.0	n/a	0.0	-0.2	n/a	-0.1	-0.3	-0.1	0.0	0.1	n/a	0.0	-0.2	-0.4	n/a	-0.1	-0.1
2014/2015 to 2015/2016	n/a	-0.1	0.0	n/a	0.0	-0.2	n/a	0.1	0.0	0.0	-0.1	0.1	n/a	0.0	0.2	0.2	n/a	-0.2	0.0

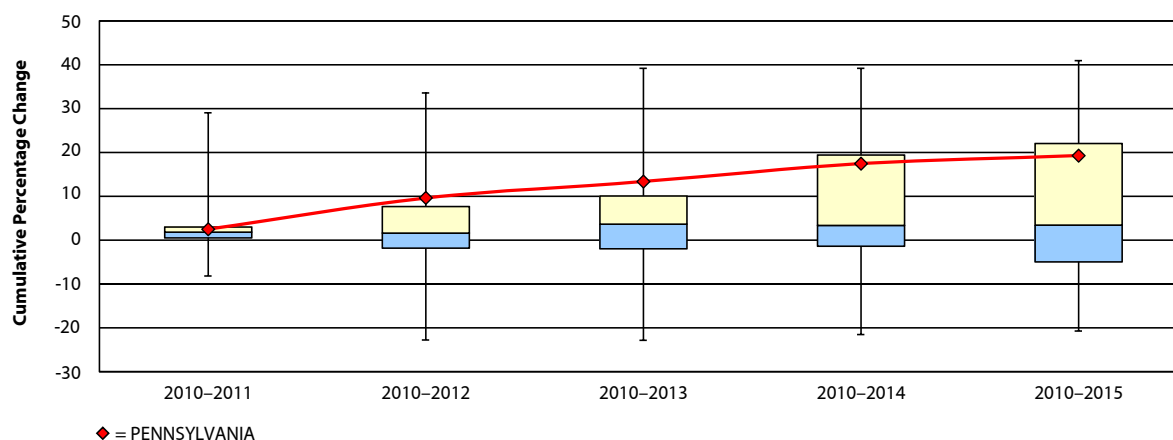
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^b The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^c The 13-state median is the state ranked 7th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 43 Trend of Chiropractor Prices**Table for Figure 43: Trend of Chiropractor Prices**

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Cumulative percentage change from 2010 to:																			
2011	n/a	2.4	0.9	n/a	2.8	-8.1	n/a	0.2	1.2	-4.8	1.8	3.2	n/a	1.7	2.5	29.0	n/a	4.5	1.8
2012	n/a	0.8	-3.6	n/a	4.2	-22.8	n/a	1.6	1.6	-3.3	-0.4	5.7	n/a	3.7	9.6	33.5	n/a	16.5	1.6
2013	n/a	-2.2	-1.8	n/a	5.2	-22.8	n/a	4.0	1.5	-6.2	0.1	6.9	n/a	3.6	13.4	39.2	n/a	20.3	3.6
2014	n/a	7.4	-0.9	n/a	3.0	-21.5	n/a	21.4	-0.5	-5.0	3.4	10.4	n/a	-2.0	17.5	39.2	n/a	24.5	3.4
2015	n/a	11.2	-7.6	n/a	3.5	-20.7	n/a	31.9	3.1	-5.9	-4.0	8.9	n/a	-0.4	19.3	40.9	n/a	24.8	3.5
Annual percentage change:																			
2011 to 2012	n/a	2.4	0.9	n/a	2.8	-8.1	n/a	0.2	1.2	-4.8	1.8	3.2	n/a	1.7	2.5	29.0	n/a	4.5	1.8
2012 to 2013	n/a	-1.5	-4.4	n/a	1.3	-15.9	n/a	1.4	0.4	1.6	-2.2	2.5	n/a	2.0	6.9	3.5	n/a	11.5	1.4
2013 to 2014	n/a	-3.0	1.9	n/a	1.0	-0.1	n/a	2.3	-0.1	-3.0	0.4	1.1	n/a	0.0	3.4	4.3	n/a	3.3	1.0
2014 to 2015	n/a	9.8	0.9	n/a	-2.1	1.8	n/a	16.7	-2.0	1.3	3.3	3.3	n/a	-5.4	3.6	0.0	n/a	3.5	1.8
2015 to 2016	n/a	3.5	-6.8	n/a	0.5	1.0	n/a	8.6	3.6	-0.9	-7.1	-1.4	n/a	1.6	1.5	1.3	n/a	0.2	1.0

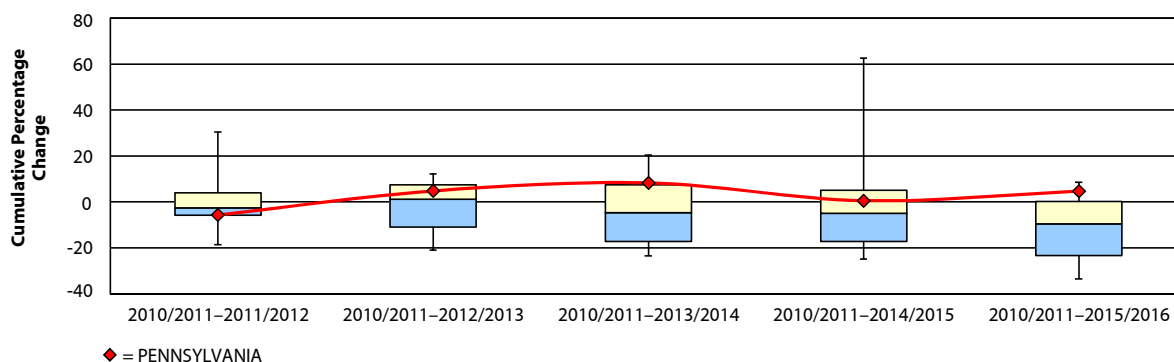
Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^b The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^c The 13-state median is the state ranked 7th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 44 Trend of Chiropractor Utilization for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 44: Trend of Chiropractor Utilization for Claims with More Than 7 Days of Lost Time (12 months)^a**

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	-3.9	-6.0	n/a	-18.6	2.4	n/a	-3.6	30.4	-0.4	5.6	-7.4	n/a	15.8	-5.7	-2.2	n/a	-2.6	-2.6
2012/2013	n/a	-8.7	-1.5	n/a	9.4	5.5	n/a	-21.0	-9.2	1.8	-14.4	1.1	n/a	11.7	4.8	-12.8	n/a	12.1	1.1
2013/2014	n/a	-19.8	-17.3	n/a	4.8	2.6	n/a	-8.0	6.5	-7.2	11.6	-4.7	n/a	-17.1	8.3	-23.5	n/a	20.4	-4.7
2014/2015	n/a	-20.2	-14.3	n/a	62.6	2.4	n/a	-24.9	-11.7	-5.0	7.7	-5.9	n/a	-3.6	0.5	-22.0	n/a	17.5	-5.0
2015/2016	n/a	-21.1	-24.5	n/a	-0.9	-9.5	n/a	-33.5	-27.0	-8.5	-22.1	1.4	n/a	8.5	4.7	-14.4	n/a	-3.4	-9.5
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	-3.9	-6.0	n/a	-18.6	2.4	n/a	-3.6	30.4	-0.4	5.6	-7.4	n/a	15.8	-5.7	-2.2	n/a	-2.6	-2.6
2011/2012 to 2012/2013	n/a	-4.9	4.8	n/a	34.4	3.1	n/a	-18.0	-30.4	2.2	-19.0	9.2	n/a	-3.5	11.1	-10.8	n/a	15.1	2.2
2012/2013 to 2013/2014	n/a	-12.2	-16.0	n/a	-4.3	-2.8	n/a	16.5	17.3	-8.9	30.4	-5.7	n/a	-25.8	3.3	-12.3	n/a	7.4	-4.3
2013/2014 to 2014/2015	n/a	-0.6	3.6	n/a	55.2	-0.2	n/a	-18.4	-17.1	2.4	-3.4	-1.2	n/a	16.3	-7.1	2.1	n/a	-2.4	-0.6
2014/2015 to 2015/2016	n/a	-1.1	-11.9	n/a	-39.1	-11.7	n/a	-11.5	-17.3	-3.7	-27.7	7.7	n/a	12.6	4.1	9.7	n/a	-17.7	-11.5

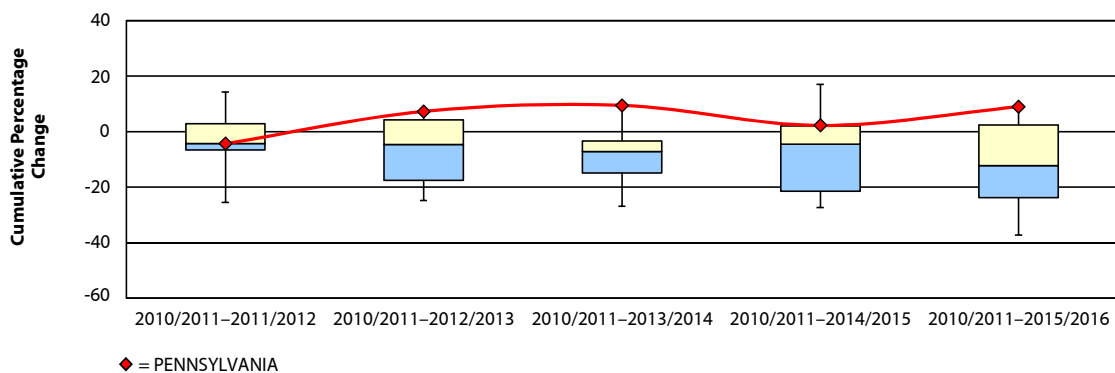
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^b The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^c The 13-state median is the state ranked 7th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 45 Trend of Visits per Claim to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 45: Trend of Visits per Claim to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	-5.2	-1.1	n/a	-25.4	1.6	n/a	-2.2	14.3	4.1	-11.9	-6.5	n/a	12.7	-4.3	-5.7	n/a	-6.6	-4.3
2012/2013	n/a	-9.1	8.2	n/a	-18.5	-4.7	n/a	-21.5	-13.8	2.4	-24.8	2.3	n/a	6.0	7.3	-16.5	n/a	-1.7	-4.7
2013/2014	n/a	-18.6	-7.2	n/a	-11.3	-5.1	n/a	-10.2	-5.4	-5.2	-7.8	-1.6	n/a	-18.6	9.5	-26.8	n/a	1.1	-7.2
2014/2015	n/a	-23.7	-6.0	n/a	17.0	-2.0	n/a	-26.1	-19.2	0.0	-6.9	-4.5	n/a	1.9	2.2	-27.3	n/a	2.3	-4.5
2015/2016	n/a	-28.5	-17.7	n/a	-1.0	-12.3	n/a	-37.2	-25.1	-0.5	-22.4	5.2	n/a	7.7	9.0	-20.0	n/a	-11.9	-12.3
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	-5.2	-1.1	n/a	-25.4	1.6	n/a	-2.2	14.3	4.1	-11.9	-6.5	n/a	12.7	-4.3	-5.7	n/a	-6.6	-4.3
2011/2012 to 2012/2013	n/a	-4.1	9.5	n/a	9.3	-6.2	n/a	-19.7	-24.6	-1.6	-14.7	9.3	n/a	-5.9	12.1	-11.5	n/a	5.3	-4.1
2012/2013 to 2013/2014	n/a	-10.4	-14.2	n/a	8.8	-0.5	n/a	14.3	9.7	-7.3	22.7	-3.8	n/a	-23.2	2.0	-12.4	n/a	2.8	-0.5
2013/2014 to 2014/2015	n/a	-6.3	1.3	n/a	31.9	3.2	n/a	-17.7	-14.5	5.4	1.0	-2.9	n/a	25.2	-6.6	-0.6	n/a	1.1	1.0
2014/2015 to 2015/2016	n/a	-6.3	-12.4	n/a	-15.4	-10.5	n/a	-15.0	-7.3	-0.5	-16.7	10.2	n/a	5.6	6.6	10.0	n/a	-13.8	-7.3

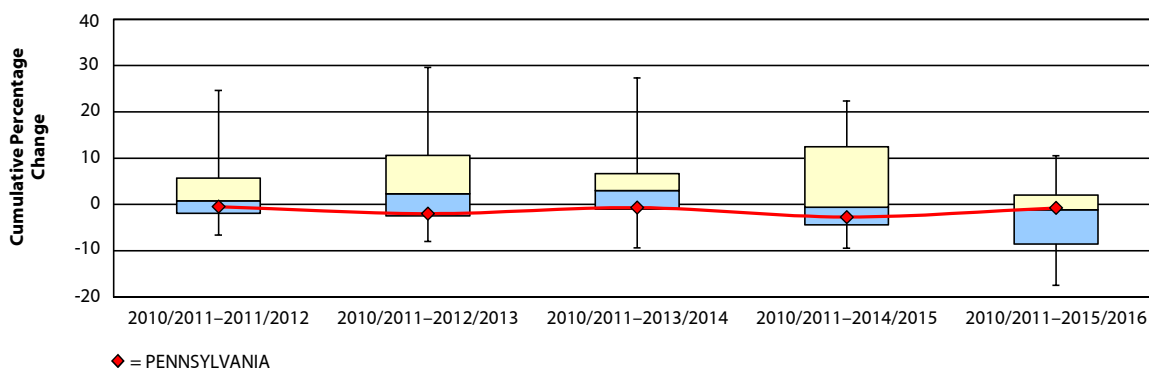
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^b The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^c The 13-state median is the state ranked 7th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 46 Trend of Services per Visit to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 46: Trend of Services per Visit to Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**

	AR ^a	CA	FL ^b	GA ^a	IA ^b	IL	IN ^a	KY ^b	LA ^b	MA	MI ^b	MN	NC ^a	NJ ^b	PA	TX	VA ^a	WI	13-State Median ^c
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	1.9	-3.4	n/a	-6.6	0.1	n/a	-4.0	8.0	0.1	24.7	1.0	n/a	11.2	-0.5	0.8	n/a	3.5	0.8
2012/2013	n/a	3.1	-8.0	n/a	29.6	6.9	n/a	-3.2	-1.3	2.3	21.4	2.0	n/a	4.8	-2.0	-3.0	n/a	14.3	2.3
2013/2014	n/a	5.6	-9.4	n/a	2.6	4.2	n/a	5.7	7.6	1.1	27.3	-1.4	n/a	3.0	-0.7	-2.5	n/a	22.2	3.0
2014/2015	n/a	-0.1	-9.4	n/a	22.3	3.5	n/a	-3.0	0.8	-2.2	21.5	-0.6	n/a	-7.6	-2.7	-5.8	n/a	22.2	-0.6
2015/2016	n/a	2.0	-10.8	n/a	-17.5	1.1	n/a	5.6	-10.7	-2.5	2.0	-1.2	n/a	-5.5	-0.8	-6.4	n/a	10.5	-1.2
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	1.9	-3.4	n/a	-6.6	0.1	n/a	-4.0	8.0	0.1	24.7	1.0	n/a	11.2	-0.5	0.8	n/a	3.5	0.8
2011/2012 to 2012/2013	n/a	1.1	-4.7	n/a	38.8	6.8	n/a	0.8	-8.6	2.2	-2.6	1.0	n/a	-5.8	-1.5	-3.7	n/a	10.5	0.8
2012/2013 to 2013/2014	n/a	2.4	-1.5	n/a	-20.8	-2.5	n/a	9.2	9.1	-1.2	4.9	-3.3	n/a	-1.7	1.3	0.5	n/a	7.0	0.5
2013/2014 to 2014/2015	n/a	-5.4	0.0	n/a	19.2	-0.7	n/a	-8.2	-6.3	-3.3	-4.6	0.8	n/a	-10.3	-2.0	-3.4	n/a	-0.1	-3.3
2014/2015 to 2015/2016	n/a	2.2	-1.5	n/a	-32.5	-2.3	n/a	8.9	-11.4	-0.3	-16.0	-0.6	n/a	2.2	2.0	-0.7	n/a	-9.5	-0.7

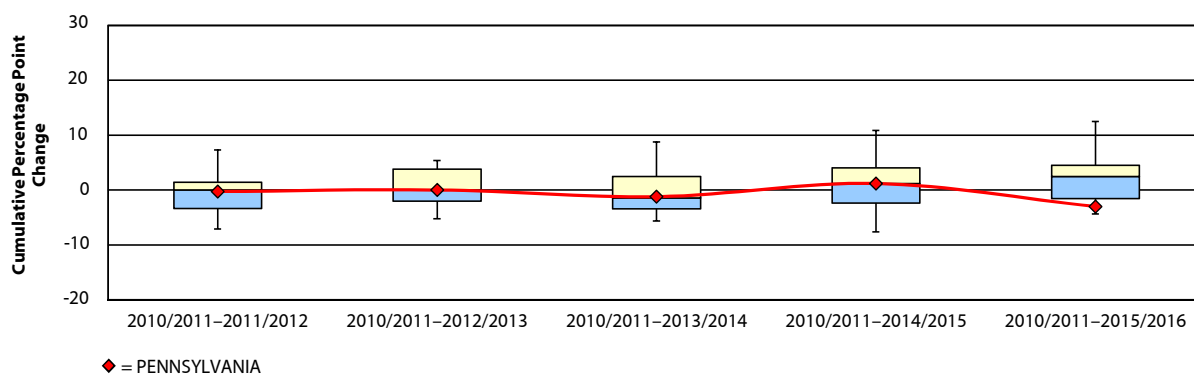
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^b The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^c The 13-state median is the state ranked 7th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 47 Trend of Resource Intensity^a for Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 47: Trend of Resource Intensity^a for Chiropractors for Claims with More Than 7 Days of Lost Time (12 months)**

	AR ^b	CA	FL ^c	GA ^b	IA ^c	IL	IN ^b	KY ^c	LA ^c	MA	MI ^c	MN	NC ^b	NJ ^c	PA	TX	VA ^b	WI
Cumulative percentage point change from 2010/2011 to:																		
2011/2012	n/a	0.0	-3.6	n/a	7.3	1.7	n/a	0.6	6.8	-3.1	-7.1	-0.1	n/a	-6.8	-0.3	1.2	n/a	0.9
2012/2013	n/a	-3.0	0.9	n/a	-3.1	5.4	n/a	3.7	5.2	-1.0	-5.2	-1.0	n/a	-0.9	0.0	4.0	n/a	0.4
2013/2014	n/a	-5.6	-1.0	n/a	8.8	5.5	n/a	-3.6	5.6	-1.7	-3.2	-1.7	n/a	-4.0	-1.2	-0.6	n/a	-1.4
2014/2015	n/a	0.5	3.3	n/a	10.9	3.7	n/a	2.1	4.7	-1.7	-6.4	-1.4	n/a	-3.0	1.2	4.3	n/a	-7.6
2015/2016	n/a	2.5	4.8	n/a	12.5	3.9	n/a	0.6	5.2	-4.3	1.6	-1.5	n/a	10.7	-3.0	4.3	n/a	-0.9
Annual percentage point change:																		
2010/2011 to 2011/2012	n/a	0.0	-3.6	n/a	7.3	1.7	n/a	0.6	6.8	-3.1	-7.1	-0.1	n/a	-6.8	-0.3	1.2	n/a	0.9
2011/2012 to 2012/2013	n/a	-3.2	4.8	n/a	-17.4	3.6	n/a	3.3	0.4	2.1	0.5	-1.0	n/a	4.6	0.3	3.0	n/a	-0.7
2012/2013 to 2013/2014	n/a	-3.2	-1.8	n/a	10.4	0.3	n/a	-10.5	-0.6	-0.8	3.9	-0.7	n/a	-3.0	-1.2	-4.9	n/a	-1.6
2013/2014 to 2014/2015	n/a	7.1	5.1	n/a	-2.8	-1.8	n/a	5.2	0.0	0.1	-2.9	0.3	n/a	1.9	2.1	6.4	n/a	-5.1
2014/2015 to 2015/2016	n/a	2.5	2.2	n/a	3.9	0.6	n/a	-1.6	1.6	-2.8	5.4	0.0	n/a	14.2	-4.3	-0.6	n/a	4.2

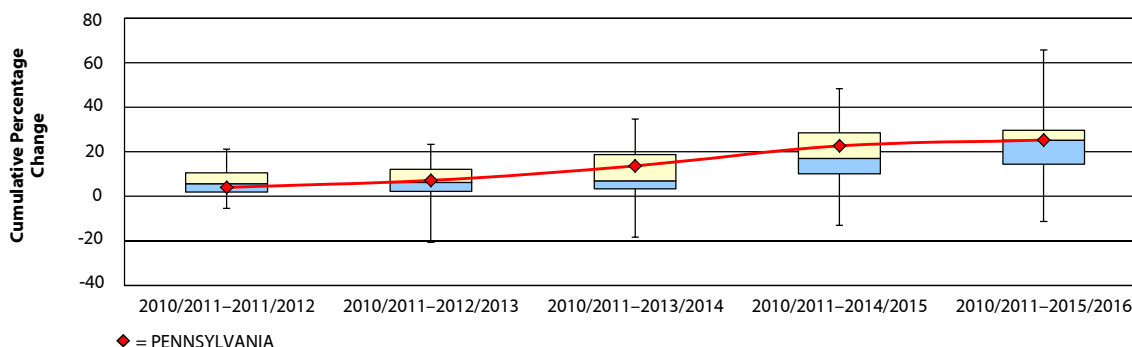
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^c The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

Key: CPT: Current Procedural Terminology; n/a: not available; RVU: relative value unit.

Figure 48 Trend of Average Payment per Claim to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)

Table for Figure 48: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	5.8	1.9	1.8	5.5	21.1	-5.4	12.3	-3.9	10.6	2.4	8.5	0.3	-2.4	10.6	4.0	19.4	6.3	13.1	5.7
2012/2013	4.3	1.0	2.1	12.4	12.4	-20.7	9.6	3.0	5.5	5.5	7.7	0.0	-1.1	12.2	7.1	22.7	6.8	23.3	6.2
2013/2014	3.2	-0.2	0.6	21.8	15.4	-18.4	19.1	3.3	8.2	3.9	13.5	3.5	5.0	18.7	13.7	33.3	5.6	34.7	6.9
2014/2015	10.2	17.6	2.4	22.2	32.9	-13.0	40.9	14.3	12.9	12.1	16.3	5.9	6.5	32.6	22.6	28.6	19.8	48.3	16.9
2015/2016	16.7	25.1	2.0	21.2	39.0	-11.3	65.7	27.3	14.4	11.2	28.8	9.1	29.6	46.1	25.2	16.5	25.8	53.0	25.2
Annual percentage change:																			
2010/2011 to 2011/2012	5.8	1.9	1.8	5.5	21.1	-5.4	12.3	-3.9	10.6	2.4	8.5	0.3	-2.4	10.6	4.0	19.4	6.3	13.1	5.7
2011/2012 to 2012/2013	-1.5	-0.9	0.3	6.5	-7.2	-16.1	-2.4	7.2	-4.6	3.0	-0.7	-0.4	1.3	1.4	3.0	2.7	0.5	9.0	0.4
2012/2013 to 2013/2014	-1.0	-1.2	-1.5	8.4	2.6	2.9	8.6	0.3	2.6	-1.5	5.3	3.5	6.2	5.8	6.1	8.6	-1.2	9.3	3.2
2013/2014 to 2014/2015	6.7	17.8	1.8	0.3	15.2	6.6	18.3	10.6	4.3	7.9	2.5	2.3	1.4	11.7	7.9	-3.6	13.5	10.1	7.3
2014/2015 to 2015/2016	6.0	6.4	-0.4	-0.8	4.6	2.0	17.6	11.4	1.3	-0.9	10.8	3.1	21.7	10.1	2.1	-9.4	5.0	3.2	3.9
Percentage of claims with PT/OT involvement																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.4	2.6	0.2	1.4	0.4	-0.2	1.5	-2.5	-0.3	0.5	0.6	-1.5	1.3	0.4	0.0	-0.6	1.5	0.8	0.4
2012/2013	0.4	2.7	1.0	3.5	1.2	1.6	2.1	-0.6	-1.9	2.2	0.7	-0.5	-0.7	0.5	-1.4	-0.7	3.4	0.2	0.6
2013/2014	7.1	4.4	2.9	4.7	6.3	3.5	6.7	2.8	0.3	2.9	4.0	-0.2	1.5	3.8	1.9	-1.8	3.5	1.8	3.2
2014/2015	10.6	5.3	3.7	4.8	6.2	4.8	8.4	2.8	0.4	3.6	4.8	-0.1	4.0	3.4	2.3	-0.2	6.4	1.4	3.9
2015/2016	9.3	5.4	3.4	6.1	5.5	4.7	9.1	4.0	0.5	4.0	5.9	1.7	4.7	6.1	3.0	0.1	6.6	2.1	4.7
Annual percentage point change:																			
2010/2011 to 2011/2012	0.4	2.6	0.2	1.4	0.4	-0.2	1.5	-2.5	-0.3	0.5	0.6	-1.5	1.3	0.4	0.0	-0.6	1.5	0.8	0.4
2011/2012 to 2012/2013	0.0	0.0	0.8	2.1	0.8	1.9	0.5	1.9	-1.6	1.6	0.1	1.0	-1.9	0.1	-1.4	-0.1	1.8	-0.6	0.3
2012/2013 to 2013/2014	6.7	1.7	1.9	1.2	5.1	1.8	4.7	3.4	2.1	0.7	3.3	0.3	2.2	3.3	3.3	-1.2	0.2	1.6	2.0
2013/2014 to 2014/2015	3.6	1.0	0.9	0.2	-0.1	1.3	1.6	-0.1	0.1	0.7	0.8	0.1	2.5	-0.4	0.5	1.7	2.9	-0.5	0.7
2014/2015 to 2015/2016	-1.3	0.0	-0.3	1.2	-0.7	-0.1	0.7	1.3	0.1	0.4	1.1	1.8	0.7	2.7	0.7	0.3	0.2	0.7	0.5

continued

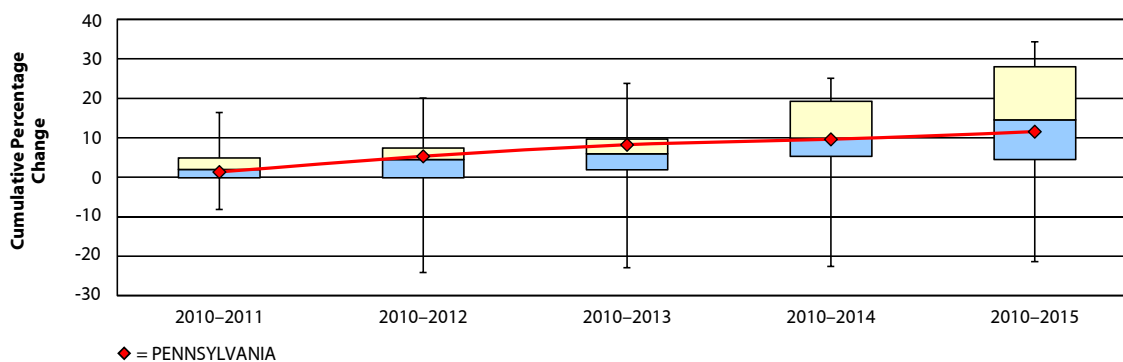
Table for Figure 48: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made to PT/OTs																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.3	0.2	-0.6	0.3	0.4	-0.3	0.4	-1.4	0.1	0.2	0.4	-0.3	-0.1	0.7	0.7	1.1	1.0	0.7	0.3
2012/2013	0.2	-0.2	-0.9	1.6	0.4	0.1	0.0	-0.6	-0.9	0.6	0.7	-0.3	-0.5	0.3	-0.5	1.1	0.5	0.8	0.2
2013/2014	0.7	0.4	-0.3	1.5	0.3	0.7	1.5	0.8	0.3	0.7	1.5	-0.6	1.2	1.6	0.5	1.2	0.3	1.4	0.7
2014/2015	1.6	3.0	-0.7	2.3	1.7	1.5	3.3	1.8	-0.3	1.1	2.3	0.0	2.1	3.1	1.5	1.1	2.0	1.2	1.6
2015/2016	2.9	4.5	-0.9	2.4	2.5	1.7	7.9	2.1	-0.2	1.4	4.1	0.8	6.4	5.1	1.2	0.6	2.9	1.9	2.2
Annual percentage point change:																			
2010/2011 to 2011/2012	0.3	0.2	-0.6	0.3	0.4	-0.3	0.4	-1.4	0.1	0.2	0.4	-0.3	-0.1	0.7	0.7	1.1	1.0	0.7	0.3
2011/2012 to 2012/2013	-0.1	-0.4	-0.3	1.2	0.0	0.4	-0.4	0.8	-1.0	0.4	0.4	0.0	-0.4	-0.4	-1.2	0.1	-0.5	0.1	0.0
2012/2013 to 2013/2014	0.6	0.6	0.5	-0.1	-0.1	0.5	1.5	1.3	1.1	0.1	0.8	-0.3	1.6	1.3	1.0	0.0	-0.3	0.6	0.6
2013/2014 to 2014/2015	0.8	2.6	-0.4	0.9	1.3	0.8	1.8	1.0	-0.6	0.3	0.8	0.7	0.9	1.5	1.0	-0.1	1.8	-0.2	0.9
2014/2015 to 2015/2016	1.3	1.5	-0.2	0.0	0.8	0.2	4.6	0.3	0.1	0.3	1.8	0.7	4.4	1.9	-0.3	-0.5	0.9	0.7	0.7

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: PT/OT: physical/occupational therapist.

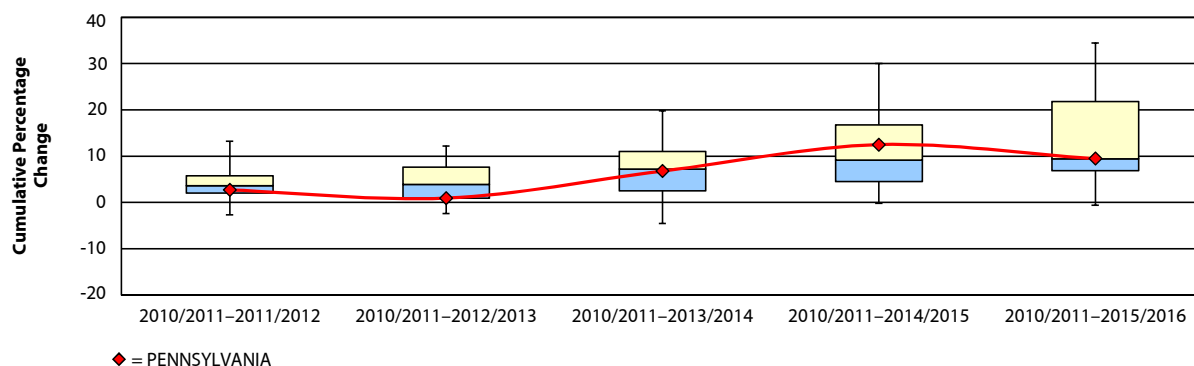
Figure 49 Trend of PT/OT Prices**Table for Figure 49: Trend of PT/OT Prices**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	7.6	-0.2	-2.1	7.1	9.8	-8.2	1.1	2.5	3.9	-1.6	0.7	0.8	-0.1	4.3	1.4	16.4	3.4	4.9	1.9
2012	7.4	-0.6	-2.2	13.3	4.3	-24.1	4.7	2.2	5.0	-0.6	0.5	2.8	-0.1	7.5	5.3	20.1	5.4	11.1	4.5
2013	9.7	-1.8	-2.9	17.5	2.0	-22.9	6.4	1.9	6.2	-2.5	2.9	5.7	4.4	7.2	8.2	23.8	10.7	17.3	6.0
2014	8.2	25.1	-1.0	18.9	6.4	-22.6	19.6	18.6	10.1	-1.6	4.5	9.0	5.3	19.2	9.6	20.7	18.4	23.6	9.9
2015	4.5	29.0	-0.4	20.1	9.7	-21.4	28.0	34.3	9.7	0.1	4.0	8.2	23.9	28.2	11.5	17.5	19.2	31.2	14.5
Annual percentage change:																			
2010 to 2011	7.6	-0.2	-2.1	7.1	9.8	-8.2	1.1	2.5	3.9	-1.6	0.7	0.8	-0.1	4.3	1.4	16.4	3.4	4.9	1.9
2011 to 2012	-0.2	-0.4	-0.1	5.8	-5.0	-17.3	3.6	-0.4	1.1	1.1	-0.3	1.9	0.0	3.1	3.9	3.2	1.9	5.9	1.1
2012 to 2013	2.2	-1.2	-0.7	3.7	-2.2	1.6	1.6	-0.3	1.1	-1.9	2.4	2.8	4.5	-0.3	2.8	3.1	5.0	5.6	1.9
2013 to 2014	-1.4	27.4	1.9	1.2	4.3	0.4	12.4	16.3	3.7	0.9	1.6	3.1	0.9	11.2	1.3	-2.5	6.9	5.4	2.5
2014 to 2015	-3.4	3.1	0.6	1.0	3.1	1.5	7.0	13.3	-0.4	1.7	-0.4	-0.7	17.7	7.5	1.7	-2.6	0.7	6.1	1.6

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: PT/OT: physical/occupational therapist.

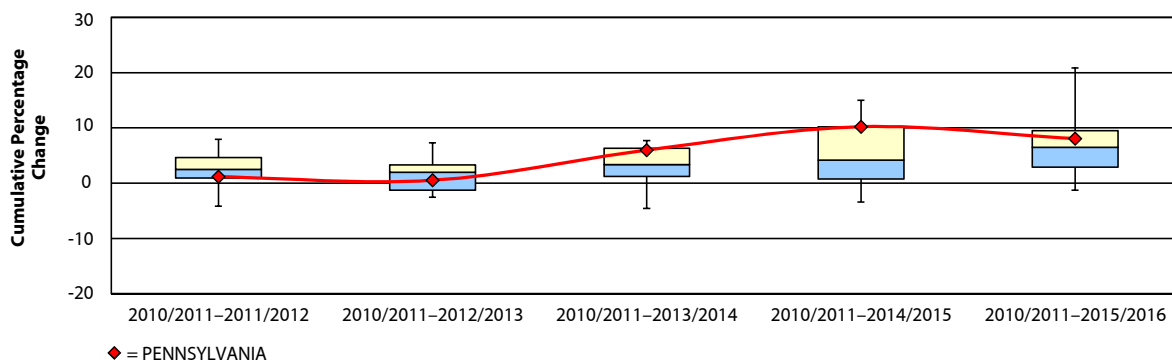
Figure 50 Trend of PT/OT Utilization for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 50: Trend of PT/OT Utilization for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-2.7	3.0	4.6	3.3	13.2	5.7	11.5	-0.3	2.5	5.8	9.7	-0.7	-1.2	4.0	2.7	5.3	2.0	8.8	3.6
2012/2013	-2.4	3.1	4.3	3.2	9.3	5.3	8.2	7.6	2.5	7.5	8.1	-1.4	0.2	3.5	0.9	5.1	0.9	12.2	3.9
2013/2014	-4.6	6.6	2.1	6.4	19.8	9.6	15.5	11.0	7.0	7.4	11.6	2.0	2.5	7.5	6.8	10.4	-1.4	18.1	7.2
2014/2015	4.2	29.4	5.2	3.3	30.0	16.7	22.0	5.2	10.9	11.5	8.9	-0.2	4.5	7.1	12.5	9.5	2.1	23.3	9.2
2015/2016	6.9	29.7	7.1	-0.6	29.6	17.4	34.5	10.3	10.1	9.3	22.6	3.7	5.6	9.2	9.5	1.0	7.3	21.8	9.4
Annual percentage change:																			
2010/2011 to 2011/2012	-2.7	3.0	4.6	3.3	13.2	5.7	11.5	-0.3	2.5	5.8	9.7	-0.7	-1.2	4.0	2.7	5.3	2.0	8.8	3.6
2011/2012 to 2012/2013	0.3	0.0	-0.3	-0.1	-3.5	-0.4	-2.9	7.9	0.0	1.7	-1.5	-0.7	1.3	-0.5	-1.7	-0.2	-1.1	3.1	-0.2
2012/2013 to 2013/2014	-2.2	3.4	-2.1	3.1	9.6	4.0	6.7	3.2	4.3	-0.1	3.3	3.5	2.3	3.8	5.8	5.0	-2.3	5.3	3.4
2013/2014 to 2014/2015	9.2	21.4	3.0	-2.9	8.5	6.5	5.6	-5.3	3.7	3.7	-2.4	-2.2	2.0	-0.3	5.4	-0.9	3.6	4.4	3.6
2014/2015 to 2015/2016	2.6	0.2	1.9	-3.8	-0.3	0.6	10.2	4.8	-0.7	-1.9	12.5	3.9	1.0	1.9	-2.7	-7.8	5.1	-1.2	0.8

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: PT/OT: physical/occupational therapist.

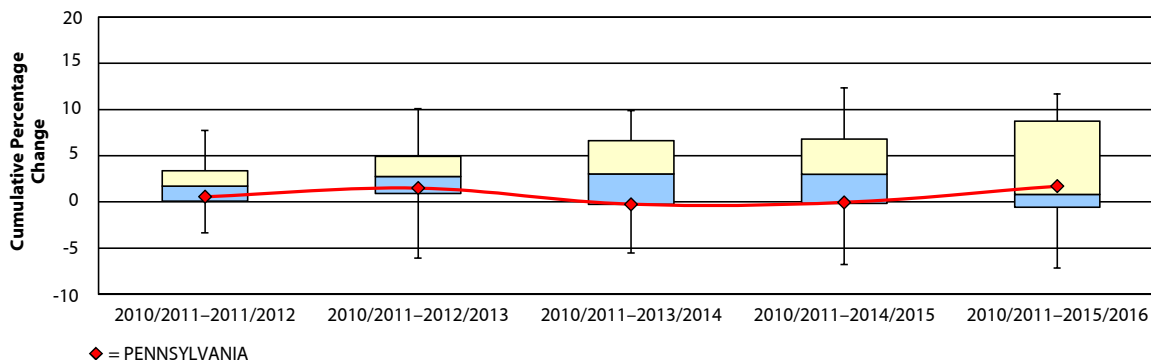
Figure 51 Trend of Visits per Claim to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 51: Trend of Visits per Claim to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-4.2	2.9	3.8	0.9	4.6	1.9	7.9	-3.2	6.0	7.0	7.5	0.1	-2.4	1.5	1.2	2.1	4.2	3.5	2.5
2012/2013	-2.5	2.3	4.8	1.2	-1.4	-1.2	2.1	3.8	1.8	7.3	5.8	-2.4	-2.0	-1.3	0.5	2.7	3.3	2.9	2.0
2013/2014	-4.6	1.2	2.4	4.3	6.3	2.2	7.1	6.3	0.7	7.5	7.7	0.5	-0.4	1.4	6.0	5.4	1.6	7.4	3.3
2014/2015	0.1	1.5	5.1	1.8	15.0	6.8	10.7	0.8	-1.3	12.1	4.9	-3.4	0.4	3.5	10.2	4.4	3.9	11.6	4.1
2015/2016	6.6	-1.3	5.4	0.9	15.4	6.9	20.8	3.3	-0.5	9.5	15.1	3.5	2.1	2.9	8.1	7.3	6.4	11.0	6.5
Annual percentage change:																			
2010/2011 to 2011/2012	-4.2	2.9	3.8	0.9	4.6	1.9	7.9	-3.2	6.0	7.0	7.5	0.1	-2.4	1.5	1.2	2.1	4.2	3.5	2.5
2011/2012 to 2012/2013	1.7	-0.6	0.9	0.2	-5.7	-3.1	-5.4	7.2	-4.0	0.2	-1.5	-2.5	0.4	-2.8	-0.6	0.6	-0.8	-0.6	-0.6
2012/2013 to 2013/2014	-2.1	-1.1	-2.3	3.1	7.7	3.5	4.8	2.4	-1.1	0.2	1.8	2.9	1.7	2.7	5.4	2.6	-1.7	4.4	2.5
2013/2014 to 2014/2015	4.9	0.3	2.6	-2.4	8.2	4.5	3.4	-5.2	-2.0	4.3	-2.6	-3.8	0.8	2.1	4.0	-0.9	2.3	3.9	2.2
2014/2015 to 2015/2016	6.5	-2.7	0.3	-0.9	0.4	0.0	9.2	2.5	0.8	-2.3	9.8	7.1	1.7	-0.6	-2.0	2.9	2.4	-0.5	0.6

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: PT/OT: physical/occupational therapist.

Figure 52 Trend of Services per Visit to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 52: Trend of Services per Visit to PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**

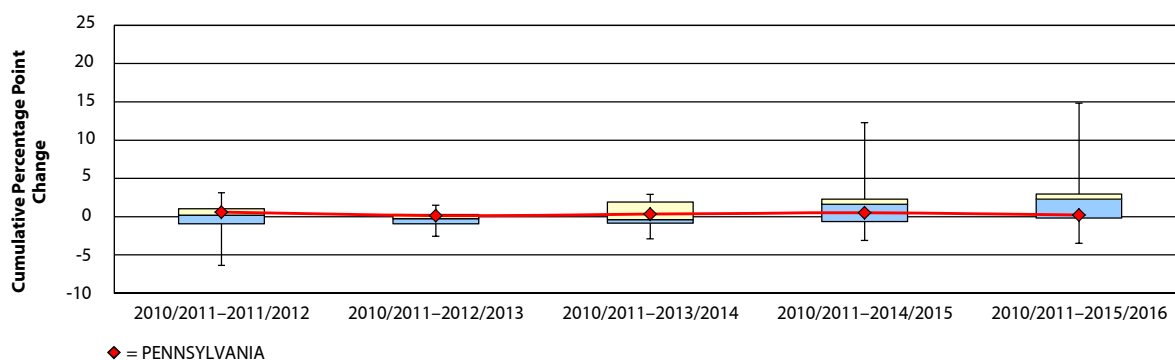
	AR	CA ^a	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Cumulative percentage change from 2010/2011 to:																			
2011/2012	0.0	0.1	1.1	0.3	7.7	3.4	4.0	0.2	2.3	-3.3	3.4	-1.5	2.3	2.3	0.6	3.1	-2.1	5.9	1.7
2012/2013	3.6	1.7	-0.5	1.4	9.3	5.1	6.6	0.5	2.6	0.9	4.0	-6.1	2.9	4.9	1.5	3.4	-1.5	10.1	2.8
2013/2014	2.5	3.4	-1.0	1.4	9.9	3.8	7.5	0.2	2.7	-1.8	5.4	-5.5	3.4	6.6	-0.2	7.0	-1.8	9.7	3.0
2014/2015	2.4	9.2	-1.8	1.6	10.1	5.3	10.7	-0.2	4.5	-1.7	5.8	-6.8	3.1	2.9	-0.1	6.8	-3.1	12.3	3.0
2015/2016	-2.9	9.8	-0.6	-0.1	9.8	5.2	11.7	0.2	0.5	-2.8	8.7	-7.1	1.1	3.9	1.7	-3.9	-0.2	9.4	0.8
Annual percentage change:																			
2010/2011 to 2011/2012	0.0	0.1	1.1	0.3	7.7	3.4	4.0	0.2	2.3	-3.3	3.4	-1.5	2.3	2.3	0.6	3.1	-2.1	5.9	1.7
2011/2012 to 2012/2013	3.6	1.6	-1.6	1.2	1.5	1.6	2.5	0.4	0.3	4.4	0.6	-4.7	0.5	2.6	0.9	0.3	0.6	3.9	1.0
2012/2013 to 2013/2014	-1.1	1.7	-0.5	-0.1	0.5	-1.2	0.9	-0.3	0.1	-2.6	1.3	0.6	0.5	1.6	-1.7	3.5	-0.3	-0.4	0.0
2013/2014 to 2014/2015	-0.1	5.7	-0.7	0.3	0.2	1.4	2.9	-0.4	1.7	0.1	0.4	-1.3	-0.3	-3.5	0.2	-0.2	-1.3	2.4	0.1
2014/2015 to 2015/2016	-5.2	0.5	1.2	-1.7	-0.2	-0.1	0.9	0.3	-3.8	-1.1	2.8	-0.4	-1.9	1.0	1.8	-10.0	2.9	-2.6	-0.1

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a In California, a maximum of four individual services per visit are reimbursed. In addition, some procedures are defined in 30-minute increments rather than the more standard 15 minutes.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: PT/OT: physical/occupational therapist.

Figure 53 Trend of Resource Intensity^a for PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 53: Trend of Resource Intensity^a for PT/OTs for Claims with More Than 7 Days of Lost Time (12 months)**

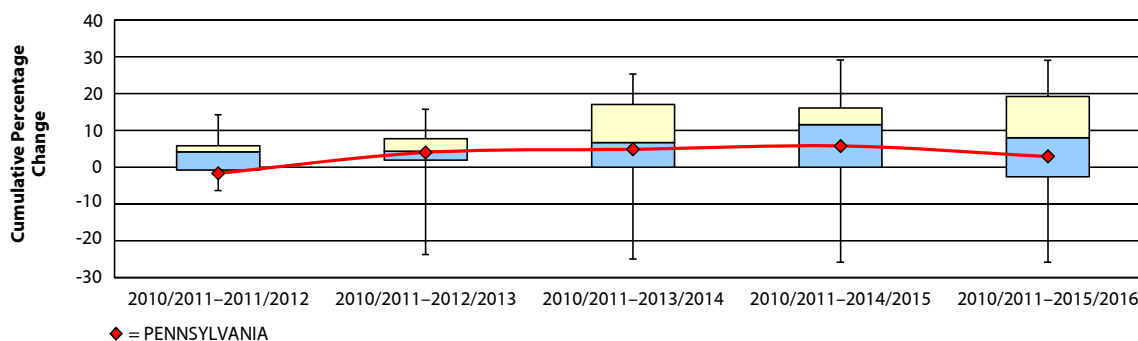
	AR	CA ^b	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Cumulative percentage point change from 2010/2011 to:																		
2011/2012	1.8	0.7	-0.2	1.5	1.1	0.1	-1.5	1.4	-6.4	3.1	-2.4	0.3	-0.9	-0.2	0.6	0.6	0.1	-1.3
2012/2013	-2.5	-0.7	0.3	-0.1	0.4	1.5	-1.4	0.7	-2.3	0.1	-2.6	1.3	-0.4	-0.1	0.1	-0.5	-0.9	-0.6
2013/2014	-1.3	0.4	1.1	-0.6	1.9	2.9	-1.6	2.3	2.8	2.8	-2.9	-0.4	-0.4	-0.6	0.3	-0.8	-1.1	-0.7
2014/2015	2.3	12.3	2.3	-2.0	3.1	3.8	-2.7	2.2	7.4	2.0	-3.1	1.4	0.3	0.8	0.5	-0.6	1.9	-2.1
2015/2016	4.1	14.8	2.7	-2.9	2.9	4.3	-2.4	2.4	9.4	3.0	-3.5	1.1	2.4	2.2	0.2	-1.2	1.3	-0.2
Annual percentage point change:																		
2010/2011 to 2011/2012	1.8	0.7	-0.2	1.5	1.1	0.1	-1.5	1.4	-6.4	3.1	-2.4	0.3	-0.9	-0.2	0.6	0.6	0.1	-1.3
2011/2012 to 2012/2013	-4.4	-1.4	0.4	-1.6	-0.6	1.4	0.0	-0.9	3.8	-3.0	-0.2	1.0	0.5	0.1	-0.4	-1.0	-1.0	0.7
2012/2013 to 2013/2014	1.1	1.1	0.8	-0.5	1.4	1.3	-0.1	1.5	4.9	2.5	-0.2	-1.7	0.0	-0.5	0.2	-0.3	-0.2	-0.1
2013/2014 to 2014/2015	3.8	11.1	1.1	-1.3	0.9	0.6	-0.8	0.0	4.3	-0.8	-0.2	1.7	0.8	1.4	0.2	0.2	3.0	-1.1
2014/2015 to 2015/2016	1.8	2.2	0.3	-0.9	-0.2	0.4	0.5	0.1	2.0	0.9	0.0	-0.3	2.0	1.3	-0.3	-0.6	-0.6	1.5

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b In California, a maximum of four individual services per visit are reimbursed. In addition, some procedures are defined in 30-minute increments rather than the more standard 15 minutes.

Key: CPT: Current Procedural Terminology; PT/OT: physical/occupational therapist; RVU: relative value unit.

Figure 54 Trend of Average Payment per Claim for Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 54: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	14.3	0.0	0.5	5.9	4.2	-6.3	6.0	5.0	5.7	-0.8	-2.2	11.5	-2.6	0.7	-1.6	12.7	4.7	4.1	4.2
2012/2013	7.7	-0.6	3.6	15.3	3.5	-23.7	6.4	4.7	6.7	2.0	-5.3	15.7	3.3	1.4	4.0	15.7	6.2	12.7	4.4
2013/2014	9.2	0.0	-1.4	25.3	17.0	-24.9	10.5	3.3	-0.8	1.0	2.6	19.5	13.9	-1.2	4.9	22.2	8.5	18.3	6.7
2014/2015	12.3	11.6	-3.3	17.5	10.9	-25.8	12.8	11.6	-5.5	0.0	5.1	29.2	16.1	-3.2	5.8	20.0	12.1	26.8	11.6
2015/2016	0.3	15.3	-7.7	15.8	9.9	-25.8	16.5	24.1	-4.9	-5.2	0.5	24.3	29.1	-2.6	3.0	19.3	6.2	25.5	8.1
Annual percentage change:																			
2010/2011 to 2011/2012	14.3	0.0	0.5	5.9	4.2	-6.3	6.0	5.0	5.7	-0.8	-2.2	11.5	-2.6	0.7	-1.6	12.7	4.7	4.1	4.2
2011/2012 to 2012/2013	-5.7	-0.6	3.1	8.9	-0.7	-18.6	0.3	-0.3	0.9	2.8	-3.2	3.8	6.1	0.7	5.8	2.7	1.4	8.2	1.2
2012/2013 to 2013/2014	1.4	0.6	-4.9	8.7	13.1	-1.6	3.9	-1.3	-7.1	-1.0	8.4	3.2	10.2	-2.6	0.8	5.7	2.2	5.0	1.8
2013/2014 to 2014/2015	2.8	11.6	-2.0	-6.2	-5.3	-1.2	2.1	8.0	-4.7	-1.0	2.4	8.1	1.9	-2.1	0.9	-1.8	3.3	7.2	1.4
2014/2015 to 2015/2016	-10.7	3.3	-4.5	-1.4	-0.8	0.0	3.3	11.2	0.7	-5.2	-4.4	-3.7	11.2	0.7	-2.7	-0.6	-5.3	-1.1	-1.0
Percentage of claims with evaluation and management services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.0	0.3	-0.1	0.1	1.8	0.3	0.3	-0.2	1.0	0.1	0.3	-2.3	0.0	0.1	-0.3	0.2	1.1	0.1	0.1
2012/2013	1.2	0.4	0.7	0.4	1.4	0.1	-0.1	-0.6	0.7	2.2	-1.6	-3.9	-0.6	0.1	-0.3	0.4	1.4	-0.4	0.2
2013/2014	0.8	0.3	0.5	0.5	1.0	0.7	0.3	0.7	1.1	2.5	-0.3	-2.3	-0.8	1.0	1.0	0.3	1.0	0.0	0.6
2014/2015	0.5	0.1	0.4	0.2	0.4	-0.7	0.2	-0.9	1.0	3.1	-1.1	-4.0	-1.1	1.2	0.4	-0.3	0.9	-0.3	0.2
2015/2016	-0.6	-0.2	0.2	0.1	0.1	-0.5	0.2	-0.7	-0.5	3.7	-0.1	-4.7	-0.6	1.1	0.8	-0.1	0.5	-0.2	-0.1
Annual percentage point change:																			
2010/2011 to 2011/2012	0.0	0.3	-0.1	0.1	1.8	0.3	0.3	-0.2	1.0	0.1	0.3	-2.3	0.0	0.1	-0.3	0.2	1.1	0.1	0.1
2011/2012 to 2012/2013	1.2	0.1	0.8	0.3	-0.5	-0.2	-0.5	-0.4	-0.3	2.1	-1.9	-1.6	-0.6	0.0	0.0	0.2	0.3	-0.4	-0.1
2012/2013 to 2013/2014	-0.4	-0.1	-0.2	0.1	-0.4	0.6	0.4	1.4	0.4	0.3	1.2	1.5	-0.2	0.8	1.2	-0.1	-0.4	0.3	0.3
2013/2014 to 2014/2015	-0.3	-0.2	-0.1	-0.2	-0.6	-1.4	0.0	-1.7	-0.1	0.6	-0.7	-1.7	-0.3	0.3	-0.6	-0.6	-0.1	-0.3	-0.3
2014/2015 to 2015/2016	-1.1	-0.4	-0.1	-0.1	-0.3	0.2	-0.1	0.2	-1.5	0.6	1.0	-0.8	0.5	-0.2	0.4	0.2	-0.4	0.1	-0.1

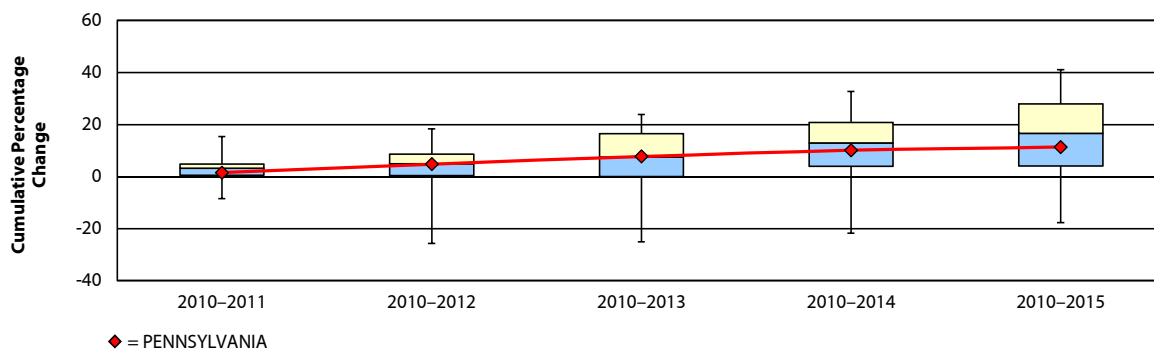
continued

Table for Figure 54: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for evaluation and management services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.6	-0.5	-0.5	0.1	-0.4	-0.1	-0.2	-0.1	-0.1	-0.1	-0.6	0.4	-0.2	-0.2	-0.2	0.4	0.3	0.0	-0.1
2012/2013	0.3	-0.5	-0.6	0.8	-0.1	-0.3	-0.3	-0.3	-0.2	0.0	-0.7	0.4	0.0	-0.3	-0.2	0.6	0.0	0.1	-0.2
2013/2014	0.1	0.3	-0.6	0.6	-0.3	-0.4	-0.2	0.0	-0.3	0.1	-0.5	0.1	0.6	-0.4	-0.3	0.5	0.0	0.1	0.0
2014/2015	0.1	2.4	-1.1	0.6	-0.5	-0.7	-0.3	0.2	-1.0	-0.4	-0.3	1.1	0.9	-0.4	-0.4	0.2	0.0	0.0	-0.2
2015/2016	0.2	3.3	-1.5	0.4	-0.3	-0.7	0.4	0.3	-1.0	-0.5	-0.6	1.0	2.1	-0.4	-0.8	0.7	-0.2	0.1	0.0
Annual percentage point change:																			
2010/2011 to 2011/2012	0.6	-0.5	-0.5	0.1	-0.4	-0.1	-0.2	-0.1	-0.1	-0.1	-0.6	0.4	-0.2	-0.2	-0.2	0.4	0.3	0.0	-0.1
2011/2012 to 2012/2013	-0.3	0.0	-0.1	0.7	0.3	-0.2	-0.1	-0.2	-0.1	0.2	-0.2	0.0	0.1	-0.1	0.0	0.2	-0.3	0.1	0.0
2012/2013 to 2013/2014	-0.2	0.8	-0.1	-0.2	-0.2	-0.1	0.0	0.3	-0.1	0.1	0.2	-0.3	0.7	-0.1	-0.1	-0.1	0.0	0.0	-0.1
2013/2014 to 2014/2015	0.0	2.1	-0.5	0.0	-0.2	-0.3	-0.1	0.2	-0.7	-0.5	0.2	1.0	0.2	0.0	-0.1	-0.3	0.0	-0.1	-0.1
2014/2015 to 2015/2016	0.1	0.9	-0.3	-0.2	0.2	0.0	0.7	0.0	-0.1	-0.1	-0.3	-0.1	1.3	0.0	-0.4	0.5	-0.2	0.1	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

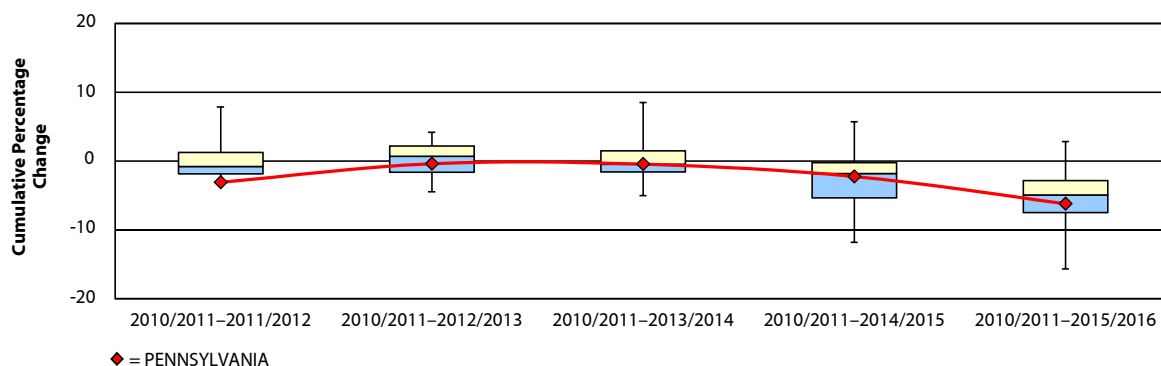
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 55 Trend of Prices for Evaluation and Management by Nonhospital Providers**Table for Figure 55: Trend of Prices for Evaluation and Management by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	4.5	-0.3	0.8	8.8	4.8	-8.4	2.9	6.6	0.5	0.1	0.8	14.1	-0.1	3.4	1.5	15.4	3.9	3.9	3.2
2012	6.0	-0.6	0.9	14.4	7.4	-25.7	5.0	8.6	1.1	-0.5	0.3	17.6	0.1	5.0	4.8	18.4	6.0	9.5	5.0
2013	6.9	-0.8	-0.2	18.8	11.1	-25.1	5.8	9.0	2.1	-0.7	4.8	21.7	23.6	-3.0	7.7	22.2	9.1	16.2	7.3
2014	4.2	29.4	0.5	19.7	14.6	-21.8	11.8	20.8	4.0	-1.3	6.9	32.7	25.3	-1.0	10.1	19.2	14.0	23.8	12.9
2015	4.4	36.2	-0.2	19.8	15.1	-17.6	20.2	32.3	4.1	-2.0	5.0	32.9	41.1	2.4	11.4	20.0	18.0	27.9	16.6
Annual percentage change:																			
2010 to 2011	4.5	-0.3	0.8	8.8	4.8	-8.4	2.9	6.6	0.5	0.1	0.8	14.1	-0.1	3.4	1.5	15.4	3.9	3.9	3.2
2011 to 2012	1.5	-0.4	0.0	5.2	2.5	-18.9	2.1	1.9	0.6	-0.6	-0.4	3.1	0.2	1.5	3.2	2.5	2.1	5.4	1.7
2012 to 2013	0.8	-0.2	-1.1	3.8	3.5	0.9	0.8	0.4	1.0	-0.2	4.5	3.5	23.5	-7.6	2.8	3.2	2.9	6.1	1.9
2013 to 2014	-2.5	30.4	0.8	0.8	3.1	4.4	5.7	10.8	1.8	-0.6	2.0	9.0	1.4	2.0	2.2	-2.4	4.5	6.5	2.1
2014 to 2015	0.2	5.3	-0.7	0.0	0.5	5.3	7.5	9.6	0.1	-0.7	-1.8	0.2	12.6	3.4	1.1	0.7	3.5	3.4	0.9

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 56 Trend of Utilization of Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 56: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.8	1.1	-0.4	-1.8	1.3	-0.7	4.1	-1.9	4.3	-1.3	-0.8	-2.7	-2.2	-3.0	-3.1	-1.6	1.7	-0.8	-0.8
2012/2013	0.7	0.6	2.8	0.9	0.7	0.7	4.2	-3.6	3.2	1.4	-4.4	-1.6	2.2	-3.0	-0.4	-2.9	2.0	2.5	0.7
2013/2014	1.5	-1.6	-1.4	5.6	8.5	-1.0	4.8	-5.0	-3.6	-0.5	0.9	-1.5	-1.8	-3.6	-0.4	-0.1	0.2	2.5	-0.5
2014/2015	5.7	-11.8	-3.9	-1.3	-0.3	-6.1	3.9	-6.3	-11.3	-0.2	0.2	-2.7	-3.7	-5.4	-2.2	-0.7	-0.8	5.5	-1.8
2015/2016	-4.6	-15.7	-7.5	-2.9	-2.6	-9.7	2.8	-5.2	-9.5	-3.4	-3.6	-6.9	-4.7	-6.8	-6.2	-1.7	-9.2	-0.5	-4.9
Annual percentage change:																			
2010/2011 to 2011/2012	7.8	1.1	-0.4	-1.8	1.3	-0.7	4.1	-1.9	4.3	-1.3	-0.8	-2.7	-2.2	-3.0	-3.1	-1.6	1.7	-0.8	-0.8
2011/2012 to 2012/2013	-6.7	-0.5	3.2	2.8	-0.5	1.4	0.1	-1.7	-1.0	2.7	-3.7	1.1	4.4	0.0	2.8	-1.4	0.3	3.3	0.2
2012/2013 to 2013/2014	0.8	-2.2	-4.1	4.7	7.7	-1.7	0.6	-1.5	-6.6	-1.8	5.6	0.1	-3.9	-0.7	-0.1	2.9	-1.8	0.0	-0.4
2013/2014 to 2014/2015	4.2	-10.4	-2.5	-6.6	-8.1	-5.2	-0.9	-1.4	-8.0	0.3	-0.8	-1.2	-1.9	-1.8	-1.8	-0.5	-0.9	3.0	-1.6
2014/2015 to 2015/2016	-9.7	-4.4	-3.7	-1.5	-2.3	-3.9	-1.0	1.3	2.1	-3.2	-3.7	-4.3	-1.0	-1.5	-4.0	-1.0	-8.5	-5.8	-3.5
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	6.3	0.9	-0.2	-2.5	1.5	-1.4	2.6	-1.9	3.2	-1.6	-1.3	-3.6	-1.9	-2.0	-3.1	-1.9	2.2	-0.4	-1.3
2012/2013	0.3	0.3	0.8	-0.2	-0.8	-0.8	1.8	-1.8	2.0	1.7	-3.5	-2.8	0.5	-1.4	-1.1	-2.3	2.0	0.9	0.1
2013/2014	1.2	-0.6	-3.2	3.3	4.7	-0.7	1.4	-3.7	-4.9	1.1	0.7	-3.4	-4.1	-0.4	-2.3	0.2	0.3	0.4	-0.1
2014/2015	3.0	-3.4	-3.9	-1.7	-3.1	-3.9	1.7	-6.3	-11.4	1.6	1.9	-5.0	-5.4	0.0	-3.4	1.5	1.4	1.3	-2.4
2015/2016	-4.0	-5.9	-5.0	-2.5	-4.6	-7.5	1.8	-7.1	-10.8	-1.3	-0.4	-7.1	-7.9	-0.4	-6.8	0.1	-5.7	-2.5	-4.8
Annual percentage change:																			
2010/2011 to 2011/2012	6.3	0.9	-0.2	-2.5	1.5	-1.4	2.6	-1.9	3.2	-1.6	-1.3	-3.6	-1.9	-2.0	-3.1	-1.9	2.2	-0.4	-1.3
2011/2012 to 2012/2013	-5.6	-0.6	0.9	2.4	-2.3	0.6	-0.7	0.1	-1.2	3.3	-2.2	0.9	2.4	0.7	2.1	-0.4	-0.2	1.3	0.3
2012/2013 to 2013/2014	0.9	-0.8	-4.0	3.5	5.6	0.1	-0.4	-1.9	-6.8	-0.5	4.3	-0.6	-4.6	1.0	-1.2	2.5	-1.6	-0.5	-0.5
2013/2014 to 2014/2015	1.8	-2.8	-0.7	-4.9	-7.5	-3.2	0.3	-2.7	-6.8	0.5	1.2	-1.6	-1.3	0.4	-1.1	1.3	1.1	0.9	-0.9
2014/2015 to 2015/2016	-6.8	-2.6	-1.1	-0.8	-1.6	-3.7	0.1	-0.8	0.8	-2.8	-2.3	-2.3	-2.7	-0.4	-3.5	-1.4	-7.1	-3.7	-2.3

continued

Table for Figure 56: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Evaluation and Management by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

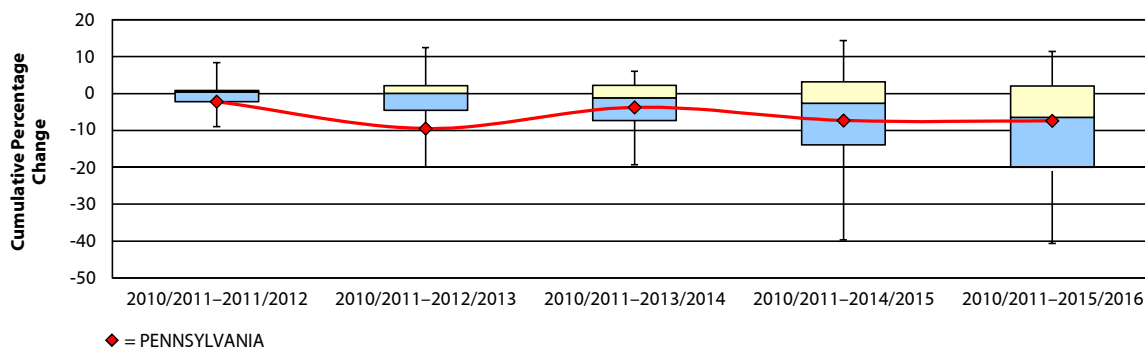
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	0.2	0.3	0.2	0.1	-0.8	0.2	1.1	-0.6	-0.6	0.6	0.2	0.3	0.3	-0.8	-0.1	0.4	0.1	-0.1	0.2
2012/2013	0.4	-0.1	1.7	-0.4	-0.1	0.5	1.3	-0.6	-0.6	0.5	0.2	-0.2	1.3	-0.2	0.2	-0.2	1.0	0.9	0.2
2013/2014	0.0	-0.9	1.1	-0.1	-0.1	0.3	0.4	-0.7	-0.4	0.3	1.0	0.1	1.6	-0.7	0.3	-0.1	0.8	0.9	0.2
2014/2015	1.3	-6.0	1.0	-0.4	0.3	-0.3	0.7	0.5	-0.5	0.6	0.0	0.4	0.4	-0.9	-0.5	-0.3	0.3	1.8	0.3
2015/2016	0.0	-6.8	0.5	-0.6	-0.6	-0.6	0.4	0.1	-0.6	0.3	0.0	-0.2	1.0	-0.1	-0.9	-0.5	-0.4	1.2	-0.2
Annual percentage change:																			
2010/2011 to 2011/2012	0.2	0.3	0.2	0.1	-0.8	0.2	1.1	-0.6	-0.6	0.6	0.2	0.3	0.3	-0.8	-0.1	0.4	0.1	-0.1	0.2
2011/2012 to 2012/2013	0.2	-0.3	1.5	-0.5	0.7	0.3	0.2	0.1	0.0	-0.1	0.0	-0.5	1.0	0.6	0.3	-0.6	1.0	1.0	0.2
2012/2013 to 2013/2014	-0.4	-0.8	-0.7	0.3	0.0	-0.2	-0.9	-0.1	0.2	-0.2	0.8	0.3	0.4	-0.5	0.0	0.1	-0.2	0.0	-0.1
2013/2014 to 2014/2015	1.3	-5.1	0.0	-0.4	0.3	-0.6	0.3	1.2	-0.1	0.2	-1.0	0.3	-1.2	-0.2	-0.8	-0.3	-0.5	0.9	-0.1
2014/2015 to 2015/2016	-1.3	-0.9	-0.5	-0.1	-0.9	-0.4	-0.4	-0.4	-0.2	-0.3	-0.1	-0.6	0.6	0.8	-0.4	-0.1	-0.7	-0.6	-0.4
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	1.3	-0.2	-0.5	0.4	0.4	0.5	0.2	0.4	1.1	-0.3	0.1	1.0	-0.4	-0.4	0.2	-0.3	-0.5	0.1	
2012/2013	-0.2	0.2	0.2	1.5	1.7	0.9	0.9	-1.4	1.5	-1.0	-1.2	1.7	0.3	-1.5	0.6	-0.8	-1.1	0.9	
2013/2014	0.1	-0.4	0.7	2.1	3.7	-0.8	2.4	-1.0	1.2	-2.1	-0.9	2.4	0.6	-2.7	1.5	-0.6	-1.0	0.6	
2014/2015	1.2	-3.0	-1.1	0.4	2.7	-2.1	1.1	-0.5	0.0	-2.5	-1.8	2.5	1.2	-4.6	1.5	-2.1	-2.5	1.6	
2015/2016	-0.5	-3.7	-3.1	-0.1	2.6	-1.9	0.0	1.6	1.3	-2.6	-3.3	1.4	2.4	-6.4	1.3	-1.6	-3.2	-0.2	
Annual percentage point change:																			
2010/2011 to 2011/2012	1.3	-0.2	-0.5	0.4	0.4	0.5	0.2	0.4	1.1	-0.3	0.1	1.0	-0.4	-0.4	0.2	-0.3	-0.5	0.1	
2011/2012 to 2012/2013	-1.3	0.3	0.7	1.1	1.2	0.4	0.7	-1.9	0.4	-0.6	-1.3	0.8	0.8	-1.1	0.5	-0.5	-0.5	0.9	
2012/2013 to 2013/2014	0.4	-0.6	0.5	0.6	1.9	-1.7	1.5	0.4	-0.2	-1.1	0.4	0.7	0.2	-1.2	0.9	0.3	0.0	-0.4	
2013/2014 to 2014/2015	1.0	-2.7	-1.8	-1.5	-0.7	-1.4	-1.2	0.5	-1.1	-0.4	-0.9	0.1	0.6	-2.0	0.1	-1.6	-1.4	1.0	
2014/2015 to 2015/2016	-1.5	-0.8	-2.1	-0.6	0.0	0.1	-1.0	2.3	1.4	-0.1	-1.5	-1.0	1.3	-1.9	-0.1	0.4	-0.9	-1.6	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 57 Trend of Average Payment per Claim for Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 57: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	0.4	0.5	0.0	0.4	-3.6	-5.1	0.4	-0.7	3.3	2.7	0.8	-9.0	-2.9	0.4	-2.2	8.4	2.5	-1.2	0.4
2012/2013	12.4	1.0	2.1	3.2	-4.1	-19.9	1.5	1.8	-1.7	-4.5	-5.0	-9.8	-0.6	-0.5	-9.5	5.2	2.8	0.5	0.0
2013/2014	-1.2	-4.6	-1.2	3.6	6.0	-18.7	5.5	0.8	-7.3	1.8	-11.1	-19.3	-2.3	2.0	-3.7	-9.5	4.1	2.2	-1.2
2014/2015	-9.6	-22.0	-0.9	-2.8	14.3	-21.1	7.7	0.2	-12.9	3.2	-13.9	-39.7	-2.5	4.2	-7.3	-26.1	9.2	3.1	-2.6
2015/2016	-21.0	-30.9	-4.5	-7.5	10.4	-20.4	9.6	0.0	-15.6	1.0	-40.6	-37.1	-19.7	-3.9	-7.4	-29.0	1.6	3.0	-7.5
Annual percentage change:																			
2010/2011 to 2011/2012	0.4	0.5	0.0	0.4	-3.6	-5.1	0.4	-0.7	3.3	2.7	0.8	-9.0	-2.9	0.4	-2.2	8.4	2.5	-1.2	0.4
2011/2012 to 2012/2013	12.0	0.5	2.1	2.7	-0.5	-15.7	1.1	2.6	-4.9	-7.1	-5.7	-0.9	2.3	-0.9	-7.4	-3.0	0.4	1.7	-0.1
2012/2013 to 2013/2014	-12.1	-5.5	-3.2	0.5	10.5	1.5	3.9	-0.9	-5.7	6.6	-6.5	-10.5	-1.6	2.5	6.4	-14.0	1.2	1.7	-0.2
2013/2014 to 2014/2015	-8.5	-18.3	0.3	-6.2	7.9	-3.0	2.1	-0.7	-6.0	1.4	-3.1	-25.3	-0.2	2.1	-3.7	-18.3	4.9	0.9	-1.8
2014/2015 to 2015/2016	-12.6	-11.4	-3.6	-4.9	-3.4	1.0	1.7	-0.2	-3.1	-2.1	-31.0	4.3	-17.7	-7.7	-0.1	-4.0	-6.9	-0.1	-3.5
Percentage of claims with major radiology services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	2.0	-0.1	1.2	0.1	1.8	0.6	1.4	-0.1	0.9	-0.1	1.0	-1.2	-0.3	0.0	0.3	-2.6	0.9	-0.2	0.2
2012/2013	-1.8	0.9	1.7	1.3	-1.0	-1.0	2.9	-1.3	-0.6	0.7	-0.1	0.0	0.3	-0.8	0.0	-3.5	2.9	0.1	0.0
2013/2014	0.5	1.1	0.5	2.3	2.9	-0.3	2.8	-0.4	-1.8	0.3	2.1	0.8	-1.2	0.4	0.6	-3.3	0.9	0.5	0.5
2014/2015	-1.0	0.9	0.9	-0.7	4.2	0.5	3.8	-1.5	0.8	0.4	2.1	-0.4	-2.3	0.5	0.2	-4.9	1.8	0.4	0.5
2015/2016	-1.3	0.2	0.6	0.4	2.0	-0.4	5.0	-0.1	0.2	1.0	2.2	-1.1	-1.2	0.8	0.2	-4.9	0.2	0.1	0.2
Annual percentage point change:																			
2010/2011 to 2011/2012	2.0	-0.1	1.2	0.1	1.8	0.6	1.4	-0.1	0.9	-0.1	1.0	-1.2	-0.3	0.0	0.3	-2.6	0.9	-0.2	0.2
2011/2012 to 2012/2013	-3.8	1.0	0.5	1.3	-2.8	-1.7	1.5	-1.2	-1.5	0.8	-1.1	1.1	0.6	-0.8	-0.3	-0.9	2.0	0.3	0.0
2012/2013 to 2013/2014	2.3	0.2	-1.2	0.9	3.9	0.7	-0.1	1.0	-1.2	-0.4	2.1	0.9	-1.5	1.2	0.6	0.1	-2.0	0.5	0.5
2013/2014 to 2014/2015	-1.6	-0.2	0.5	-2.9	1.4	0.8	1.1	-1.1	2.5	0.1	0.0	-1.2	-1.2	0.1	-0.3	-1.6	0.9	-0.1	0.0
2014/2015 to 2015/2016	-0.3	-0.7	-0.3	1.1	-2.2	-0.9	1.2	1.3	-0.6	0.5	0.0	-0.7	1.1	0.3	0.0	0.0	-1.6	-0.3	-0.2

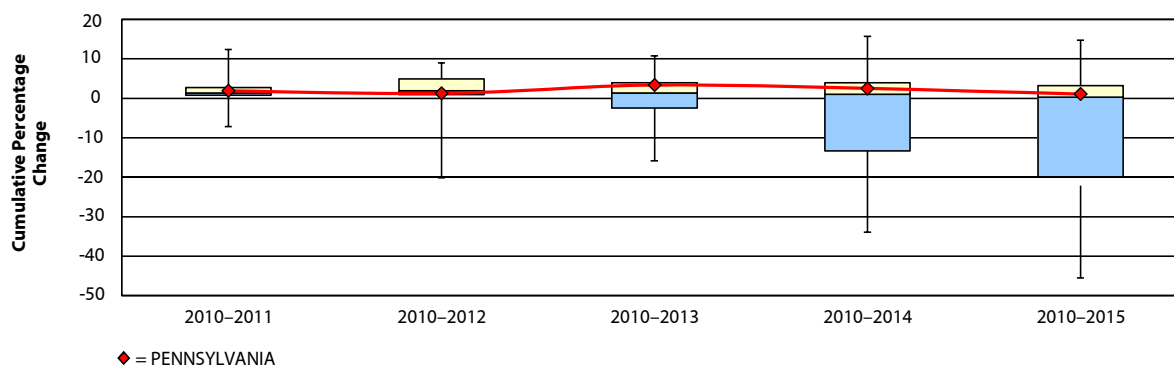
continued

Table for Figure 57: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for major radiology services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.1	-0.2	-0.2	-0.1	-0.4	0.0	-0.2	-0.2	-0.1	0.0	-0.1	-0.5	-0.2	-0.1	-0.1	-0.2	0.1	-0.2	-0.1
2012/2013	0.1	0.0	-0.3	0.1	-0.4	-0.1	-0.2	-0.2	-0.5	-0.2	-0.2	-0.5	-0.1	-0.2	-0.6	-0.3	0.0	-0.3	-0.2
2013/2014	-0.2	0.0	-0.3	-0.2	-0.3	-0.1	-0.1	-0.1	-0.6	0.0	-0.4	-1.1	0.0	-0.1	-0.5	-0.9	-0.1	-0.4	-0.2
2014/2015	-0.5	-0.6	-0.5	-0.4	0.0	-0.2	-0.1	-0.2	-0.9	-0.1	-0.5	-1.7	0.0	0.0	-0.7	-1.4	0.0	-0.8	-0.4
2015/2016	-0.5	-1.0	-0.6	-0.5	-0.1	-0.3	0.4	-0.4	-1.0	-0.1	-1.2	-1.6	-0.1	-0.2	-0.8	-1.4	-0.2	-0.7	-0.5
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	-0.2	-0.2	-0.1	-0.4	0.0	-0.2	-0.2	-0.1	0.0	-0.1	-0.5	-0.2	-0.1	-0.1	-0.2	0.1	-0.2	-0.1
2011/2012 to 2012/2013	0.1	0.1	-0.1	0.2	0.0	-0.1	0.1	-0.1	-0.3	-0.2	-0.1	0.0	0.1	-0.2	-0.5	-0.2	-0.1	-0.1	-0.1
2012/2013 to 2013/2014	-0.3	0.0	0.0	-0.3	0.1	0.0	0.0	0.2	-0.1	0.2	-0.2	-0.6	0.1	0.1	0.1	-0.5	-0.1	-0.1	0.0
2013/2014 to 2014/2015	-0.3	-0.6	-0.2	-0.2	0.4	-0.1	0.0	-0.1	-0.3	-0.1	0.0	-0.6	0.0	0.1	-0.2	-0.5	0.1	-0.4	-0.1
2014/2015 to 2015/2016	0.0	-0.3	-0.2	-0.1	-0.1	0.0	0.5	-0.2	-0.1	0.1	-0.7	0.1	-0.2	-0.2	-0.2	0.0	-0.2	0.1	-0.1

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

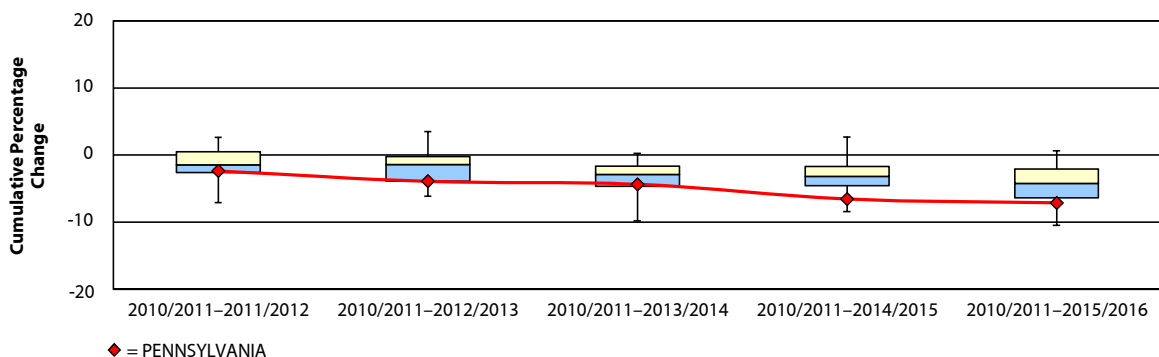
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 58 Trend of Prices for Major Radiology by Nonhospital Providers**Table for Figure 58: Trend of Prices for Major Radiology by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	0.8	0.8	1.2	1.2	2.7	-7.1	-1.0	8.6	1.7	1.4	2.4	-5.9	1.2	5.8	1.9	12.4	5.4	0.6	1.3
2012	4.7	1.2	0.9	3.7	3.9	-20.1	1.0	7.6	0.3	-0.1	2.1	-5.6	1.8	4.9	1.2	9.0	7.4	4.9	1.9
2013	-2.5	-4.3	1.6	2.2	10.7	-15.9	5.5	9.3	-0.2	0.1	-7.9	-10.1	1.1	3.9	3.4	-1.9	9.1	3.2	1.4
2014	-13.3	-23.4	0.7	1.7	15.6	-18.3	4.9	4.0	-4.9	-1.8	-10.2	-34.0	1.4	2.8	2.5	-25.3	15.7	4.6	1.0
2015	-22.1	-29.5	0.1	1.0	9.1	-18.1	4.1	3.5	-4.6	-2.3	-45.5	-34.8	-18.0	-1.3	1.1	-29.6	12.6	0.6	-1.8
Annual percentage change:																			
2010 to 2011	0.8	0.8	1.2	1.2	2.7	-7.1	-1.0	8.6	1.7	1.4	2.4	-5.9	1.2	5.8	1.9	12.4	5.4	0.6	1.3
2011 to 2012	3.9	0.4	-0.3	2.5	1.1	-14.0	2.0	-0.9	-1.4	-1.5	-0.4	0.3	0.6	-0.9	-0.6	-3.0	1.9	4.3	0.0
2012 to 2013	-6.9	-5.5	0.7	-1.5	6.6	5.3	4.5	1.6	-0.5	0.1	-9.8	-4.8	-0.7	-0.9	2.1	-9.9	1.5	-1.7	-0.6
2013 to 2014	-11.1	-20.0	-0.9	-0.5	4.4	-2.9	-0.6	-4.9	-4.7	-1.9	-2.5	-26.5	0.2	-1.1	-0.8	-23.9	6.1	1.3	-1.5
2014 to 2015	-10.2	-7.9	-0.7	-0.7	-5.7	0.2	-0.8	-0.5	0.3	-0.5	-39.3	-1.3	-19.1	-4.0	-1.4	-5.7	-2.7	-3.8	-2.1

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 59 Trend of Utilization of Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 59: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-7.1	1.8	-0.8	-1.4	-3.2	-2.2	1.1	1.4	0.3	0.5	-2.6	2.6	-0.9	-2.6	-2.4	-2.0	-2.7	-3.4	-1.7
2012/2013	1.9	-0.2	-0.7	-0.9	-4.5	-2.3	0.5	-1.3	-3.0	-6.1	-3.9	3.5	0.2	-2.1	-3.9	-1.4	-5.3	-3.4	-1.8
2013/2014	-9.8	0.3	-1.9	-0.1	-1.2	-5.4	-0.8	-6.0	-3.9	-4.6	-2.9	-4.6	-1.7	-2.6	-4.4	-2.9	-6.3	-1.6	-2.9
2014/2015	-8.4	2.7	-1.7	-4.6	-4.5	-6.7	1.6	-3.2	-4.3	-1.7	-0.6	-1.7	-1.9	-2.1	-6.6	-4.4	-4.6	-0.7	-2.6
2015/2016	-8.4	-0.3	-3.1	-5.9	-6.2	-5.1	0.6	-6.4	-9.1	-3.3	-4.0	0.3	-4.2	-2.1	-7.1	-3.6	-10.5	0.1	-4.1
Annual percentage change:																			
2010/2011 to 2011/2012	-7.1	1.8	-0.8	-1.4	-3.2	-2.2	1.1	1.4	0.3	0.5	-2.6	2.6	-0.9	-2.6	-2.4	-2.0	-2.7	-3.4	-1.7
2011/2012 to 2012/2013	9.7	-2.0	0.1	0.5	-1.4	-0.1	-0.6	-2.7	-3.3	-6.6	-1.4	0.8	1.1	0.5	-1.6	0.6	-2.7	0.0	-0.3
2012/2013 to 2013/2014	-11.6	0.5	-1.1	0.8	3.5	-3.1	-1.3	-4.7	-1.0	1.6	1.0	-7.8	-1.9	-0.5	-0.5	-1.5	-1.1	1.8	-1.0
2013/2014 to 2014/2015	1.5	2.4	0.1	-4.5	-3.4	-1.3	2.5	2.9	-0.3	3.1	2.4	3.0	-0.3	0.5	-2.3	-1.6	1.9	0.9	0.7
2014/2015 to 2015/2016	0.0	-2.9	-1.4	-1.3	-1.7	1.7	-1.0	-3.3	-5.0	-1.6	-3.4	2.1	-2.3	0.0	-0.6	0.8	-6.2	0.8	-1.4
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-5.2	1.9	0.0	-0.2	0.3	0.2	1.4	2.9	0.7	2.5	0.1	1.0	-0.5	-1.3	-0.7	0.2	-1.7	-2.0	0.1
2012/2013	1.3	0.4	-0.5	0.5	1.5	0.6	0.7	-0.6	-4.3	-0.8	-1.9	2.9	0.5	-2.4	-1.9	0.2	-1.8	-0.7	-0.1
2013/2014	-3.6	0.5	-1.7	0.4	2.1	-1.0	1.0	-2.3	-4.2	0.8	-0.3	-0.1	-0.3	-2.6	-1.9	0.5	-3.6	-0.9	-0.6
2014/2015	-1.7	1.5	-0.1	-3.2	-0.6	-1.8	2.9	-2.0	-7.1	2.9	0.7	2.2	-0.7	-1.1	-3.6	-0.7	-3.2	3.4	-0.7
2015/2016	-2.6	-1.2	-1.0	-4.8	-2.5	-1.3	3.2	-4.5	-8.6	1.4	-1.3	1.5	-2.2	-1.1	-4.7	-0.2	-6.9	1.5	-1.3
Annual percentage change:																			
2010/2011 to 2011/2012	-5.2	1.9	0.0	-0.2	0.3	0.2	1.4	2.9	0.7	2.5	0.1	1.0	-0.5	-1.3	-0.7	0.2	-1.7	-2.0	0.1
2011/2012 to 2012/2013	6.9	-1.5	-0.4	0.7	1.2	0.4	-0.6	-3.4	-5.0	-3.2	-2.0	1.9	1.0	-1.1	-1.2	0.1	0.0	1.3	-0.2
2012/2013 to 2013/2014	-4.8	0.0	-1.2	-0.2	0.6	-1.6	0.2	-1.7	0.1	1.6	1.7	-2.9	-0.8	-0.2	0.0	0.2	-1.8	-0.1	-0.1
2013/2014 to 2014/2015	2.0	1.0	1.6	-3.6	-2.7	-0.8	1.9	0.3	-3.0	2.1	1.0	2.2	-0.4	1.6	-1.8	-1.2	0.4	4.3	0.7
2014/2015 to 2015/2016	-0.9	-2.6	-0.9	-1.6	-1.8	0.5	0.3	-2.5	-1.6	-1.4	-2.0	-0.7	-1.5	-0.1	-1.0	0.5	-3.8	-1.9	-1.4

continued

Table for Figure 59: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Major Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

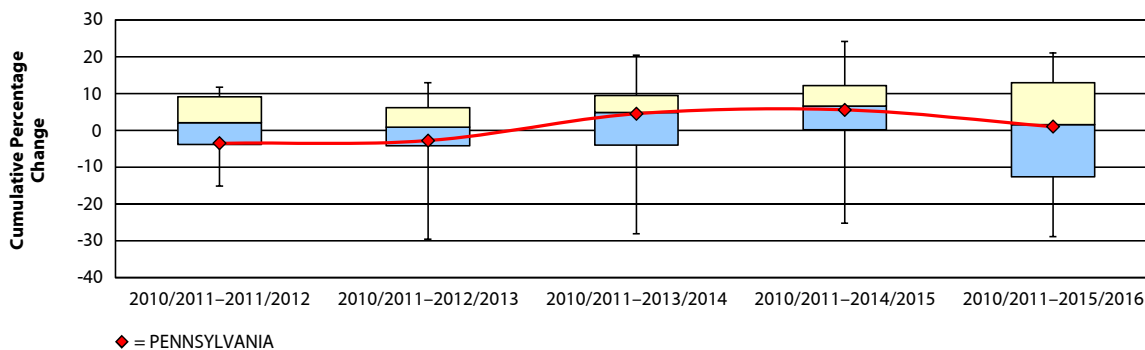
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-3.9	-0.7	-1.7	-2.3	-4.0	-2.0	-2.3	-2.9	-1.5	-4.4	-3.0	-0.2	-2.0	-2.6	-2.7	-3.5	-0.8	-1.4	-2.3
2012/2013	-1.9	-1.9	-0.8	-3.6	-5.6	-3.4	-3.5	-1.5	0.3	-8.3	-2.6	-2.1	-2.4	-1.7	-3.0	-3.0	-5.5	-3.9	-2.8
2013/2014	-8.3	-1.2	-0.8	-3.2	-4.0	-4.8	-4.1	-6.4	-1.3	-8.9	-3.0	-4.9	-4.2	-2.2	-3.4	-5.0	-5.2	-1.6	-4.0
2014/2015	-9.4	-2.1	-2.8	-4.5	-5.5	-5.3	-3.7	-3.5	-1.8	-8.0	-2.3	-4.3	-4.1	-2.9	-3.7	-4.9	-4.3	-4.0	-4.0
2015/2016	-8.7	-2.8	-2.8	-4.7	-5.8	-4.7	-6.1	-6.2	-3.6	-7.8	-3.1	-2.6	-4.5	-3.8	-4.2	-5.0	-6.3	-2.1	-4.6
Annual percentage change:																			
2010/2011 to 2011/2012	-3.9	-0.7	-1.7	-2.3	-4.0	-2.0	-2.3	-2.9	-1.5	-4.4	-3.0	-0.2	-2.0	-2.6	-2.7	-3.5	-0.8	-1.4	-2.3
2011/2012 to 2012/2013	2.1	-1.2	1.0	-1.4	-1.7	-1.4	-1.2	1.5	1.9	-4.1	0.4	-1.9	-0.4	0.9	-0.3	0.5	-4.7	-2.6	-0.8
2012/2013 to 2013/2014	-6.5	0.7	0.0	0.5	1.7	-1.4	-0.6	-4.9	-1.6	-0.6	-0.4	-2.8	-1.9	-0.5	-0.5	-2.1	0.3	2.5	-0.6
2013/2014 to 2014/2015	-1.2	-0.9	-2.0	-1.4	-1.6	-0.6	0.4	3.0	-0.5	1.0	0.7	0.6	0.2	-0.7	-0.3	0.1	0.9	-2.5	-0.4
2014/2015 to 2015/2016	0.8	-0.7	0.0	-0.3	-0.3	0.7	-2.6	-2.8	-1.8	0.2	-0.8	1.8	-0.4	-1.0	-0.5	-0.1	-2.0	2.0	-0.4
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	1.1	0.4	1.0	0.8	1.3	-0.5	1.7	1.4	0.8	1.8	0.6	1.4	1.2	1.2	0.6	1.3	-0.1	0.3	
2012/2013	1.6	1.0	0.6	1.8	0.6	0.3	2.9	1.1	1.4	1.4	-0.1	2.2	1.3	1.5	0.4	1.3	1.3	0.9	
2013/2014	0.8	0.8	0.7	2.3	0.7	-0.1	1.6	2.3	1.3	1.7	-0.3	0.5	1.7	1.7	0.2	1.6	1.5	0.7	
2014/2015	1.8	3.1	1.3	2.2	1.7	-0.1	1.9	1.6	3.7	1.9	-0.4	0.3	1.7	0.9	-0.1	0.9	2.0	-0.3	
2015/2016	1.4	3.4	0.7	2.6	2.3	0.4	3.0	3.3	2.1	1.6	-0.8	1.2	1.1	1.8	0.6	1.3	1.5	0.5	
Annual percentage point change:																			
2010/2011 to 2011/2012	1.1	0.4	1.0	0.8	1.3	-0.5	1.7	1.4	0.8	1.8	0.6	1.4	1.2	1.2	0.6	1.3	-0.1	0.3	
2011/2012 to 2012/2013	0.4	0.6	-0.4	1.1	-0.7	0.7	1.1	-0.3	0.7	-0.3	-0.8	0.7	0.1	0.3	-0.2	0.0	1.4	0.6	
2012/2013 to 2013/2014	-0.6	-0.2	0.1	0.5	0.1	-0.4	-1.2	1.4	-0.1	0.3	-0.2	-1.5	0.4	0.2	-0.2	0.3	0.2	-0.2	
2013/2014 to 2014/2015	1.0	2.3	0.6	-0.1	1.0	0.0	0.2	-0.9	2.5	0.1	0.0	-0.2	0.0	-0.8	-0.4	-0.7	0.5	-1.0	
2014/2015 to 2015/2016	-0.4	0.4	-0.5	0.5	0.7	0.5	1.1	1.8	-1.6	-0.3	-0.4	0.9	-0.5	0.9	0.8	0.4	-0.4	0.8	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 60 Trend of Average Payment per Claim for Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 60: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	9.4	1.7	-4.3	9.5	1.9	-12.6	9.2	10.2	2.4	5.3	4.7	-15.1	-5.9	-3.8	-3.5	11.7	6.2	-1.3	2.1
2012/2013	6.2	1.9	-3.3	12.8	1.6	-29.6	1.8	8.5	-4.1	0.2	2.0	-16.0	-11.3	-4.3	-2.8	13.0	7.5	-1.1	0.9
2013/2014	12.2	0.8	-0.1	20.4	5.7	-28.0	8.2	17.0	-4.0	6.0	-0.2	-9.2	-11.9	-9.2	4.6	15.6	9.5	5.3	4.9
2014/2015	2.4	0.7	8.4	11.5	12.2	-25.2	17.4	24.2	-10.6	11.5	3.2	0.2	-11.9	-13.8	5.6	7.7	17.4	13.7	6.7
2015/2016	2.1	-12.6	13.0	-0.8	13.1	-28.8	16.9	21.0	-7.7	2.9	-12.8	2.8	-17.0	-19.9	1.0	-0.1	19.0	4.6	1.6
Annual percentage change:																			
2010/2011 to 2011/2012	9.4	1.7	-4.3	9.5	1.9	-12.6	9.2	10.2	2.4	5.3	4.7	-15.1	-5.9	-3.8	-3.5	11.7	6.2	-1.3	2.1
2011/2012 to 2012/2013	-3.0	0.2	1.1	3.0	-0.2	-19.4	-6.8	-1.5	-6.3	-4.8	-2.5	-1.1	-5.7	-0.5	0.7	1.1	1.3	0.2	-0.8
2012/2013 to 2013/2014	5.6	-1.1	3.3	6.8	4.0	2.2	6.3	7.9	0.1	5.8	-2.2	8.1	-0.7	-5.1	7.5	2.2	1.8	6.5	3.7
2013/2014 to 2014/2015	-8.7	-0.1	8.5	-7.4	6.1	4.0	8.6	6.2	-6.9	5.2	3.4	10.4	0.0	-5.0	1.0	-6.8	7.3	8.0	3.7
2014/2015 to 2015/2016	-0.3	-13.2	4.3	-11.0	0.8	-4.9	-0.4	-2.5	3.2	-7.7	-15.6	2.6	-5.8	-7.1	-4.3	-7.2	1.4	-8.0	-4.6
Percentage of claims with minor radiology services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.1	0.5	0.3	-2.1	-0.4	0.0	-0.7	-0.4	0.2	0.1	0.4	-1.0	-0.6	-1.0	-1.0	-0.9	-0.1	1.0	-0.2
2012/2013	-0.9	0.2	-0.3	-1.5	-1.3	-1.6	-2.5	-0.8	-0.5	-0.5	-2.7	-1.6	-2.3	-1.9	-1.7	-1.0	-0.1	0.5	-1.1
2013/2014	-1.3	-0.5	-0.3	-1.4	1.4	-1.8	-0.2	-2.3	2.3	-0.7	-0.3	-0.1	-2.1	-1.4	-2.4	-1.6	-1.6	0.8	-1.0
2014/2015	1.5	-1.5	-0.4	-2.3	0.0	-1.6	-0.6	-3.4	0.9	-0.2	0.2	-2.4	-3.3	-1.6	-2.9	-2.8	-0.3	0.0	-1.1
2015/2016	-1.6	-2.4	-1.7	-2.7	-3.9	-2.9	-1.8	-4.3	-1.3	-2.5	-0.5	-4.2	-4.0	-3.1	-3.6	-3.1	-1.3	-0.1	-2.6
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	0.5	0.3	-2.1	-0.4	0.0	-0.7	-0.4	0.2	0.1	0.4	-1.0	-0.6	-1.0	-1.0	-0.9	-0.1	1.0	-0.2
2011/2012 to 2012/2013	-1.0	-0.4	-0.6	0.6	-0.9	-1.7	-1.8	-0.4	-0.8	-0.6	-3.1	-0.6	-1.7	-0.8	-0.8	-0.1	0.0	-0.5	-0.7
2012/2013 to 2013/2014	-0.4	-0.7	0.0	0.1	2.7	-0.2	2.3	-1.5	2.9	-0.2	2.4	1.5	0.2	0.5	-0.7	-0.6	-1.5	0.3	0.1
2013/2014 to 2014/2015	2.8	-1.0	0.0	-1.0	-1.5	0.2	-0.4	-1.1	-1.4	0.5	0.5	-2.3	-1.2	-0.2	-0.5	-1.2	1.3	-0.8	-0.6
2014/2015 to 2015/2016	-3.1	-0.9	-1.3	-0.3	-3.9	-1.3	-1.2	-0.9	-2.2	-2.3	-0.7	-1.8	-0.7	-1.5	-0.7	-0.3	-1.0	-0.1	-1.1

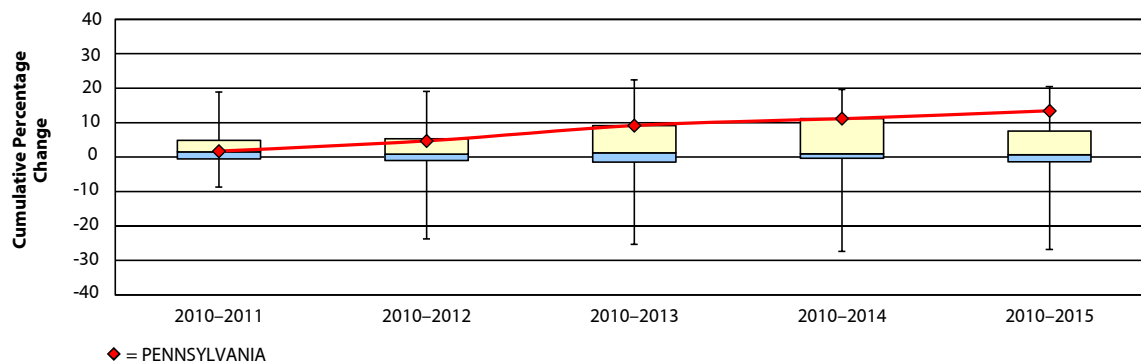
continued

Table for Figure 60: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for minor radiology services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.1	0.0	-0.1	0.0	-0.2	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0
2012/2013	0.0	0.0	-0.2	0.1	-0.1	-0.2	-0.2	0.0	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	0.0	0.0	-0.2	-0.1
2013/2014	0.0	0.0	-0.1	0.0	-0.2	-0.2	-0.1	0.1	-0.1	0.0	-0.1	-0.2	-0.1	-0.3	-0.1	0.0	0.0	-0.1	-0.1
2014/2015	-0.1	0.1	-0.1	0.0	-0.1	-0.2	-0.1	0.1	-0.4	0.0	-0.1	-0.1	-0.1	-0.3	-0.1	-0.1	0.0	-0.2	-0.1
2015/2016	0.1	-0.1	-0.1	-0.2	-0.1	-0.3	0.1	0.0	-0.4	-0.1	-0.3	-0.1	0.0	-0.5	-0.2	-0.1	0.1	-0.3	-0.1
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	0.0	-0.1	0.0	-0.2	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0
2011/2012 to 2012/2013	-0.1	0.0	0.0	0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1
2012/2013 to 2013/2014	0.0	0.1	0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.1	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0
2013/2014 to 2014/2015	-0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	-0.3	0.0	0.1	0.1	0.0	-0.1	0.0	-0.1	0.1	-0.1	0.0
2014/2015 to 2015/2016	0.1	-0.2	0.0	-0.2	0.0	-0.1	0.2	-0.1	0.0	-0.1	-0.2	0.0	0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

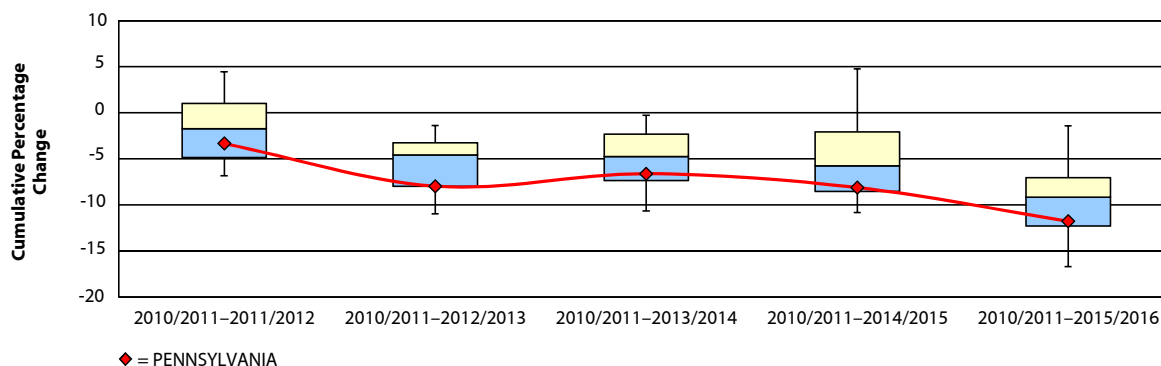
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 61 Trend of Prices for Minor Radiology by Nonhospital Providers**Table for Figure 61: Trend of Prices for Minor Radiology by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	6.5	-0.1	0.8	13.1	4.9	-7.3	-1.9	13.6	1.6	1.4	0.2	-6.0	-0.5	-8.7	1.7	18.9	2.6	3.2	1.5
2012	5.3	-0.1	0.9	18.9	-1.0	-23.8	-2.0	16.0	2.1	0.5	0.7	-3.9	-1.0	-6.4	4.7	19.0	3.8	5.8	0.8
2013	9.0	-0.5	1.3	22.5	1.0	-22.6	-2.1	16.1	1.4	1.1	0.6	-1.6	-1.4	-25.3	9.2	21.5	4.5	15.1	1.2
2014	0.4	13.3	0.8	16.8	-0.3	-21.7	-1.9	17.0	1.0	-0.2	0.5	4.7	-2.0	-27.4	11.2	9.3	8.6	19.7	0.9
2015	-5.5	2.5	0.0	8.6	-1.2	-20.2	-0.1	17.2	1.3	-0.4	-7.9	3.4	-1.3	-26.9	13.4	1.9	7.6	20.5	0.7
Annual percentage change:																			
2010 to 2011	6.5	-0.1	0.8	13.1	4.9	-7.3	-1.9	13.6	1.6	1.4	0.2	-6.0	-0.5	-8.7	1.7	18.9	2.6	3.2	1.5
2011 to 2012	-1.1	0.0	0.1	5.1	-5.6	-17.8	-0.2	2.1	0.5	-0.9	0.6	2.2	-0.5	2.5	2.9	0.1	1.1	2.6	0.3
2012 to 2013	3.5	-0.4	0.4	3.0	2.0	1.6	-0.1	0.1	-0.7	0.7	-0.2	2.4	-0.4	-20.2	4.3	2.1	0.7	8.7	0.7
2013 to 2014	-7.9	13.8	-0.5	-4.6	-1.3	1.1	0.3	0.8	-0.4	-1.3	-0.1	6.4	-0.6	-2.8	1.8	-10.1	4.0	4.0	-0.2
2014 to 2015	-5.9	-9.6	-0.8	-7.1	-0.9	2.0	1.8	0.2	0.3	-0.2	-8.3	-1.2	0.7	0.7	2.0	-6.8	-0.9	0.7	-0.5

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 62 Trend of Utilization of Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 62: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	2.4	1.0	-0.6	-4.6	0.2	-1.8	4.5	1.3	-1.6	3.4	-1.8	0.8	-5.2	-6.8	-3.3	-5.7	-5.4	-4.9	-1.7
2012/2013	-1.9	-1.4	-3.3	-9.5	-4.7	-2.9	-3.5	-7.2	-4.8	-2.1	-4.5	-4.1	-8.9	-10.9	-8.0	-8.0	-3.7	-6.0	-4.6
2013/2014	-2.3	-3.5	-4.1	-7.3	-0.3	-5.0	-0.8	-4.7	-4.3	-0.4	-4.8	-2.3	-10.7	-10.4	-6.6	-8.2	-7.7	-5.3	-4.7
2014/2015	-6.8	-8.6	-3.6	-10.8	1.9	-3.7	1.9	-5.7	-6.8	4.8	-2.1	-2.3	-10.8	-8.5	-8.1	-9.8	-5.8	0.1	-5.8
2015/2016	-7.0	-14.4	-9.5	-16.7	-4.6	-7.7	-1.4	-12.3	-7.2	-2.4	-8.7	-5.4	-13.0	-12.8	-11.8	-11.8	-10.8	-8.7	-9.1
Annual percentage change:																			
2010/2011 to 2011/2012	2.4	1.0	-0.6	-4.6	0.2	-1.8	4.5	1.3	-1.6	3.4	-1.8	0.8	-5.2	-6.8	-3.3	-5.7	-5.4	-4.9	-1.7
2011/2012 to 2012/2013	-4.2	-2.4	-2.6	-5.1	-4.9	-1.1	-7.7	-8.4	-3.2	-5.3	-2.8	-4.8	-4.0	-4.4	-4.8	-2.5	1.9	-1.2	-4.1
2012/2013 to 2013/2014	-0.4	-2.1	-0.9	2.4	4.6	-2.2	2.8	2.7	0.5	1.8	-0.3	1.8	-1.9	0.6	1.5	-0.2	-4.2	0.8	0.5
2013/2014 to 2014/2015	-4.6	-5.3	0.5	-3.8	2.2	1.4	2.8	-1.1	-2.6	5.2	2.8	0.0	-0.1	2.1	-1.6	-1.8	2.1	5.7	0.3
2014/2015 to 2015/2016	-0.2	-6.4	-6.2	-6.6	-6.4	-4.1	-3.3	-7.0	-0.3	-6.9	-6.8	-3.2	-2.5	-4.7	-4.0	-2.3	-5.3	-8.9	-5.0
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	4.2	0.8	-0.6	0.3	0.2	0.4	5.0	1.2	-3.0	3.9	0.0	0.8	-3.9	-3.8	-1.4	-1.7	-5.5	-2.7	0.1
2012/2013	6.5	-2.0	-2.7	-4.5	-2.5	-0.4	0.2	-4.3	-2.1	-1.7	-3.2	-1.9	-6.5	-5.8	-3.5	-2.7	-4.3	-2.1	-2.6
2013/2014	9.4	-3.3	-2.5	-2.1	2.4	-2.0	1.7	-2.5	-1.3	0.1	-1.5	0.2	-8.1	-4.2	-2.9	-1.3	-5.4	-2.8	-2.0
2014/2015	3.0	-6.9	-2.1	-6.5	4.3	-1.3	6.7	-2.7	-5.3	3.7	1.1	1.1	-6.0	-2.5	-3.1	-2.8	-2.6	2.6	-2.3
2015/2016	6.4	-10.5	-4.3	-10.5	-0.6	-2.0	4.4	-7.7	-4.6	-1.4	-4.1	-2.6	-7.3	-5.9	-4.8	-4.5	-6.4	-1.7	-4.4
Annual percentage change:																			
2010/2011 to 2011/2012	4.2	0.8	-0.6	0.3	0.2	0.4	5.0	1.2	-3.0	3.9	0.0	0.8	-3.9	-3.8	-1.4	-1.7	-5.5	-2.7	0.1
2011/2012 to 2012/2013	2.2	-2.8	-2.1	-4.8	-2.6	-0.8	-4.5	-5.4	1.0	-5.4	-3.2	-2.7	-2.7	-2.1	-2.2	-1.0	1.3	0.6	-2.4
2012/2013 to 2013/2014	2.7	-1.3	0.2	2.6	5.0	-1.6	1.5	1.9	0.8	1.8	1.8	2.1	-1.7	1.7	0.6	1.4	-1.1	-0.8	1.5
2013/2014 to 2014/2015	-5.9	-3.7	0.4	-4.5	1.9	0.8	4.9	-0.2	-4.1	3.6	2.6	0.9	2.3	1.8	-0.2	-1.5	2.9	5.6	0.9
2014/2015 to 2015/2016	3.3	-3.9	-2.3	-4.2	-4.7	-0.8	-2.2	-5.1	0.7	-5.0	-5.1	-3.7	-1.4	-3.5	-1.7	-1.8	-3.8	-4.2	-3.6

continued

Table for Figure 62: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Minor Radiology by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

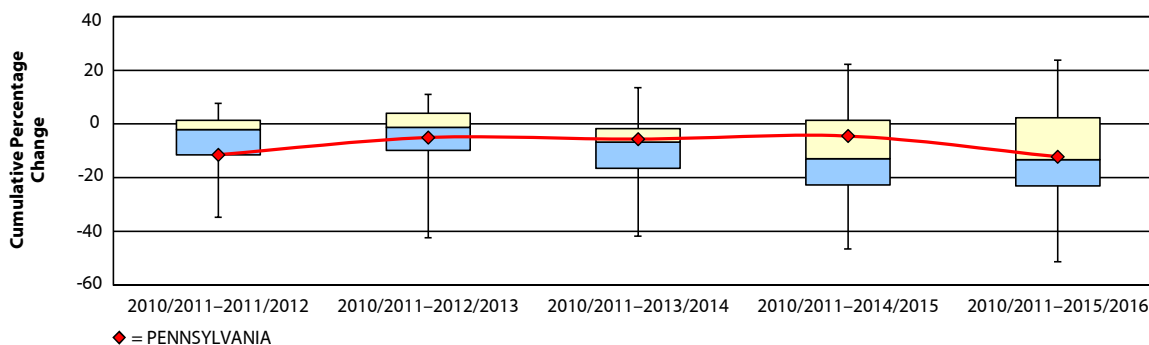
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	2.1	0.0	-0.1	-0.9	0.2	-0.3	0.1	0.8	-0.2	-0.4	-0.4	2.5	0.4	-1.7	-0.5	-0.7	0.5	0.4	0.0
2012/2013	-1.5	-0.1	0.4	-3.0	-1.1	0.9	-1.7	0.6	-0.4	-2.9	0.4	0.5	0.5	-2.4	-0.6	-1.4	1.7	0.2	-0.3
2013/2014	-5.0	0.0	-1.0	-1.1	-0.4	0.2	-1.8	0.3	-1.7	-2.4	-0.3	2.9	0.4	-2.8	-0.9	-1.2	-0.6	2.8	-0.8
2014/2015	-5.4	-1.3	-1.8	-1.6	-1.0	0.3	-2.4	-0.5	-0.4	-1.9	-0.9	0.9	-0.4	-2.5	-2.4	-2.0	-1.8	0.8	-1.4
2015/2016	-4.9	-2.0	-1.1	-3.7	-1.3	-0.9	-3.0	-1.7	-1.5	-2.4	-0.6	1.8	-1.6	-3.5	-2.4	-2.4	-1.7	0.1	-1.7
Annual percentage change:																			
2010/2011 to 2011/2012	2.1	0.0	-0.1	-0.9	0.2	-0.3	0.1	0.8	-0.2	-0.4	-0.4	2.5	0.4	-1.7	-0.5	-0.7	0.5	0.4	0.0
2011/2012 to 2012/2013	-3.5	-0.2	0.5	-2.1	-1.3	1.2	-1.8	-0.2	-0.2	-2.6	0.8	-1.9	0.1	-0.7	-0.1	-0.6	1.1	-0.2	-0.2
2012/2013 to 2013/2014	-3.5	0.1	-1.3	1.9	0.7	-0.7	-0.2	-0.3	-1.3	0.5	-0.8	2.3	-0.1	-0.5	-0.4	0.1	-2.2	2.6	-0.2
2013/2014 to 2014/2015	-0.4	-1.3	-0.8	-0.5	-0.6	0.1	-0.5	-0.8	1.3	0.5	-0.6	-2.0	-0.8	0.4	-1.4	-0.8	-1.2	-1.9	-0.7
2014/2015 to 2015/2016	0.6	-0.7	0.7	-2.2	-0.3	-1.2	-0.7	-1.2	-1.1	-0.5	0.3	0.9	-1.2	-1.0	0.0	-0.4	0.1	-0.7	-0.6
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-2.8	0.0	-0.6	-3.5	-0.6	-2.1	-1.1	0.1	0.6	-0.7	-1.9	-2.7	-2.0	-2.1	-1.9	-3.2	0.4	-2.3	
2012/2013	-6.6	0.4	-1.5	-2.8	-1.2	-3.8	-2.4	-2.2	-3.2	0.9	-2.6	-3.0	-3.5	-4.0	-4.2	-4.0	-0.5	-4.1	
2013/2014	-6.6	-0.5	-1.3	-4.8	-2.7	-4.1	-1.9	-2.2	-3.7	0.7	-4.2	-4.3	-3.7	-4.5	-3.7	-5.3	-2.1	-5.1	
2014/2015	-4.1	-1.1	0.0	-3.8	-1.2	-3.4	-2.8	-2.1	-3.4	1.5	-3.8	-3.9	-5.1	-4.7	-3.6	-5.0	-1.3	-3.0	
2015/2016	-8.9	-2.9	-4.3	-4.0	-2.8	-5.8	-3.0	-2.0	-3.7	-0.1	-5.3	-3.0	-5.3	-5.2	-5.9	-5.0	-2.4	-7.5	
Annual percentage point change:																			
2010/2011 to 2011/2012	-2.8	0.0	-0.6	-3.5	-0.6	-2.1	-1.1	0.1	0.6	-0.7	-1.9	-2.7	-2.0	-2.1	-1.9	-3.2	0.4	-2.3	
2011/2012 to 2012/2013	-3.8	0.5	-0.9	0.5	-0.7	-1.7	-1.3	-2.3	-3.9	1.6	-0.8	-0.4	-1.6	-2.1	-2.4	-0.9	-0.9	-1.8	
2012/2013 to 2013/2014	0.0	-1.0	0.2	-2.1	-1.5	-0.4	0.6	0.0	-0.5	-0.3	-1.7	-1.3	-0.3	-0.5	0.6	-1.3	-1.7	-1.0	
2013/2014 to 2014/2015	2.0	-0.6	1.4	0.8	1.6	0.8	-0.8	0.2	0.2	0.8	0.6	0.4	-1.5	-0.1	0.0	0.3	0.9	2.4	
2014/2015 to 2015/2016	-4.9	-2.0	-4.5	-0.6	-1.7	-2.6	-0.3	-0.1	-0.3	-1.5	-1.8	0.7	-0.4	-0.7	-2.5	-0.2	-1.2	-4.6	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 63 Trend of Average Payment per Claim for Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 63: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.7	3.0	-12.4	2.3	-4.7	-18.7	5.7	-9.6	-1.4	1.0	-22.3	-34.8	-9.4	1.2	-11.5	-2.2	1.4	-2.0	-2.1
2012/2013	-6.1	4.0	-10.1	0.8	0.2	-35.2	5.0	-6.1	-2.1	-0.4	-19.3	-42.4	2.9	8.2	-5.1	5.6	-9.9	11.0	-1.3
2013/2014	9.5	-1.9	-11.8	0.9	-3.7	-33.2	-1.7	-16.6	-18.8	2.6	-21.8	-41.7	-9.9	-2.9	-5.7	-7.9	-9.4	13.5	-6.8
2014/2015	-27.0	1.3	-4.7	4.1	-4.2	-33.4	13.8	-13.6	-12.8	6.3	-24.3	-46.5	-16.9	-13.0	-4.5	-22.7	-13.1	22.2	-12.9
2015/2016	-23.1	-2.0	-11.4	14.6	-13.1	-31.1	13.5	-13.6	5.9	2.3	-33.9	-51.4	-30.6	-15.6	-12.2	-21.6	-18.1	23.8	-13.3
Annual percentage change:																			
2010/2011 to 2011/2012	7.7	3.0	-12.4	2.3	-4.7	-18.7	5.7	-9.6	-1.4	1.0	-22.3	-34.8	-9.4	1.2	-11.5	-2.2	1.4	-2.0	-2.1
2011/2012 to 2012/2013	-12.7	0.9	2.6	-1.5	5.2	-20.2	-0.6	3.9	-0.7	-1.4	3.8	-11.6	13.6	6.9	7.2	7.9	-11.1	13.3	1.8
2012/2013 to 2013/2014	16.6	-5.6	-1.9	0.1	-3.9	3.0	-6.5	-11.2	-17.0	3.0	-3.1	1.1	-12.4	-10.3	-0.6	-12.8	0.5	2.2	-2.5
2013/2014 to 2014/2015	-33.3	3.3	8.1	3.2	-0.5	-0.2	15.8	3.6	7.3	3.7	-3.3	-8.2	-7.8	-10.4	1.2	-16.1	-4.0	7.6	0.5
2014/2015 to 2015/2016	5.3	-3.2	-7.1	10.1	-9.2	3.5	-0.2	-0.1	21.5	-3.8	-12.6	-9.1	-16.5	-2.9	-8.0	1.4	-5.9	1.3	-3.1
Percentage of claims with pain management injections																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.1	0.2	1.1	-0.3	2.0	0.0	1.0	-1.4	0.2	0.4	1.3	-0.7	0.2	0.1	0.3	0.3	1.0	-0.1	0.2
2012/2013	-0.6	0.3	1.2	0.8	0.5	-0.4	1.2	-1.9	2.0	2.0	-0.3	-0.3	-1.6	-0.2	0.0	-0.5	2.6	-0.8	-0.1
2013/2014	-0.2	-0.2	0.8	0.5	1.2	0.2	2.0	-0.6	3.1	2.3	1.4	-0.4	0.0	0.5	0.4	0.2	1.2	0.8	0.5
2014/2015	1.2	-0.8	1.1	-0.4	2.1	-0.7	2.2	-1.2	1.6	2.6	1.9	0.0	-0.8	1.6	0.2	-0.4	3.5	0.6	0.9
2015/2016	1.1	-2.0	-0.6	-1.5	2.2	-1.5	1.6	-2.2	2.8	3.1	0.8	0.2	0.3	1.1	-0.5	0.0	2.0	-1.3	0.3
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	0.2	1.1	-0.3	2.0	0.0	1.0	-1.4	0.2	0.4	1.3	-0.7	0.2	0.1	0.3	0.3	1.0	-0.1	0.2
2011/2012 to 2012/2013	-0.7	0.1	0.1	1.1	-1.5	-0.4	0.2	-0.5	1.8	1.6	-1.6	0.4	-1.8	-0.3	-0.3	-0.7	1.6	-0.6	-0.3
2012/2013 to 2013/2014	0.4	-0.4	-0.4	-0.3	0.7	0.6	0.8	1.3	1.1	0.4	1.7	-0.2	1.6	0.8	0.3	0.6	-1.4	1.5	0.6
2013/2014 to 2014/2015	1.4	-0.6	0.3	-0.9	0.8	-0.9	0.2	-0.6	-1.5	0.2	0.5	0.4	-0.8	1.0	-0.2	-0.6	2.3	-0.2	0.0
2014/2015 to 2015/2016	-0.1	-1.1	-1.7	-1.1	0.1	-0.8	-0.7	-1.0	1.2	0.5	-1.1	0.3	1.2	-0.5	-0.7	0.5	-1.5	-1.9	-0.7

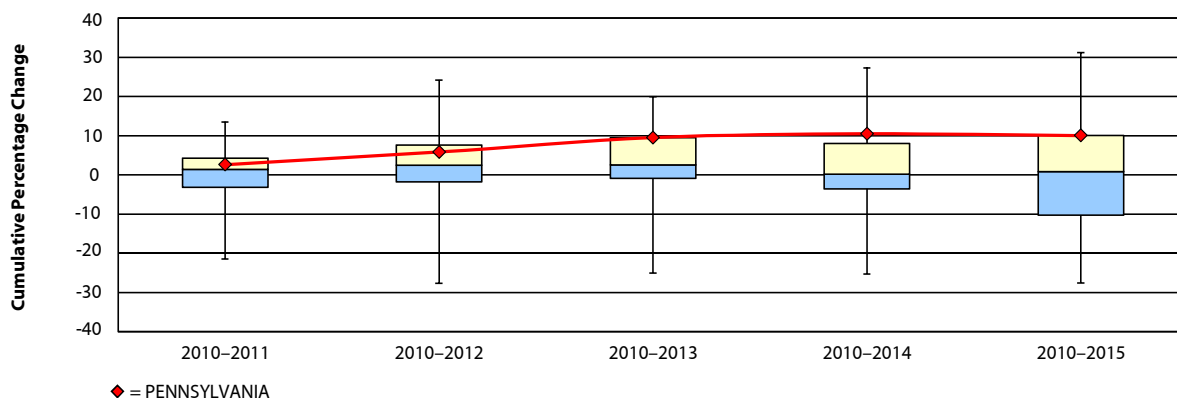
continued

Table for Figure 63: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for pain management injections																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.0	0.0	-0.1	0.0	0.0	-0.2	0.0	-0.2	-0.1	0.0	-0.2	-0.4	-0.1	0.0	-0.1	0.0	0.1	-0.1	-0.1
2012/2013	-0.1	0.0	-0.1	0.0	0.0	-0.3	0.0	-0.2	0.0	0.1	-0.2	-0.5	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0
2013/2014	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.1	-0.2	-0.1	0.2	-0.2	-0.5	0.0	-0.1	-0.1	-0.1	-0.1	0.1	-0.1
2014/2015	-0.2	0.0	-0.1	-0.1	-0.1	-0.3	0.0	-0.2	-0.2	0.2	-0.2	-0.5	-0.1	-0.2	-0.1	-0.2	-0.1	0.0	-0.1
2015/2016	-0.1	0.0	-0.2	0.0	-0.1	-0.4	0.1	-0.3	0.0	0.2	-0.3	-0.5	-0.1	-0.3	-0.2	-0.1	-0.2	-0.1	-0.1
Annual percentage point change:																			
2010/2011 to 2011/2012	0.0	0.0	-0.1	0.0	0.0	-0.2	0.0	-0.2	-0.1	0.0	-0.2	-0.4	-0.1	0.0	-0.1	0.0	0.1	-0.1	-0.1
2011/2012 to 2012/2013	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
2012/2013 to 2013/2014	0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.1	0.1	0.0
2013/2014 to 2014/2015	-0.2	0.0	0.0	0.1	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.1	-0.1	0.0
2014/2015 to 2015/2016	0.1	0.0	-0.1	0.0	0.0	0.0	0.1	-0.1	0.3	0.0	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

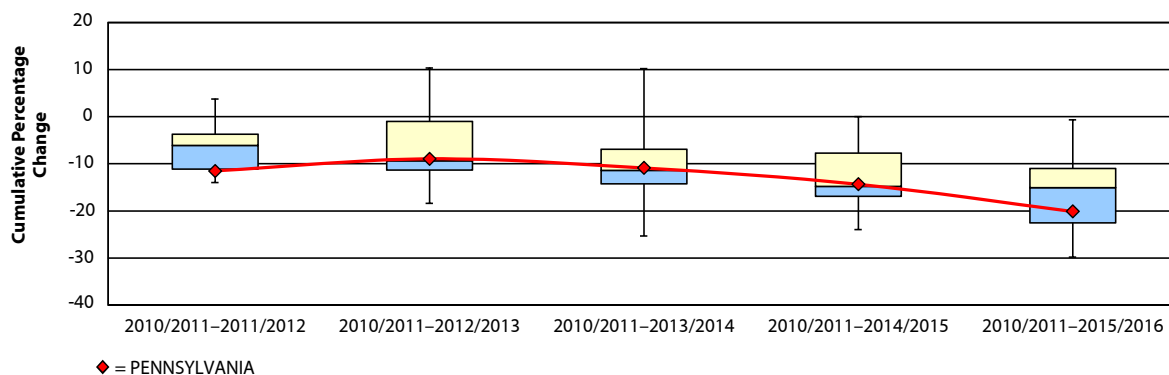
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 64 Trend of Prices for Pain Management Injections by Nonhospital Providers**Table for Figure 64: Trend of Prices for Pain Management Injections by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	3.7	3.4	-3.2	6.8	4.3	-9.6	-0.9	-0.5	-5.1	2.9	-3.3	-21.4	-1.2	11.1	2.6	13.5	0.1	4.4	1.4
2012	7.6	1.6	-3.9	11.0	1.8	-27.7	3.1	-1.8	-0.1	3.6	-2.2	-18.4	-1.4	24.2	5.8	16.6	7.3	13.8	2.4
2013	6.2	0.7	-0.8	14.1	4.3	-25.0	2.6	-3.9	2.4	6.0	2.4	-19.4	-0.9	0.9	9.5	13.1	11.4	19.9	2.5
2014	-14.1	-2.9	0.4	0.1	8.0	-25.0	5.7	-0.6	1.3	10.1	0.9	-25.3	-2.7	-12.8	10.5	-3.6	16.9	27.3	0.2
2015	-6.4	-3.0	-0.7	4.3	-0.9	-23.2	11.3	2.3	19.8	7.3	-11.2	-27.6	-10.3	-19.0	10.0	10.0	14.2	31.2	0.8
Annual percentage change:																			
2010 to 2011	3.7	3.4	-3.2	6.8	4.3	-9.6	-0.9	-0.5	-5.1	2.9	-3.3	-21.4	-1.2	11.1	2.6	13.5	0.1	4.4	1.4
2011 to 2012	3.8	-1.8	-0.8	4.0	-2.4	-20.0	4.0	-1.3	5.3	0.6	1.2	3.9	-0.2	11.8	3.1	2.7	7.2	9.0	2.9
2012 to 2013	-1.3	-0.9	3.2	2.8	2.5	3.7	-0.5	-2.2	2.5	2.3	4.7	-1.3	0.4	-18.7	3.5	-3.0	3.8	5.4	2.4
2013 to 2014	-19.2	-3.6	1.2	-12.3	3.6	0.0	3.0	3.5	-1.1	3.9	-1.5	-7.2	-1.7	-13.6	0.9	-14.7	5.0	6.2	-0.6
2014 to 2015	9.0	-0.1	-1.1	4.3	-8.2	2.4	5.4	2.9	18.3	-2.5	-12.0	-3.1	-7.8	-7.1	-0.4	14.1	-2.3	3.0	-0.3

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 65 Trend of Utilization of Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 65: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	0.9	-0.3	-13.9	-3.7	-5.1	-4.7	3.7	-5.8	-7.9	-6.4	-14.0	-3.4	-10.7	-13.7	-11.5	-11.1	-5.8	-11.1	-6.1
2012/2013	-10.3	2.8	-14.6	-10.4	10.3	-9.7	1.5	0.2	-11.3	-4.1	-18.4	-11.0	-2.7	-15.5	-8.9	-7.2	-17.3	-1.0	-9.3
2013/2014	8.5	-0.1	-18.1	-19.5	10.2	-13.0	-4.3	-9.1	-25.3	-10.2	-13.2	-12.4	-9.1	-14.2	-10.9	-11.9	-18.9	-6.9	-11.4
2014/2015	-9.0	0.0	-16.5	-15.8	-7.7	-17.8	-4.0	-10.4	-21.5	-7.2	-16.9	-13.9	-15.3	-17.9	-14.3	-16.8	-23.9	-7.7	-14.8
2015/2016	-12.6	-1.4	-26.9	-22.9	-12.6	-10.6	-0.7	-10.6	-11.8	-11.0	-21.4	-19.1	-23.0	-15.5	-20.1	-22.5	-29.8	-14.6	-15.0
Annual percentage change:																			
2010/2011 to 2011/2012	0.9	-0.3	-13.9	-3.7	-5.1	-4.7	3.7	-5.8	-7.9	-6.4	-14.0	-3.4	-10.7	-13.7	-11.5	-11.1	-5.8	-11.1	-6.1
2011/2012 to 2012/2013	-11.1	3.0	-0.9	-6.9	16.3	-5.3	-2.1	6.4	-3.7	2.4	-5.1	-7.9	9.0	-2.1	2.9	4.4	-12.2	11.4	-1.5
2012/2013 to 2013/2014	20.9	-2.7	-4.0	-10.2	-0.1	-3.6	-5.8	-9.3	-15.8	-6.3	6.3	-1.6	-6.6	1.5	-2.1	-5.1	-1.9	-6.0	-3.8
2013/2014 to 2014/2015	-16.1	0.1	2.0	4.6	-16.3	-5.5	0.4	-1.5	5.1	3.4	-4.2	-1.7	-6.8	-4.3	-3.9	-5.5	-6.3	-0.8	-2.8
2014/2015 to 2015/2016	-4.0	-1.5	-12.5	-8.5	-5.3	8.8	3.4	-0.2	12.3	-4.1	-5.5	-6.0	-9.0	3.0	-6.8	-6.9	-7.7	-7.5	-5.4
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.2	0.4	-4.6	-0.5	-1.6	-2.7	2.7	-4.4	-5.2	-1.6	-6.3	-1.1	-7.5	-6.2	-7.9	-6.0	-3.0	-3.1	-3.0
2012/2013	1.2	-0.1	-7.1	-4.7	2.8	-5.1	2.7	-3.5	-3.2	-5.7	-11.7	-4.8	-3.9	-6.8	-9.1	-5.2	-8.6	-4.1	-4.8
2013/2014	13.2	-2.3	-12.6	-10.3	-3.0	-7.4	-0.7	-8.1	-15.0	-5.7	-10.9	-5.8	-6.5	-10.1	-12.5	-8.7	-12.5	-4.7	-7.7
2014/2015	-3.6	-4.1	-11.9	-9.8	-9.1	-12.2	-2.3	-9.8	-17.3	-1.2	-12.7	-6.6	-9.8	-13.3	-9.7	-10.9	-18.4	-7.1	-9.8
2015/2016	-9.4	-6.2	-15.5	-9.6	-10.3	-12.3	-0.7	-13.7	-12.3	-5.0	-15.3	-11.9	-14.1	-12.6	-14.6	-12.4	-22.3	-11.8	-12.3
Annual percentage change:																			
2010/2011 to 2011/2012	7.2	0.4	-4.6	-0.5	-1.6	-2.7	2.7	-4.4	-5.2	-1.6	-6.3	-1.1	-7.5	-6.2	-7.9	-6.0	-3.0	-3.1	-3.0
2011/2012 to 2012/2013	-5.6	-0.5	-2.7	-4.3	4.4	-2.4	0.0	0.9	2.1	-4.2	-5.7	-3.7	3.9	-0.6	-1.3	0.9	-5.8	-1.1	-1.2
2012/2013 to 2013/2014	11.9	-2.2	-5.9	-5.8	-5.7	-2.5	-3.4	-4.7	-12.2	0.1	0.9	-1.1	-2.7	-3.5	-3.7	-3.8	-4.3	-0.7	-3.5
2013/2014 to 2014/2015	-14.9	-1.9	0.7	0.6	-6.3	-5.2	-1.5	-1.9	-2.7	4.7	-2.0	-0.9	-3.6	-3.6	3.2	-2.3	-6.8	-2.5	-2.1
2014/2015 to 2015/2016	-6.0	-2.2	-4.0	0.2	-1.3	0.0	1.6	-4.3	6.1	-3.8	-3.0	-5.7	-4.7	0.8	-5.3	-1.8	-4.8	-5.0	-3.4

continued

Table for Figure 65: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Pain Management Injections by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

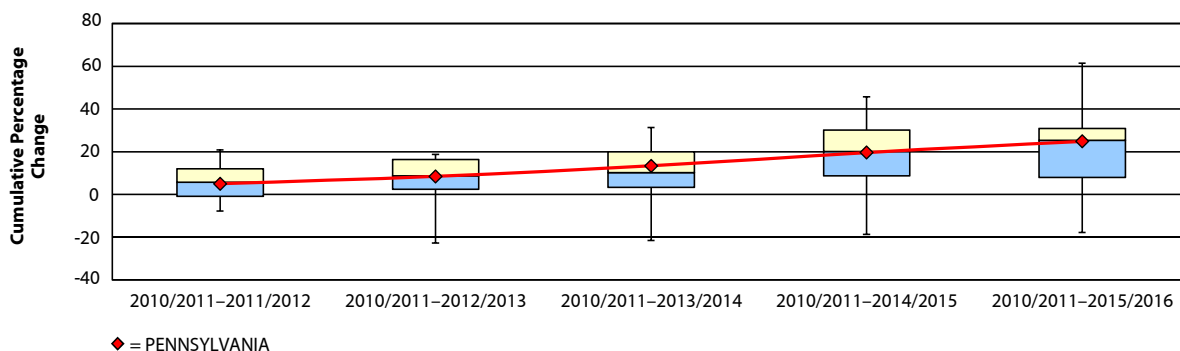
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	2.7	-0.2	-6.0	-1.8	-2.0	-0.8	0.6	-3.2	-4.2	0.0	-5.9	-3.4	-1.2	-6.2	-5.8	-3.3	2.1	-1.4	-1.9
2012/2013	0.9	1.5	-5.5	-2.5	1.6	-2.5	-1.0	0.8	-6.2	3.5	-3.8	-4.1	1.8	-4.8	-2.8	-3.4	-2.5	2.9	-2.5
2013/2014	2.6	0.9	-5.3	-3.4	8.6	-5.0	-1.0	1.8	-10.3	1.8	-0.4	-2.9	1.7	-5.4	-1.1	-3.9	-1.1	4.7	-1.0
2014/2015	-1.2	-0.6	-6.1	-1.1	0.4	-3.1	0.9	-1.5	-5.9	1.7	-4.6	-1.8	-1.4	-4.3	-3.5	-6.0	-4.7	2.6	-1.6
2015/2016	-0.1	-0.7	-9.3	-4.5	2.5	0.4	0.1	2.0	-2.8	-0.3	-5.9	-1.3	-3.1	-4.1	-4.8	-8.3	-7.0	2.2	-2.1
Annual percentage change:																			
2010/2011 to 2011/2012	2.7	-0.2	-6.0	-1.8	-2.0	-0.8	0.6	-3.2	-4.2	0.0	-5.9	-3.4	-1.2	-6.2	-5.8	-3.3	2.1	-1.4	-1.9
2011/2012 to 2012/2013	-1.7	1.7	0.5	-0.7	3.7	-1.7	-1.6	4.1	-2.1	3.4	2.2	-0.7	3.0	1.4	3.2	-0.2	-4.5	4.4	1.0
2012/2013 to 2013/2014	1.7	-0.6	0.3	-0.9	6.8	-2.5	0.0	1.0	-4.3	-1.6	3.6	1.2	-0.1	-0.6	1.7	-0.5	1.5	1.7	0.2
2013/2014 to 2014/2015	-3.7	-1.5	-0.8	2.4	-7.5	1.9	1.8	-3.2	4.9	-0.1	-4.3	1.2	-3.1	1.1	-2.4	-2.1	-3.7	-1.9	-1.7
2014/2015 to 2015/2016	1.1	-0.2	-3.4	-3.4	2.1	3.7	-0.8	3.5	3.3	-2.0	-1.3	0.4	-1.7	0.3	-1.4	-2.5	-2.4	-0.5	-0.6
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-7.5	0.7	-3.2	-1.5	-2.6	-1.8	-0.7	1.4	-1.2	-4.5	-2.3	1.4	-2.1	-1.1	1.7	-2.9	-3.9	-5.6	
2012/2013	-12.1	2.5	-1.5	-4.2	4.8	-2.2	-1.0	2.8	-4.0	-1.3	-3.3	-2.7	-0.6	-4.7	2.9	-0.2	-5.6	1.4	
2013/2014	-6.5	1.4	-0.2	-6.5	4.7	-0.2	-3.3	-2.1	-3.5	-6.6	-2.7	-3.9	-4.8	0.5	2.7	-0.7	-5.1	-4.1	
2014/2015	-4.2	4.8	1.3	-4.2	0.9	-1.6	-1.1	0.5	-1.8	-6.0	-1.4	-5.5	-4.7	-0.6	-0.9	-2.6	-2.1	-1.8	
2015/2016	-4.7	4.8	-3.0	-6.3	-3.1	0.8	-0.8	0.7	1.0	-5.7	-1.7	-7.2	-6.8	0.8	-1.2	-4.7	-3.1	-3.4	
Annual percentage point change:																			
2010/2011 to 2011/2012	-7.5	0.7	-3.2	-1.5	-2.6	-1.8	-0.7	1.4	-1.2	-4.5	-2.3	1.4	-2.1	-1.1	1.7	-2.9	-3.9	-5.6	
2011/2012 to 2012/2013	-5.0	1.7	1.9	-2.8	8.0	-0.4	-0.3	1.5	-3.1	3.4	-1.2	-4.2	1.9	-4.2	1.3	3.0	-2.3	8.1	
2012/2013 to 2013/2014	8.0	-0.9	1.4	-2.9	-0.2	2.1	-2.3	-4.8	-0.1	-5.6	1.0	-1.4	-4.3	6.0	-0.1	-0.5	0.4	-5.6	
2013/2014 to 2014/2015	1.1	3.4	1.9	3.0	-2.8	-1.6	2.2	2.7	2.4	0.9	1.3	-1.8	-0.3	-1.3	-4.0	-2.2	3.1	2.3	
2014/2015 to 2015/2016	-0.7	0.2	-5.0	-2.8	-4.4	3.0	0.4	0.2	3.7	0.0	-0.5	-2.3	-2.9	1.7	-0.5	-2.6	-1.5	-1.8	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 66 Trend of Average Payment per Claim for Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 66: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-3.4	0.4	1.2	8.1	20.8	-7.7	14.6	-5.1	12.8	2.8	7.8	-0.8	-1.2	12.0	5.0	14.8	6.4	6.8	5.7
2012/2013	2.3	2.0	2.4	18.8	18.8	-22.7	15.0	1.0	9.0	3.6	12.7	4.5	3.3	16.5	8.5	16.5	11.1	17.4	8.7
2013/2014	8.9	2.2	-0.3	31.3	17.3	-21.5	19.7	2.1	11.6	3.3	22.9	7.3	8.0	20.0	13.4	24.6	8.9	30.3	10.3
2014/2015	16.2	24.1	0.0	30.1	34.3	-18.7	41.1	15.8	15.4	8.1	20.5	8.8	7.9	34.2	19.7	21.1	22.3	45.7	20.1
2015/2016	8.0	30.9	0.4	28.5	38.7	-17.7	61.5	26.9	16.0	6.0	26.9	7.0	25.9	48.3	24.9	9.3	23.9	43.5	25.4
Annual percentage change:																			
2010/2011 to 2011/2012	-3.4	0.4	1.2	8.1	20.8	-7.7	14.6	-5.1	12.8	2.8	7.8	-0.8	-1.2	12.0	5.0	14.8	6.4	6.8	5.7
2011/2012 to 2012/2013	5.9	1.5	1.2	9.9	-1.7	-16.3	0.4	6.4	-3.4	0.8	4.5	5.4	4.5	4.0	3.3	1.4	4.4	9.9	3.7
2012/2013 to 2013/2014	6.5	0.2	-2.6	10.5	-1.2	1.6	4.1	1.1	2.4	-0.3	9.1	2.7	4.6	3.0	4.6	7.0	-2.0	11.0	2.8
2013/2014 to 2014/2015	6.7	21.4	0.3	-0.9	14.4	3.6	17.9	13.5	3.4	4.6	-1.9	1.4	-0.1	11.8	5.5	-2.9	12.3	11.8	5.0
2014/2015 to 2015/2016	-7.1	5.5	0.4	-1.2	3.3	1.2	14.4	9.6	0.5	-1.9	5.3	-1.7	16.7	10.5	4.4	-9.7	1.3	-1.5	1.3
Percentage of claims with physical medicine services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-1.0	0.5	1.2	1.4	0.3	-0.8	0.1	-2.1	-0.5	0.3	0.0	-0.5	0.2	0.4	-1.5	-1.9	0.7	-1.5	0.0
2012/2013	-2.2	1.3	2.5	2.5	-2.1	0.1	2.1	-0.5	-2.2	1.5	-1.3	-1.2	-0.2	0.3	-3.3	-2.0	1.4	-1.6	-0.3
2013/2014	2.0	1.5	2.2	3.6	1.8	0.3	4.8	0.3	0.1	1.6	1.6	-0.4	0.7	4.1	-0.4	-1.2	1.0	-2.6	1.3
2014/2015	3.1	1.9	3.2	2.4	1.6	0.8	5.7	0.5	-0.1	1.9	2.7	-1.4	1.0	3.0	-0.9	-0.9	2.6	-1.6	1.8
2015/2016	1.8	1.6	2.8	4.5	1.0	0.5	5.7	2.3	0.2	1.6	3.1	-0.8	1.4	3.8	-0.5	-0.6	2.4	-2.9	1.6
Annual percentage point change:																			
2010/2011 to 2011/2012	-1.0	0.5	1.2	1.4	0.3	-0.8	0.1	-2.1	-0.5	0.3	0.0	-0.5	0.2	0.4	-1.5	-1.9	0.7	-1.5	0.0
2011/2012 to 2012/2013	-1.2	0.8	1.3	1.1	-2.4	0.9	2.0	1.6	-1.7	1.2	-1.3	-0.7	-0.4	-0.1	-1.8	-0.1	0.8	-0.2	-0.1
2012/2013 to 2013/2014	4.2	0.3	-0.3	1.1	3.8	0.2	2.8	0.9	2.3	0.1	2.9	0.7	0.9	3.8	2.9	0.7	-0.4	-1.0	0.9
2013/2014 to 2014/2015	1.1	0.4	1.0	-1.2	-0.1	0.5	0.8	0.2	-0.2	0.3	1.1	-0.9	0.3	-1.1	-0.5	0.3	1.6	1.1	0.3
2014/2015 to 2015/2016	-1.3	-0.3	-0.4	2.1	-0.6	-0.3	0.1	1.8	0.3	-0.3	0.5	0.5	0.4	0.8	0.5	0.3	-0.2	-1.3	0.2

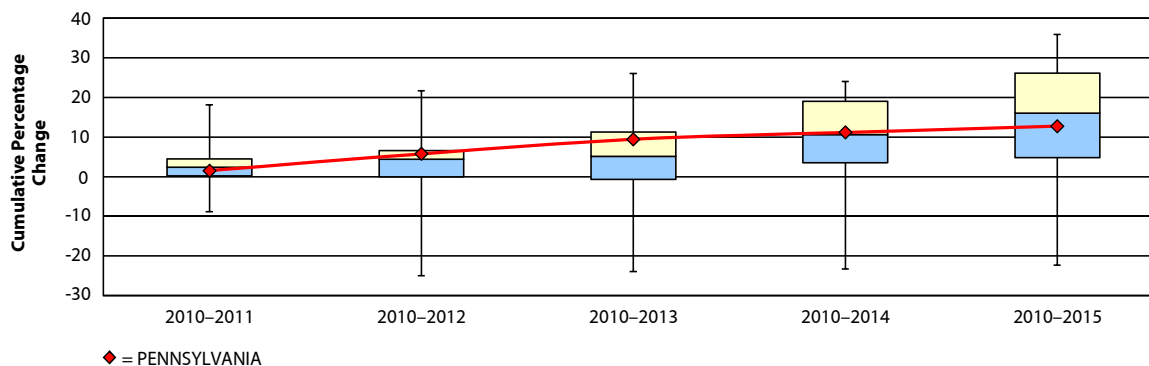
continued

Table for Figure 66: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for physical medicine services																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-0.5	-0.3	-0.5	0.6	0.4	-1.1	0.2	-1.6	0.3	0.2	0.1	-0.3	-0.2	0.9	0.3	0.6	1.0	0.1	0.2
2012/2013	-0.3	0.0	-0.7	2.2	0.4	-1.0	0.5	-0.9	-0.6	0.3	0.9	-0.1	0.0	0.9	-0.9	0.5	0.6	0.4	0.1
2013/2014	0.4	0.6	-0.6	2.3	-0.4	-1.1	1.2	0.1	0.6	0.4	2.2	-0.7	1.4	2.0	-0.2	0.9	0.1	0.6	0.5
2014/2015	1.1	3.7	-1.1	2.8	1.1	-1.0	3.0	1.6	-0.1	0.4	2.6	0.1	1.9	3.5	0.3	0.4	1.7	1.0	1.1
2015/2016	1.4	5.1	-1.3	3.0	1.9	-0.9	7.4	1.9	-0.1	0.4	3.6	0.3	5.9	5.1	0.3	-0.3	2.1	0.9	1.6
Annual percentage point change:																			
2010/2011 to 2011/2012	-0.5	-0.3	-0.5	0.6	0.4	-1.1	0.2	-1.6	0.3	0.2	0.1	-0.3	-0.2	0.9	0.3	0.6	1.0	0.1	0.2
2011/2012 to 2012/2013	0.2	0.3	-0.2	1.5	-0.1	0.1	0.3	0.7	-0.9	0.1	0.8	0.2	0.2	-0.1	-1.1	0.0	-0.4	0.3	0.1
2012/2013 to 2013/2014	0.7	0.7	0.1	0.1	-0.8	-0.2	0.7	1.0	1.3	0.1	1.3	-0.6	1.4	1.2	0.7	0.4	-0.5	0.3	0.5
2013/2014 to 2014/2015	0.7	3.1	-0.5	0.5	1.5	0.2	1.8	1.5	-0.8	0.0	0.4	0.8	0.4	1.5	0.5	-0.5	1.6	0.3	0.5
2014/2015 to 2015/2016	0.3	1.4	-0.2	0.1	0.9	0.1	4.4	0.2	0.0	0.0	1.0	0.3	4.0	1.6	-0.1	-0.7	0.4	0.0	0.3

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

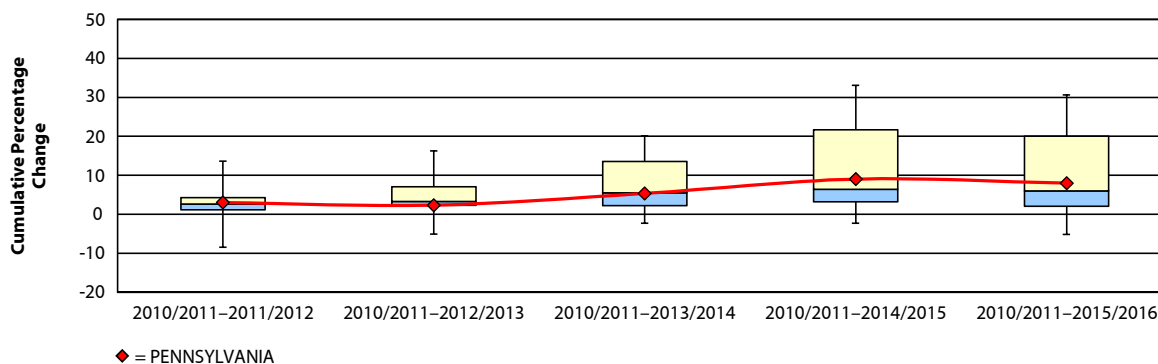
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 67 Trend of Prices for Physical Medicine by Nonhospital Providers**Table for Figure 67: Trend of Prices for Physical Medicine by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	7.6	1.3	-2.2	6.6	8.4	-8.9	0.7	2.0	2.8	-1.8	0.2	2.8	-0.3	4.3	1.5	18.2	3.7	4.5	2.4
2012	7.7	0.5	-2.6	12.4	1.2	-25.0	4.4	1.9	4.4	-1.2	-0.1	4.5	-1.2	6.6	5.8	21.7	5.8	9.4	4.4
2013	11.5	-1.8	-3.2	16.6	-0.7	-23.9	5.5	1.8	4.8	-2.7	2.6	7.3	3.1	8.3	9.4	26.0	11.3	15.2	5.2
2014	7.4	24.0	-1.4	17.7	3.0	-23.3	18.0	19.0	8.2	-2.2	3.5	10.0	4.3	19.9	11.2	22.9	18.7	22.1	10.6
2015	4.8	27.8	-0.8	19.5	5.2	-22.3	26.1	35.9	7.2	-0.6	3.4	8.9	21.6	28.2	12.7	20.4	19.3	28.7	16.0
Annual percentage change:																			
2010 to 2011	7.6	1.3	-2.2	6.6	8.4	-8.9	0.7	2.0	2.8	-1.8	0.2	2.8	-0.3	4.3	1.5	18.2	3.7	4.5	2.4
2011 to 2012	0.1	-0.8	-0.4	5.5	-6.6	-17.7	3.7	-0.1	1.5	0.6	-0.3	1.7	-0.9	2.2	4.2	3.0	2.1	4.7	1.1
2012 to 2013	3.6	-2.3	-0.6	3.7	-1.9	1.4	1.0	-0.1	0.4	-1.5	2.7	2.6	4.3	1.6	3.5	3.6	5.2	5.3	2.1
2013 to 2014	-3.7	26.3	1.8	0.9	3.8	0.8	11.8	16.9	3.3	0.6	0.9	2.5	1.2	10.7	1.6	-2.4	6.7	6.0	2.2
2014 to 2015	-2.5	3.0	0.6	1.6	2.2	1.3	6.9	14.2	-0.9	1.6	0.0	-1.0	16.6	6.9	1.4	-2.1	0.5	5.5	1.5

Notes: Prices are based on calendar years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 68 Trend of Utilization of Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 68: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-8.4	1.3	2.7	2.6	13.6	3.4	13.6	-5.4	7.6	1.9	7.0	-3.1	1.1	4.2	3.0	1.2	1.4	4.3	2.6
2012/2013	-5.1	3.1	2.2	5.4	16.3	3.5	12.1	2.6	7.1	2.9	12.4	-0.1	4.6	6.3	2.3	-0.7	2.8	11.2	3.3
2013/2014	-1.6	5.8	-0.2	8.7	20.1	4.7	13.9	2.6	13.5	3.5	18.2	0.1	5.7	7.8	5.4	2.3	-2.3	16.7	5.5
2014/2015	5.0	29.2	2.2	5.9	33.1	8.8	21.9	0.2	22.6	6.0	13.0	-2.3	4.9	6.9	9.0	3.2	2.7	21.7	6.4
2015/2016	2.1	29.4	4.0	1.0	28.1	8.4	30.6	1.6	20.8	3.8	20.1	-2.7	2.2	9.4	8.0	-5.2	3.3	15.4	6.0
Annual percentage change:																			
2010/2011 to 2011/2012	-8.4	1.3	2.7	2.6	13.6	3.4	13.6	-5.4	7.6	1.9	7.0	-3.1	1.1	4.2	3.0	1.2	1.4	4.3	2.6
2011/2012 to 2012/2013	3.7	1.8	-0.4	2.8	2.4	0.1	-1.3	8.4	-0.4	1.0	5.0	3.1	3.5	2.0	-0.7	-1.8	1.4	6.7	1.9
2012/2013 to 2013/2014	3.6	2.6	-2.4	3.1	3.3	1.2	1.6	0.0	6.0	0.5	5.2	0.1	1.0	1.4	2.9	2.9	-4.9	4.9	2.1
2013/2014 to 2014/2015	6.7	22.1	2.3	-2.6	10.8	3.9	7.1	-2.4	8.0	2.5	-4.4	-2.3	-0.8	-0.8	3.5	0.9	5.1	4.3	3.0
2014/2015 to 2015/2016	-2.8	0.2	1.8	-4.6	-3.8	-0.3	7.1	1.5	-1.5	-2.1	6.2	-0.4	-2.6	2.4	-0.9	-8.1	0.6	-5.2	-0.7
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-10.9	0.6	1.9	-0.1	6.5	-0.2	8.0	-7.2	8.5	2.8	3.2	-2.6	-1.5	2.2	0.3	-1.4	3.2	-1.7	0.5
2012/2013	-8.2	1.6	2.5	2.9	7.0	-3.8	4.1	-1.3	5.3	2.2	8.0	-0.1	0.5	1.3	1.0	-2.0	5.1	1.2	1.4
2013/2014	-2.7	-0.3	-0.4	6.7	8.3	-3.7	3.6	-1.0	1.6	1.7	10.8	-1.2	0.8	1.5	2.7	0.0	0.3	4.5	1.2
2014/2015	-2.8	-1.1	0.6	2.7	17.1	-2.5	8.3	-4.3	-0.3	4.9	6.0	-5.0	-0.2	3.1	3.2	-1.8	3.2	8.2	1.6
2015/2016	-2.4	-4.4	1.1	0.8	14.3	-3.8	13.2	-4.5	-1.3	3.1	8.5	-4.4	-3.1	3.0	3.2	-1.1	1.2	2.7	1.0
Annual percentage change:																			
2010/2011 to 2011/2012	-10.9	0.6	1.9	-0.1	6.5	-0.2	8.0	-7.2	8.5	2.8	3.2	-2.6	-1.5	2.2	0.3	-1.4	3.2	-1.7	0.5
2011/2012 to 2012/2013	3.1	1.0	0.6	3.0	0.5	-3.6	-3.6	6.4	-2.9	-0.5	4.6	2.5	2.1	-1.0	0.7	-0.6	1.8	3.0	0.8
2012/2013 to 2013/2014	6.0	-1.9	-2.8	3.7	1.2	0.1	-0.4	0.3	-3.5	-0.5	2.6	-1.1	0.3	0.3	1.7	2.0	-4.6	3.2	0.3
2013/2014 to 2014/2015	-0.2	-0.7	0.9	-3.8	8.1	1.3	4.5	-3.3	-1.9	3.1	-4.4	-3.9	-1.0	1.5	0.5	-1.8	3.0	3.6	0.2
2014/2015 to 2015/2016	0.5	-3.4	0.6	-1.8	-2.4	-1.4	4.6	-0.2	-1.0	-1.7	2.4	0.7	-2.9	0.0	0.0	0.7	-1.9	-5.2	-0.6

continued

Table for Figure 68: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Physical Medicine by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

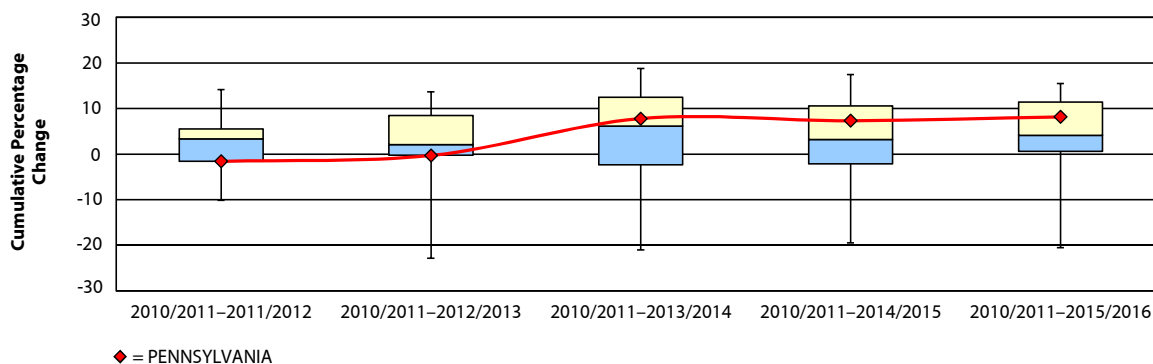
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	2.3	0.1	0.7	0.4	6.0	3.2	5.8	0.6	3.1	-3.5	4.3	-0.4	2.8	2.5	2.0	2.0	-2.3	6.4	2.1
2012/2013	5.3	1.2	-0.9	1.3	8.2	5.3	8.0	0.3	3.0	-0.3	4.0	-0.4	4.0	5.1	0.9	1.3	-1.7	10.3	2.2
2013/2014	2.2	3.7	-1.2	1.4	10.1	4.2	9.7	0.9	3.9	-1.8	6.4	1.8	4.6	6.0	0.9	3.9	-1.9	11.2	3.8
2014/2015	5.7	13.4	-1.7	2.9	10.9	6.1	12.5	0.4	4.9	-2.0	6.7	0.6	3.7	3.0	1.7	4.0	-2.7	13.0	3.9
2015/2016	1.1	14.7	-0.9	1.3	10.2	6.3	14.9	1.2	1.6	-3.2	10.5	0.3	2.0	3.7	3.0	-5.1	0.1	10.5	1.8
Annual percentage change:																			
2010/2011 to 2011/2012	2.3	0.1	0.7	0.4	6.0	3.2	5.8	0.6	3.1	-3.5	4.3	-0.4	2.8	2.5	2.0	2.0	-2.3	6.4	2.1
2011/2012 to 2012/2013	3.0	1.1	-1.7	0.9	2.0	2.1	2.1	-0.2	-0.2	3.3	-0.3	0.0	1.2	2.6	-1.0	-0.7	0.7	3.7	1.0
2012/2013 to 2013/2014	-2.9	2.5	-0.2	0.1	1.8	-1.1	1.5	0.5	0.9	-1.5	2.4	2.2	0.6	0.8	0.0	2.5	-0.2	0.8	0.7
2013/2014 to 2014/2015	3.4	9.4	-0.6	1.5	0.7	1.8	2.6	-0.5	1.0	-0.2	0.3	-1.2	-0.8	-2.8	0.8	0.1	-0.8	1.7	0.5
2014/2015 to 2015/2016	-4.4	1.1	0.9	-1.6	-0.7	0.2	2.1	0.8	-3.1	-1.3	3.5	-0.3	-1.7	0.7	1.2	-8.8	2.9	-2.2	0.0
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.8	0.6	0.2	2.2	1.5	0.5	-0.8	1.2	-4.7	2.8	-0.2	-0.4	-0.7	-0.3	0.7	0.6	0.1	0.1	
2012/2013	-1.4	-0.3	0.8	1.3	0.8	2.4	-0.3	1.8	-1.7	1.1	0.1	0.4	-0.5	0.1	0.9	-0.1	-0.8	0.7	
2013/2014	-0.9	2.3	1.8	0.6	2.4	4.5	-0.1	2.2	7.7	3.4	0.6	-0.5	-0.2	0.2	1.2	-1.6	-0.2	0.9	
2014/2015	2.3	16.4	3.1	0.2	4.3	5.5	-0.1	3.3	17.5	3.2	0.3	1.3	1.1	1.6	2.7	0.7	2.2	0.2	
2015/2016	3.7	19.1	3.5	-0.6	4.3	6.3	0.2	3.1	20.0	3.9	0.7	1.3	3.0	3.3	2.4	0.8	2.1	2.4	
Annual percentage point change:																			
2010/2011 to 2011/2012	0.8	0.6	0.2	2.2	1.5	0.5	-0.8	1.2	-4.7	2.8	-0.2	-0.4	-0.7	-0.3	0.7	0.6	0.1	0.1	
2011/2012 to 2012/2013	-2.4	-0.8	0.6	-0.9	-0.7	1.8	0.4	0.5	2.7	-1.7	0.3	0.8	0.2	0.4	0.2	-0.8	-0.9	0.5	
2012/2013 to 2013/2014	0.5	2.5	1.0	-0.7	1.3	2.1	0.2	0.4	8.7	2.3	0.4	-0.9	0.2	0.1	0.2	-1.4	0.6	0.1	
2013/2014 to 2014/2015	3.2	13.1	1.3	-0.3	1.4	0.9	0.0	1.1	8.7	-0.3	-0.2	1.8	1.2	1.3	1.5	2.2	2.4	-0.6	
2014/2015 to 2015/2016	1.4	2.3	0.4	-0.8	0.2	0.8	0.3	-0.2	2.6	0.7	0.3	0.0	1.9	1.6	-0.3	0.2	-0.1	1.8	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 69 Trend of Average Payment per Claim for Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 69: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	5.2	2.6	4.7	10.0	12.6	-9.8	5.5	-0.4	0.7	-3.9	4.0	-10.1	-6.5	-0.6	-1.6	14.1	4.1	6.4	3.3
2012/2013	-5.7	2.4	8.4	8.6	-0.3	-22.8	11.1	1.7	0.5	1.6	3.7	0.6	-4.7	3.9	-0.3	13.7	6.5	10.7	2.1
2013/2014	4.5	-2.3	13.1	12.5	14.7	-21.0	9.8	-7.5	-3.1	2.4	0.0	10.3	-4.7	3.8	7.8	16.3	18.8	11.5	6.2
2014/2015	-2.1	-8.2	7.6	17.1	17.4	-19.4	14.9	-4.9	-0.4	-0.8	1.1	10.4	-3.9	2.0	7.3	10.6	4.4	17.0	3.2
2015/2016	-12.4	-7.7	9.2	14.8	7.1	-20.5	15.5	0.9	2.4	11.4	0.6	5.8	-11.7	2.1	8.2	14.8	0.9	12.6	4.1
Annual percentage change:																			
2010/2011 to 2011/2012	5.2	2.6	4.7	10.0	12.6	-9.8	5.5	-0.4	0.7	-3.9	4.0	-10.1	-6.5	-0.6	-1.6	14.1	4.1	6.4	3.3
2011/2012 to 2012/2013	-10.3	-0.2	3.6	-1.3	-11.4	-14.4	5.2	2.1	-0.3	5.7	-0.3	11.9	2.0	4.6	1.3	-0.4	2.4	4.0	1.7
2012/2013 to 2013/2014	10.8	-4.6	4.3	3.5	15.0	2.3	-1.1	-9.0	-3.5	0.8	-3.6	9.6	0.0	-0.1	8.1	2.3	11.5	0.7	1.6
2013/2014 to 2014/2015	-6.4	-6.1	-4.8	4.1	2.4	2.0	4.6	2.8	2.7	-3.1	1.1	0.1	0.8	-1.7	-0.4	-4.9	-12.1	5.0	0.5
2014/2015 to 2015/2016	-10.5	0.6	1.5	-2.0	-8.8	-1.4	0.5	6.1	2.8	12.3	-0.5	-4.1	-8.1	0.1	0.8	3.8	-3.3	-3.8	-0.2
Percentage of claims with major surgery																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-1.5	0.0	0.4	0.7	-1.3	-0.9	1.4	-1.3	0.3	-0.9	1.2	-2.3	0.7	0.5	0.8	0.5	-2.3	-2.8	0.2
2012/2013	-1.6	0.1	-0.5	0.0	-3.6	-2.1	0.8	-2.1	-0.4	0.4	-0.8	-1.7	-2.1	-0.5	0.3	-0.1	-0.1	-2.9	-0.5
2013/2014	-3.0	-1.4	-0.4	-0.1	-3.4	-1.6	1.0	-0.1	0.0	-0.2	-0.2	-2.3	-1.3	-0.5	0.8	-0.1	-1.1	-1.7	-0.4
2014/2015	-3.6	-2.2	-0.2	-1.4	-3.3	-1.7	2.0	-3.0	1.5	0.1	-1.9	-3.4	-3.6	-0.2	-0.7	-0.4	0.1	-1.3	-1.4
2015/2016	-3.0	-3.7	-0.9	-2.3	-2.7	-1.4	2.1	-4.7	0.7	0.2	-1.7	-3.9	-3.6	-0.5	-1.7	-1.1	-2.3	-3.0	-2.0
Annual percentage point change:																			
2010/2011 to 2011/2012	-1.5	0.0	0.4	0.7	-1.3	-0.9	1.4	-1.3	0.3	-0.9	1.2	-2.3	0.7	0.5	0.8	0.5	-2.3	-2.8	0.2
2011/2012 to 2012/2013	-0.1	0.1	-0.9	-0.6	-2.4	-1.3	-0.6	-0.8	-0.7	1.2	-2.1	0.7	-2.8	-1.0	-0.4	-0.6	2.1	-0.2	-0.6
2012/2013 to 2013/2014	-1.4	-1.5	0.1	-0.2	0.3	0.5	0.2	2.0	0.4	-0.5	0.6	-0.7	0.7	0.0	0.5	0.0	-1.0	1.2	0.2
2013/2014 to 2014/2015	-0.6	-0.8	0.2	-1.3	0.1	-0.1	1.0	-3.0	1.5	0.2	-1.6	-1.1	-2.2	0.3	-1.5	-0.3	1.2	0.4	-0.2
2014/2015 to 2015/2016	0.6	-1.5	-0.8	-0.9	0.6	0.3	0.1	-1.7	-0.7	0.1	0.1	-0.4	0.0	-0.4	-1.0	-0.6	-2.4	-1.7	-0.5

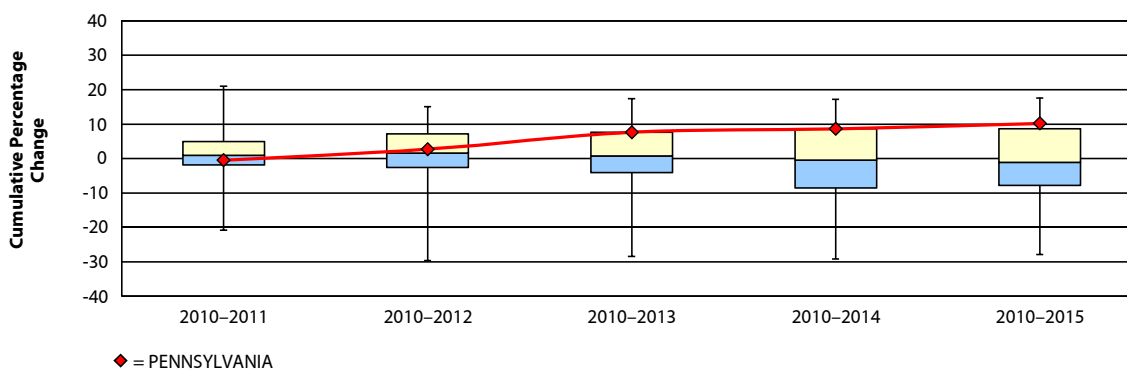
continued

Table for Figure 69: Trend of Average Payment per Claim, Percentage of Claims, and Percentage of Payments for Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Percentage of medical payments made for major surgery																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.0	-0.1	-0.1	0.6	-0.6	-1.2	-0.3	-0.6	-0.4	-1.6	0.0	-1.2	-0.4	-0.4	0.1	0.5	-0.2	-0.6	-0.4
2012/2013	-0.8	-0.1	-0.4	0.4	-1.7	-1.5	-0.1	-0.8	-0.6	-0.2	-0.2	-0.5	-0.9	-0.8	-0.4	0.2	-0.2	-1.0	-0.5
2013/2014	-0.8	-0.4	0.1	-0.3	-1.3	-1.3	-0.4	-0.2	-0.5	-0.2	-0.7	-0.7	-0.3	-0.7	-0.2	0.0	0.3	-1.2	-0.4
2014/2015	-1.4	-0.7	-0.5	0.2	-1.2	-1.6	-0.2	-1.2	-0.6	-1.5	-0.7	-0.4	-0.5	-0.7	-0.6	-0.4	-0.6	-1.8	-0.6
2015/2016	-1.1	-0.8	-0.6	-0.3	-1.5	-1.5	1.3	-1.8	-0.6	1.0	-0.9	-0.6	-0.2	-1.2	-1.0	0.0	-1.0	-2.4	-0.9
Annual percentage point change:																			
2010/2011 to 2011/2012	0.0	-0.1	-0.1	0.6	-0.6	-1.2	-0.3	-0.6	-0.4	-1.6	0.0	-1.2	-0.4	-0.4	0.1	0.5	-0.2	-0.6	-0.4
2011/2012 to 2012/2013	-0.7	0.0	-0.3	-0.2	-1.1	-0.3	0.3	-0.2	-0.2	1.4	-0.2	0.6	-0.5	-0.4	-0.5	-0.3	0.1	-0.3	-0.3
2012/2013 to 2013/2014	0.0	-0.3	0.5	-0.7	0.4	0.1	-0.4	0.6	0.1	-0.1	-0.5	-0.2	0.6	0.1	0.2	-0.2	0.5	-0.2	0.1
2013/2014 to 2014/2015	-0.6	-0.3	-0.6	0.5	0.1	-0.2	0.3	-1.0	-0.1	-1.3	0.0	0.3	-0.2	0.0	-0.4	-0.4	-0.9	-0.6	-0.3
2014/2015 to 2015/2016	0.3	-0.2	-0.2	-0.5	-0.3	0.0	1.5	-0.6	0.0	2.5	-0.2	-0.1	0.3	-0.5	-0.5	0.4	-0.4	-0.6	-0.2

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

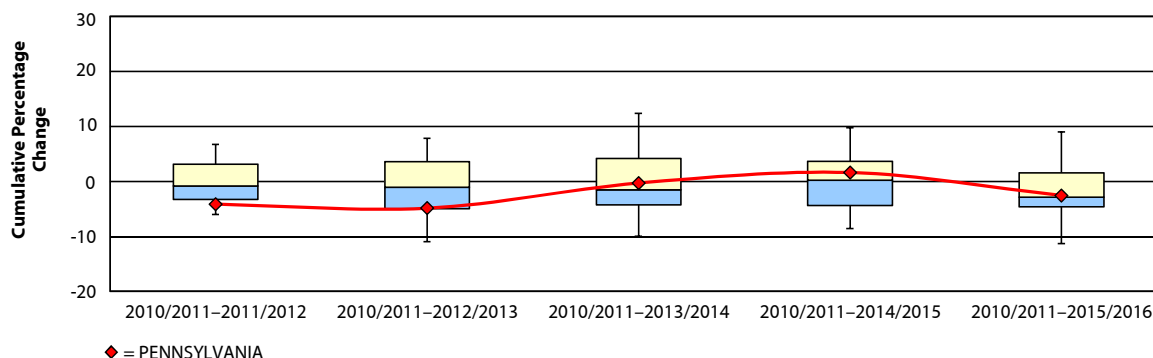
^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 70 Trend of Prices for Major Surgery by Nonhospital Providers**Table for Figure 70: Trend of Prices for Major Surgery by Nonhospital Providers**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Cumulative percentage change from 2010 to:																			
2011	7.6	0.8	-1.9	11.5	4.3	-9.8	-1.2	1.6	-1.9	1.1	-0.4	-20.9	-1.9	4.9	-0.5	21.1	6.0	4.0	1.0
2012	4.8	0.1	-3.7	14.3	5.6	-29.7	5.8	-1.5	-2.6	0.3	-5.8	-20.5	0.4	8.2	2.7	15.0	12.3	7.2	1.5
2013	6.4	2.5	-4.1	17.1	3.0	-28.5	3.0	-1.7	-3.7	-3.2	-6.1	-18.0	-1.0	-9.2	7.6	17.4	7.9	11.2	0.7
2014	3.6	-21.7	0.2	15.2	-3.5	-29.2	0.8	1.6	-4.0	-1.1	-8.6	-17.7	-1.7	-9.7	8.6	14.6	15.4	17.2	-0.4
2015	3.0	-24.9	-3.8	13.8	-4.9	-27.9	7.4	2.8	-3.4	1.1	-10.9	-16.6	-3.7	-7.8	10.2	15.2	8.6	17.6	-1.1
Annual percentage change:																			
2010 to 2011	7.6	0.8	-1.9	11.5	4.3	-9.8	-1.2	1.6	-1.9	1.1	-0.4	-20.9	-1.9	4.9	-0.5	21.1	6.0	4.0	1.0
2011 to 2012	-2.6	-0.7	-1.8	2.5	1.3	-22.0	7.1	-3.0	-0.8	-0.8	-5.5	0.4	2.3	3.1	3.2	-5.0	6.0	3.0	-0.2
2012 to 2013	1.5	2.4	-0.4	2.4	-2.5	1.7	-2.7	-0.3	-1.0	-3.4	-0.3	3.2	-1.3	-16.1	4.8	2.0	-4.0	3.8	-0.3
2013 to 2014	-2.6	-23.6	4.6	-1.6	-6.3	-1.0	-2.1	3.3	-0.4	2.1	-2.6	0.3	-0.7	-0.5	0.9	-2.4	7.0	5.4	-0.6
2014 to 2015	-0.6	-4.1	-4.0	-1.2	-1.4	1.9	6.5	1.3	0.7	2.2	-2.5	1.3	-2.1	2.1	1.4	0.5	-5.9	0.3	0.4

Note: Prices are based on calendar years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 71 Trend of Utilization of Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 71: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Utilization																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-1.3	-0.8	4.6	-0.5	-0.9	-0.8	3.1	-2.5	-0.9	-3.5	3.8	6.7	-6.0	-3.3	-4.1	-4.3	1.2	3.1	-0.9
2012/2013	-11.0	0.3	4.0	-3.9	-4.9	0.8	3.6	2.3	-9.0	-1.6	4.5	7.9	-7.1	-4.3	-4.9	-5.1	-0.6	5.9	-1.1
2013/2014	-6.1	-4.3	1.8	-3.5	-2.8	0.2	4.4	-8.4	-3.5	2.1	7.5	12.3	-10.0	-2.8	-0.3	-4.9	4.2	4.7	-1.5
2014/2015	-4.4	-7.4	4.8	-0.1	2.2	0.5	8.0	-5.4	-5.8	3.7	9.7	8.7	-8.6	-1.9	1.6	-4.2	-3.4	3.1	0.2
2015/2016	-11.3	-8.2	1.5	-8.7	-3.4	-3.1	8.7	-4.0	-3.8	9.0	8.4	4.3	-8.0	-4.6	-2.6	-2.6	-0.3	1.0	-2.9
Annual percentage change:																			
2010/2011 to 2011/2012	-1.3	-0.8	4.6	-0.5	-0.9	-0.8	3.1	-2.5	-0.9	-3.5	3.8	6.7	-6.0	-3.3	-4.1	-4.3	1.2	3.1	-0.9
2011/2012 to 2012/2013	-9.8	1.1	-0.5	-3.5	-4.1	1.5	0.4	4.9	-8.1	2.1	0.7	1.0	-1.1	-1.0	-0.8	-0.9	-1.8	2.7	-0.7
2012/2013 to 2013/2014	5.5	-4.6	-2.1	0.5	2.3	-0.5	0.8	-10.4	6.0	3.7	2.8	4.2	-3.1	1.5	4.8	0.3	4.8	-1.1	1.2
2013/2014 to 2014/2015	1.8	-3.3	2.9	3.5	5.2	0.3	3.4	3.3	-2.4	1.5	2.1	-3.3	1.6	0.9	1.9	0.7	-7.2	-1.5	1.5
2014/2015 to 2015/2016	-7.2	-0.8	-3.1	-8.7	-5.5	-3.6	0.7	1.4	2.1	5.1	-1.2	-4.0	0.6	-2.8	-4.1	1.6	3.2	-2.1	-1.6
Visits per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	4.0	0.6	3.6	0.8	-1.5	0.6	0.1	2.1	2.8	1.8	-1.2	0.5	0.4	0.4	0.1	0.4	-0.8	0.4	0.5
2012/2013	-0.1	0.1	2.0	0.3	-2.5	0.4	-0.1	0.3	-0.1	-1.0	0.1	0.5	-0.5	1.8	-0.8	-0.4	-0.9	1.1	0.0
2013/2014	0.2	-0.3	4.0	2.1	-0.3	0.8	0.6	-1.7	-0.3	1.0	1.8	1.7	-1.6	1.5	-0.6	0.4	-0.4	0.9	0.5
2014/2015	0.2	-1.6	-1.0	-0.4	-0.3	-2.2	1.2	0.8	-1.7	0.8	-2.5	-1.0	1.0	0.3	-1.2	-0.2	-2.5	1.5	-0.3
2015/2016	-1.2	-2.2	-1.0	2.0	-3.0	-0.2	0.7	2.0	0.4	-0.2	-0.3	-3.9	-1.5	0.6	-0.7	1.1	-1.9	0.0	-0.2
Annual percentage change:																			
2010/2011 to 2011/2012	4.0	0.6	3.6	0.8	-1.5	0.6	0.1	2.1	2.8	1.8	-1.2	0.5	0.4	0.4	0.1	0.4	-0.8	0.4	0.5
2011/2012 to 2012/2013	-4.0	-0.5	-1.6	-0.5	-1.0	-0.1	-0.2	-1.8	-2.8	-2.8	1.3	0.0	-0.9	1.4	-0.9	-0.8	-0.1	0.7	-0.7
2012/2013 to 2013/2014	0.4	-0.3	2.0	1.7	2.3	0.4	0.7	-2.0	-0.2	2.0	1.8	1.2	-1.2	-0.4	0.1	0.8	0.5	-0.3	0.4
2013/2014 to 2014/2015	-0.1	-1.3	-4.9	-2.4	-0.1	-2.9	0.6	2.5	-1.5	-0.1	-4.2	-2.7	2.7	-1.2	-0.6	-0.6	-2.1	0.6	-0.9
2014/2015 to 2015/2016	-1.4	-0.6	0.0	2.4	-2.7	2.0	-0.5	1.2	2.1	-1.0	2.3	-2.9	-2.5	0.3	0.5	1.3	0.6	-1.5	0.2

continued

Table for Figure 71: Trend of Utilization, Visits per Claim, Services per Visit, and Resource Intensity^a for Major Surgery by Nonhospital Providers for Claims with More Than 7 Days of Lost Time (12 months) (continued)

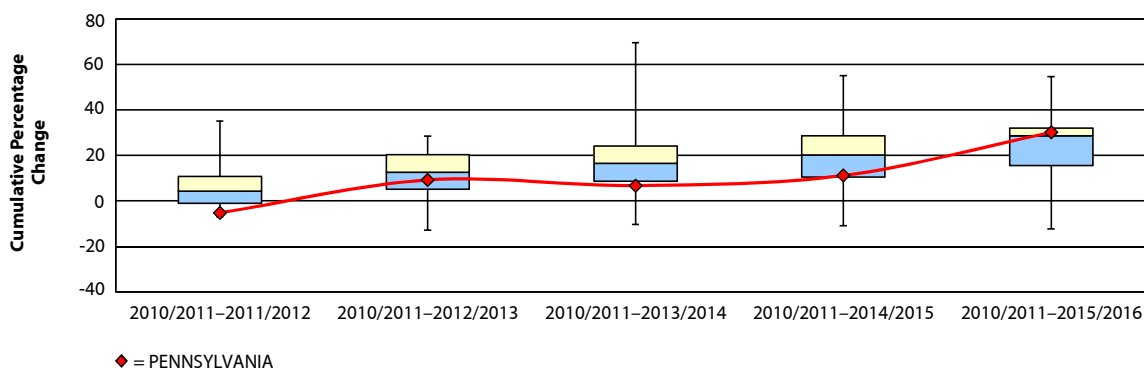
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Services per visit																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-5.9	-1.1	3.1	2.9	0.6	-3.5	3.5	-8.0	-5.6	-8.5	3.4	4.3	-3.8	-3.7	-8.3	-5.6	5.8	2.8	-2.3
2012/2013	-12.1	1.3	0.7	-2.7	-3.0	-4.3	5.6	-2.9	-5.1	-1.5	1.8	4.5	-4.8	-7.1	-7.1	-6.3	-1.0	1.8	-2.8
2013/2014	-7.7	-3.9	-0.1	-3.7	-2.1	-3.1	1.1	7.4	-4.1	-0.9	2.6	8.5	-6.9	-5.7	-4.9	-6.0	4.4	0.9	-2.6
2014/2015	-8.9	-8.8	4.0	1.1	0.9	-2.0	6.5	-7.0	-9.7	-1.3	6.7	5.9	-6.8	-4.0	-0.7	-5.7	-3.5	-3.3	-2.7
2015/2016	-13.9	-9.5	-0.3	-7.9	-3.1	-8.2	5.8	-10.3	-1.3	4.4	5.3	3.7	-6.8	-6.4	-6.5	-6.2	-0.4	-3.3	-4.7
Annual percentage change:																			
2010/2011 to 2011/2012	-5.9	-1.1	3.1	2.9	0.6	-3.5	3.5	-8.0	-5.6	-8.5	3.4	4.3	-3.8	-3.7	-8.3	-5.6	5.8	2.8	-2.3
2011/2012 to 2012/2013	-6.7	2.5	-2.3	-5.4	-3.6	-0.8	2.0	5.6	0.5	7.7	-1.5	0.3	-1.1	-3.6	1.4	-0.8	-6.4	-1.0	-0.9
2012/2013 to 2013/2014	5.0	-5.2	-0.9	-1.0	0.9	1.2	-4.3	10.5	1.1	0.6	0.7	3.8	-2.2	1.5	2.3	0.4	5.5	-0.9	0.8
2013/2014 to 2014/2015	-1.3	-5.0	4.1	4.9	3.0	1.1	5.3	-13.4	-5.8	-0.4	4.0	-2.5	0.1	1.9	4.4	0.3	-7.6	-4.2	0.2
2014/2015 to 2015/2016	-5.4	-0.8	-4.1	-8.9	-3.9	-6.3	-0.6	-3.6	9.3	5.8	-1.3	-2.0	0.0	-2.5	-5.8	-0.4	3.2	0.0	-1.7
Resource intensity^a																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.3	0.4	-2.6	-3.9	-0.4	1.8	-1.0	3.3	1.3	3.1	1.5	2.6	-2.8	-1.1	3.8	1.4	-2.8	0.2	
2012/2013	0.3	-0.8	0.6	-1.6	0.2	4.1	-1.9	4.9	-4.9	0.9	2.8	2.7	-2.2	-0.3	2.8	1.8	1.5	3.9	
2013/2014	0.6	0.0	-1.9	-2.0	-1.0	2.1	2.5	-14.2	-0.4	2.0	2.7	1.9	-2.0	0.8	5.0	0.9	0.7	3.7	
2014/2015	3.3	2.7	1.7	-1.0	2.0	3.9	0.2	1.0	4.2	4.0	4.5	3.8	-3.4	0.9	3.5	1.7	3.0	4.6	
2015/2016	2.9	3.1	2.1	-3.3	2.4	4.5	2.1	4.4	-4.5	4.9	3.6	4.8	0.0	0.2	4.4	2.2	2.1	4.5	
Annual percentage point change:																			
2010/2011 to 2011/2012	0.3	0.4	-2.6	-3.9	-0.4	1.8	-1.0	3.3	1.3	3.1	1.5	2.6	-2.8	-1.1	3.8	1.4	-2.8	0.2	
2011/2012 to 2012/2013	0.0	-1.2	3.0	2.1	0.6	2.4	-0.9	1.5	-6.3	-2.5	1.2	0.1	0.6	0.8	-1.1	0.4	4.0	3.6	
2012/2013 to 2013/2014	0.3	0.8	-2.4	-0.3	-1.3	-2.1	4.2	-19.0	5.0	1.1	-0.1	-0.9	0.1	1.1	2.2	-1.0	-0.9	-0.1	
2013/2014 to 2014/2015	3.0	2.8	3.5	1.0	3.0	1.9	-2.4	14.8	4.7	2.0	1.6	1.8	-1.4	0.1	-1.7	0.9	2.3	0.9	
2014/2015 to 2015/2016	-0.2	0.5	0.4	-2.3	0.6	0.8	1.8	3.6	-9.7	0.7	-0.7	1.1	3.6	-0.6	1.1	0.4	-1.0	0.0	

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Figure 72 Trend of Average Hospital Payment per Inpatient Episode for Claims with More Than 7 Days of Lost Time^a (12 months)**Table for Figure 72: Trend of Average Hospital Payment per Inpatient Episode and Other Metrics for Claims with More Than 7 Days of Lost Time^a (12 months)**

	AR ^b	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	17-State Median ^c
Average hospital payment per inpatient episode																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	9.2	25.3	-1.4	35.1	4.3	1.1	2.8	-6.9	2.4	11.1	9.3	-5.9	10.4	-5.2	7.6	-0.8	14.0	4.3
2012/2013	n/a	12.6	28.5	-10.3	25.9	-12.9	21.8	11.9	5.8	0.1	11.4	18.8	14.3	17.6	9.2	13.5	4.4	27.7	12.6
2013/2014	n/a	20.3	13.8	17.1	69.5	-10.3	15.8	1.1	-7.9	12.6	20.3	34.3	10.5	16.5	6.7	24.6	29.5	23.7	16.5
2014/2015	n/a	13.5	36.4	24.9	44.4	-10.9	25.6	10.5	10.5	26.7	12.2	30.6	-1.1	8.6	11.2	25.2	20.1	55.0	20.1
2015/2016	n/a	20.2	54.6	28.1	37.8	0.6	-9.0	25.5	30.3	10.8	33.7	28.6	-12.3	20.4	30.1	30.3	29.6	48.7	28.6
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	9.2	25.3	-1.4	35.1	4.3	1.1	2.8	-6.9	2.4	11.1	9.3	-5.9	10.4	-5.2	7.6	-0.8	14.0	4.3
2011/2012 to 2012/2013	n/a	3.1	2.6	-9.1	-6.8	-16.4	20.5	8.9	13.7	-2.2	0.3	8.7	21.6	6.5	15.3	5.4	5.3	12.0	5.4
2012/2013 to 2013/2014	n/a	6.9	-11.5	30.6	34.6	2.9	-5.0	-9.6	-12.9	12.4	7.9	13.0	-3.3	-0.9	-2.3	9.8	24.0	-3.1	2.9
2013/2014 to 2014/2015	n/a	-5.7	19.9	6.7	-14.8	-0.6	8.5	9.3	19.9	12.6	-6.7	-2.8	-10.6	-6.8	4.2	0.5	-7.2	25.3	0.5
2014/2015 to 2015/2016	n/a	5.9	13.4	2.5	-4.6	12.9	-27.6	13.6	18.0	-12.5	19.2	-1.5	-11.3	10.9	17.0	4.1	7.9	-4.1	5.9
Average hospital payment per claim for inpatient services																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	10.1	29.4	-2.7	36.4	2.0	2.5	0.6	-5.1	5.8	12.7	14.0	-10.1	7.0	-3.8	2.6	-3.1	11.9	2.6
2012/2013	n/a	14.2	36.9	-4.4	28.9	-11.0	18.7	15.8	10.9	9.2	16.0	26.2	12.3	13.8	12.4	11.1	9.2	32.5	13.8
2013/2014	n/a	18.6	10.1	22.0	80.3	-9.6	15.3	6.9	-3.9	12.5	30.9	48.3	6.8	12.8	11.1	27.8	34.1	33.3	15.3
2014/2015	n/a	13.6	40.9	32.6	53.3	-7.3	37.9	15.7	12.8	26.3	20.6	46.5	1.4	3.7	10.1	27.8	17.7	57.6	20.6
2015/2016	n/a	24.9	53.6	52.2	43.5	1.4	-7.0	48.3	32.9	10.2	41.9	38.0	-16.2	20.4	38.8	32.5	33.2	52.3	33.2
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	10.1	29.4	-2.7	36.4	2.0	2.5	0.6	-5.1	5.8	12.7	14.0	-10.1	7.0	-3.8	2.6	-3.1	11.9	2.6
2011/2012 to 2012/2013	n/a	3.8	5.8	-1.8	-5.5	-12.8	15.8	15.2	16.9	3.2	3.0	10.7	24.9	6.4	16.8	8.3	12.7	18.4	8.3
2012/2013 to 2013/2014	n/a	3.8	-19.6	27.6	39.8	1.6	-2.8	-7.7	-13.3	3.0	12.9	17.5	-4.9	-0.9	-1.2	15.1	22.8	0.6	1.6
2013/2014 to 2014/2015	n/a	-4.2	28.0	8.7	-15.0	2.6	19.6	8.2	17.3	12.3	-7.9	-1.2	-5.0	-8.1	-0.9	0.0	-12.2	18.2	0.0
2014/2015 to 2015/2016	n/a	9.9	9.1	14.8	-6.4	9.4	-32.6	28.2	17.8	-12.7	17.7	-5.8	-17.4	16.2	26.1	3.7	13.1	-3.4	9.4

continued

Table for Figure 72: Trend of Average Hospital Payment per Inpatient Episode and Other Metrics for Claims with More Than 7 Days of Lost Time^a (12 months) (continued)

	AR ^b	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	17-State Median ^c
Median hospital payment per inpatient episode																			
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	10.1	12.3	-8.1	17.6	5.7	0.8	7.6	-2.0	0.0	3.4	5.2	0.7	12.7	10.7	9.1	1.9	14.1	5.7
2011/2012 to 2012/2013	n/a	3.5	4.7	10.5	3.6	-16.9	23.2	15.7	6.7	-5.2	6.8	2.5	16.0	7.9	-1.1	5.8	6.3	2.0	5.8
2012/2013 to 2013/2014	n/a	11.4	7.8	22.9	22.6	3.9	-1.2	-11.0	-10.5	27.2	4.7	4.3	-1.4	5.4	17.9	10.2	23.7	16.2	7.8
2013/2014 to 2014/2015	n/a	2.3	8.9	-0.5	1.2	3.3	0.1	3.3	19.3	3.3	-5.2	2.7	-5.0	-4.9	4.4	4.8	-11.1	-1.2	2.3
2014/2015 to 2015/2016	n/a	8.1	2.0	-9.6	-0.5	14.5	-23.2	22.7	-4.9	3.1	6.9	12.1	-7.8	15.7	0.4	9.4	2.9	14.4	3.1
Percentage of claims with inpatient care																			
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	0.0	-0.4	0.2	0.0	-0.1	0.4	0.1	-1.6	-0.1	-0.1	0.3	0.2	-0.9	0.0	0.1	-0.2	-0.2	0.0
2011/2012 to 2012/2013	n/a	-0.5	0.6	-0.9	-0.8	-0.2	-0.6	-0.5	-0.4	-0.4	-0.4	-1.3	-1.2	0.4	-0.7	-0.2	-0.1	-0.1	-0.4
2012/2013 to 2013/2014	n/a	-0.3	-0.4	0.1	0.0	-0.5	0.3	-1.3	-1.2	-0.3	-0.5	-0.9	-1.1	-0.1	0.0	0.0	-0.8	-0.2	-0.3
2013/2014 to 2014/2015	n/a	-0.4	-0.4	-0.3	-1.0	-0.2	-0.6	-0.5	0.7	0.2	-0.5	-0.8	0.2	-0.9	-0.2	0.2	-0.9	-0.4	-0.4
2014/2015 to 2015/2016	n/a	-0.2	0.3	-0.6	0.2	0.0	-0.4	-0.1	-0.8	0.0	0.1	-0.4	0.5	0.0	-0.5	-0.9	-1.0	0.0	-0.1
Percentage of payments for inpatient care																			
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	1.7	3.0	-1.0	3.2	0.6	-0.9	-1.4	-3.6	0.1	1.2	3.2	-1.8	-0.9	-2.6	-0.7	-0.5	0.5	-0.5
2011/2012 to 2012/2013	n/a	-2.1	2.1	-2.2	-1.2	-0.1	2.1	0.9	1.5	-1.1	-0.5	-1.8	0.9	1.5	0.0	0.8	-0.1	1.1	0.0
2012/2013 to 2013/2014	n/a	1.4	-5.4	3.6	4.9	-1.4	-1.4	-2.1	-2.9	-0.7	-0.3	2.8	-3.2	-1.3	-0.2	1.4	2.0	-1.0	-0.7
2013/2014 to 2014/2015	n/a	-2.1	2.5	-0.3	-7.8	-0.3	0.7	-1.6	1.8	2.4	-1.8	-5.4	0.2	-3.7	-1.8	0.3	-5.4	0.5	-0.3
2014/2015 to 2015/2016	n/a	1.0	3.4	0.9	0.4	0.6	-4.9	1.8	1.6	-2.3	2.8	-2.0	0.4	2.8	3.4	-0.7	-0.1	-0.5	0.6

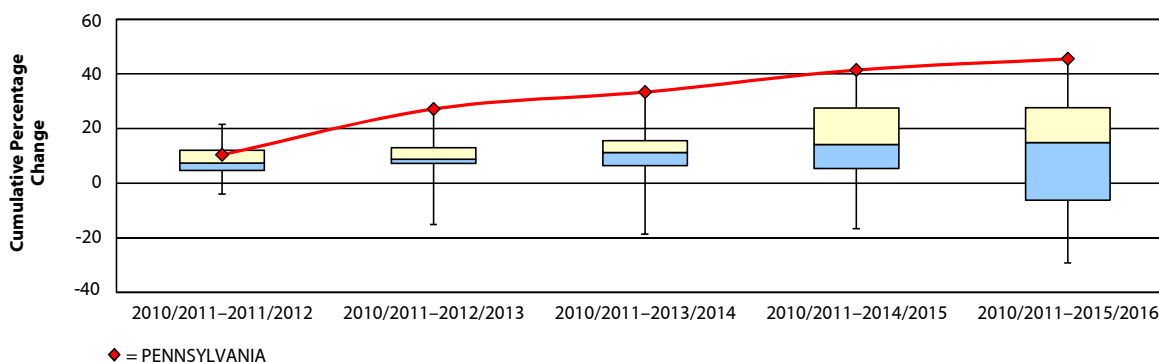
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a In this report we identify hospital inpatient stays using revenue codes for room and board. We then use the service dates to construct hospital inpatient episodes, which include one day before and one day after the hospital inpatient stay, and capture all hospital services provided during the inpatient episode. The payments captured include only the payments made to the hospital provider for services rendered during the inpatient stay (i.e., it excludes payments to surgeons, etc., billing separately from the hospital).

^b Trends in hospital inpatient payments per episode are not shown for Arkansas because the cell sizes underlying the data are too small to support a trend analysis.

^c The 17-state median is the state ranked 9th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 73 Trend of Hospital Outpatient Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 73: Trend of Hospital Outpatient Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average hospital outpatient payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.1	4.7	4.8	11.8	16.1	1.2	14.9	12.3	21.5	5.0	4.9	-4.0	8.7	8.6	10.4	7.6	0.2	1.7	7.4
2012/2013	20.8	7.9	11.9	9.8	11.5	-15.2	13.9	8.0	24.4	7.2	6.6	-2.9	10.9	8.8	27.2	8.7	8.4	6.7	8.7
2013/2014	11.5	5.9	27.0	10.9	16.3	-18.6	14.8	4.5	20.9	10.1	6.3	8.2	0.7	9.1	33.3	13.4	11.7	14.5	11.2
2014/2015	14.0	5.6	33.9	0.0	29.3	-16.7	3.7	10.3	30.9	18.9	7.7	5.4	-6.4	14.4	41.4	21.7	24.8	25.6	14.2
2015/2016	-15.9	2.0	38.3	-6.3	28.5	-13.1	-27.7	19.2	28.8	18.2	-0.1	2.4	-29.3	11.4	45.5	26.7	24.5	26.0	14.8
Annual percentage change:																			
2010/2011 to 2011/2012	7.1	4.7	4.8	11.8	16.1	1.2	14.9	12.3	21.5	5.0	4.9	-4.0	8.7	8.6	10.4	7.6	0.2	1.7	7.4
2011/2012 to 2012/2013	12.7	3.1	6.8	-1.8	-3.9	-16.2	-0.8	-3.8	2.4	2.1	1.6	1.1	2.0	0.2	15.2	1.0	8.2	5.0	1.8
2012/2013 to 2013/2014	-7.7	-1.9	13.4	1.0	4.3	-4.0	0.8	-3.2	-2.8	2.7	-0.3	11.5	-9.2	0.3	4.9	4.4	3.1	7.3	0.9
2013/2014 to 2014/2015	2.2	-0.2	5.5	-9.8	11.2	2.4	-9.7	5.6	8.3	8.0	1.3	-2.6	-7.1	4.9	6.0	7.3	11.7	9.7	5.2
2014/2015 to 2015/2016	-26.2	-3.4	3.2	-6.3	-0.7	4.3	-30.3	8.1	-1.6	-0.6	-7.2	-2.8	-24.4	-2.6	2.9	4.1	-0.2	0.3	-1.1
Percentage of claims with hospital outpatient services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	4.3	-0.9	-0.8	-0.6	-0.3	1.2	1.1	1.9	0.7	1.1	-0.9	1.1	0.5	-0.9	-1.1	1.3	-3.8	0.4	0.4
2011/2012 to 2012/2013	-0.9	-2.5	0.0	-2.8	-1.0	-1.2	-0.8	-1.2	-0.6	-0.9	-0.3	-0.4	-2.1	-0.8	1.3	-0.4	0.0	-0.3	-0.8
2012/2013 to 2013/2014	-2.4	-1.5	-0.7	-3.5	1.1	-1.3	-1.2	-1.8	-1.1	-1.5	-0.8	-1.0	-2.6	-1.0	-1.2	-0.3	-1.5	1.1	-1.2
2013/2014 to 2014/2015	-2.6	-1.1	-0.1	-1.5	0.2	-0.4	-1.2	-1.6	2.4	0.1	-0.1	0.5	-1.2	0.5	-0.4	-0.1	1.5	1.5	-0.1
2014/2015 to 2015/2016	1.7	-1.9	-1.9	-3.0	-4.0	-1.0	-0.1	-1.0	-1.9	-2.2	-1.2	-1.1	-1.6	-3.1	-2.8	-1.1	-1.5	0.6	-1.5
Percentage of medical payments made for hospital outpatient services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	3.0	-0.1	-0.8	0.9	0.1	1.7	1.0	3.2	4.1	1.3	-1.0	-1.4	2.5	0.5	1.4	0.5	-1.6	-0.3	0.7
2011/2012 to 2012/2013	2.9	-0.3	0.0	-1.1	0.0	-0.7	-0.9	-2.8	-0.1	0.3	1.6	-0.5	-1.0	-0.7	2.3	-0.1	-0.1	-0.5	-0.2
2012/2013 to 2013/2014	-5.1	0.0	3.6	-1.6	-3.3	-2.0	-1.1	-0.1	-0.1	0.0	-2.7	-0.2	-2.0	-0.2	-0.3	-0.6	-0.3	1.1	-0.3
2013/2014 to 2014/2015	1.8	0.1	-0.4	-2.1	4.5	-0.4	-4.3	0.9	0.9	0.9	0.9	2.1	-1.6	1.3	0.7	1.3	3.4	0.3	0.9
2014/2015 to 2015/2016	-5.5	-0.5	-0.5	-1.4	-0.1	0.6	-5.0	0.4	-2.0	-0.8	-3.0	-0.3	-4.8	-1.8	-1.8	1.0	-0.2	1.9	-0.6

continued

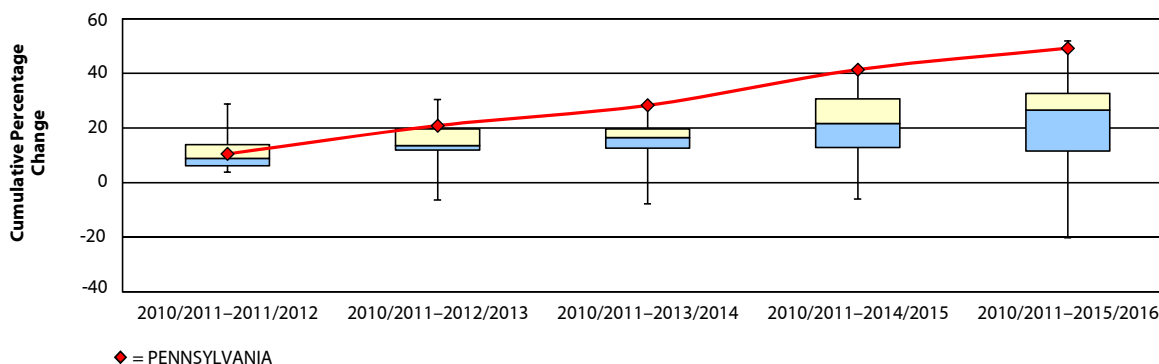
Table for Figure 73: Trend of Hospital Outpatient Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average hospital outpatient payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	-4.0	2.7	8.5	19.7	5.0	-0.7	13.9	-2.3	21.9	5.9	6.5	-4.0	12.7	1.4	4.1	6.4	7.9	4.2	5.5
2011/2012 to 2012/2013	9.2	4.5	7.3	-1.4	4.2	-17.0	5.5	1.0	5.1	4.8	-0.3	6.2	-2.4	10.1	6.5	2.2	0.5	1.4	4.4
2012/2013 to 2013/2014	-7.4	7.0	16.7	-3.0	0.5	-0.4	-1.1	2.9	-3.4	3.2	0.6	4.9	-3.9	-0.7	8.9	1.1	2.3	1.8	0.9
2013/2014 to 2014/2015	4.3	2.5	7.0	17.4	11.5	1.8	8.3	11.0	6.8	10.6	2.1	2.1	0.5	-7.7	4.6	14.0	14.7	9.7	6.9
2014/2015 to 2015/2016	-16.0	-2.1	-3.5	24.1	1.5	-1.3	-1.6	4.2	14.1	-1.2	4.8	4.2	20.8	15.2	4.5	11.0	7.1	3.6	4.2
Hospital outpatient services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	11.6	1.9	-3.5	-6.5	10.6	1.9	0.9	15.0	-0.4	-0.9	-1.5	0.0	-3.5	7.0	6.1	1.1	-7.2	-2.4	0.5
2011/2012 to 2012/2013	3.2	-1.4	-0.4	-0.4	-7.8	1.0	-6.0	-4.7	-2.5	-2.6	2.0	-4.8	4.5	-9.0	8.2	-1.1	7.7	3.6	-0.8
2012/2013 to 2013/2014	-0.3	-8.3	-2.8	4.1	3.7	-3.6	1.9	-6.0	0.6	-0.4	-0.9	6.3	-5.5	1.0	-3.7	3.2	0.8	5.5	0.1
2013/2014 to 2014/2015	-2.0	-2.7	-1.4	-23.2	-0.2	0.6	-16.6	-4.9	1.4	-2.4	-0.8	-4.6	-7.5	13.6	1.4	-5.9	-2.6	0.0	-2.2
2014/2015 to 2015/2016	-12.1	-1.4	6.9	-24.5	-2.2	5.7	-29.2	3.7	-13.8	0.6	-11.5	-6.7	-37.4	-15.5	-1.5	-6.2	-6.9	-3.2	-6.5
Hospital outpatient visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	10.9	-2.3	0.0	-10.7	6.8	0.0	0.4	14.9	-3.0	-0.7	-2.9	3.0	-4.8	-2.2	4.3	5.1	-12.0	-3.2	-0.4
2011/2012 to 2012/2013	2.5	0.8	2.1	-4.2	-8.6	-2.6	-9.1	-4.9	-3.9	-1.6	-0.6	0.5	3.4	-8.6	8.6	-1.1	9.3	1.7	-0.9
2012/2013 to 2013/2014	-1.3	-7.7	-10.4	2.4	2.9	-0.9	1.9	-7.9	0.5	-2.1	-0.5	-0.2	-7.8	-1.1	-3.8	3.0	-2.9	8.3	-1.0
2013/2014 to 2014/2015	-5.5	-4.7	2.0	-7.6	-3.0	0.9	-8.5	-6.6	7.5	-3.1	-2.1	-2.8	-9.1	12.9	4.3	0.4	-4.8	0.1	-2.9
2014/2015 to 2015/2016	-5.4	-2.3	2.9	-3.2	-0.8	6.3	-5.7	0.1	-12.1	1.4	-9.6	-7.0	-16.6	-15.1	-3.2	1.3	-4.3	-2.8	-3.2
Hospital outpatient services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	0.7	4.4	-3.4	4.7	3.5	2.0	0.5	0.0	2.8	-0.1	1.5	-2.9	1.3	9.5	1.7	-3.8	5.5	0.8	1.4
2011/2012 to 2012/2013	0.7	-2.1	-2.5	3.9	0.8	3.7	3.4	0.1	1.4	-1.0	2.6	-5.3	1.1	-0.5	-0.4	0.0	-1.4	1.8	0.4
2012/2013 to 2013/2014	0.9	-0.6	8.6	1.7	0.8	-2.8	0.0	2.0	0.1	1.7	-0.4	6.5	2.5	2.1	0.1	0.2	3.8	-2.6	0.9
2013/2014 to 2014/2015	3.7	2.1	-3.4	-16.9	2.9	-0.4	-8.9	1.8	-5.7	0.7	1.3	-1.8	1.7	0.6	-2.8	-6.3	2.3	-0.1	0.3
2014/2015 to 2015/2016	-7.1	0.9	3.9	-22.0	-1.4	-0.6	-24.9	3.6	-1.9	-0.7	-2.1	0.3	-25.0	-0.4	1.7	-7.4	-2.7	-0.4	-1.1

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 74 Trend of Hospital Outpatient Treatment/Operating/Recovery Room Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 74: Trend of Hospital Outpatient Treatment/Operating/Recovery Room Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average treatment/operating/recovery room payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	6.2	3.9	6.8	16.0	13.5	6.9	7.3	14.2	28.8	17.3	4.6	4.7	13.9	8.5	10.5	11.1	4.8	9.2	8.9
2012/2013	13.6	10.5	17.0	22.9	19.7	-6.4	13.5	7.7	30.4	11.9	1.9	13.0	22.8	16.7	20.9	13.9	12.0	13.1	13.6
2013/2014	13.7	9.5	19.6	17.0	12.6	-7.8	15.4	4.0	21.1	19.2	-4.3	18.1	17.7	21.0	28.3	15.3	20.4	15.9	16.5
2014/2015	19.3	11.1	16.5	31.0	28.3	-6.0	12.8	12.5	30.0	25.5	-2.6	14.0	13.8	30.7	41.4	23.9	39.4	34.0	21.6
2015/2016	-20.2	11.9	11.6	36.6	29.3	-1.9	-5.1	28.1	33.6	21.5	-0.6	26.1	20.8	31.7	49.2	27.0	51.9	32.6	26.5
Annual percentage change:																			
2010/2011 to 2011/2012	6.2	3.9	6.8	16.0	13.5	6.9	7.3	14.2	28.8	17.3	4.6	4.7	13.9	8.5	10.5	11.1	4.8	9.2	8.9
2011/2012 to 2012/2013	7.0	6.4	9.6	5.9	5.4	-12.4	5.8	-5.7	1.2	-4.6	-2.5	7.9	7.8	7.5	9.4	2.5	6.8	3.5	5.9
2012/2013 to 2013/2014	0.1	-0.9	2.2	-4.8	-5.9	-1.5	1.6	-3.5	-7.2	6.5	-6.2	4.5	-4.2	3.7	6.2	1.3	7.5	2.5	0.7
2013/2014 to 2014/2015	4.9	1.5	-2.6	12.0	14.0	1.9	-2.2	8.2	7.3	5.3	1.9	-3.5	-3.3	8.0	10.2	7.4	15.8	15.6	6.3
2014/2015 to 2015/2016	-33.1	0.7	-4.2	4.3	0.7	4.4	-15.9	13.9	2.7	-3.2	2.0	10.7	6.1	0.8	5.5	2.5	8.9	-1.0	2.3
Percentage of claims with treatment/operating/recovery room services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	2.6	-0.6	-0.5	0.3	0.9	-0.7	4.5	-0.5	-0.2	-0.4	-0.4	-1.5	-0.7	-0.4	-0.8	1.0	-2.4	-1.4	-0.5
2011/2012 to 2012/2013	2.1	-0.5	-0.4	-0.9	-3.1	-0.6	-1.8	-0.8	1.9	1.3	-0.3	-1.3	-2.7	-0.2	1.4	-0.5	0.8	-0.2	-0.4
2012/2013 to 2013/2014	-1.7	-0.2	1.3	-0.5	1.5	-1.1	0.0	0.4	-0.4	-0.2	0.6	1.4	-1.2	1.7	0.6	0.4	-1.3	1.4	0.2
2013/2014 to 2014/2015	2.1	-0.1	0.4	-1.9	1.4	-0.4	-0.6	-2.1	1.9	0.9	-0.8	-1.0	-0.9	-0.6	-1.1	0.4	1.6	0.6	-0.3
2014/2015 to 2015/2016	-2.0	-1.2	-0.1	-1.0	-1.3	0.0	1.0	-0.9	-1.2	-1.4	-1.4	-1.7	-3.2	-0.4	0.1	-0.1	-2.6	0.2	-1.1
Percentage of medical payments made for treatment/operating/recovery room services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	1.0	-0.3	-0.4	0.8	0.1	0.6	1.0	0.8	2.1	1.0	-0.4	-0.4	1.0	0.0	0.4	0.8	-0.4	0.2	0.5
2011/2012 to 2012/2013	1.1	0.1	0.0	0.2	0.2	0.1	-0.1	-1.2	0.9	-0.2	0.0	0.0	-0.4	0.1	0.5	-0.1	0.2	-0.3	0.0
2012/2013 to 2013/2014	-1.0	0.1	1.2	-1.1	-1.9	-0.7	-0.1	0.3	-0.7	0.6	-1.2	0.0	-0.1	0.6	0.2	-0.4	0.0	0.2	-0.1
2013/2014 to 2014/2015	0.9	0.2	-0.4	0.3	2.3	-0.3	-1.0	0.0	0.7	0.2	0.1	0.1	-0.4	0.2	0.3	0.9	1.7	0.7	0.2
2014/2015 to 2015/2016	-2.3	-0.4	-0.5	-0.2	0.3	0.3	-0.1	0.1	-0.3	-0.5	-0.3	0.5	0.5	-0.2	0.0	0.8	-0.1	0.5	-0.1

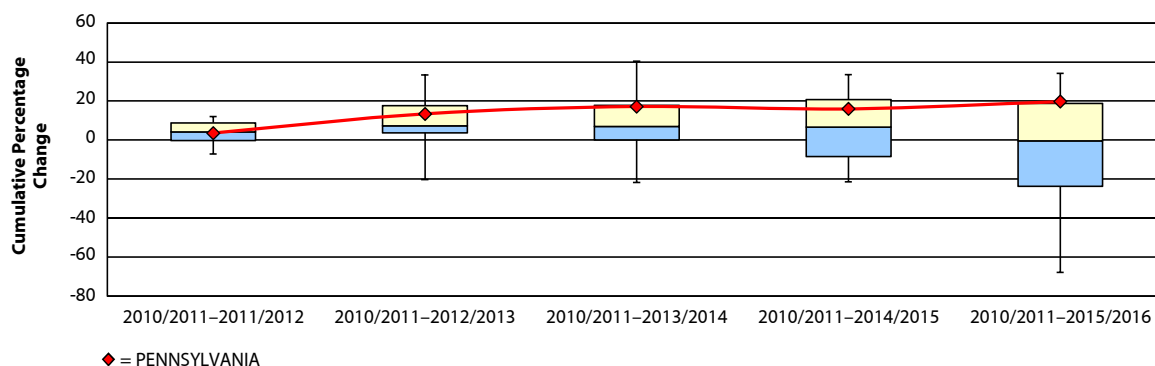
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Table for Figure 74: Trend of Hospital Outpatient Treatment/Operating/Recovery Room Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average treatment/operating/recovery room payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	-2.8	1.1	10.5	10.9	4.5	5.9	6.7	17.8	14.2	16.5	8.1	6.0	12.9	13.3	9.3	10.7	3.0	10.6	9.9
2011/2012 to 2012/2013	14.6	13.2	5.4	5.5	0.3	-11.3	4.6	-9.2	11.0	-1.4	-5.1	5.6	7.4	9.6	11.9	3.4	4.5	1.6	5.0
2012/2013 to 2013/2014	4.5	-0.3	11.2	-7.5	7.0	0.8	3.7	8.4	1.1	13.2	-6.0	6.1	-7.0	3.1	4.7	0.8	9.3	8.7	4.1
2013/2014 to 2014/2015	3.9	3.8	8.2	39.3	10.0	6.4	15.5	8.5	-3.0	3.8	1.0	2.3	-5.7	2.0	8.6	10.5	16.5	12.1	7.3
2014/2015 to 2015/2016	-23.5	4.9	-5.8	19.8	2.2	3.4	15.0	4.2	7.5	-2.8	4.2	7.4	29.4	3.7	10.0	7.6	7.4	3.5	4.5
Treatment/operating/recovery room services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	9.2	2.7	-3.3	4.6	8.7	0.9	0.6	-3.0	12.9	0.7	-3.3	-1.2	0.8	-4.2	1.1	0.3	1.7	-1.3	0.8
2011/2012 to 2012/2013	-6.6	-6.0	4.0	0.4	5.1	-1.2	1.2	3.8	-8.8	-3.3	2.7	2.2	0.4	-1.9	-2.3	-0.9	2.2	2.0	0.4
2012/2013 to 2013/2014	-4.2	-0.6	-8.1	3.0	-12.1	-2.2	-2.0	-11.0	-8.2	-5.9	-0.2	-1.5	3.0	0.6	1.4	0.4	-1.6	-5.7	-1.8
2013/2014 to 2014/2015	1.0	-2.2	-10.0	-19.7	3.6	-4.2	-15.3	-0.3	10.7	1.4	0.9	-5.6	2.6	5.9	1.5	-2.7	-0.6	3.1	0.3
2014/2015 to 2015/2016	-12.5	-4.0	1.6	-13.0	-1.4	1.0	-26.9	9.3	-4.4	-0.4	-2.1	3.0	-18.0	-2.7	-4.1	-4.7	1.4	-4.3	-3.4
Treatment/operating/recovery room visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	8.6	3.0	0.1	-0.1	6.7	3.2	-3.3	-7.0	3.8	-2.9	-1.7	-0.6	1.7	-1.7	0.7	3.9	-0.1	-0.9	0.0
2011/2012 to 2012/2013	-11.5	-4.1	9.3	-1.7	2.3	-2.3	5.7	16.6	-1.1	-3.0	0.0	9.2	-2.1	-2.1	0.2	-2.1	3.9	0.3	-0.5
2012/2013 to 2013/2014	-5.4	-0.3	-10.3	1.6	-10.7	-0.1	-2.9	-17.8	-10.5	-7.4	2.5	-0.1	0.5	0.0	-1.4	1.8	-1.0	-4.1	-1.2
2013/2014 to 2014/2015	-0.5	-1.0	-5.3	-7.7	0.3	-0.7	-6.2	0.2	17.4	1.2	2.7	-7.9	1.6	1.3	3.1	2.4	-3.8	6.7	0.3
2014/2015 to 2015/2016	-8.7	-2.0	-3.9	-2.6	-1.1	0.3	-7.3	7.4	-6.2	-3.6	-5.5	0.4	-5.4	-4.1	-0.2	-1.2	2.8	-4.6	-3.1
Treatment/operating/recovery room services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	0.5	-0.3	-3.5	4.7	1.8	-2.2	4.0	4.3	8.7	3.7	-1.6	-0.6	-0.8	-2.5	0.4	-3.4	1.8	-0.4	0.1
2011/2012 to 2012/2013	5.4	-1.9	-4.9	2.1	2.7	1.1	-4.2	-11.0	-7.8	-0.3	2.6	-6.4	2.6	0.2	-2.5	1.2	-1.6	1.7	0.0
2012/2013 to 2013/2014	1.3	-0.3	2.5	1.4	-1.6	-2.1	0.9	8.2	2.6	1.5	-2.7	-1.4	2.5	0.6	2.8	-1.3	-0.6	-1.7	0.7
2013/2014 to 2014/2015	1.5	-1.2	-5.0	-13.0	3.2	-3.6	-9.7	-0.6	-5.7	0.2	-1.8	2.4	1.0	4.5	-1.6	-5.0	3.3	-3.3	-1.4
2014/2015 to 2015/2016	-4.2	-2.0	5.7	-10.6	-0.3	0.6	-21.2	1.8	1.9	3.3	3.6	2.6	-13.3	1.4	-3.9	-3.6	-1.3	0.3	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 75 Trend of Hospital Outpatient Major Radiology Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 75: Trend of Hospital Outpatient Major Radiology Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average major radiology payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-0.3	10.8	9.6	3.2	10.8	-3.5	5.8	-1.7	0.0	3.8	4.9	-0.8	12.0	8.7	3.6	-7.1	7.8	4.6	4.2
2012/2013	6.0	33.4	17.6	6.0	18.1	-20.4	9.3	2.3	4.9	1.7	5.8	3.6	27.6	24.2	13.4	-5.0	8.5	11.6	7.3
2013/2014	2.8	40.4	32.9	0.7	23.3	-21.7	8.3	-4.2	-1.5	4.0	0.1	5.6	17.7	19.7	17.2	-8.2	16.7	16.6	7.0
2014/2015	-21.1	17.9	33.4	-17.7	21.8	-18.3	-8.5	2.8	-3.8	6.2	0.0	7.0	11.5	33.5	15.9	-21.4	24.1	20.7	6.6
2015/2016	-50.4	-14.5	34.2	-31.1	18.8	-17.1	-67.8	3.1	-4.1	6.8	-6.1	6.1	-27.0	20.6	19.7	-23.8	18.4	24.7	-0.5
Annual percentage change:																			
2010/2011 to 2011/2012	-0.3	10.8	9.6	3.2	10.8	-3.5	5.8	-1.7	0.0	3.8	4.9	-0.8	12.0	8.7	3.6	-7.1	7.8	4.6	4.2
2011/2012 to 2012/2013	6.3	20.4	7.3	2.7	6.6	-17.5	3.3	4.1	4.9	-2.0	0.8	4.4	13.9	14.3	9.5	2.3	0.7	6.7	4.6
2012/2013 to 2013/2014	-3.1	5.3	13.0	-5.0	4.4	-1.7	-0.8	-6.4	-6.0	2.3	-5.4	1.9	-7.7	-3.6	3.3	-3.4	7.5	4.5	-1.3
2013/2014 to 2014/2015	-23.2	-16.1	0.4	-18.2	-1.2	4.3	-15.6	7.3	-2.3	2.1	-0.1	1.3	-5.3	11.5	-1.1	-14.3	6.4	3.5	-0.6
2014/2015 to 2015/2016	-37.2	-27.5	0.6	-16.3	-2.4	1.5	-64.8	0.3	-0.4	0.6	-6.1	-0.8	-34.5	-9.7	3.2	-3.0	-4.6	3.3	-2.7
Percentage of claims with major radiology services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	2.0	0.0	0.2	-0.7	1.0	1.1	0.4	3.3	1.7	0.2	-0.5	0.3	-0.4	0.2	-1.1	0.0	0.4	0.7	0.3
2011/2012 to 2012/2013	-2.9	-0.1	0.6	-0.1	-0.7	-0.7	0.0	-3.0	0.4	1.0	0.8	1.3	0.4	1.0	2.7	-0.1	0.0	0.1	0.1
2012/2013 to 2013/2014	1.9	0.2	-0.5	-1.0	1.2	0.6	-0.2	-0.7	-1.0	-1.8	0.4	0.2	-1.6	-0.2	-1.3	-0.3	-1.4	0.7	-0.2
2013/2014 to 2014/2015	-3.6	0.3	1.0	0.8	-0.3	-0.5	0.4	1.2	1.2	0.2	1.5	0.2	0.3	0.1	-1.0	0.2	1.3	1.6	0.3
2014/2015 to 2015/2016	1.6	-0.3	0.3	-0.1	-2.3	0.0	0.4	-1.3	1.5	0.0	-1.4	-1.2	-1.2	0.2	-0.2	-0.3	-0.1	-0.3	-0.1
Percentage of medical payments made for major radiology services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	0.2	0.0	0.1	-0.1	0.0	0.1	-0.1	0.2	0.0	0.1	-0.1	0.0	0.2	0.1	-0.1	-0.2	0.3	0.2	0.0
2011/2012 to 2012/2013	-0.2	0.1	0.2	0.0	0.4	-0.1	0.0	-0.4	0.2	0.0	0.3	0.3	0.4	0.2	0.3	0.0	-0.3	0.1	0.1
2012/2013 to 2013/2014	-0.1	0.1	0.3	-0.2	-0.3	0.0	-0.1	-0.1	-0.3	-0.2	-0.4	-0.2	-0.4	-0.1	-0.2	-0.1	-0.1	0.1	-0.1
2013/2014 to 2014/2015	-1.2	0.0	0.1	-0.1	0.0	0.0	-0.4	0.4	-0.2	-0.1	0.3	0.3	0.0	0.1	-0.2	-0.1	0.4	-0.1	0.0
2014/2015 to 2015/2016	-0.5	-0.2	0.0	-0.1	-0.2	0.0	-1.0	-0.5	0.2	0.1	-0.4	-0.1	-0.8	-0.1	0.0	0.0	-0.1	0.3	-0.1

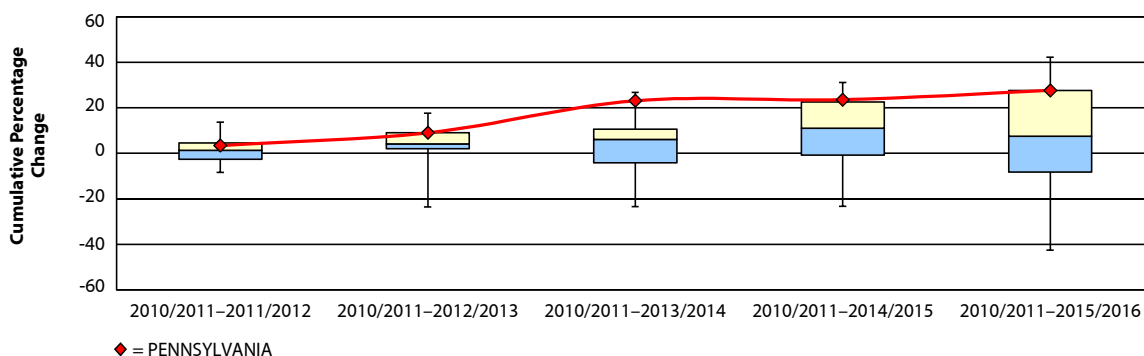
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Table for Figure 75: Trend of Hospital Outpatient Major Radiology Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average major radiology payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	5.7	9.1	12.1	6.9	11.0	0.3	2.9	4.8	11.7	4.8	8.2	-1.8	11.6	10.3	6.1	-1.4	6.2	4.5	6.2
2011/2012 to 2012/2013	5.9	26.0	9.5	-2.2	6.0	-18.3	3.0	-1.1	4.7	2.6	-2.0	2.9	7.1	10.3	9.6	1.8	1.4	7.8	3.9
2012/2013 to 2013/2014	-4.1	4.5	11.1	-4.3	3.2	3.3	-0.3	-0.8	-5.2	4.8	-2.5	3.2	-3.8	-1.9	3.2	-2.9	9.8	4.3	1.4
2013/2014 to 2014/2015	-23.7	-16.7	2.3	-11.1	1.7	0.2	-14.9	1.7	-0.2	-2.3	-4.6	3.0	-3.3	4.0	-4.6	-17.0	0.3	3.5	-1.3
2014/2015 to 2015/2016	-38.2	-26.7	-2.1	-18.8	-1.6	-0.1	-63.1	-0.6	-0.8	-1.9	-0.8	-5.3	-32.8	-6.0	5.3	1.9	4.6	3.0	-1.8
Major radiology services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	-5.6	1.6	-2.3	-3.5	-0.2	-3.8	2.8	-6.2	-10.4	-0.9	-3.0	1.1	0.4	-1.5	-2.4	-5.8	1.5	0.1	-1.9
2011/2012 to 2012/2013	0.4	-4.4	-1.9	5.1	0.5	1.0	0.2	5.3	0.1	-4.5	2.8	1.4	6.4	3.6	-0.1	0.5	-0.8	-1.0	0.4
2012/2013 to 2013/2014	1.1	0.7	1.8	-0.8	1.1	-4.9	-0.5	-5.6	-0.9	-2.4	-2.9	-1.2	-4.1	-1.8	0.1	-0.5	-2.1	0.2	-0.9
2013/2014 to 2014/2015	0.5	0.8	-1.9	-8.0	-2.9	4.1	-0.8	5.5	-2.1	4.5	4.8	-1.6	-2.1	7.2	3.7	3.2	6.0	0.0	0.7
2014/2015 to 2015/2016	1.7	-1.0	2.8	3.2	-0.8	1.6	-4.6	0.9	0.4	2.6	-5.4	4.8	-2.5	-3.9	-2.0	-4.8	-8.8	0.3	-0.2
Major radiology visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	-2.2	1.9	2.3	1.8	3.0	-1.7	3.9	0.4	-4.6	2.4	1.5	-1.0	0.8	0.6	-0.1	0.6	-2.2	0.1	0.6
2011/2012 to 2012/2013	0.3	1.1	-2.1	1.0	-2.2	0.6	-1.0	-2.4	-2.3	-1.5	0.2	1.3	3.9	2.5	0.9	-0.4	2.4	-0.1	0.2
2012/2013 to 2013/2014	-2.6	-2.8	-1.4	-2.0	1.6	-1.1	-3.1	-0.9	3.4	-1.7	-1.5	0.3	-5.7	-0.3	-1.5	0.4	-2.9	-0.5	-1.4
2013/2014 to 2014/2015	4.1	1.5	2.8	-2.4	-2.4	0.9	2.4	0.6	-2.8	2.2	1.0	0.5	1.0	0.7	1.4	-0.7	0.8	1.3	0.9
2014/2015 to 2015/2016	0.6	-0.2	0.0	0.6	-3.5	0.3	0.3	1.5	1.1	-1.0	-0.2	-0.5	-3.0	-1.4	-1.5	1.5	-5.9	-1.2	-0.2
Major radiology services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	-3.5	-0.3	-4.5	-5.1	-3.1	-2.2	-1.0	-6.5	-6.1	-3.2	-4.5	2.1	-0.4	-2.1	-2.3	-6.4	3.8	0.0	-2.7
2011/2012 to 2012/2013	0.1	-5.4	0.2	4.0	2.8	0.4	1.2	7.8	2.4	-3.0	2.6	0.1	2.4	1.1	-1.0	0.9	-3.1	-0.9	0.7
2012/2013 to 2013/2014	3.8	3.6	3.2	1.2	-0.4	-3.8	2.7	-4.8	-4.2	-0.7	-1.4	-1.5	1.7	-1.5	1.6	-0.9	0.8	0.7	0.2
2013/2014 to 2014/2015	-3.4	-0.7	-4.6	-5.8	-0.5	3.3	-3.1	4.9	0.8	2.3	3.7	-2.1	-3.1	6.5	2.2	3.9	5.2	-1.3	0.1
2014/2015 to 2015/2016	1.0	-0.8	2.9	2.6	2.8	1.4	-4.9	-0.5	-0.7	3.6	-5.1	5.2	0.5	-2.6	-0.5	-6.2	-3.1	1.5	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 76 Trend of Hospital Outpatient Minor Radiology Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 76: Trend of Hospital Outpatient Minor Radiology Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average minor radiology payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	7.9	1.4	4.5	5.0	13.6	-4.0	1.2	-2.6	10.9	3.4	-3.7	-8.4	-1.9	-2.6	3.4	-2.7	-0.7	4.1	1.3
2012/2013	12.0	4.1	17.6	6.8	13.5	-23.6	5.3	-1.8	10.7	2.0	3.4	-16.6	4.1	3.9	9.0	-4.3	3.5	5.0	4.1
2013/2014	-1.9	4.4	26.8	15.1	22.1	-23.5	10.6	-4.2	6.4	5.6	-1.5	-14.5	-5.0	8.7	23.1	-4.2	9.2	6.5	6.0
2014/2015	-6.0	22.6	31.1	27.2	23.5	-23.3	-0.8	4.5	11.2	11.0	-0.5	-6.9	-3.3	14.9	23.5	11.1	8.6	14.3	11.0
2015/2016	-42.6	28.6	28.8	42.2	11.5	-25.4	-39.5	4.1	3.7	6.9	-1.0	-8.3	-22.2	8.1	27.6	28.5	12.3	11.2	7.5
Annual percentage change:																			
2010/2011 to 2011/2012	7.9	1.4	4.5	5.0	13.6	-4.0	1.2	-2.6	10.9	3.4	-3.7	-8.4	-1.9	-2.6	3.4	-2.7	-0.7	4.1	1.3
2011/2012 to 2012/2013	3.8	2.6	12.5	1.7	-0.1	-20.4	4.1	0.8	-0.2	-1.3	7.4	-9.0	6.1	6.7	5.4	-1.6	4.2	0.9	2.2
2012/2013 to 2013/2014	-12.4	0.3	7.8	7.8	7.5	0.1	5.0	-2.4	-3.8	3.5	-4.8	2.6	-8.7	4.6	12.9	0.1	5.5	1.4	2.0
2013/2014 to 2014/2015	-4.2	17.4	3.4	10.5	1.2	0.3	-10.2	9.0	4.5	5.1	1.0	8.9	1.8	5.8	0.4	15.9	-0.6	7.4	3.9
2014/2015 to 2015/2016	-39.0	4.9	-1.8	11.7	-9.8	-2.8	-39.1	-0.4	-6.7	-3.7	-0.5	-1.6	-19.6	-6.0	3.3	15.6	3.4	-2.7	-2.3
Percentage of claims with minor radiology services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	1.5	0.3	-0.6	-0.9	1.2	0.7	1.7	-0.5	-0.7	0.5	0.8	0.4	0.3	-0.3	-2.1	0.9	-3.7	1.5	0.4
2011/2012 to 2012/2013	3.2	-1.3	0.2	-0.5	-1.6	-0.8	-2.5	-0.6	-0.5	-1.5	-0.4	1.6	-0.3	0.0	2.1	-0.4	0.5	0.0	-0.4
2012/2013 to 2013/2014	-3.2	-0.6	-0.6	-1.4	3.1	-1.0	-0.1	-2.5	-1.0	-1.6	-0.1	0.1	-1.3	-0.3	-1.9	-0.2	-1.4	-0.1	-0.8
2013/2014 to 2014/2015	-0.7	-0.5	0.1	-0.6	1.6	1.0	-0.8	-0.5	-0.1	1.3	3.0	-2.2	-0.8	0.0	-2.6	-0.6	0.3	1.8	-0.3
2014/2015 to 2015/2016	-1.8	-1.5	-1.6	-6.4	-6.1	-1.3	-10.5	-1.3	-1.3	-2.5	-2.2	0.6	-8.2	-1.9	-1.2	-7.1	-2.8	0.9	-1.8
Percentage of medical payments made for minor radiology services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.0	-0.2	0.1	0.0
2011/2012 to 2012/2013	0.1	0.0	0.1	0.0	0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
2012/2013 to 2013/2014	-0.3	0.0	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0
2013/2014 to 2014/2015	-0.1	0.0	-0.1	0.0	0.1	0.0	-0.2	0.1	-0.1	0.0	0.1	0.1	0.1	0.1	-0.1	0.1	0.0	0.0	0.0
2014/2015 to 2015/2016	-0.3	0.0	-0.2	-0.1	-0.3	-0.1	-0.5	-0.2	-0.2	-0.1	-0.1	0.0	-0.5	-0.1	0.0	0.0	0.0	0.1	-0.1

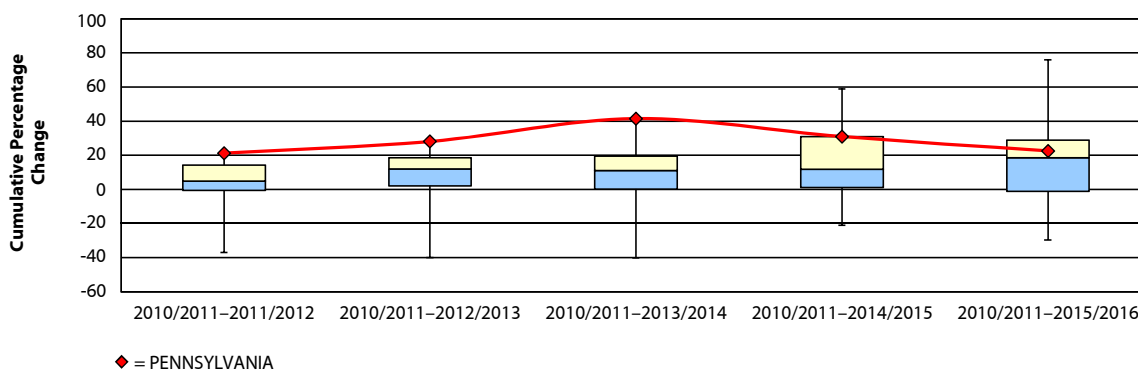
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Table for Figure 76: Trend of Hospital Outpatient Minor Radiology Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average minor radiology payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	6.8	-1.4	5.8	6.7	6.8	-3.0	-0.1	-2.9	11.4	3.4	-0.9	-8.9	5.1	2.8	3.2	-2.3	1.4	3.0	2.9
2011/2012 to 2012/2013	16.6	5.2	8.2	3.8	3.6	-20.9	3.2	2.8	5.0	1.6	2.9	-1.8	6.7	4.7	6.2	-1.7	2.7	2.3	3.4
2012/2013 to 2013/2014	-15.5	0.9	9.9	10.6	7.6	0.5	3.7	6.3	-8.6	3.6	-3.1	1.4	-6.1	4.1	9.1	-1.6	8.4	-0.4	2.5
2013/2014 to 2014/2015	-3.8	15.7	4.0	4.9	2.4	2.5	-9.7	-3.0	0.4	0.8	-4.5	8.4	-4.6	1.8	-0.2	13.7	0.4	4.8	1.3
2014/2015 to 2015/2016	-37.1	4.3	-5.0	17.4	-3.3	-2.4	-34.7	3.4	1.5	-0.5	1.4	-1.2	-11.1	-4.0	2.7	21.7	5.7	-1.2	-0.9
Minor radiology services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	1.0	2.9	-1.2	-1.6	6.4	-1.0	1.3	0.3	-0.5	0.0	-2.8	0.6	-6.7	-5.3	0.2	-0.4	-2.0	1.1	-0.2
2011/2012 to 2012/2013	-11.0	-2.4	4.0	-2.0	-3.6	0.6	0.9	-1.9	-4.9	-2.9	4.3	-7.3	-0.6	2.0	-0.8	0.0	1.5	-1.4	-1.1
2012/2013 to 2013/2014	3.7	-0.5	-1.9	-2.6	-0.1	-0.4	1.2	-8.2	5.3	-0.1	-1.7	1.2	-2.8	0.5	3.5	1.7	-2.7	1.8	-0.1
2013/2014 to 2014/2015	-0.4	1.5	-0.6	5.3	-1.2	-2.2	-0.6	12.4	4.1	4.3	5.8	0.5	6.7	3.9	0.5	2.0	-1.0	2.4	1.7
2014/2015 to 2015/2016	-2.9	0.6	3.4	-4.8	-6.7	-0.4	-6.7	-3.6	-8.1	-3.2	-1.8	-0.4	-9.5	-2.0	0.6	-5.0	-2.1	-1.5	-2.5
Minor radiology visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	5.3	2.0	2.3	-2.1	3.0	-0.6	1.1	-2.9	-1.5	-0.1	0.1	1.1	-5.9	-2.5	0.4	0.9	-4.1	-1.0	0.0
2011/2012 to 2012/2013	-7.5	-1.5	0.1	-2.3	-1.9	-1.2	-1.9	0.3	-3.1	-0.2	2.2	-1.7	-0.7	-1.7	0.7	0.7	0.4	-0.9	-1.1
2012/2013 to 2013/2014	4.2	0.0	-1.4	1.1	2.8	0.3	3.0	-6.6	5.3	-1.5	0.1	-1.0	-4.1	1.3	1.1	0.2	-2.2	3.5	0.3
2013/2014 to 2014/2015	-3.7	0.5	0.6	1.6	-2.8	-1.5	-0.3	3.8	2.5	2.2	1.0	-0.5	6.0	-0.7	1.2	0.4	0.3	2.3	0.6
2014/2015 to 2015/2016	0.2	1.5	-1.6	1.5	-2.2	0.3	0.8	1.1	-2.9	-3.3	0.9	-0.2	-5.4	0.2	-1.1	2.6	-1.3	-2.9	0.0
Minor radiology services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	-4.1	0.8	-3.4	0.5	3.3	-0.4	0.2	3.3	1.0	0.1	-2.9	-0.5	-0.8	-2.9	-0.2	-1.3	2.1	2.1	0.0
2011/2012 to 2012/2013	-3.7	-0.9	3.9	0.3	-1.8	1.8	2.9	-2.2	-1.9	-2.7	2.1	-5.7	0.1	3.7	-1.4	-0.7	1.1	-0.4	-0.6
2012/2013 to 2013/2014	-0.4	-0.5	-0.5	-3.7	-2.8	-0.7	-1.7	-1.7	-0.1	1.5	-1.8	2.2	1.4	-0.8	2.4	1.5	-0.5	-1.6	-0.5
2013/2014 to 2014/2015	3.4	1.0	-1.2	3.7	1.6	-0.6	-0.2	8.4	1.5	2.0	4.7	1.0	0.7	4.7	-0.7	1.5	-1.3	0.1	1.2
2014/2015 to 2015/2016	-3.1	-1.0	5.2	-6.2	-4.6	-0.7	-7.5	-4.7	-5.4	0.1	-2.7	-0.1	-4.3	-2.3	1.7	-7.4	-0.9	1.4	-2.5

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 77 Trend of Hospital Outpatient Laboratory Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 77: Trend of Hospital Outpatient Laboratory Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average laboratory payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	18.5	7.4	7.0	-3.4	7.1	-0.7	4.5	21.1	14.3	-2.0	2.0	-1.3	4.1	2.9	21.2	-37.0	14.8	5.1	4.8
2012/2013	8.5	12.1	18.5	-9.4	14.8	-16.6	21.8	0.9	21.2	2.0	11.8	2.9	26.2	16.3	28.1	-40.0	8.4	16.2	11.9
2013/2014	16.2	10.6	34.1	-13.3	32.0	-12.9	11.1	-5.6	17.1	0.2	5.7	12.2	19.4	20.3	41.4	-40.1	11.1	10.9	11.1
2014/2015	45.5	12.1	58.8	-21.1	18.1	-11.9	-0.1	-5.5	18.8	1.0	4.9	11.5	11.2	27.4	30.9	9.3	34.2	34.3	11.8
2015/2016	-9.8	28.1	52.1	-10.1	33.1	-10.1	-29.7	13.0	13.5	-0.7	-1.2	15.7	21.4	22.7	22.5	76.0	28.9	38.7	18.6
Annual percentage change:																			
2010/2011 to 2011/2012	18.5	7.4	7.0	-3.4	7.1	-0.7	4.5	21.1	14.3	-2.0	2.0	-1.3	4.1	2.9	21.2	-37.0	14.8	5.1	4.8
2011/2012 to 2012/2013	-8.4	4.3	10.7	-6.2	7.2	-16.0	16.5	-16.7	6.1	4.1	9.6	4.3	21.2	13.0	5.7	-4.7	-5.5	10.5	5.0
2012/2013 to 2013/2014	7.1	-1.3	13.2	-4.4	14.9	4.4	-8.7	-6.5	-3.4	-1.8	-5.4	9.0	-5.4	3.4	10.4	-0.2	2.5	-4.5	-0.7
2013/2014 to 2014/2015	25.2	1.3	18.4	-9.0	-10.5	1.2	-10.1	0.1	1.5	0.9	-0.8	-0.6	-6.9	5.9	-7.4	82.4	20.8	21.1	1.0
2014/2015 to 2015/2016	-38.1	14.3	-4.2	14.0	12.7	2.1	-29.7	19.6	-4.4	-1.7	-5.8	3.8	9.2	-3.7	-6.4	61.1	-3.9	3.2	0.2
Percentage of claims with laboratory services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	-0.2	0.1	-0.5	-0.2	1.0	-0.7	2.5	2.9	-0.9	0.5	-0.5	0.6	0.1	-0.6	0.2	0.6	-0.5	-0.2	-0.1
2011/2012 to 2012/2013	1.4	-0.8	-0.4	0.6	-2.5	-0.6	-1.6	-2.7	0.5	0.7	0.1	0.9	-1.1	0.1	1.1	-0.1	0.7	-0.2	0.0
2012/2013 to 2013/2014	-1.5	-0.6	0.2	-1.4	1.4	-0.7	0.1	2.2	-1.4	0.5	-0.5	0.4	-1.6	-0.5	-0.6	-1.4	-1.5	-1.0	-0.6
2013/2014 to 2014/2015	-1.2	-1.3	-0.8	-7.2	0.3	-0.5	-3.4	-1.8	0.4	-0.5	-0.6	-0.9	-0.9	-0.2	-1.3	-11.1	1.0	0.4	-0.8
2014/2015 to 2015/2016	-3.0	-2.6	-0.2	-6.4	-1.8	-1.2	-12.6	-1.5	0.1	-0.5	-0.9	-0.2	-11.3	-1.1	-1.0	-3.6	-2.6	0.1	-1.3
Percentage of medical payments made for laboratory services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.1	0.0	0.0
2011/2012 to 2012/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	-0.1	0.0	0.0
2012/2013 to 2013/2014	0.0	0.0	0.1	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013/2014 to 2014/2015	0.4	0.0	0.0	-0.3	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	0.1	-0.1	0.0	0.1	0.0	0.0
2014/2015 to 2015/2016	-0.4	0.0	0.0	-0.1	0.1	0.0	-0.2	0.2	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.0	-0.1	0.1	0.0

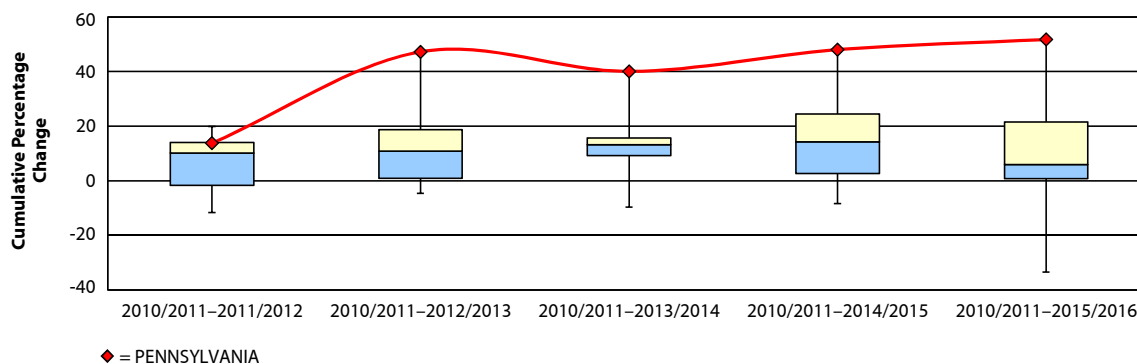
continued

Table for Figure 77: Trend of Hospital Outpatient Laboratory Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average laboratory payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	-3.4	0.2	10.0	-2.1	10.3	-4.3	3.6	7.9	5.9	-6.3	0.3	0.1	7.6	3.8	10.1	-37.0	9.1	-1.9	1.9
2011/2012 to 2012/2013	13.3	7.1	9.5	-5.4	3.3	-12.4	5.8	-8.6	6.2	6.9	9.1	4.7	10.1	7.6	9.4	-4.8	-1.6	5.4	6.0
2012/2013 to 2013/2014	1.9	2.0	15.4	-5.9	6.0	6.2	7.9	3.9	-7.9	4.0	2.3	5.6	-1.7	3.6	13.6	0.6	6.6	4.7	4.0
2013/2014 to 2014/2015	31.0	2.1	17.4	12.5	3.8	6.4	0.2	0.0	1.7	5.9	-5.4	-0.8	-2.4	5.3	-5.9	125.9	11.5	18.5	4.5
2014/2015 to 2015/2016	-40.7	21.8	-6.6	28.2	-2.0	-2.7	-20.0	1.8	6.5	-0.6	-0.8	4.1	18.0	-5.5	-1.2	67.9	3.2	-3.6	-0.7
Laboratory services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	22.7	7.2	-2.7	-1.4	-2.9	3.8	0.9	12.2	7.9	4.6	1.7	-1.4	-3.2	-0.8	10.1	-0.1	5.2	7.1	2.8
2011/2012 to 2012/2013	-19.2	-2.7	1.1	-0.8	3.7	-4.2	10.1	-8.8	-0.1	-2.6	0.4	-0.4	10.1	5.0	-3.4	0.1	-3.9	4.9	-0.2
2012/2013 to 2013/2014	5.1	-3.3	-1.9	1.6	8.4	-1.7	-15.4	-10.0	4.9	-5.7	-7.5	3.2	-3.8	-0.1	-2.8	-0.8	-3.9	-8.8	-2.3
2013/2014 to 2014/2015	-4.4	-0.8	0.9	-19.1	-13.7	-4.9	-10.3	0.0	-0.2	-4.7	4.9	0.2	-4.6	0.6	-1.6	-19.2	8.3	2.2	-1.2
2014/2015 to 2015/2016	4.4	-6.2	2.6	-11.1	15.0	5.0	-12.1	17.5	-10.2	-1.1	-5.1	-0.4	-7.5	1.9	-5.3	-4.1	-7.0	7.1	-2.6
Laboratory visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	8.1	2.4	-1.9	-2.0	-1.6	0.7	3.0	5.1	1.1	4.6	4.0	-5.3	-1.8	-6.6	4.4	2.9	1.4	9.1	1.9
2011/2012 to 2012/2013	-10.3	-0.7	1.0	0.2	4.6	-1.0	2.6	-3.3	-0.6	-4.2	-6.3	6.0	3.5	2.9	-2.3	-1.3	-3.2	-1.1	-0.8
2012/2013 to 2013/2014	5.6	-1.8	-0.5	3.8	7.4	-1.9	-7.8	-9.9	8.3	2.5	-0.5	0.9	3.3	-2.4	-0.9	-0.7	-1.6	-1.0	-0.6
2013/2014 to 2014/2015	-5.6	-2.4	-0.6	-15.3	-8.7	-1.3	-11.1	0.1	-7.0	-4.4	-0.6	5.5	-7.8	3.8	-0.6	-12.9	6.1	0.9	-1.8
2014/2015 to 2015/2016	8.5	-2.3	-0.8	-2.3	6.3	0.3	1.0	10.0	-3.7	-1.9	-3.1	-5.0	-4.7	-0.9	-3.5	2.1	-6.5	-0.9	-1.4
Laboratory services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	13.5	4.7	-0.9	0.6	-1.2	3.1	-2.0	6.8	6.7	0.0	-2.2	4.1	-1.5	6.1	5.4	-3.0	3.8	-1.8	1.9
2011/2012 to 2012/2013	-10.0	-2.0	0.2	-1.0	-0.8	-3.2	7.4	-5.6	0.5	1.7	7.2	-6.1	6.4	2.0	-1.1	1.4	-0.7	6.0	-0.3
2012/2013 to 2013/2014	-0.5	-1.5	-1.4	-2.1	0.9	0.1	-8.2	-0.1	-3.1	-8.0	-7.1	2.3	-6.8	2.3	-1.9	-0.1	-2.3	-7.8	-1.7
2013/2014 to 2014/2015	1.2	1.6	1.5	-4.5	-5.5	-3.7	1.0	0.0	7.3	-0.3	5.5	-5.0	3.4	-3.0	-1.0	-7.3	2.1	1.3	0.5
2014/2015 to 2015/2016	-3.8	-3.9	3.4	-9.0	8.2	4.6	-13.0	6.8	-6.8	0.7	-2.0	4.9	-2.9	2.8	-1.8	-6.0	-0.5	8.0	-1.2

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 78 Trend of Hospital Outpatient Physical Medicine Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 78: Trend of Hospital Outpatient Physical Medicine Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average physical medicine payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	17.7	16.8	19.9	-3.2	17.8	0.6	1.9	9.7	7.3	-2.0	10.5	-2.5	14.0	12.7	13.7	11.7	-11.7	-1.7	10.1
2012/2013	36.8	20.4	-2.6	13.7	16.8	-4.2	0.9	12.6	9.0	-4.6	8.9	3.9	32.3	18.7	47.2	13.3	-0.4	7.2	10.8
2013/2014	20.5	12.5	-0.8	9.7	25.1	-9.7	9.2	9.9	13.8	-1.1	15.7	5.9	15.7	11.3	40.1	24.4	14.8	15.5	13.1
2014/2015	20.9	29.3	9.8	2.6	25.7	-2.8	-8.4	20.4	1.5	0.1	18.3	9.8	5.8	24.5	48.0	26.1	10.2	22.9	14.2
2015/2016	-5.0	38.5	8.1	12.1	21.6	0.7	-24.3	40.9	6.2	2.6	5.6	5.1	-33.5	-1.0	51.8	20.4	3.6	22.8	5.9
Annual percentage change:																			
2010/2011 to 2011/2012	17.7	16.8	19.9	-3.2	17.8	0.6	1.9	9.7	7.3	-2.0	10.5	-2.5	14.0	12.7	13.7	11.7	-11.7	-1.7	10.1
2011/2012 to 2012/2013	16.3	3.1	-18.7	17.5	-0.8	-4.7	-0.9	2.6	1.6	-2.7	-1.4	6.6	16.1	5.3	29.4	1.4	12.8	9.0	2.8
2012/2013 to 2013/2014	-11.9	-6.6	1.8	-3.6	7.2	-5.7	8.2	-2.4	4.4	3.6	6.2	1.9	-12.6	-6.3	-4.9	9.8	15.2	7.8	1.9
2013/2014 to 2014/2015	0.3	15.0	10.7	-6.4	0.4	7.5	-16.1	9.6	-10.8	1.3	2.2	3.8	-8.5	11.9	5.7	1.4	-4.0	6.4	1.8
2014/2015 to 2015/2016	-21.4	7.1	-1.6	9.3	-3.2	3.7	-17.4	17.0	4.7	2.5	-10.7	-4.3	-37.2	-20.5	2.5	-4.6	-5.9	-0.1	-2.4
Percentage of claims with physical medicine services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	2.8	-0.9	-0.5	-1.1	0.1	0.1	-1.1	3.5	0.2	-0.2	-2.5	0.9	-1.3	-0.3	-0.7	1.2	-1.0	-0.1	-0.3
2011/2012 to 2012/2013	0.3	0.0	0.1	-1.2	-2.2	-0.9	-2.5	-3.1	-1.1	-0.9	0.5	-1.5	-0.1	-1.1	2.3	-0.5	0.2	-0.3	-0.7
2012/2013 to 2013/2014	-1.5	-0.9	-0.4	0.3	0.3	0.3	-0.6	-1.4	0.1	-0.7	-0.5	1.0	-1.6	-0.4	-1.7	0.3	-0.9	2.9	-0.4
2013/2014 to 2014/2015	-3.7	-0.6	0.1	-1.0	0.4	-0.7	-2.0	-2.0	1.7	-0.5	-1.8	-0.2	-1.1	0.6	0.7	-0.1	-0.3	0.1	-0.4
2014/2015 to 2015/2016	0.8	-0.5	0.4	-0.8	-2.5	0.7	-0.6	-0.6	-2.4	0.2	-2.0	-2.1	-1.8	-1.7	-1.7	0.2	0.0	0.0	-0.6
Percentage of medical payments made for physical medicine services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	1.2	0.1	0.0	-0.2	0.2	0.2	-0.7	1.2	0.0	-0.2	-0.5	0.0	0.0	0.1	0.4	0.3	-0.7	-0.4	0.0
2011/2012 to 2012/2013	0.8	0.0	-0.1	0.0	-0.2	0.2	-0.5	-0.9	-0.3	-0.4	0.3	-0.1	0.3	-0.2	2.0	0.0	0.2	0.1	0.0
2012/2013 to 2013/2014	-1.3	-0.1	0.0	0.1	-0.3	-0.3	0.1	-0.1	0.4	0.1	-0.1	0.0	-0.5	-0.2	-1.3	0.0	0.2	0.8	0.0
2013/2014 to 2014/2015	-0.8	-0.1	0.0	-0.3	0.1	0.0	-1.0	-0.1	-0.3	-0.3	-0.2	0.5	-0.3	0.3	0.5	0.0	-0.3	-0.3	-0.2
2014/2015 to 2015/2016	-0.2	0.0	0.0	0.0	-0.3	0.3	-0.2	0.1	-0.5	0.3	-1.3	-0.6	-0.8	-0.7	-0.8	0.0	-0.1	0.3	-0.2

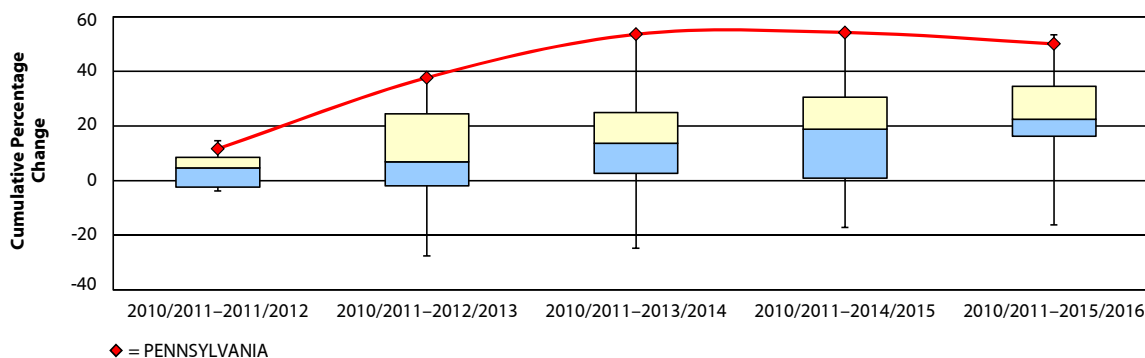
continued

Table for Figure 78: Trend of Hospital Outpatient Physical Medicine Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average physical medicine payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	7.4	4.8	18.5	4.5	4.4	-3.8	1.6	0.8	15.5	-1.5	4.8	-5.7	7.0	-3.2	11.7	11.3	5.5	1.2	4.7
2011/2012 to 2012/2013	13.1	2.4	-10.1	11.6	6.6	-8.0	2.9	0.4	-0.6	-2.5	0.1	5.9	5.9	12.9	20.3	0.6	2.2	3.6	2.7
2012/2013 to 2013/2014	-15.0	-1.5	13.4	15.9	3.5	1.1	-0.4	1.7	5.5	0.1	5.2	1.2	-8.3	-10.2	1.7	5.0	5.1	5.1	1.7
2013/2014 to 2014/2015	-9.6	6.7	4.7	-7.3	3.0	1.7	-9.1	15.3	-2.7	4.5	-2.1	8.6	3.2	-4.7	4.9	-5.3	4.6	7.6	3.1
2014/2015 to 2015/2016	-7.6	-7.0	-5.3	8.9	0.6	-0.4	-12.6	12.7	15.4	5.2	0.5	-0.5	-30.6	-8.7	-3.3	1.8	3.7	4.1	0.1
Physical medicine services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	9.6	11.4	1.2	-7.3	12.8	4.5	0.3	8.9	-7.1	-0.6	5.4	3.4	6.5	16.5	1.8	0.4	-16.3	-2.8	2.6
2011/2012 to 2012/2013	2.8	0.7	-9.6	5.2	-7.0	3.6	-3.8	2.2	2.3	-0.2	-1.5	0.6	9.6	-6.7	7.6	0.8	10.4	5.2	1.5
2012/2013 to 2013/2014	3.6	-5.1	-10.2	-16.8	3.5	-6.7	8.6	-4.1	-1.1	3.5	1.0	0.7	-4.6	4.4	-6.5	4.5	9.7	2.5	0.8
2013/2014 to 2014/2015	10.9	7.8	5.8	1.0	-2.5	5.7	-7.7	-5.0	-8.3	-3.1	4.4	-4.4	-11.3	17.3	0.8	7.1	-8.2	-1.1	-0.2
2014/2015 to 2015/2016	-15.0	15.2	3.9	0.4	-3.9	4.1	-5.5	3.8	-9.3	-2.6	-11.1	-3.8	-9.5	-13.0	6.0	-6.3	-9.3	-4.0	-3.9
Physical medicine visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	1.1	8.8	-1.4	-11.3	8.6	0.6	4.3	9.4	-4.0	0.7	2.0	-1.2	7.0	0.5	1.2	0.1	-16.4	-3.2	0.6
2011/2012 to 2012/2013	10.7	5.0	-9.0	7.2	-6.7	1.0	-2.8	2.8	-0.1	1.0	-2.3	2.4	2.5	-4.2	5.3	0.4	12.4	3.2	1.7
2012/2013 to 2013/2014	0.9	-4.6	-15.0	-13.3	3.0	-5.4	4.8	-4.2	0.0	2.5	-1.4	-3.5	-6.0	1.2	-4.2	2.4	3.3	3.7	-0.7
2013/2014 to 2014/2015	2.2	-5.3	7.2	2.0	-5.1	2.3	-6.4	-0.8	-3.5	-1.0	4.0	-3.7	-8.5	12.9	0.4	5.6	-7.4	-1.3	-0.9
2014/2015 to 2015/2016	-7.0	0.2	1.7	0.1	0.5	3.3	-2.8	-1.4	-5.0	1.0	-8.7	-2.7	-5.4	-10.6	3.2	-2.5	-9.2	-2.9	-2.6
Physical medicine services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	8.4	2.3	2.6	4.5	3.9	4.0	-3.9	-0.5	-3.2	-1.2	3.3	4.6	-0.4	15.9	0.7	0.3	0.2	0.4	1.5
2011/2012 to 2012/2013	-7.2	-4.1	-0.6	-1.8	-0.3	2.6	-1.0	-0.6	2.4	-1.2	0.7	-1.7	7.0	-2.6	2.1	0.4	-1.8	1.9	-0.6
2012/2013 to 2013/2014	2.7	-0.6	5.6	-4.0	0.5	-1.4	3.7	0.1	-1.1	1.0	2.5	4.4	1.4	3.2	-2.4	2.1	6.2	-1.2	1.2
2013/2014 to 2014/2015	8.6	13.8	-1.3	-1.0	2.7	3.4	-1.4	-4.2	-5.0	-2.1	0.4	-0.8	-3.0	3.9	0.3	1.4	-0.9	0.2	-0.3
2014/2015 to 2015/2016	-8.6	15.0	2.2	0.3	-4.4	0.7	-2.8	5.3	-4.6	-3.5	-2.6	-1.2	-4.3	-2.6	2.7	-3.8	-0.1	-1.1	-1.9

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 79 Trend of Hospital Outpatient Clinic/Evaluation and Management Average Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 79: Trend of Hospital Outpatient Clinic/Evaluation and Management Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months)**

	AR ^a	CA	FL	GA	IA	IL	IN	KY	LA ^b	MA	MI	MN	NC	NJ	PA	TX	VA	WI	17-State Median ^c
Average clinic/evaluation and management payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	n/a	-3.2	-3.8	4.1	8.8	-2.7	5.8	14.6	8.2	-3.7	0.3	8.0	4.6	6.9	11.7	-2.2	11.2	1.4	4.6
2012/2013	n/a	-11.4	6.9	-2.4	25.1	-27.6	12.0	2.2	26.2	-4.6	5.9	20.5	-1.5	27.7	37.7	1.8	23.9	17.7	6.9
2013/2014	n/a	1.0	22.8	13.8	26.2	-24.8	21.9	4.2	32.0	-8.6	8.8	23.5	5.7	27.4	53.6	-5.4	13.7	5.5	13.7
2014/2015	n/a	-1.6	23.6	2.8	37.0	-17.1	18.8	17.6	29.1	-7.2	9.2	31.6	1.7	44.0	54.3	0.1	29.6	21.1	18.8
2015/2016	n/a	17.4	21.4	38.6	22.5	-16.2	22.3	31.0	53.4	-7.4	19.9	26.1	-9.2	38.2	50.1	15.1	27.9	23.0	22.5
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	-3.2	-3.8	4.1	8.8	-2.7	5.8	14.6	8.2	-3.7	0.3	8.0	4.6	6.9	11.7	-2.2	11.2	1.4	4.6
2011/2012 to 2012/2013	n/a	-8.5	11.1	-6.2	15.0	-25.6	5.8	-10.8	16.7	-0.9	5.6	11.5	-5.8	19.5	23.3	4.1	11.4	16.1	5.8
2012/2013 to 2013/2014	n/a	14.0	14.9	16.5	0.9	3.7	8.9	2.0	4.6	-4.2	2.7	2.5	7.3	-0.3	11.5	-7.1	-8.2	-10.4	2.7
2013/2014 to 2014/2015	n/a	-2.6	0.6	-9.7	8.6	10.3	-2.5	12.9	-2.2	1.5	0.4	6.5	-3.8	13.0	0.4	5.8	14.0	14.8	1.5
2014/2015 to 2015/2016	n/a	19.3	-1.8	34.8	-10.6	1.1	2.9	11.3	18.8	-0.2	9.8	-4.2	-10.7	-4.0	-2.7	15.1	-1.3	1.6	1.1
Percentage of claims with clinic/evaluation and management services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	0.0	0.2	-0.3	-1.8	-0.1	1.5	1.4	-1.7	-0.8	3.5	5.5	-0.6	-0.8	1.8	0.7	-0.9	-0.6	-0.1
2011/2012 to 2012/2013	n/a	-0.7	0.5	-0.3	-0.9	1.0	-1.1	1.1	-0.2	-1.2	-1.6	1.0	0.3	-0.4	2.7	-0.6	-0.5	-0.5	-0.4
2012/2013 to 2013/2014	n/a	-0.7	-0.4	-0.2	1.0	0.0	-0.7	-0.7	-1.2	-3.0	0.6	-2.5	1.1	-0.5	-1.9	0.8	2.0	1.7	-0.4
2013/2014 to 2014/2015	n/a	0.2	-0.3	0.0	0.8	1.6	1.4	-2.1	1.7	-0.9	-0.9	1.6	0.4	0.3	0.6	-0.2	0.6	1.8	0.4
2014/2015 to 2015/2016	n/a	0.0	0.2	-0.3	-1.5	1.1	-0.4	0.7	-0.6	-1.2	0.6	-1.3	-1.4	-0.1	-2.0	-0.4	1.1	0.8	-0.3
Percentage of medical payments made for clinic/evaluation and management services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	n/a	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	0.1	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2011/2012 to 2012/2013	n/a	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
2012/2013 to 2013/2014	n/a	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.2	0.0	-0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2013/2014 to 2014/2015	n/a	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0
2014/2015 to 2015/2016	n/a	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.1	0.0

continued

Table for Figure 79: Trend of Hospital Outpatient Clinic/Evaluation and Management Average Payment per Claim and Other Metrics for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR ^a	CA	FL	GA	IA	IL	IN	KY	LA ^b	MA	MI	MN	NC	NJ	PA	TX	VA	WI	17-State Median ^c
Average clinic/evaluation and management payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	-6.0	-8.5	7.5	5.5	-3.2	12.2	9.5	20.4	-5.9	-5.0	4.9	1.1	7.5	9.6	4.5	6.8	0.2	4.9
2011/2012 to 2012/2013	n/a	-1.3	4.8	-1.7	19.6	-23.4	-0.4	-9.4	6.7	2.3	3.6	5.9	-13.1	11.4	11.5	5.0	2.1	9.4	3.6
2012/2013 to 2013/2014	n/a	8.9	17.2	8.7	-4.1	3.0	17.9	0.7	12.1	3.2	-1.4	4.4	14.8	1.5	8.2	-3.5	1.1	-8.3	3.2
2013/2014 to 2014/2015	n/a	6.2	-2.6	-10.5	9.3	0.6	-8.9	7.0	-5.1	1.2	7.9	12.6	-2.1	12.1	0.0	8.4	12.5	1.4	1.4
2014/2015 to 2015/2016	n/a	14.7	5.3	29.0	-10.3	7.2	1.9	12.6	12.0	3.9	-3.9	-1.8	17.2	3.7	5.3	13.3	2.1	5.1	5.3
Clinic/evaluation and management services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	3.0	5.1	-3.1	3.2	0.5	-5.7	4.6	-10.1	2.3	5.6	3.0	3.4	-0.6	1.9	-6.4	4.1	1.2	2.3
2011/2012 to 2012/2013	n/a	-7.3	6.1	-4.6	-3.9	-2.8	6.3	-1.5	9.3	-3.1	1.9	5.3	8.4	7.3	10.6	-0.9	9.1	6.1	5.3
2012/2013 to 2013/2014	n/a	4.7	-2.0	7.1	5.3	0.7	-7.7	1.3	-6.7	-7.1	4.2	-1.8	-6.5	-1.8	3.1	-3.7	-9.2	-2.2	-1.8
2013/2014 to 2014/2015	n/a	-8.3	3.3	0.9	-0.6	9.6	7.0	5.4	3.0	0.3	-6.9	-5.4	-1.7	0.8	0.5	-2.4	1.3	13.2	0.8
2014/2015 to 2015/2016	n/a	4.0	-6.7	4.6	-0.3	-5.7	1.0	-1.2	6.1	-4.0	14.3	-2.4	-23.8	-7.4	-7.6	1.6	-3.3	-3.4	-2.4
Clinic/evaluation and management visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	2.8	6.9	-0.2	3.1	0.7	-5.2	3.8	-6.5	2.8	6.8	2.3	3.9	-1.0	2.3	-7.5	0.5	1.8	2.3
2011/2012 to 2012/2013	n/a	-8.0	7.0	-6.1	-1.5	-3.4	3.0	-6.4	5.9	-2.5	0.8	6.7	7.1	4.8	8.5	-1.9	8.0	6.1	3.0
2012/2013 to 2013/2014	n/a	6.1	-1.7	9.0	7.6	1.7	-7.3	2.4	-2.6	-8.4	4.0	-2.2	-5.5	-4.4	1.8	-2.9	-9.2	-0.6	-1.7
2013/2014 to 2014/2015	n/a	-7.8	5.5	1.0	0.2	8.4	8.2	4.6	2.5	-0.8	-5.2	-3.6	-2.1	4.0	-1.1	-2.7	1.9	13.3	1.0
2014/2015 to 2015/2016	n/a	2.9	-6.2	9.5	-0.7	-3.5	3.0	-0.6	6.2	-2.8	14.1	-2.8	-24.4	-6.1	-4.7	-1.5	-1.4	-2.9	-1.5
Clinic/evaluation and management services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	n/a	0.2	-1.6	-2.9	0.1	-0.2	-0.5	0.8	-3.9	-0.4	-1.2	0.6	-0.4	0.4	-0.4	1.2	3.6	-0.6	-0.4
2011/2012 to 2012/2013	n/a	0.8	-0.9	1.6	-2.4	0.6	3.2	5.3	3.2	-0.6	1.1	-1.3	1.2	2.3	1.9	1.0	1.0	0.1	1.0
2012/2013 to 2013/2014	n/a	-1.3	-0.3	-1.7	-2.1	-0.9	-0.4	-1.1	-4.2	1.3	0.2	0.4	-1.0	2.8	1.2	-0.9	0.0	-1.6	-0.9
2013/2014 to 2014/2015	n/a	-0.6	-2.1	-0.1	-0.8	1.1	-1.1	0.8	0.4	1.0	-1.8	-1.9	0.4	-3.0	1.6	0.4	-0.6	-0.1	-0.1
2014/2015 to 2015/2016	n/a	1.1	-0.6	-4.6	0.4	-2.3	-2.0	-0.6	-0.2	-1.2	0.2	0.4	0.9	-1.3	-3.0	3.1	-1.9	-0.5	-0.6

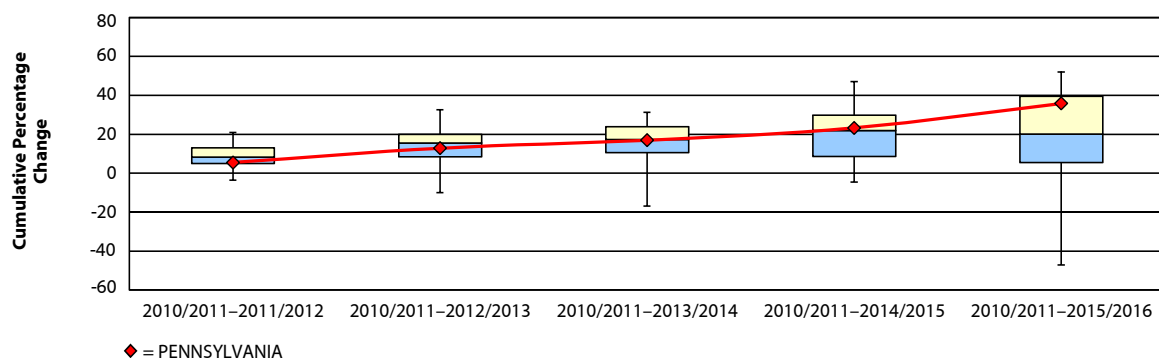
Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^aThe cell sizes underlying the data in Arkansas for hospital outpatient clinic/evaluation and management measures are too small to support a trend analysis.

^bThe numbers shown for hospital outpatient clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

^cThe 17-state median is the state ranked 9th on a given measure; the state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Key: n/a: not available.

Figure 80 Trend of Average Hospital Outpatient Emergency Payment per Claim for Claims with More Than 7 Days of Lost Time (12 months)**Table for Figure 80: Trend of Average Hospital Outpatient Emergency Payment per Claim, Payment per Service, and Services per Claim for Claims with More Than 7 Days of Lost Time (12 months)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average emergency payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	20.9	-0.2	8.5	-0.5	5.6	6.5	17.5	15.1	5.0	8.0	10.8	-3.5	9.1	13.1	5.5	4.1	9.1	16.6	8.3
2012/2013	17.5	1.3	16.9	0.8	8.9	-10.0	29.7	24.4	17.3	12.2	14.2	8.5	19.9	32.6	12.9	1.9	18.8	21.6	15.6
2013/2014	13.4	-0.8	23.9	-16.9	17.9	-9.7	31.3	22.3	24.1	10.7	19.8	11.4	18.3	30.5	16.9	4.0	13.1	26.5	17.4
2014/2015	-1.7	0.0	28.3	-2.2	20.0	-4.5	39.5	35.1	26.7	17.8	26.9	8.6	20.2	47.0	23.3	20.6	29.8	32.9	22.0
2015/2016	-47.1	10.7	19.5	4.4	20.3	5.6	-9.3	46.8	48.4	25.9	19.9	10.7	3.0	52.0	35.8	39.6	30.9	39.5	20.1
Annual percentage change:																			
2010/2011 to 2011/2012	20.9	-0.2	8.5	-0.5	5.6	6.5	17.5	15.1	5.0	8.0	10.8	-3.5	9.1	13.1	5.5	4.1	9.1	16.6	8.3
2011/2012 to 2012/2013	-2.8	1.5	7.8	1.4	3.2	-15.5	10.4	8.1	11.7	3.9	3.1	12.4	9.9	17.3	7.0	-2.1	8.8	4.3	5.6
2012/2013 to 2013/2014	-3.5	-2.0	5.9	-17.6	8.2	0.3	1.2	-1.6	5.8	-1.4	4.9	2.7	-1.4	-1.6	3.6	2.1	-4.7	4.0	0.8
2013/2014 to 2014/2015	-13.3	0.7	3.6	17.7	1.9	5.7	6.2	10.5	2.1	6.4	5.9	-2.5	1.6	12.6	5.4	16.0	14.8	5.0	5.6
2014/2015 to 2015/2016	-46.2	10.8	-6.9	6.8	0.2	10.6	-34.9	8.6	17.1	6.9	-5.5	1.9	-14.3	3.4	10.2	15.8	0.8	5.0	4.2
Percentage of claims with emergency services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	-0.5	0.7	-0.6	-0.7	0.8	1.6	0.8	2.4	1.8	1.0	-2.6	1.3	0.8	0.4	-0.5	1.0	-3.1	0.5	0.7
2011/2012 to 2012/2013	4.3	-0.6	0.6	-0.5	0.3	-0.5	-0.8	-1.8	-0.4	-1.1	2.1	-0.4	-0.4	0.7	-0.3	0.6	0.9	1.5	-0.4
2012/2013 to 2013/2014	-3.8	-0.1	0.8	-2.3	1.7	-0.3	0.6	-3.9	-3.4	-1.6	-1.6	1.2	-1.4	-0.4	-1.1	-1.1	-2.4	-1.3	-1.2
2013/2014 to 2014/2015	-2.9	-0.6	0.6	-0.3	-0.6	-0.5	-1.1	0.5	0.9	-1.0	3.4	-0.7	0.6	0.6	-2.8	0.0	1.3	1.4	-0.1
2014/2015 to 2015/2016	4.1	-0.8	-1.4	-0.8	-4.2	-2.4	-0.4	0.4	-0.9	-2.1	-1.4	0.5	-2.6	-2.0	-1.4	-0.7	-1.7	0.9	-1.1
Percentage of medical payments made for emergency services																			
Annual percentage point change:																			
2010/2011 to 2011/2012	0.3	0.0	-0.1	-0.1	-0.1	0.2	0.1	0.2	0.2	0.3	-0.1	0.0	0.2	0.2	0.1	0.0	0.0	0.2	0.1
2011/2012 to 2012/2013	0.1	0.0	0.1	0.0	0.2	0.0	0.1	0.0	-0.2	0.0	0.2	0.2	0.2	0.3	0.0	0.0	0.1	0.0	0.0
2012/2013 to 2013/2014	-0.3	0.1	0.4	-0.5	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.3	-0.1	-0.1
2013/2014 to 2014/2015	-0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.2	-0.1	-0.1	0.4	0.1	0.2	0.3	-0.1	0.2	0.4	0.0	0.0
2014/2015 to 2015/2016	-0.4	0.1	-0.3	0.0	-0.1	0.0	-0.5	0.0	0.3	0.2	-0.2	0.2	-0.2	-0.1	0.0	0.3	0.0	0.2	0.0

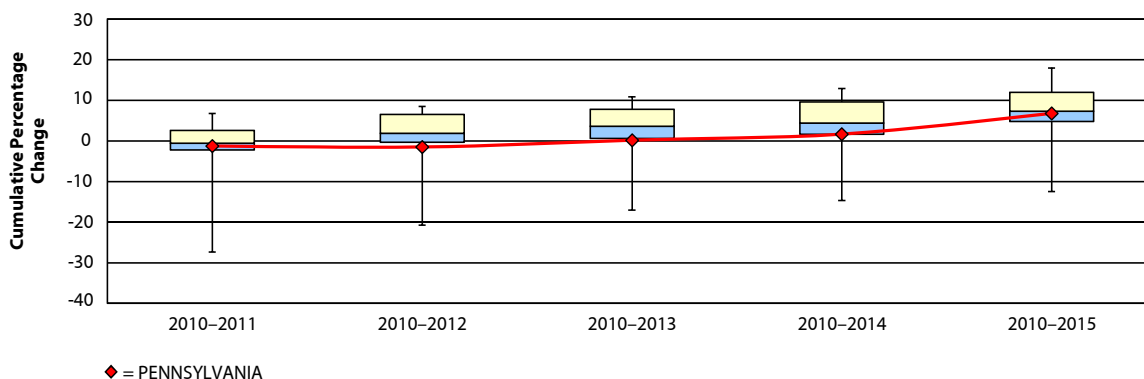
continued

Table for Figure 80: Trend of Average Hospital Outpatient Emergency Payment per Claim, Payment per Service, and Services per Claim for Claims with More Than 7 Days of Lost Time (12 months) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Average emergency payment per service																			
Annual percentage change:																			
2010/2011 to 2011/2012	13.7	-1.1	9.9	4.1	10.6	7.1	13.6	11.6	7.4	9.1	14.5	3.3	8.4	11.2	6.7	8.8	7.5	14.0	8.9
2011/2012 to 2012/2013	4.8	2.8	14.3	9.9	0.4	-12.4	8.5	7.9	12.1	4.9	5.3	16.4	16.4	15.1	8.4	-1.4	8.7	5.0	8.2
2012/2013 to 2013/2014	10.7	8.5	16.0	-5.4	19.3	11.0	20.6	7.4	16.2	8.9	11.2	16.5	13.7	10.1	6.7	9.4	9.5	13.3	10.9
2013/2014 to 2014/2015	3.3	6.8	15.0	22.5	3.4	11.4	11.3	7.6	3.5	10.0	6.0	-1.3	0.5	13.9	8.1	20.0	12.1	7.6	7.8
2014/2015 to 2015/2016	-38.5	15.2	0.2	27.2	5.3	11.0	-21.4	12.5	18.3	10.1	-6.0	4.4	3.9	7.8	7.7	13.7	8.9	7.9	7.9
Emergency services per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	6.4	0.9	-1.3	-4.4	-4.5	-0.5	3.4	3.1	-2.2	-1.0	-3.2	-6.6	0.6	1.7	-1.1	-4.3	1.5	2.3	-0.8
2011/2012 to 2012/2013	-7.2	-1.2	-5.7	-7.8	2.8	-3.5	1.8	0.1	-0.4	-1.0	-2.1	-3.5	-5.6	1.9	-1.3	-0.7	0.1	-0.7	-1.1
2012/2013 to 2013/2014	-12.8	-9.7	-8.7	-12.9	-9.3	-9.7	-16.1	-8.4	-8.9	-9.5	-5.7	-11.9	-13.2	-10.6	-2.9	-6.7	-13.0	-8.3	-9.6
2013/2014 to 2014/2015	-16.0	-5.7	-9.9	-3.9	-1.5	-5.0	-4.6	2.7	-1.4	-3.3	-0.1	-1.2	1.1	-1.1	-2.5	-3.4	2.4	-2.4	-2.4
2014/2015 to 2015/2016	-12.7	-3.8	-7.1	-16.0	-4.9	-0.4	-17.2	-3.4	-1.0	-2.9	0.5	-2.4	-17.5	-4.1	2.3	1.8	-7.4	-2.7	-3.6
Emergency visits per claim																			
Annual percentage change:																			
2010/2011 to 2011/2012	3.1	0.4	0.2	-1.3	-0.5	-0.7	1.3	-0.7	2.3	1.9	-2.1	0.3	-0.2	1.0	-0.1	-0.2	-3.4	-0.3	-0.2
2011/2012 to 2012/2013	1.7	-2.0	-0.8	-0.3	1.9	1.6	1.9	5.1	0.7	-0.3	-1.7	1.4	-0.2	-0.8	-0.8	0.6	2.2	-0.2	0.2
2012/2013 to 2013/2014	-3.5	-0.5	0.1	-2.3	1.8	-0.9	-1.8	-2.6	-1.6	-0.7	0.5	-0.7	-0.9	-0.3	0.3	0.2	-3.4	0.7	-0.7
2013/2014 to 2014/2015	-0.6	1.0	0.0	2.1	-2.1	-0.4	-2.0	-0.3	1.3	-1.1	-1.6	-1.1	-0.7	1.1	-1.3	-0.7	2.2	-1.3	-0.6
2014/2015 to 2015/2016	-1.8	-3.2	-0.2	-3.1	-0.4	0.2	-0.7	-0.7	-0.1	0.9	-0.8	0.6	-1.8	-0.3	-0.1	-0.1	-2.5	0.9	-0.4
Emergency services per visit																			
Annual percentage change:																			
2010/2011 to 2011/2012	3.2	0.5	-1.5	-3.1	-4.0	0.1	2.1	3.8	-4.4	-2.8	-1.2	-6.8	0.8	0.7	-1.0	-4.2	5.1	2.6	-0.4
2011/2012 to 2012/2013	-8.8	0.8	-4.9	-7.5	0.8	-5.1	-0.1	-4.8	-1.1	-0.7	-0.3	-4.8	-5.4	2.7	-0.5	-1.3	-2.0	-0.5	-1.2
2012/2013 to 2013/2014	-9.6	-9.2	-8.8	-10.8	-10.9	-8.8	-14.5	-6.0	-7.5	-8.8	-6.2	-11.3	-12.4	-10.4	-3.2	-6.8	-9.9	-8.9	-9.0
2013/2014 to 2014/2015	-15.5	-6.6	-9.9	-5.9	0.6	-4.7	-2.6	3.0	-2.7	-2.2	1.5	-0.1	1.9	-2.2	-1.1	-2.7	0.1	-1.1	-2.2
2014/2015 to 2015/2016	-11.0	-0.6	-7.0	-13.4	-4.5	-0.6	-16.6	-2.8	-0.9	-3.8	1.3	-3.0	-15.9	-3.9	2.4	1.9	-5.1	-3.6	-3.7

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 81 Trend in Percentage of Medical Payments for Care Rendered within Networks^a (calendar years)**Table for Figure 81: Trend in Percentage of Medical Payments for Care Rendered within Networks^a (calendar years)**

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Percentage of overall medical payments for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	0.2	-1.6	-2.2	-2.4	6.8	4.2	4.4	4.0	-2.3	2.6	0.5	0.9	-2.2	-1.7	-1.3	-27.3	-1.3	0.6	-0.6
2012	5.6	0.2	1.2	0.1	8.5	6.9	7.2	6.5	-0.9	7.1	3.7	2.8	-2.7	1.3	-1.5	-20.7	2.5	-0.3	1.9
2013	6.9	3.4	3.3	2.0	8.8	10.9	7.8	10.5	0.6	7.7	2.1	9.3	-0.6	7.6	0.2	-17.0	3.8	0.4	3.6
2014	4.2	2.7	4.6	1.1	9.6	11.6	6.8	12.9	7.2	9.7	3.2	8.5	-1.3	9.6	1.7	-14.7	4.3	-1.2	4.4
2015	12.2	5.5	7.5	4.8	12.0	14.6	8.1	18.0	11.0	9.3	1.8	5.3	2.5	14.3	6.8	-12.4	7.1	2.2	7.3
Annual percentage point change:																			
2010 to 2011	0.2	-1.6	-2.2	-2.4	6.8	4.2	4.4	4.0	-2.3	2.6	0.5	0.9	-2.2	-1.7	-1.3	-27.3	-1.3	0.6	-0.6
2011 to 2012	5.4	1.8	3.4	2.5	1.7	2.7	2.8	2.6	1.4	4.6	3.3	1.9	-0.5	3.0	-0.2	6.6	3.8	-1.0	2.6
2012 to 2013	1.3	3.2	2.1	1.9	0.3	4.0	0.6	4.0	1.5	0.6	-1.6	6.4	2.1	6.3	1.7	3.7	1.3	0.7	1.8
2013 to 2014	-2.6	-0.6	1.3	-0.9	0.8	0.7	-1.0	2.4	6.6	2.0	1.1	-0.8	-0.7	1.9	1.5	2.4	0.5	-1.6	0.8
2014 to 2015	8.0	2.8	2.9	3.7	2.4	3.0	1.3	5.0	3.8	-0.4	-1.4	-3.2	3.8	4.7	5.1	2.2	2.8	3.4	2.9
Percentage of medical payments to hospital providers for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	0.7	2.4	-1.9	-3.2	8.7	4.5	3.6	9.4	-3.3	-0.1	2.2	1.6	-4.0	-1.4	-0.3	-22.6	-2.5	1.0	0.3
2012	6.6	4.9	0.8	-1.2	9.9	7.0	6.4	12.5	-0.3	0.5	4.4	3.1	-4.9	2.6	0.0	-15.6	-0.8	-0.2	1.7
2013	3.9	4.8	5.5	-3.7	6.8	7.7	4.2	12.0	0.4	4.3	1.2	10.1	-1.8	5.4	2.9	-11.4	0.3	1.7	4.0
2014	0.3	1.1	6.8	-1.5	7.9	7.3	4.0	16.1	9.2	5.6	4.2	7.7	-4.8	3.7	3.5	-8.8	1.5	-0.8	3.8
2015	16.1	3.6	10.1	2.3	10.8	13.2	0.5	19.4	14.9	5.4	0.5	3.6	-0.5	7.9	12.5	-5.0	3.8	4.9	5.1
Annual percentage point change:																			
2010 to 2011	0.7	2.4	-1.9	-3.2	8.7	4.5	3.6	9.4	-3.3	-0.1	2.2	1.6	-4.0	-1.4	-0.3	-22.6	-2.5	1.0	0.3
2011 to 2012	5.9	2.5	2.6	2.1	1.1	2.5	2.7	3.1	3.0	0.7	2.2	1.5	-0.9	4.0	0.3	7.0	1.7	-1.1	2.3
2012 to 2013	-2.7	-0.1	4.8	-2.6	-3.0	0.7	-2.2	-0.5	0.7	3.8	-3.2	7.0	3.1	2.8	2.9	4.2	1.1	1.8	0.9
2013 to 2014	-3.6	-3.7	1.3	2.2	1.1	-0.4	-0.2	4.0	8.7	1.2	3.0	-2.4	-3.1	-1.7	0.6	2.5	1.2	-2.5	0.9
2014 to 2015	15.8	2.6	3.3	3.8	2.9	5.9	-3.5	3.3	5.7	-0.2	-3.7	-4.1	4.3	4.1	9.0	3.9	2.3	5.7	3.6

continued

Table for Figure 81: Trend in Percentage of Medical Payments for Care Rendered within Networks^a (calendar years) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Percentage of medical payments to nonhospital providers for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	1.3	-2.7	-3.4	-2.0	5.0	3.6	4.9	-1.7	-2.0	4.9	-1.0	1.4	-0.1	-2.0	-2.3	-30.7	2.3	0.4	-0.6
2012	6.1	-0.5	-0.5	0.6	7.6	6.8	8.0	1.6	-2.0	12.8	3.1	4.6	-0.4	1.2	-3.0	-24.2	7.8	-0.4	1.4
2013	11.5	3.9	0.2	4.5	11.1	13.8	11.4	9.8	-0.5	11.1	3.5	11.0	0.6	9.6	-2.4	-20.7	9.7	-0.6	7.0
2014	10.1	4.3	0.7	2.2	12.2	15.4	11.3	11.3	4.8	13.5	3.4	13.6	1.9	13.6	0.0	-18.3	10.1	-1.5	7.5
2015	12.6	7.6	4.8	6.2	14.4	17.8	16.3	18.6	8.0	13.3	4.6	13.2	5.2	19.3	2.5	-16.8	14.5	-0.2	10.3
Annual percentage point change:																			
2010 to 2011	1.3	-2.7	-3.4	-2.0	5.0	3.6	4.9	-1.7	-2.0	4.9	-1.0	1.4	-0.1	-2.0	-2.3	-30.7	2.3	0.4	-0.6
2011 to 2012	4.9	2.2	2.9	2.7	2.6	3.1	3.1	3.3	0.0	7.9	4.0	3.2	-0.2	3.2	-0.7	6.5	5.5	-0.8	3.1
2012 to 2013	5.4	4.4	0.8	3.8	3.5	7.0	3.4	8.3	1.5	-1.7	0.4	6.4	1.0	8.4	0.6	3.5	2.0	-0.2	3.5
2013 to 2014	-1.4	0.4	0.4	-2.3	1.1	1.6	0.0	1.5	5.3	2.5	-0.1	2.6	1.3	4.0	2.5	2.4	0.4	-0.9	1.2
2014 to 2015	2.4	3.2	4.2	4.0	2.3	2.4	4.9	7.3	3.2	-0.2	1.2	-0.4	3.3	5.7	2.5	1.5	4.4	1.3	2.8
Percentage of medical payments to physicians for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	2.2	-2.1	-3.5	-1.5	5.5	5.1	4.8	0.0	-3.7	3.8	-1.2	0.5	0.9	-1.3	-0.8	-31.1	1.9	1.1	0.2
2012	5.5	-0.9	-0.7	-0.2	8.8	8.3	7.8	1.5	-5.1	11.8	3.7	5.8	-1.4	2.2	-2.4	-25.3	6.7	1.3	1.9
2013	8.6	2.4	0.1	2.3	13.1	11.2	10.8	12.0	-4.2	10.8	3.4	10.6	-0.2	11.4	-1.8	-20.5	7.6	1.9	5.5
2014	11.7	1.6	0.8	-0.3	14.5	12.0	8.5	13.1	1.8	12.9	2.9	12.2	-0.3	16.5	1.3	-17.2	7.9	0.7	5.4
2015	12.7	3.6	5.2	6.2	18.4	14.5	14.4	19.0	3.3	11.9	3.8	13.6	3.9	23.7	7.4	-16.5	15.1	2.7	9.6
Annual percentage point change:																			
2010 to 2011	2.2	-2.1	-3.5	-1.5	5.5	5.1	4.8	0.0	-3.7	3.8	-1.2	0.5	0.9	-1.3	-0.8	-31.1	1.9	1.1	0.2
2011 to 2012	3.3	1.2	2.8	1.3	3.2	3.2	3.0	1.5	-1.4	8.0	4.9	5.3	-2.2	3.6	-1.6	5.9	4.7	0.2	3.1
2012 to 2013	3.1	3.3	0.8	2.5	4.3	2.9	3.0	10.5	1.0	-1.0	-0.4	4.8	1.2	9.2	0.5	4.8	0.9	0.6	2.7
2013 to 2014	3.1	-0.8	0.7	-2.5	1.4	0.8	-2.4	1.1	6.0	2.1	-0.4	1.6	-0.1	5.1	3.1	3.3	0.3	-1.2	1.0
2014 to 2015	1.0	1.9	4.4	6.5	3.9	2.5	5.9	5.9	1.5	-0.9	0.9	1.4	4.2	7.2	6.1	0.7	7.2	2.1	3.2
Percentage of medical payments to chiropractors for care within networks^{c,d}																			
Cumulative percentage point change from 2010 to:																			
2011	n/a	-2.5	-5.1	n/a	-11.3	4.0	n/a	-9.4	-7.4	8.2	4.8	5.1	n/a	4.2	-6.7	-40.0	n/a	-1.8	-2.5
2012	n/a	-3.0	-2.8	n/a	-4.5	1.4	n/a	1.3	-10.1	10.5	5.2	6.3	n/a	-4.7	-15.0	-37.8	n/a	-11.8	-3.0
2013	n/a	1.7	8.6	n/a	-1.8	0.8	n/a	0.2	-10.1	6.7	5.4	9.5	n/a	3.2	-15.4	-39.0	n/a	-16.2	0.8
2014	n/a	-2.5	5.6	n/a	15.2	3.5	n/a	8.6	-7.6	12.8	-14.8	8.6	n/a	18.3	-12.4	-36.5	n/a	-9.0	3.5
2015	n/a	-0.7	18.8	n/a	10.2	1.7	n/a	10.8	-8.5	7.2	-5.9	9.0	n/a	35.2	-10.3	-33.7	n/a	-6.5	1.7
Annual percentage point change:																			
2010 to 2011	n/a	-2.5	-5.1	n/a	-11.3	4.0	n/a	-9.4	-7.4	8.2	4.8	5.1	n/a	4.2	-6.7	-40.0	n/a	-1.8	-2.5
2011 to 2012	n/a	-0.6	2.3	n/a	6.8	-2.6	n/a	10.7	-2.7	2.3	0.5	1.2	n/a	-8.9	-8.3	2.2	n/a	-10.0	0.5
2012 to 2013	n/a	4.7	11.4	n/a	2.7	-0.6	n/a	-1.1	0.0	-3.8	0.1	3.2	n/a	7.9	-0.4	-1.2	n/a	-4.3	0.0
2013 to 2014	n/a	-4.2	-3.0	n/a	16.9	2.8	n/a	8.4	2.5	6.1	-20.2	-1.0	n/a	15.1	3.1	2.5	n/a	7.1	2.8
2014 to 2015	n/a	1.8	13.2	n/a	-4.9	-1.9	n/a	2.3	-0.9	-5.6	8.9	0.4	n/a	16.8	2.1	2.8	n/a	2.5	2.1

continued

Table for Figure 81: Trend in Percentage of Medical Payments for Care Rendered within Networks^a (calendar years) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Percentage of medical payments to physical therapists for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	-4.0	-4.0	-2.4	-2.6	4.4	-1.4	6.2	0.5	-5.5	4.6	-2.0	-1.3	-3.6	-3.9	-4.7	-40.7	3.3	-2.8	-2.5
2012	-5.2	2.5	0.0	-2.2	0.5	1.9	8.2	1.0	-6.7	5.3	-0.9	-5.2	-1.9	-2.5	-3.6	-32.3	11.3	-7.5	-1.4
2013	10.2	13.3	3.4	8.3	4.0	21.7	16.4	10.0	-2.8	5.0	3.5	3.3	0.6	4.3	-0.8	-28.4	15.4	-8.7	4.2
2014	5.2	15.5	6.7	7.2	6.3	29.7	18.7	14.9	6.8	5.9	2.3	9.6	2.4	4.7	4.0	-24.4	16.5	-9.7	6.5
2015	8.0	15.9	6.4	5.4	7.2	31.7	18.3	16.7	6.1	5.5	2.1	4.2	-0.9	6.2	4.4	-28.6	16.2	-11.3	6.2
Annual percentage point change:																			
2010 to 2011	-4.0	-4.0	-2.4	-2.6	4.4	-1.4	6.2	0.5	-5.5	4.6	-2.0	-1.3	-3.6	-3.9	-4.7	-40.7	3.3	-2.8	-2.5
2011 to 2012	-1.2	6.5	2.4	0.4	-3.9	3.4	2.0	0.5	-1.2	0.7	1.2	-3.9	1.7	1.4	1.2	8.4	8.0	-4.8	1.2
2012 to 2013	15.4	10.8	3.4	10.5	3.5	19.8	8.2	9.0	3.8	-0.3	4.4	8.5	2.6	6.9	2.7	3.9	4.1	-1.2	4.2
2013 to 2014	-5.0	2.2	3.2	-1.1	2.3	7.9	2.2	4.9	9.6	0.9	-1.2	6.4	1.8	0.4	4.8	4.0	1.1	-1.0	2.2
2014 to 2015	2.8	0.4	-0.3	-1.9	1.0	2.1	-0.4	1.8	-0.7	-0.4	-0.2	-5.5	-3.3	1.5	0.4	-4.2	-0.4	-1.6	-0.3
Percentage of medical payments to other nonhospital providers^e for care within networks																			
Cumulative percentage point change from 2010 to:																			
2011	6.3	0.9	-2.8	-0.4	3.7	2.7	0.9	-5.5	5.3	3.5	1.9	4.1	0.4	-6.4	-1.4	-16.3	3.5	-1.0	0.9
2012	19.7	6.8	1.3	10.3	13.9	4.9	7.8	6.0	8.5	13.3	7.2	4.9	6.7	-2.4	1.6	-8.6	9.0	-0.8	6.7
2013	27.0	13.2	-0.4	13.0	15.3	11.6	4.4	7.0	7.6	4.2	6.5	17.0	4.5	2.0	-0.8	-6.2	12.2	-2.4	6.7
2014	21.2	15.0	-2.1	10.8	13.6	5.5	9.9	5.1	8.4	6.9	8.9	20.9	8.9	3.5	-2.6	-6.5	10.8	-2.4	8.6
2015	25.9	22.1	4.0	13.8	13.2	6.0	13.6	19.4	17.6	10.9	11.7	16.3	12.9	4.8	-3.4	0.7	11.3	-0.5	12.3
Annual percentage point change:																			
2010 to 2011	6.3	0.9	-2.8	-0.4	3.7	2.7	0.9	-5.5	5.3	3.5	1.9	4.1	0.4	-6.4	-1.4	-16.3	3.5	-1.0	0.9
2011 to 2012	13.3	5.8	4.1	10.7	10.2	2.2	6.9	11.5	3.2	9.8	5.3	0.8	6.2	4.1	3.0	7.6	5.5	0.2	5.7
2012 to 2013	7.3	6.4	-1.8	2.7	1.4	6.7	-3.4	0.9	-0.9	-9.1	-0.6	12.1	-2.2	4.3	-2.4	2.4	3.2	-1.6	1.2
2013 to 2014	-5.8	1.8	-1.7	-2.2	-1.7	-6.1	5.5	-1.8	0.8	2.7	2.3	3.9	4.4	1.6	-1.7	-0.2	-1.4	0.1	-0.1
2014 to 2015	4.7	7.1	6.1	3.0	-0.4	0.5	3.6	14.3	9.2	4.0	2.8	-4.6	4.0	1.2	-0.8	7.2	0.4	1.9	3.3

Note: A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a The percentage of medical payments to different types of health care providers for care rendered within networks is based on identification of network care provided by the data sources.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

^c The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^d The data in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey contain relatively few claims (less than 200) with chiropractic treatment, and the numbers may fluctuate from year to year. Therefore, the data should be used with caution.

^e Other nonhospital providers include nurses and other ancillary providers (such as psychologists, social workers, acupuncture, etc.), medical equipment suppliers and pharmacies, diagnostic centers (such as MRI and imaging facilities), etc.

Key: MRI: magnetic resonance imaging; n/a: not available.

Table 1 Criteria for Characterizations of Performance Used in This Report

Multistate Values	Comparison with Median State	
Higher	More than 10 percent above median	
Lower	More than 10 percent below median	
Typical or close to	Within 10 percent above or below median	
Trends ^a	Change in Cost Measures (annual average percentage)	Change in Frequency Measures (annual average percentage points)
Very rapid increase	+9% and higher	+4 points and higher
Rapid increase	+6% to 8.9%	+2 to 3.9 points
Moderate increase	+3% to 5.9%	+1 to 1.9 points
Flat, little change	+2.9% to –2.9%	+0.9 points to –0.9 points
Moderate decrease	–3% to –5.9%	–1 to –1.9 points
Rapid decrease	–6% to –8.9%	–2 to –3.9 points
Very rapid decrease	–9% and lower	–4 points and lower

^a Other words used to describe an increase include *growth*, *rise*, and *acceleration* (movement up at least one category over the period analyzed). Other words used to describe a decrease include *fall*, *drop*, and *deceleration* (movement down at least one category over the period analyzed).

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Table 2 Comparing Pennsylvania with the Median State: Selected Performance Measures, 2015/2016 Claims with More Than 7 Days of Lost Time

	Pennsylvania	18-State Median ^a	Percentage or Percentage Point Difference	Pennsylvania Characterization Relative to Median ^b
Average medical payment per claim (all claims)	\$3,557	\$3,468	2.6%	Typical
Average medical payment per claim with more than 7 days of lost time	\$13,838	\$12,136	14.0%	Typical
Nonhospital providers				
Average payment per claim	\$7,382	\$7,066	4.5%	Typical
Percentage of claims	98.8%	98.8%	0.0	Typical
Percentage of payments	49.4%	53.2%	-3.8	Typical
<i>By type of nonhospital provider</i>				
Physician				
Average payment per claim	\$3,364	\$4,503	-25.3%	Lower
Percentage of claims	96.4%	97.4%	-0.9	Typical
Percentage of payments	22.0%	35.0%	-13.0	Lower
Price index	88	100	-12	Lower
Utilization index ^c	105	100	5	Typical
Average number of visits per claim	10.5	9.5	10.0%	Typical
Average number of services per visit	2.3	2.3	-1.1%	Typical
Chiropractor ^d				
Average payment per claim	\$3,977	\$1,738	128.8%	Higher
Percentage of claims	7.1%	5.4%	1.7	Typical
Percentage of payments	1.9%	0.7%	1.2	Typical
Price index	104	100	4	Typical
Utilization index ^c	238	100	138	Higher
Average number of visits per claim	26.4	12.5	111.6%	Higher
Average number of services per visit	4.0	3.3	20.0%	Higher
Physical/occupational therapist				
Average payment per claim	\$4,042	\$3,036	33.1%	Higher
Percentage of claims	54.9%	52.3%	2.7	Typical
Percentage of payments	15.0%	12.2%	2.8	Typical
Price index	86	100	-14	Lower
Utilization index ^c	144	100	44	Higher
Average number of visits per claim	23.7	18.5	28.3%	Higher
Average number of services per visit	4.6	3.8	19.5%	Higher
<i>By type of service (selected key services)</i>				
Evaluation and management				
Average payment per claim	\$684	\$742	-7.7%	Typical
Percentage of claims	93.8%	94.3%	-0.5	Typical
Percentage of payments	4.4%	5.2%	-0.9	Typical
Price index	81	100	-19	Lower
Utilization index ^c	117	100	17	Higher
Average number of visits per claim	7.4	6.2	19.5%	Higher
Average number of services per visit	1.0	1.0	-0.2%	Typical

continued

Table 2 Comparing Pennsylvania with the Median State: Selected Performance Measures, 2015/2016 Claims with More Than 7 Days of Lost Time (continued)

	Pennsylvania	18-State Median ^a	Percentage or Percentage Point Difference	Pennsylvania Characterization Relative to Median ^b
Physical medicine				
Average payment per claim	\$4,482	\$3,166	41.6%	Higher
Percentage of claims	60.8%	60.0%	0.7	Typical
Percentage of payments	18.5%	14.6%	3.9	Typical
Price index	88	100	-12	Lower
Utilization index ^c	160	100	60	Higher
Average number of visits per claim	27.5	19.6	39.9%	Higher
Average number of services per visit	4.4	3.8	17.0%	Higher
Neurological/neuromuscular testing ^e				
Average payment per claim	\$402	\$608	-33.8%	Lower
Percentage of claims	11.6%	8.4%	3.3	Typical
Percentage of payments	0.3%	0.4%	-0.1	Typical
Price index	61	100	-39	Lower
Utilization index ^c	111	100	11	Higher
Average number of visits per claim	1.4	1.3	8.1%	Typical
Average number of services per visit	2.3	2.2	2.9%	Typical
Minor radiology				
Average payment per claim	\$151	\$193	-21.7%	Lower
Percentage of claims	73.2%	74.8%	-1.5	Typical
Percentage of payments	0.8%	1.2%	-0.4	Typical
Price index	99	100	-1	Typical
Utilization index ^c	100	100	0	Typical
Average number of visits per claim	2.6	2.7	-2.5%	Typical
Average number of services per visit	1.3	1.3	-1.3%	Typical
Major radiology				
Average payment per claim	\$694	\$696	-0.2%	Typical
Percentage of claims	54.9%	48.0%	6.8	Typical
Percentage of payments	2.6%	2.6%	0.0	Typical
Price index	107	100	7	Typical
Utilization index ^c	106	100	6	Typical
Average number of visits per claim	1.5	1.4	6.4%	Typical
Average number of services per visit	1.2	1.2	0.1%	Typical
Major surgery				
Average payment per claim	\$2,557	\$2,647	-3.4%	Typical
Percentage of claims	30.0%	30.1%	0.0	Typical
Percentage of payments	5.2%	6.4%	-1.2	Typical
Price index	100	100	0	Typical
Utilization index ^c	91	100	-9	Typical
Average number of visits per claim	1.2	1.2	-0.5%	Typical
Average number of services per visit	2.1	2.4	-9.3%	Typical
Pain management injections				
Average payment per claim	\$403	\$467	-13.7%	Lower
Percentage of claims	18.1%	17.2%	0.8	Typical
Percentage of payments	0.5%	0.7%	-0.3	Typical
Price index	64	100	-36	Lower
Utilization index ^c	135	100	35	Higher
Average number of visits per claim	1.9	1.5	25.7%	Higher
Average number of services per visit	1.4	1.2	10.9%	Higher

continued

Table 2 Comparing Pennsylvania with the Median State: Selected Performance Measures, 2015/2016 Claims with More Than 7 Days of Lost Time (continued)

	Pennsylvania	18-State Median ^a	Percentage or Percentage Point Difference	Pennsylvania Characterization Relative to Median ^b
Hospital providers				
Average payment per claim	\$8,171	\$8,099	0.9%	Typical
Percentage of claims	73.8%	65.9%	7.8	Typical
Percentage of payments	49.4%	46.1%	3.3	Typical
<i>By type of hospital provider</i>				
Hospital inpatient ^{f,g}				
Average payment per claim	\$46,378	\$39,391	17.7%	Higher
Percentage of claims	6.5%	5.7%	0.7	Typical
Percentage of payments	22.5%	17.2%	5.3	Typical
Hospital outpatient ^f				
Average payment per claim	\$5,423	\$4,841	12.0%	Typical
Percentage of claims	72.5%	64.6%	7.9	Typical
Percentage of payments	26.9%	25.2%	1.7	Typical
<i>By type of outpatient service (selected key services)</i>				
Clinic/evaluation and management ^h				
Average payment per claim	\$572	\$436	31.3%	Higher
Percentage of claims	17.0%	11.6%	5.5	Typical
Percentage of payments	0.7%	0.3%	0.4	Typical
Average payment per service	\$119	\$134	-11.3%	Typical
Average number of services per claim	4.8	3.8	28.2%	Higher
Average number of visits per claim	4.2	3.5	17.8%	Higher
Average number of services per visit	1.2	1.0	11.7%	Higher
Physical medicine				
Average payment per claim	\$4,708	\$2,430	93.8%	Higher
Percentage of claims	17.2%	15.1%	2.1	Typical
Percentage of payments	5.5%	3.1%	2.3	Typical
Average payment per service	\$67	\$60	11.4%	Higher
Average number of services per claim	70.8	38.4	84.1%	Higher
Average number of visits per claim	18.6	13.3	40.0%	Higher
Average number of services per visit	3.8	3.1	24.6%	Higher
Minor radiology				
Average payment per claim	\$325	\$371	-12.5%	Lower
Percentage of claims	41.7%	37.5%	4.2	Typical
Percentage of payments	0.9%	1.1%	-0.1	Typical
Average payment per service	\$144	\$168	-14.0%	Lower
Average number of services per claim	2.2	2.0	9.9%	Typical
Average number of visits per claim	1.6	1.4	13.0%	Higher
Average number of services per visit	1.4	1.4	-3.7%	Typical

continued

Table 2 Comparing Pennsylvania with the Median State: Selected Performance Measures, 2015/2016 Claims with More Than 7 Days of Lost Time (continued)

	Pennsylvania	18-State Median ^a	Percentage or Percentage Point Difference	Pennsylvania Characterization Relative to Median ^b
Major radiology				
Average payment per claim	\$1,469	\$1,625	-9.6%	Typical
Percentage of claims	20.4%	18.5%	1.9	Typical
Percentage of payments	2.1%	2.5%	-0.5	Typical
Average payment per service	\$895	\$950	-5.8%	Typical
Average number of services per claim	1.6	1.6	2.1%	Typical
Average number of visits per claim	1.3	1.2	7.1%	Typical
Average number of services per visit	1.3	1.3	-3.0%	Typical
Treatment/operating/recovery room				
Average payment per claim	\$4,055	\$5,532	-26.7%	Lower
Percentage of claims	24.9%	21.8%	3.1	Typical
Percentage of payments	6.9%	9.5%	-2.7	Typical
Average payment per service	\$1,130	\$2,390	-52.7%	Lower
Average number of services per claim	3.6	2.4	47.1%	Higher
Average number of visits per claim	1.4	1.3	5.6%	Typical
Average number of services per visit	2.6	1.8	42.5%	Higher

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

^b When describing the performance of a state in this table, we generally use the criteria and key terms from Table 1. For some measures, such as those based on percentages of payments and percentages of claims, often specific numeric criteria are not used to apply the characterization of a state's value relative to the median, as the distributions of states' values on different percentage measures are often subject to different degrees of variation. Instead, we apply the characterization by reviewing where each state's value falls relative to other states in the overall distribution. A characterization is assigned after taking into consideration the magnitude of the values, the range and clusters of states' values, and the homogeneity or heterogeneity of the overall distribution.

^c The utilization index takes into account both the volume of services and the resource intensity of services (i.e., the relative complexity for a mix of services). It is defined as the weighted average number of services per claim; the weights are the RVU values. The utilization index number for a study state is derived by setting the 18-state median at 100. Note that the numbers in this table are also adjusted for the interstate differences in injury and industry mix.

^d The numbers for chiropractors in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying these measures. The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison. We show a 13-state median for these measures.

^e In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^f For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^g The cell sizes underlying the data in Arkansas for hospital inpatient measures are too small to support an interstate comparison.

^h The numbers shown for clinic/evaluation and management in Arkansas are too small to support an interstate comparison. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measures.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Table 3 Trends in Pennsylvania: Selected Performance Measures, Not Adjusted for Injury and Industry Mix, Claims with More Than 7 Days of Lost Time

	Unadjusted Values	Trend (annual average percentage or percentage point change)		
	2015/2016 Claims	2014/2015 to 2015/2016	2013/2014 to 2015/2016	2010/2011 to 2015/2016
Average medical payment per claim (all claims)	\$3,642	5.5	5.1	5.1
Average medical payment per claim with more than 7 days of lost time	\$13,761	4.2	3.1	4.6
Nonhospital providers				
Average payment per claim	\$7,410	2.0	2.9	3.4
Percentage of payments	49.7	-1.7	-0.5	-0.3
Price	\$65	1.1	1.2	1.8
Utilization ^a	105	-1.4	-0.8	-0.1
<i>By type of nonhospital provider</i>				
Physician				
Average payment per claim	\$3,378	-4.7	-3.9	-0.6
Price	\$118	1.0	1.2	1.7
Utilization ^a	50	-4.6	-5.0	-3.4
Average number of visits per claim	10.4	-1.9	-4.0	-3.0
Average number of services per visit	2.3	-4.3	-3.8	-3.0
Chiropractor^b				
Average payment per claim	\$3,977	10.8	2.3	5.2
Price	\$37	1.5	2.6	3.6
Utilization ^a	80	4.1	-1.7	0.9
Average number of visits per claim	26.3	6.6	-0.2	1.7
Average number of services per visit	4.0	2.0	0.0	-0.2
Physical/occupational therapist				
Average payment per claim	\$4,110	2.1	5.0	4.6
Price	\$35	1.7	1.5	2.2
Utilization ^a	90	-2.7	1.3	1.8
Average number of visits per claim	24.0	-2.0	1.0	1.6
Average number of services per visit	4.6	1.8	1.0	0.3
<i>By type of service (selected key services)</i>				
Evaluation and management				
Average payment per claim	\$683	-2.7	-0.9	0.6
Price	\$90	1.1	1.7	2.2
Utilization ^a	20	-4.0	-2.9	-1.3
Average number of visits per claim	7.4	-3.5	-2.3	-1.4
Average number of services per visit	1.0	-0.4	-0.6	-0.2
Physical medicine				
Average payment per claim	\$4,542	4.4	4.9	4.5
Price	\$35	1.4	1.5	2.4
Utilization ^a	101	-0.9	1.3	1.6
Average number of visits per claim	27.7	0.0	0.2	0.6
Average number of services per visit	4.5	1.2	1.0	0.6
Neurological/neuromuscular testing^c				
Average payment per claim	\$398	5.7	-4.8	-9.7
Price	\$118	1.2	-0.2	-8.7
Utilization ^a	12	3.4	-5.0	-10.5
Average number of visits per claim	1.4	-0.8	0.9	0.1
Average number of services per visit	2.3	6.2	-6.0	-19.5

continued

Table 3 Trends in Pennsylvania: Selected Performance Measures, Not Adjusted for Injury and Industry Mix, Claims with More Than 7 Days of Lost Time (continued)

	Unadjusted Values	Trend (annual average percentage or percentage point change)		
	2015/2016 Claims	2014/2015 to 2015/2016	2013/2014 to 2015/2016	2010/2011 to 2015/2016
Minor radiology				
Average payment per claim	\$151	-4.3	-1.7	0.2
Price	\$48	2.0	1.9	2.6
Utilization ^a	4	-4.0	-2.8	-2.5
Average number of visits per claim	2.6	-1.7	-1.0	-1.0
Average number of services per visit	1.3	0.0	-0.7	-0.5
Major radiology				
Average payment per claim	\$689	-0.1	-1.9	-1.5
Price	\$424	-1.4	-1.1	0.2
Utilization ^a	13	-0.6	-1.5	-1.5
Average number of visits per claim	1.5	-1.0	-1.4	-0.9
Average number of services per visit	1.2	-0.5	-0.4	-0.8
Major surgery				
Average payment per claim	\$2,537	0.8	0.2	1.6
Price	\$1,592	1.4	1.2	2.0
Utilization ^a	45	-4.1	-1.1	-0.5
Average number of visits per claim	1.2	0.5	-0.1	-0.1
Average number of services per visit	2.1	-5.8	-0.8	-1.3
Pain management injections				
Average payment per claim	\$390	-8.0	-3.5	-2.6
Price	\$143	-0.4	0.2	1.9
Utilization ^a	8	-6.8	-5.3	-4.4
Average number of visits per claim	1.8	-5.3	-1.2	-3.1
Average number of services per visit	1.4	-1.4	-1.9	-1.0
Hospital providers				
Average payment per claim	\$8,098	3.4	3.8	5.7
Percentage of claims	74.4	-2.8	-1.6	-0.9
Average payment per service	\$213	4.7	4.0	3.3
Average number of services per claim	38.0	-1.3	-0.2	2.4

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Utilization is defined as the average number of services per claim, weighted by the RVUs or the relative complexity of the procedures performed. When reporting trends, we do not adjust the numbers for the interstate differences in injury and industry mix because the unadjusted numbers provide the most relevant information on how the system performance changed in each state over time. In this table the utilization numbers are the actual RVU weighted average numbers of services per claim in the study state (not indexed to the median state). This table also shows changes over time in this measure.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures are too small to support a trend analysis.

^c In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Table 4 Percentage of Overall Medical Payments by Provider and Service Type for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
Nonhospital providers	48.7	72.5	51.8	67.5	46.2	64.6	67.2	49.2	51.5	56.4	53.7	49.8	57.1	66.5	49.4	61.2	52.7	51.6	53.2
<i>By type of nonhospital provider</i>																			
Physician	29.5	45.8	34.6	42.6	31.3	40.5	42.8	29.3	30.9	38.7	27.3	35.7	31.5	44.3	22.0	35.5	33.6	38.0	35.0
Chiropractor ^b	n/a	1.3	0.1	n/a	0.1	1.3	n/a	0.5	0.5	0.8	0.1	1.7	n/a	0.1	1.9	2.6	n/a	0.7	0.7
PT/OT	9.3	13.0	8.3	12.7	9.7	15.1	17.9	11.7	10.8	9.5	16.3	6.9	15.2	15.4	15.0	11.7	13.3	7.9	12.2
Other nonhospital providers ^c	9.9	12.5	8.9	12.1	5.1	7.6	6.5	7.8	9.4	7.4	9.9	5.5	10.3	6.7	10.4	11.4	5.7	5.0	8.3
<i>By type of service (selected key services)</i>																			
Evaluation and management	5.1	15.2	5.0	7.0	4.4	3.8	4.8	5.2	4.3	7.1	6.9	7.0	5.9	5.3	4.4	10.1	4.8	5.5	5.2
Physical medicine	10.7	15.1	8.7	14.3	11.0	19.5	19.4	13.9	12.3	10.3	19.1	9.5	15.9	15.8	18.5	17.1	14.9	10.3	14.6
Major surgery	6.1	5.4	4.8	7.7	8.5	11.0	11.6	5.6	5.4	18.7	5.7	5.8	6.8	15.1	5.2	6.0	7.2	12.4	6.4
Pain management injections	0.7	0.4	0.6	0.9	0.8	0.9	1.4	0.5	1.2	1.0	0.5	0.5	0.6	1.2	0.5	0.4	0.9	1.6	0.7
Minor radiology	1.2	1.5	1.2	1.5	1.1	1.3	1.5	0.9	1.3	0.8	1.0	1.1	1.2	1.2	0.8	1.0	1.2	1.5	1.2
Major radiology	2.2	3.0	2.7	2.8	3.1	2.6	3.5	2.5	2.7	2.9	1.6	2.3	3.6	2.3	2.6	2.0	2.5	3.7	2.6
Neurological/neuromuscular testing	0.2	0.8	0.3	0.4	0.3	0.4	0.4	0.2	0.4	0.4	0.4	0.3	0.4	0.5	0.3	0.7	0.4	0.4	0.4
Emergency	0.5	0.4	0.4	0.4	0.5	0.4	0.8	0.6	0.4	0.6	0.6	0.5	0.4	0.7	0.3	0.5	0.9	0.8	0.5
Other nonhospital services ^d	22.0	30.8	28.0	32.4	16.5	24.6	23.8	19.9	23.7	14.6	18.0	22.7	22.3	24.4	16.9	23.5	19.8	15.4	22.5
Hospital providers	49.8	26.5	47.1	31.8	53.4	34.9	32.5	50.0	47.3	43.2	45.4	49.4	41.9	32.9	49.4	37.3	46.7	48.1	46.1
Hospital inpatient ^{e,f}	n/a	17.7	24.1	19.7	18.1	12.6	14.2	17.2	10.4	15.6	15.7	17.2	18.5	19.4	22.5	17.3	16.4	11.8	17.2
Hospital outpatient ^g	20.3	8.8	23.0	12.1	35.4	22.3	18.3	32.8	36.9	27.6	29.7	32.1	23.4	13.5	26.9	19.9	30.3	36.3	25.2
<i>By type of outpatient service (selected key services)</i>																			
Clinic/evaluation and management ^g	n/a	0.2	0.2	0.2	0.8	0.5	0.3	0.4	0.1	1.1	0.5	1.2	0.2	0.2	0.7	0.3	0.3	0.6	0.3
Emergency	0.9	1.1	2.4	1.3	1.8	1.6	1.2	1.7	2.3	3.8	1.9	2.4	2.3	2.3	1.3	1.6	2.5	1.5	1.8
Laboratory	0.4	0.1	0.7	0.1	0.5	0.4	0.1	0.7	0.7	0.3	0.3	0.4	0.3	0.4	0.3	0.1	0.5	0.4	0.4
Minor radiology	0.5	0.3	1.7	0.5	1.5	1.0	0.5	1.5	1.4	1.5	1.1	1.0	1.2	1.0	0.9	0.6	1.8	1.4	1.1
Major radiology	2.0	0.4	3.1	0.6	4.2	2.3	0.7	3.2	3.3	2.8	3.6	3.1	1.7	1.1	2.1	0.9	3.6	4.9	2.5
Treatment/operating/recovery room	5.2	4.8	6.8	6.0	12.0	7.7	10.4	10.4	15.8	8.2	9.9	9.5	10.5	3.6	6.9	12.1	9.6	12.2	9.5
Physical medicine	3.1	0.6	0.5	0.6	5.3	3.5	2.2	4.4	3.2	4.2	5.3	5.3	1.0	1.3	5.5	2.1	3.0	8.5	3.1
Other hospital outpatient services ^h	7.8	1.3	7.6	2.6	9.2	5.5	3.0	10.4	10.2	5.7	7.0	9.3	6.2	3.6	9.3	2.2	9.1	6.9	7.0
Unclassified providerⁱ	1.5	1.0	1.1	0.7	0.4	0.5	0.3	0.8	1.2	0.3	0.9	0.9	1.0	0.6	1.2	1.5	0.6	0.2	0.8

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

^b The numbers for chiropractors in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measure. The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for the chiropractic measure at the claim level are too small to support an interstate comparison. We show a 13-state median for this measure.

^c Other nonhospital providers include nurses and other ancillary providers (such as psychologists, social workers, acupuncture, etc.), medical equipment suppliers and pharmacies, diagnostic centers (such as MRI and imaging facilities), etc.

^d Other nonhospital services mainly include anesthesia, drugs, legal and special reports, supplies and equipment, miscellaneous services billed by stand-alone ambulatory surgery centers, and other miscellaneous defined medical and/or diagnostic services and testing.

^e For the most part, hospital inpatient or outpatient services do not include payments to stand-alone ambulatory surgery centers, which are not consistently defined in the data but are most often included in the nonhospital physician category.

^f The cell sizes underlying the data in Arkansas for the hospital inpatient measure are too small to support an interstate comparison. We show a 17-state median for this measure.

^g The cell sizes underlying the data in Arkansas for the clinic/evaluation and management measure are too small to support an interstate comparison. We show a 17-state median for this measure. The numbers shown for clinic/evaluation and management in Louisiana should be used with caution because of relatively small cell sizes (less than 200 claims) underlying the measure.

^h Other hospital outpatient services mainly include miscellaneous hospital ambulatory surgical care, supplies and equipment, hospital drugs/pharmaceuticals, hospital outpatient service undefined, and other miscellaneous defined medical and/or diagnostic services and testing.

ⁱ Five to twenty-two percent of claims involve at least one payment to providers that could not be classified because of missing data. Payments to unclassified providers typically make up only between 0 and 1 percent of medical payments.

Key: MRI: magnetic resonance imaging; n/a: not available; PT/OT: physical therapist and/or occupational therapist.

Table 5 Summary of Medical Cost Containment Strategies, 2017

State	Managed Care Regulations	Limited Initial Provider Choice	Limited Provider Change	Nonfacility Medical Provider Fee Schedule	Hospital Outpatient Fee Regulation	Hospital Inpatient Fee Regulation	Ambulatory Surgery Center Fee Regulation	Pharmaceutical Fee Regulation	Utilization Review (non-managed care)	Treatment Guidelines	Other
Arkansas	X	X	X	X	X	X	X	X	X		
California	X	X	X	X	X	X	X	X	X	X	
Florida	X	X	X	X	X	X	X	X	X	X	See note
Georgia	X	X	X	X	X	X	X	X			
Illinois			X	X	X	X	X	See note	See note		
Indiana		X	X		X (see note)	X (see note)					
Iowa		X	X								
Kentucky	X	See note	X	X	X	X	X	X	X	See note	
Louisiana			X	X	X	X	X	X	X (see note)	X (see note)	
Massachusetts	See note	See note	X	X	X	X	X	X	X	X	See note
Michigan		X (see note)	See note	X	X	X	X	X	X		
Minnesota	See note	See note	X	X	X	X	X	X		X	See note
New Jersey	X	X	X								See note
North Carolina	X	X	X	X	X	X	X	X (see note)	See note		
Pennsylvania	See note	X (see note)	See note	X	X	X	X	X	See note		
Texas	X	See note	X	X	X	X	X	X	X	X	See note
Virginia		X	X	See note	See note	See note	See note				
Wisconsin			X					X		X	See note

Notes:

FL: The statute provides for a \$10/visit copayment for medical services following overall maximum medical improvement from an injury compensable under Florida's workers' compensation statute.

IL: Prescriptions dispensed or filled outside of licensed pharmacies are reimbursed at the average wholesale price plus a \$4.18 dispensing fee. Prescriptions filled at a licensed pharmacy are paid at the usual and customary rate. As part of the 2011 reforms, Illinois introduced new utilization review standards, applicable when utilization review is requested. Upon notification by an employer, medical providers are required to provide a clinical report to support the request for treatment. Providers who fail to comply might not be allowed to bill for their services. The utilization review has to be based upon nationally recognized treatment guidelines and evidence-based medicine. This change took effect for services occurring on or after September 1, 2011.

IN: A hospital fee schedule was implemented effective July 1, 2014, with reimbursement set at 200 percent of Medicare. Based on specific statutory language, the hospital fee schedule does not apply to ambulatory surgery centers.

KY: The worker selects the provider from within a certified managed care plan if the employer has designated such a plan. Even if a managed care plan has been designated, the worker may continue treating with the physician who provided emergency medical care. Kentucky has a clinical practice parameter for acute low back problems in adults; it is required in utilization review plans.

LA: Utilization review is required for all requests for medical services exceeding the statutory limit of \$750. Legislation passed in 2009 provided for the use of evidence-based treatment guidelines. Medical treatment guidelines adopted by the Office of Workers' Compensation went into effect on July 13, 2011.

MA: The worker selects the provider except when the employer has a preferred provider arrangement, then the worker must see that provider first. Massachusetts does not have traditional managed care, but does have this one limitation on the worker's total choice of physician. Fee schedules are in place for all treatment of work-related injuries.

MI: Effective December 2011, the employer choice of initial medical provider was extended from 10 to 28 days.

MN: The worker selects the provider except when the employer has a certified managed care plan, in which case the worker selects the provider from within the plan. Services not covered by the fee schedule are paid at 85 percent of the provider's usual and customary charge, or 85 percent of the prevailing charge, whichever is lower. However, services provided at hospitals with fewer than 100 licensed beds are paid at 100 percent of the hospital's usual and customary charge, unless the commissioner or compensation judge determines the charge is unreasonably excessive.

NC: A pharmacy fee schedule was adopted effective August 7, 2014, at 95 percent of the average wholesale price. An insurer may require preauthorization for inpatient treatment and inpatient or outpatient surgeries.

NJ: Except for emergency situations, injured workers must receive authorization from the employer or the employer's insurance carrier. The employer has the right to choose medical providers. Disputes over medical treatment are reviewable by the Division of Workers' Compensation.

PA: Workers may change providers within a listing of designated providers within the first 90 days. After that, the employee may change providers unrestricted. Statutory provisions exist for coordinated care organizations (CCOs) upon approval of the department. Utilization review is mandated for CCOs; otherwise, it is at the request of the employer, insurer, or worker. Only agency-authorized review organizations can perform utilization review functions.

TX: The worker must select the treating provider from within the medical provider network, if one is established. If care is received through a managed care organization (MCO), the MCO rules apply. The process to change providers is for the worker to submit a request to change providers. The new proposed provider has to agree to treat the worker by signing the request, and it is then submitted to the agency for approval or denial. Requires use of Official Disability Guidelines (ODG).

VA: Chapters 279 and 290, signed into law in 2016, directed the Workers' Compensation Commission to adopt regulations establishing fee schedules setting maximum reimbursement amounts for medical services provided to injured workers, to become effective on January 1, 2018. Preliminary medical fee schedules have been developed and approved by the Commission and submitted for public comment.

WI: Certified database for reimbursement.

Sources: State statutes and rules; Coomer, 2010; Fomenko and Yang, 2017; Savych, 2016b; Tanabe, 2015.

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017

Managed care				
AR Regulated but not mandated.	CA Regulated but not mandated; under contracts with certified HCOs or approved MPNs (see note).	FL Regulated but not mandated; through MCAs approved by the Agency for Health Care Administration (see note).	GA Regulated but not mandated.	IA Allowed but not regulated.
IL Allowed but not regulated.	IN Allowed but not regulated.	KY Regulated but not mandated.	LA Allowed but not regulated.	MA Allowed but not regulated.
MI Allowed but not regulated.	MN Regulated but not mandated (see note).	NC Regulated (by the Department of Insurance) but not mandated.	NJ Regulated but not mandated.	PA See note.
TX Regulated but not mandated; under contracts with health care networks (see note).	VA Allowed but not regulated.	WI Allowed but not regulated. The division's position is that employee choice can coexist with managed care.		
Initial choice of provider				
AR Employer.	CA Under an MPN, the employer arranges the initial medical evaluation, after which the worker can choose a new provider from the network (see note).	FL Employer, but if a managed care arrangement exists worker may select the initial treating provider unless otherwise specified in the plan.	GA Worker from employer panel of six or within managed care plan, if one is established.	IA Employer.
IL Worker (see note).	IN Employer.	KY Worker; worker selects from within a certified managed care plan if employer has designated a plan (see note).	LA Worker (see note).	MA Worker; however, if a PPA exists, worker may be required to have first appointment with provider from plan (see note).
MI Employer for 28 days after inception of medical care, then worker can choose the provider (see note).	MN Worker; worker selects from within a certified managed care plan if employer has established a plan (see note).	NC Employer.	NJ Employer.	PA Worker, for first 90 days, from employer list of six or more designated health care providers; worker choice if no panel is posted or needed specialty is not on the list.
TX Worker; must select from within medical provider network, if one established (see note).	VA Worker, from employer-developed panel.	WI Worker, from any provider licensed and practicing in the state. In an emergency, employer/insurer may select a provider; choice of provider reverts to the employee after the emergency has passed.		
Change of provider				
AR Employer can change without restriction; worker can petition the Commission for a one-time only change to a provider associated with the insurer or self-insurer's MCO (if a contract exists) or with any MCO (if no contract exists) or to the worker's regular treating provider (see note).	CA Within the MPN, the worker can change unrestricted. Outside the MPN, the worker is limited to one change by law, but can practically change any time prior to reaching maximum medical improvement.	FL Worker can change once per injury (upon written request); additional changes only with agreement of the employer/insurer (see note).	GA Worker can change once from the panel of physicians posted by the employer/insurer; additional changes with agreement of employer/insurer.	IA Employer can change without restriction; worker can change provider only with the approval of the employer/insurer or if ordered by the WC agency (see note).
IL Worker can change once without restriction; after that, only with agreement of the employer/insurer (see note).	IN Employer can change without restriction; worker can change provider only with the approval of the employer/insurer.	KY Worker can change once without restriction; subsequent changes require agreement of the employer/insurer.	LA Worker can change only with approval of employer/insurer; employer/insurer cannot change providers.	MA Worker can change once; after that, only with agreement of employer/insurer. Employer/insurer cannot change providers.
MI After 28 days from the inception of medical care, the worker can select the treating provider and change without restriction but must notify the employer of the change. Within the first 28 days the employer can change at will (see note).	MN Worker can change once without restriction within 60 days of initiating treatment. After the first 60 days of treatment, worker needs approval by the employer/insurer, the commissioner, or a workers' compensation judge.	NC Employer may change at any time, but all provider choices are subject to the decision of the Industrial Commission if opposing party petitions. Worker may change with employer/insurer approval or upon approval of the Industrial Commission.	NJ Employer can change without restriction; worker cannot change providers without employer/insurer approval or unless ordered by the WC agency.	PA Worker may choose another provider from within the panel at any time; after 90 days the worker is no longer required to treat within the panel.

continued

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017 (continued)**Change of provider (continued)**

TX Worker can change with agency approval using stated criteria. Worker can change once within an MPN; subsequent requests are subject to network approval. Employer/insurer cannot change providers.	VA Worker can change upon approval by the employer/insurer or if ordered by the WC Commission.	WI Worker can change once without restriction; subsequent changes require agreement of the employer/insurer. Employer/insurer cannot change providers.

Nonfacility (professional) medical provider fee regulation

AR Yes, since 1992. Based on Medicare RBRVS and Arkansas-specific conversion factors. Last updated effective January 1, 2017. Fees can only be negotiated lower than the published rate.	CA Yes, since 1950, based on California Relative Value Studies, 1974. Prior to the 2012 legislation, reviewed and updated periodically with public input. As of January 1, 2014, transition to Medicare RBRVS (over 4-year span); last update was May 15, 2017. Fees can be negotiated above or below the published rate.	FL Yes, since 1938. Based on Medicare RBRVS; last update effective July 1, 2016. Fees can be negotiated above or below the published rate (see note).	GA Yes, since 1987, based on Medicare RBRVS. Reviewed every year; last update was April 1, 2017.	IA No medical fee schedule has been adopted.
IL Yes, medical fee schedule implemented effective February 1, 2006 (see note). Last updated effective January 1, 2017; updates to select codes in April 2017. Fees can be negotiated above or below the published rate.	IN No nonfacility medical fee schedule has been adopted.	KY Yes, since 1989. Based on RV using historic data, Fair Health Database, and comparisons to CMS; previously used Medicare's RBRVS values. Fees can be negotiated below the published rate. Last update effective October 7, 2016.	LA Yes, since 1994. Based on Blue Cross/Blue Shield RVS. Last updated July 20, 2013; updates to radiology codes effective June 20, 2016 (see note). Fees can only be negotiated lower than the published rate.	MA Yes, since 1991. Based on a state-developed RVS. Last update effective January 1, 2017, for new CPT/HCPCS codes; updated April 7, 2017, for hearing and restorative services. Fees can be negotiated above or below the published rate.
MI Yes, since 1989. Based on Medicare RBRVS. May be reviewed and updated annually. Most recent update was January 13, 2017. May enter into contractual agreements below the fee schedule.	MN Yes, converted to an RBRVS system in 1983. Based on Medicare RBRVS; last updated October 1, 2016. Fees can be negotiated above or below the published rate.	NC Yes, since 1929. Based on Medicare RBRVS. Reviewed and updated periodically; last updated January 1, 2017 (see note). Fees can be negotiated if the provider has agreed to a contract.	NJ No medical fee schedule has been adopted.	PA Yes, since 1994. Based on Medicare RBRVS. Since 1995, updated annually to reflect changes in SAWW. Last update was January 1, 2017. Fees can be negotiated above or below the published rate.
TX Yes, since 1992. Based on Medicare RBRVS. Payment policies, RBRVS, and CPT codes are updated annually with Medicare. Conversion factors are updated annually based on changes to the Medicare Economic Index. Fees can only be negotiated below the published rate in certified workers' compensation health care networks (see note).	VA No medical fee schedule has been adopted (see note).	WI No medical fee schedule has been adopted (see note).		
Hospital outpatient payment regulation				
AR Yes. Reimbursed the same as nonfacility provider fees (see note).	CA Yes. Reimbursement is regulated with an APC-based methodology (see note).	FL Yes. Reimbursement using a varied method depending on the services provided (see note).	GA Yes. Reimbursement using a fixed-amount approach (see note).	IA No hospital outpatient fee schedule has been adopted.
IL Yes. CPT-based fee schedule for outpatient services (see note).	IN Yes. Reimbursement at 200 percent of Medicare, effective for services provided on or after July 1, 2014. Prior to that date, no hospital outpatient fee schedule was used (see note).	KY Yes. Hospital-specific cost-to-charge ratio established annually.	LA Yes. Reimbursement set at 90 percent of billed charges (see note). Covers all outpatient services.	MA Yes. Reimbursement using a varied method depending on the services provided (see note).
MI Yes. Regulated by formula, based on a cost-to-charge ratio for each hospital (see note).	MN Yes. Reimbursement based on percent of charges or usual and customary charge per service or procedure and differs by hospital size (see note).	NC Yes. Reimbursement set as a percentage of Medicare beginning April 1, 2015; previously, reimbursement was based on percent of charges (differs by hospital type) until 2012 and then a per-procedure-based fee schedule (see note).	NJ No hospital outpatient fee schedule has been adopted.	PA Yes. Combines features of a fixed-amount fee schedule and charge-based regulation (see note).
TX Yes. Prices are regulated with an APC-based methodology using Medicare's hospital-specific rates (see note).	VA No hospital fee schedule has been adopted (see note).	WI No hospital outpatient fee schedule has been adopted (see note).		

continued

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017 (continued)

Hospital inpatient payment regulation				
AR Yes. Reimbursement based on per diem amount according to hospital size and type of facility.	CA Yes. DRG-based fee schedule for inpatient services; uses Medicare's hospital-specific rates.	FL Yes. Reimbursement paid on per diem basis; different allowable fees based on type of hospital.	GA Yes. DRG-based fee schedule for inpatient services.	IA No hospital inpatient fee schedule has been adopted.
IL Yes. DRG-based fee schedule for inpatient services.	IN Yes. Reimbursement at 200 percent of Medicare, effective for services provided on or after July 1, 2014. Prior to that date, no hospital inpatient fee schedule was used (see note).	KY Yes. Hospital-specific cost-to-charge ratio established annually.	LA Yes. Reimbursement paid on per diem basis (see note).	MA Yes. Hospital-specific payment on account factor (PAF) established annually (see note).
MI Yes. Regulated by formula, based on a cost-to-charge ratio for each hospital (see note).	MN Yes. Effective January 1, 2016, reimbursement set at 200 percent of the Medicare DRG rates. Previously reimbursement was based on percent of charges or usual and customary charge and differed by hospital size (see note).	NC Yes. Reimbursement set as a percentage of Medicare beginning April 1, 2015; previously used DRG-based fee schedule or percent of charges (see note).	NJ No hospital inpatient fee schedule has been adopted.	PA Yes. DRG-based fee schedule for inpatient services; uses hospital-specific rates (see note).
TX Yes. DRG-based fee schedule for inpatient services; uses Medicare's hospital-specific rates (see note).	VA No hospital fee schedule has been adopted (see note).	WI No hospital inpatient fee schedule has been adopted.		
Ambulatory surgery center payment regulation				
AR Yes. Reimbursement paid same as nonfacility provider fees, by procedure code (see note).	CA Yes. APC-based fixed-amount fee schedule (see note).	FL Yes. Per-procedure-based reimbursement by CPT code at the maximum reimbursement amount (MRA) or the contract price; CPT codes not listed in the schedule are reimbursed at 70 percent of charges or the agreed-upon contract price.	GA Yes. Fixed-amount approach; same as hospital outpatient (see note).	IA No ambulatory surgery fee schedule has been adopted.
IL Yes. Per-procedure-based fee schedule, but rates are different from hospital outpatient services (see note).	IN No ambulatory surgery fee schedule has been adopted.	KY Yes. Reimbursement based on percentage of the hospital assigned cost-to-charge ratio (see note).	LA Yes. Reimbursement is 90 percent of billed charges, same as hospital outpatient (see note).	MA Yes. APC (group) based fee schedule; same reimbursement for hospital outpatient surgeries that have a Medicare APC assigned.
MI Yes. Per-procedure fixed-amount fee schedule with rates set at 130 percent of Medicare ASC rates (see note).	MN Yes, primarily percent of charges. Same as hospital outpatient fees for hospitals over 100 licensed beds (see note).	NC Yes. Reimbursement set as a percentage of Medicare beginning April 1, 2015; previously, reimbursement was based on percent of charges until 2012 and then a per-procedure-based fee schedule (see note).	NJ No ambulatory surgery fee schedule has been adopted.	PA Yes. Reimbursement based on APC payment groups defined by the Health Care Financing Administration, and includes the Medicare list of covered services and related classifications in these groups. Uses the nine group method in place in 1994, and rates are established by the provider.
TX Yes. APC-based fixed-amount fee schedule, but rates are different from hospital outpatient services (see note).	VA No ambulatory surgery fee schedule has been adopted (see note).	WI No ambulatory surgery fee schedule has been adopted.		
Pharmaceutical fee regulation				
AR Yes. Basis is AWP, plus a maximum allowable dispensing fee of \$5.13. Substitution of generic drugs required.	CA Yes. Basis is state Medicaid (Medi-Cal) fee schedule. Substitution of generic drugs required. Maximum allowable dispensing fee same for generic and brand names: \$7.25, except \$8.00 for nursing homes.	FL Yes. Basis is AWP, plus a maximum allowable dispensing fee of \$4.18, except \$8.00 for repackaged drugs. Substitution of generic drugs required.	GA Yes. Basis is AWP, plus a dispensing fee of \$4.26 for brand names and \$6.38 for generics. Reimbursement for physician-dispensed drugs set to AWP of underlying NDC, plus dispensing fee (1 per NDC per day). Substitution of generic drugs required unless brand name is requested in doctor's own handwriting on the prescription.	IA No pharmacy fee schedule has been adopted.

continued

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017 (continued)

Pharmaceutical fee regulation (continued)				
IL No pharmacy fee schedule has been adopted (see note).	IN No pharmacy fee schedule has been adopted (see note).	KY Yes. Basis is the equivalent drug product wholesale price of the lowest priced therapeutically equivalent drug in stock, plus a \$5 dispensing fee. Substitution of generic drugs is generally required.	LA Yes. Basis is the lesser of usual and customary or provider/insurer contracted charge or AWP plus 40 percent, plus a maximum allowable dispensing fee of \$10.51 for generic; AWP plus 10 percent, plus a maximum allowable dispensing fee of \$10.51 for brand name. Substitution of generic drugs allowed but not required.	MA Yes. Basis is the lesser of the estimated acquisition cost plus a \$3.00 dispensing fee or usual and customary (see note). Physician dispensing is generally prohibited.
MI Yes. Basis is AWP minus 10 percent, plus a maximum allowable dispensing fee of \$3.50 for generic and \$5.50 for brand name applicable to both pharmacy-dispensed and physician-dispensed prescriptions. Substitution of generic drugs required.	MN Yes (see note). Substitution of generic drugs required.	NC Yes (effective August 7, 2014). Basis is 95 percent of AWP. Statutes are silent on generic substitution, but according to regulators, the state implicitly permits payors to require the substitution of generic drugs for brand name drugs.	NJ No pharmacy fee schedule has been adopted.	PA Yes. Basis is 110 percent of the AWP and no dispensing fee (does not apply to hospitals and urgent care centers). Substitution of generic drugs is generally required.
TX Yes. Basis is AWP plus 9 percent for brand name drugs and AWP plus 25 percent for generic drugs, plus a maximum allowable dispensing fee of \$4.00. An additional \$15 compounding fee per prescription may be added. Substitution of generic drugs required (see note). Physician dispensing is generally prohibited.	VA No pharmacy fee schedule has been adopted.	WI Yes. Basis is AWP plus a \$3.00 dispensing fee.		
Utilization review (non-managed care)				
AR Yes, mandated for all claims. Only certified review organizations are authorized to perform UR functions.	CA Yes, mandated for all claims, under 2003 legislation (see note). Private payors authorized to perform UR functions.	FL Yes, mandated for all claims. State agency employees and private payors authorized to perform UR functions.	GA None.	IA None.
IL Not required (see note).	IN None.	KY Yes, mandated for certain claims (see note). Only certified review organizations can perform UR functions.	LA Review performed in all nonemergency hospitalizations and in cases with more than \$750 in medical costs; mandatory precertification, continued stay, discharge planning, and dispute resolution for all nonemergency hospital services.	MA Yes, mandated for all claims (see note). Only certified review organizations are authorized to perform UR functions.
MI Yes, required by insurance carriers in inpatient cases, cases in which medical expenditures (excluding inpatient care) exceed \$20,000, and cases where care is alleged to be "inappropriate, insufficient, or excessive."	MN Not required outside of MCOs; mandated for all MCOs.	NC Not required (see note). Private payors authorized to perform UR functions.	NJ None.	PA Mandated for CCOs; otherwise, at request of employer, insurer, or worker. Only agency certified review organizations can perform UR functions.
TX Preauthorization and concurrent review mandated under HB 7 (see note). Only certified review organizations are authorized to perform UR functions.	VA None (see note).	WI Not required (see note).		
Treatment guidelines (mandatory)				
AR No.	CA Yes (see note).	FL Yes (see note).	GA No.	IA No.
IL No.	IN No.	KY See note.	LA Yes (see note).	MA Yes; used in conjunction with UR program; 28 guidelines in place, developed through consensus-based, multidisciplinary effort.
MI No (see note).	MN Yes (see note).	NC No.	NJ No.	PA No.
TX Yes, under 2005 legislation, HB 7 (see note).	VA No.	WI Yes (see note).		

continued

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017 (continued)**Notes:**

AR: Reimbursement for ASC and hospital outpatient services is the lesser of the provider's usual charge, the fee calculated according to the Arkansas Workers' Compensation Commission Official Fee Schedule, or the managed care organization or preferred provider organization contracted price.

CA: Senate Bill (SB) 899 allowed employers to establish medical treatment networks effective January 1, 2005; an injured worker who does not predesignate a treating physician must receive care only through the network. Under SB 899, an employee may be treated by a predesignated physician from the date of injury if all of the requirements for predesignation are met; predesignation is allowed only for employees whose employers provide nonoccupational group health coverage through an HMO, health care plan, HCO, or other such entity described in the statute. Otherwise and prior to SB 899, the employer selects the provider for the first 30 days, unless the worker predesignated a treating physician or unless the employer or insurer established an MPN. LC 5307.1 (a)(2) requires an Official Medical Fee Schedule based on the Medicare resource-based relative value scale for physician services to begin in 2014. The fee schedule provided by Senate Bill 863 commenced on January 1, 2014, and will remain in effect until the Division of Workers' Compensation adopts an RBRVS schedule that allows no more than 120 percent of the aggregate fees allowed by Medicare. Under SB 863, effective January 1, 2013, reimbursement for ambulatory surgery center services was reduced from 120 percent to 80 percent of Medicare hospital outpatient rates. SB 228 mandated adoption of utilization guidelines effective January 1, 2004, and attached a presumption of correctness to the guidelines; the American College of Occupational and Environmental Medicine (ACOEM) practice guidelines, second edition, were adopted. Further, the legislation required the administrative director in consultation with the Commission on Health and Safety and Workers' Compensation (CHSWC) to adopt a medical treatment utilization schedule by December 1, 2004, based on CHSWC study recommendations. All employers are required to adopt UR systems consistent with the utilization schedule. SB 863 (2012) required the establishment of a 30-day independent medical review (IMR) process for medical treatment disputes for claims with injuries on/after January 1, 2013; effective July 1, 2013, IMRs are the only way for all UR decision appeals regardless the date of injury.

FL: Use of managed care is optional as of October 1, 2001, but if an authorized MCA is used, specified guidelines must be followed. Under the 2003 legislation, an insurer must authorize a change of physician within five days of the request; if the insurer fails to respond on time, the worker may select the physician. Legislation in 2003 resulted in increased reimbursements for osteopaths and physicians and for surgical procedures (effective January 1, 2004) and for chiropractor and physical/occupational therapists (effective May 2005). For these providers and services, fees are a percentage of Medicare rather than based on usual and customary charges. At the same time, a reduction in fees for certain hospital services and hospital outpatient services was mandated. Under Florida Statutes (Section 440.13(14)(b)), an employer/insurer may deviate from the fee schedule reimbursement allowance based on a contractual agreement with the health care provider for the provision of medical care and treatment in such a manner to facilitate cost containment and early return-to-work outcomes. Compensable outpatient charges are reimbursed at 75 percent of usual and customary charges. Scheduled outpatient surgeries are reimbursed at 60 percent of charges. Outpatient physical, occupational, and speech therapy, as well as scheduled nonemergency radiology and clinical laboratory services provided not in conjunction with a surgical procedure, are paid the same as nonhospital providers. Effective January 1, 2015, the hospital outpatient reimbursement approach was changed from percentage of charges to a fixed-amount method, with reimbursement for most services using a Base Rate (reflecting average charges of outpatient hospital bills, by CPT and Healthcare Common Procedure Coding System [HCPCS] code, in a specific geographic area) adjusted by a county-specific modifier. Treatment guidelines identify typical courses of intervention. Providers are expected to be familiar with the guidelines and follow the recommendations; however, the guidelines are not hard-and-fast rules and sound medical judgment is important in deciding how to use and interpret the information. The 2003 legislation required that, where the U.S. Agency for Healthcare Research and Quality has adopted treatment guidelines (those in effect on January 1, 2003), they are to be used. However, because these guidelines are not available for all diagnoses, providers often reference other treatment guidelines when the mandated resource provides no guidelines.

GA: Prior to May 2014, reimbursement rates for hospital outpatient and ambulatory surgery center services were based on the ICD-9 clinical modification (CM) listing. Some maximum allowable reimbursements (MAR) for the ICD-9-CM codes are provided in the Outpatient Surgery/Ambulatory Surgery Center Schedule. The fees are paid at the lesser of either billed charges or the MAR for the ICD-9-CM. Effective May 1, 2014, the ICD-9 coding methodology was modified by adopting the Medicare hospital outpatient prospective payment system (OPPS) reimbursement model (at 225 percent of Medicare), with state-specific guidelines, as the new billing and payment methodology.

IA: If the employer/insurer does not agree to a request to change providers, the employee can file a petition with the commissioner to seek alternate medical care.

IL: House Bill 2137 (2005) created a medical fee schedule, effective February 1, 2006. The fee schedule set fees at 90 percent of the 80th percentile of actual charges within a geographic area based on geozip (a geographic area with the same first three digits of a zip code), utilizing information contained in employers' and insurers' national databases. Twenty-nine geozip regions were established. The fee schedule is adjusted yearly based on changes to the Consumer Price Index. The legislation also required establishment of fee schedules for hospital and ambulatory surgery center services. Previously, hospital reimbursement was regulated on a case-by-case basis, usually through analysis of usual and customary charges. Hospital outpatient and ASC fee schedules were based on 90 percent of the 80th percentile of charges within a geographic area. As a result, fee schedule rates for ASC services were lower than hospital outpatient rates for the same surgeries. Two hospital inpatient fee schedules have been established: the first is the standard DRG fee schedule that applies to the vast majority of hospital inpatient bills; the second is the trauma DRG fee schedule that applies to a small number of inpatient bills that involve trauma admission at designated trauma centers. Rates/fees for inpatient care may be contracted or negotiated below the fee schedule amount. Effective January 1, 2011, the number of regional fee schedules was reduced to 4 for nonhospital services and to 14 for hospital care, down from 29 fee schedules. Reimbursement for all medical services was reduced by 30 percent, effective for services delivered on/after September 1, 2011. Effective November 2012, prescriptions dispensed or filled outside of licensed pharmacies are reimbursed at AWP plus a \$4.18 dispensing fee. Prescriptions filled at a licensed pharmacy are paid at the usual and customary rate. Utilization review is not required. The 2005 legislation defined utilization review and established qualifications for individuals who conduct utilization review within the workers' compensation system; utilization techniques may include prospective review, second opinions, concurrent review, discharge planning, peer review, independent medical examinations, and retrospective review. Utilization review may be considered in the same way as other evidence in determination of the reasonableness and necessity of medical bills or treatment. Effective for services on or after September 1, 2011, when UR is requested and upon notification by an employer, medical providers are required to provide a clinical report to support the request for treatment. Providers who fail to comply might not be allowed to bill for their services. The utilization review has to be based upon nationally recognized treatment guidelines and evidence-based medicine. Under the 2011 reforms, Illinois created a preferred provider program for selecting treating physicians. The employee may decline to participate in the program in writing and choose his/her own physician. The final preferred provider program rules went into effect in March 2013.

IN: House Bill 1320 enacted a hospital fee schedule effective July 1, 2014, with reimbursement set at 200 percent of Medicare. Prior to implementation of the hospital fee schedule, fees for medical services in a defined community in Indiana were required to be equal to or less than charges by medical providers at the 80th percentile in the same community for like services. Also, the 2013 legislation set the maximum reimbursement for repackaged prescription drugs to the AWP set by the original manufacturer of the drug, effective July 1, 2013. If the National Drug Code (NDC) for a drug cannot be determined from the medical service provider's billing or statement, the maximum reimbursement amount for the repackaged drug is the lowest cost generic for the drug.

KY: The worker may continue treating with the physician who provided emergency medical care, even if the employer has designated a managed care plan. The ASC fee schedule is based on a cost-to-charge ratio by county of location or, if qualified, ASCs can bill under affiliated hospital cost-to-charge ratios. Utilization review is required in cases in which a medical provider requests preauthorization for treatment, notification of a surgical procedure or resident placement is received, total medical costs exceed \$3,000, there are over 30 lost work days, or an arbitrator or administrative judge orders a review. Kentucky has a clinical practice parameter for acute low back problems in adults; it is required in UR plans.

LA: The worker has the right to select one treating provider in each field or specialty. The Office of Workers' Compensation updated the CPT codes, effective July 20, 2013. Prior to that update, the fee schedule had not been updated since its initial promulgation. The medical fee schedule sets reimbursement for hospital outpatient services and ambulatory surgery center services in Louisiana at 90 percent of billed charges. The workers' compensation statute, however, calls for reimbursement based on the mean of usual and customary charges. Reimbursement for inpatient services is limited to the lesser of covered billed charges or the per diem amount. Per diem amounts are standard metropolitan statistical area (SMSA) specific and medical/surgical specific. The medical treatment guidelines adopted by the Office of Workers' Compensation went into effect on July 13, 2011. The guidelines were modeled on Colorado guidelines and consist of four broad guidelines: Spine, Pain, Neurological and Neuromuscular, and Upper and Lower Extremities.

MA: Massachusetts does not have traditional managed care, but does have this one limitation on the workers' total choice of provider. Each hospital has a specific PAF (payment on account factor, a multiplier) for each rate year, and the PAF is multiplied by charges to determine reimbursement. Hospital outpatient surgeries that have a Medicare APC assigned are reimbursed at the same amount as an ASC. Nonsurgical services provided on an outpatient basis (except for restorative services) are paid under the general medical fee schedule unless the outpatient services are available only in hospitals. Then payors pay for the following services (emergency department, observation, and ambulatory surgery that is not approved by Medicare to be performed in an ASC) and any other services incidental to the visit by applying the hospital's PAF to the charge for services. The maximum reimbursement rate for generic drugs is the lesser of the federal upper limit, the state upper limit, or the estimated acquisition cost plus a \$3.00 dispensing fee, or the usual and customary charge. The estimated acquisition cost is the wholesale acquisition cost plus 5 percent, which is equivalent to the AWP minus 16 percent. Utilization review is required starting 12 weeks postinjury unless the insurer intends to deny treatment within the first 12 weeks postinjury.

MI: Legislation passed in 2011 increased the period of employer choice from 10 days to 28 days. This change was effective December 19, 2011. After 28 days from the inception of medical care, the employee may treat with a physician of his or her choice by giving to the employer the name of the physician and notice of intent to treat with the named physician. A cost-to-charge method is used to reimburse all hospital outpatient and inpatient services. The following formula applies for payment of a properly submitted bill within 30 days: appropriate charges x hospital ratio for the date of service x 107 percent. The following formula applies for payment of a properly submitted bill after 30 days: appropriate charges x hospital ratio for the date of service x 110 percent. Michigan fee schedules allow hospital-owned ASCs to seek payments under the hospital cost-to-charge ratio approach billing with the hospital's tax ID number. The development, use, and enforcement of treatment guidelines are the responsibility of the insurance carriers.

continued

Table 6 Medical Cost Containment Strategies in Use as of January 1, 2017 (continued)

MN: Employees may be allowed to obtain treatment with a provider outside the plan with whom they have a prior treating relationship and who maintains the employee's medical records. Outside providers must agree to abide by the terms of the plan. A managed care plan may not require a health care provider to accept a lesser payment or pay a fee as a condition of receiving referrals from or becoming a participating provider in the plan. Reimbursement for outpatient services at a hospital with 100 or more licensed beds is limited to the lower of the maximum fee that applies to any service included in the relative value fee schedule, 85 percent of the facility's usual and customary charge, 85 percent of the prevailing charge, or the facility's actual charge. Hospitals with fewer than 100 licensed beds are reimbursed at 100 percent of the hospital's usual and customary charge, unless the commissioner or compensation judge determines the charge is unreasonably excessive. Legislation passed in 2015 changed reimbursement for hospital inpatient care from a method based on charges to 200 percent of the Medicare DRG rates, effective January 1, 2016. Prior to January 1, 2016, reimbursement for inpatient services at a hospital with 100 or more licensed beds was limited to the lower of 85 percent of the facility's usual and customary charge, 85 percent of the prevailing charge, or the facility's actual charge. Hospitals with fewer than 100 licensed beds were reimbursed at 100 percent of the hospital's usual and customary charge, unless the commissioner or compensation judge determined the charge was unreasonably excessive. Reimbursement for pharmaceuticals for electronic transactions was the lower of 88 percent of the AWP plus a dispensing fee of \$3.65, the Medicaid MAC plus \$3.65, or the provider's usual and customary charge. Reimbursement for pharmaceuticals for paper transactions was the lower of AWP plus a \$5.14 dispensing fee, or usual and customary charge. The statute allows payors to establish pharmacy networks and negotiated fees. Treatment guidelines apply to all dates of injury and all health care providers and have been established for some common work-related injuries: low back pain, neck pain, thoracic back pain, upper extremity disorders, and reflex sympathetic dystrophy. Treatment parameters have also been adopted governing the appropriate use of medication, including controlled substances. The parameters also include broad guidelines that reflect good medical practice that apply to all injuries.

NC: Effective January 1, 2013, the multipliers for the professional fee schedule were increased for CPT codes covering evaluation and management services (from 1.58 to 2.05 of 1995 NC Medicare values) and physical medicine services (from 1.30 to 1.36); payments for many CPT general medicine codes were retained at 1995 NC Medicare values x 1.58. Effective July 2009, reimbursement for hospital outpatient services was set at 79 percent of charges (down from 95 percent) for all hospitals except critical access hospitals, which are reimbursed at 87 percent of charges. The same rates applied to ASCs. Effective February 1, 2013, charges for ASCs and outpatient services were frozen at rates set by each facility as of June 30, 2012. By freezing charges for outpatient services, North Carolina effectively moved away from a charge-based fee regulation to a fee regulation that can be characterized as a fixed-amount fee schedule. Effective April 1, 2013, the frozen rates were cut by 15 percent for outpatient services and ASCs. Inpatient hospital stays are reimbursed according to a DRG fee schedule that duplicates the State Health Plan contract. However, in instances where DRG allowances fall below charges or DRG allowances exceed charges, end caps are imposed. Interim fee schedule changes in 2013 further reduced reimbursement for hospital care. House Bill 92 (signed into law by the Governor on August 23, 2013) required that hospital reimbursement be based on "Medicare methodology" and charged the Industrial Commission with developing a new hospital fee schedule. New fee schedule rules for ASCs and hospital outpatient reimbursement, which were approved in February 2015, employ a staggered implementation of decreasing reimbursement multipliers relative to Medicare, ranging from 220 percent effective April 1, 2015, to 210 percent effective January 1, 2016, and 200 percent effective January 1, 2017 (with slightly higher rates for critical access hospitals). A similar approach is used for hospital inpatient reimbursement under the new rules, with decreasing reimbursement multipliers relative to Medicare, ranging from 190 percent effective April 1, 2015, to 180 percent effective January 1, 2016, and 160 percent effective January 1, 2017 (slightly higher rates for critical access hospitals). An insurer may require preauthorization for inpatient treatment and inpatient or outpatient surgeries.

PA: Statute provides for Coordinated Care Organizations (see 77PF Section 531). Reimbursement for hospital outpatient services is set at 113 percent of the provider's charge for a procedure or revenue billing codes frozen at December 31, 1994; levels are updated annually for changes in the statewide average weekly wage. Hospital outpatient providers that are not subject to the Medicare fee schedule are reimbursed using the provider's actual charge multiplied by the ratio of cost to charges based on the most recent Medicare cost report. Also, if the fee schedule rate for a treatment, product, or service is not available, reimbursement is the lower of 80 percent of the usual and customary charge or the actual charge. Therefore, many providers bill under the charge-based clause in the regulation. Payments to providers of inpatient acute care hospital services are based on the sum of the following: (1) 113 percent of the DRG payment, (2) 100 percent of payments that are reimbursed on the prospective pay system, (3) 100 percent of pass-through costs, and (4) 100 percent of applicable cost outliers or 100 percent of applicable day outliers. DRG rates were frozen at December 31, 1994, levels and are adjusted annually by the change in the statewide average weekly wage. The Bureau will randomly assign requests for UR to authorized UROs.

TX: House Bill (HB) 7 (2005) permitted insurers and employers to establish or contract with health care networks, which must be certified by the Texas Department of Insurance, with certification commencing January 1, 2006; it established other provisions concerning networks. Effective January 1, 2011, discounted fee contracts for voluntary or informal networks were eliminated. The reimbursement rate for inpatient care is calculated as the sum of the Medicare facility-specific reimbursement amount and any applicable outlier payment amount multiplied by 143 percent. If a facility or surgical implant provider requests separate reimbursement, the facility-specific reimbursement amount and any applicable outlier payment amount is multiplied by 108 percent. The reimbursement rate for hospital outpatient services is calculated as the sum of the Medicare facility-specific reimbursement amount and any applicable outlier payment amount multiplied by 200 percent, unless a facility or surgical implant provider requests separate reimbursement, in which case the facility-specific reimbursement amount and any applicable outlier payment amount is multiplied by 130 percent. Texas law allows a worker to obtain a brand name drug if the worker pays the difference between the generic and the brand name drug. Utilization review was not required prior to passage of HB 7 and was provided at the request of the employer, the insurer, or the worker. All claims are subject to utilization review through either preauthorization, concurrent, or retrospective review. HB 7 required that the commissioner and networks select treatment and return-to-work guidelines; the Texas Department of Insurance designated the Official Disability Guidelines (ODG) as the official workers' compensation treatment guidelines for Texas, applicable for health care provided on or after May 1, 2007, in nonnetwork claims. For return-to-work guidelines, Texas has adopted the most current edition of The Medical Disability Advisor, Workplace Guidelines for Disability Duration (MDA), published by the Reed Group.

VA: HB 378 was signed into law March 7, 2016, and requires that maximum reimbursement rates for workers' compensation services provided by medical providers be established and implemented by January 1, 2018. The Virginia Workers' Compensation Commission was tasked with adopting regulations necessary to establish the initial fee schedule rates. The legislation specifies that the initial fee schedule rate for each service should reflect an average of all payments paid to medical providers for the medical services provided in the same medical community and defined six medical communities in the state. The legislation also specifies that future increases in fee schedules should be limited to changes in the medical care component of the Consumer Price Index for All Urban Consumers (CPI-U) for the South region reported by the Bureau of Labor Statistics. Utilization review occurs only when there is a dispute between the provider and insurer as to the reasonableness or necessity of the treatment rendered. Parties can resolve these disputes through the judicial process or through peer review.

WI: Since 1992, databases certified by the Worker's Compensation Division list "formula amounts" by CPT code for each region, updated semiannually; fees are considered reasonable if below formula amounts. Prospective utilization review is prohibited; retrospective review is permitted in disputes over hospital length of stay and physician and chiropractor visits. Legislation passed in 2005 authorized the department to promulgate rules to establish treatment guidelines to be used in resolving necessity of treatment disputes; proposed rules establish standards that are largely consistent with Minnesota's treatment parameters. Treatment guidelines became effective November 1, 2007 (Chapter 81). Act 185, effective April 1, 2008, eliminated the requirement that the rules establishing necessity of treatment standards be consistent with Minnesota rules.

Key: APC: ambulatory payment classification; ASC: ambulatory surgery center; AWP: average wholesale price; CCO: coordinated-care organization; CMS: Centers for Medicare & Medicaid Services; CPT: Current Procedural Terminology; DRG: diagnosis-related group; HB: house bill; HCO: health care organization; HCPCS: Healthcare Common Procedure Coding System; HMO: health maintenance organization; ICD-9: International Classification of Diseases, 9th Revision; MAC: Medicaid administrative claiming; MCA: managed care arrangement; MCO: managed care organization; MPN: medical provider network; NDC: National Drug Code; PPA: preferred provider arrangement; RBRVS: resource-based relative value scale; RV: relative value; RVS: relative value scale; SAWW: statewide average weekly wage; UR: utilization review; URO: utilization review organization; WC: workers' compensation.

Sources: State statutes and rules; Coomer, 2010; Fomenko and Yang, 2017; Savych, 2016b; Tanabe, 2015.

Table 7 Workers' Compensation Premium over Medicare by Service Group, March 2016

State	Percentage Greater Than or Less Than Medicare									
	Overall	Emergency Services	Evaluation and Management	Major Radiology	Minor Radiology	Neurological/ Neuromuscular Testing	Physical Medicine	Pain Management Injections	Major Surgery	Maximum Spread from 8 Service Groups
Massachusetts	-2	-4	-13	-1	-5	-34	-30	17	133	167
Florida^a	-2	2	-10	5	1	-30	-8	50	37	80
New York ^a	8	73	-23	109	176	-7	-11	2	115	199
District of Columbia	13	13	13	13	13	13	14	14	14	1
California	21	19	19	33	33	18	19	35	35	17
Hawaii	23	50	21	31	57	23	21	19	30	38
South Dakota	27	86	0	158	100	-5	12	2	131	163
Maryland	29	23	24	23	23	24	24	35	63	40
Wyoming	34	88	4	195	129	16	10	22	160	191
Michigan	34	33	34	35	39	32	34	18	36	21
Oklahoma	35	45	45	106	74	4	6	58	103	102
West Virginia	35	35	35	35	35	35	36	35	35	1
Pennsylvania^a	37	37	5	128	124	13	31	43	117	123
Vermont ^b	38	41	1	165	148	11	37	111	103	164
Colorado	38	35	34	157	163	86	16	87	88	147
South Carolina	40	40	40	39	42	40	41	42	39	3
Louisiana^b	42	62	5	90	111	13	44	44	110	106
Tennessee	46	90	52	90	90	52	25	90	90	65
Delaware ^a	47	123	6	35	59	102	32	107	181	175
Arkansas	49	31	35	107	107	37	34	117	121	90
Utah	50	40	44	64	68	47	45	80	76	40
North Carolina	52	69	40	95	95	53	44	62	95	55
Ohio	53	42	42	41	49	42	42	46	120	79
Kansas	58	56	60	64	67	69	37	95	127	90
Nebraska	62	78	40	142	145	51	36	104	190	154
Kentucky	64	60	49	40	55	43	63	81	112	72
Texas^a	65	59	59	59	59	60	60	60	100	41
Minnesota	67	84	89	83	84	83	43	92	89	49
Washington	67	67	67	67	69	68	68	49	67	20
Montana	71	69	70	69	74	72	72	70	68	6
Alabama	71	28	0	302	310	2	59	43	256	310
Connecticut	73	57	56	101	118	92	26	164	261	235
New Mexico	73	95	44	407	161	61	57	85	143	363
Illinois^a	74	134	3	232	256	118	39	177	296	293
Maine	75	73	74	72	72	74	73	77	81	9
Georgia	76	50	51	145	152	69	50	68	220	170
Arizona	79	122	54	148	115	63	62	95	186	132
Mississippi	83	32	20	89	93	173	86	192	209	189
Oregon	88	97	94	108	114	81	67	158	133	91
North Dakota	91	93	91	91	91	89	90	90	96	7
Idaho	108	106	110	159	160	111	46	178	310	264
Nevada	112	139	29	441	320	50	77	122	385	412
Alaska	189	123	123	618	618	123	124	473	473	495
Rhode Island ^c	n/c	21	24	89	93	30	n/c	199	200	179
Median ^d	52	58	38	90	92	49	39	74	114	97

Notes: Fees are those in effect in March 2016. State names in bold represent states with medical fee schedules that are among the 18 states included in this study. Positive numbers in this table reflect a percentage above the Medicare fee schedule levels for a state, and negative numbers in this table reflect a percentage below the Medicare fee schedule levels for a state.

^a Delaware, Florida, Illinois, New York, Pennsylvania, and Texas have distinct fee schedules for different parts of the state. For each, a single statewide rate was created by averaging the different sub-state fee schedules using the percentage of employed persons in each sub-state region as weights. Medicare establishes distinct sub-state fee schedules in 14 states. For each, a single statewide rate was created using the same procedure.

^b In Louisiana and Vermont, 86 and 82 percent of payments for pain management injections, respectively, were paid for services without established workers' compensation fee schedule rates, allowing *by report* reimbursement. Hence, these services were excluded from the computation of the workers' compensation premiums over Medicare for these two states.

^c Rhode Island has different billing codes for physical medicine and does not establish rates for the majority of the codes. An overall rate is not established for Rhode Island as physical medicine is the largest component of the marketbasket and excluding it significantly biases the results. For more details, see the technical appendix in Fomenko and Liu (2016).

^d The value shown is for the median state in each column. Therefore, the entry for the last column (maximum spread from eight service groups) in this row is the median of the maximum spreads in the individual states, rather than the maximum spread of the entries for the median of each service group.

Key: n/c: not comparable.

Source: Fomenko and Liu, 2016.

Table 8 Percentage of Services and Average Prices for New and Established Patient Office Visit CPT Codes in All States, Calendar Year 2015

CPT Code	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a
New patient office visits																			
<i>Percentage of services</i>																			
99201	1.8	1.6	0.3	0.4	1.4	1.6	1.6	1.5	0.8	1.2	1.3	2.8	0.3	1.7	0.6	0.3	1.3	2.3	1.4
99202	16.2	9.2	4.8	5.6	18.2	10.7	16.0	10.3	8.6	12.8	17.7	27.2	10.0	9.5	10.3	7.3	27.7	20.5	10.5
99203	60.5	36.2	47.1	52.9	58.5	51.3	56.1	56.6	54.8	54.5	51.1	51.8	51.8	43.2	58.7	53.3	48.5	58.8	53.1
99204	20.2	41.7	36.3	33.0	19.3	34.5	25.3	30.1	28.8	28.3	28.5	16.8	36.6	41.6	27.5	36.4	20.3	17.4	28.7
99205	1.3	11.4	11.5	8.1	2.5	1.9	1.0	1.5	7.0	3.2	1.4	1.4	1.2	4.0	2.9	2.7	2.2	1.1	2.4
<i>Average price</i>																			
99201	\$49	\$48	\$38	\$53	\$70	\$54	\$98	\$47	\$55	\$38	\$50	\$70	\$50	\$64	\$48	\$59	\$86	\$100	\$53
99202	\$80	\$82	\$63	\$94	\$113	\$77	\$114	\$92	\$86	\$62	\$87	\$127	\$82	\$85	\$78	\$102	\$108	\$165	\$87
99203	\$124	\$119	\$94	\$145	\$164	\$112	\$162	\$130	\$117	\$101	\$132	\$184	\$120	\$128	\$102	\$153	\$158	\$240	\$129
99204	\$194	\$179	\$140	\$216	\$256	\$162	\$257	\$198	\$176	\$152	\$200	\$280	\$179	\$183	\$159	\$239	\$242	\$379	\$196
99205	\$241	\$218	\$175	\$263	\$313	\$201	\$293	\$226	\$220	\$211	\$255	\$342	\$221	\$206	\$193	\$293	\$284	\$425	\$233
Established patient office visits																			
<i>Percentage of services</i>																			
99211	0.5	0.5	0.4	0.3	0.6	3.3	0.4	3.1	1.1	0.7	0.3	0.7	0.2	0.5	1.4	1.0	0.6	0.7	0.6
99212	9.9	3.5	3.9	5.9	16.7	9.6	12.8	10.0	7.6	8.4	10.5	12.3	5.8	5.2	12.6	6.4	9.8	15.4	9.7
99213	68.3	36.6	46.3	53.6	62.0	54.9	60.8	59.9	52.3	59.7	66.6	56.8	56.8	54.8	55.3	68.5	58.2	60.2	57.5
99214	20.2	50.3	41.1	37.1	19.2	30.2	25.2	25.3	33.7	28.8	21.7	28.3	35.8	37.8	29.1	23.3	28.5	22.4	28.7
99215	1.1	9.2	8.3	3.0	1.5	1.9	0.9	1.7	5.3	2.5	0.9	1.9	1.4	1.8	1.6	0.8	2.9	1.2	1.7
<i>Average price</i>																			
99211	\$22	\$23	\$19	\$26	\$38	\$39	\$33	\$28	\$27	\$19	\$23	\$32	\$24	\$31	\$29	\$28	\$40	\$51	\$28
99212	\$49	\$50	\$38	\$59	\$73	\$49	\$69	\$53	\$47	\$38	\$52	\$75	\$48	\$59	\$45	\$58	\$65	\$104	\$52
99213	\$81	\$81	\$60	\$96	\$104	\$73	\$103	\$87	\$67	\$64	\$89	\$127	\$75	\$80	\$65	\$100	\$104	\$157	\$84
99214	\$122	\$119	\$89	\$143	\$159	\$107	\$158	\$127	\$103	\$95	\$130	\$191	\$111	\$117	\$100	\$155	\$156	\$243	\$125
99215	\$160	\$152	\$126	\$190	\$209	\$144	\$221	\$152	\$161	\$128	\$176	\$253	\$159	\$167	\$152	\$209	\$230	\$330	\$164
CPT code definitions:																			
99201: Office or other outpatient office visit for the evaluation and management of a new patient, with three key components: a problem-focused history, a problem-focused exam, and straightforward medical decision making.																			
99202: Office or other outpatient office visit for the evaluation and management of a new patient, with three key components: an expanded problem-focused history, an expanded problem-focused exam, and straightforward medical decision making.																			
99203: Office or other outpatient office visit for the evaluation and management of a new patient, with three key components: a detailed history, a detailed exam, and medical decision making of low complexity.																			
99204: Office or other outpatient office visit for the evaluation and management of a new patient, with three key components: a comprehensive history, a comprehensive exam, and medical decision making of moderate complexity.																			
99205: Office or other outpatient office visit for the evaluation and management of a new patient, with three key components: a comprehensive history, a comprehensive exam, and medical decision making of high complexity.																			
99211: Office or other outpatient office visit for the evaluation and management of an established patient that may not require the presence of a physician.																			
99212: Office or other outpatient office visit for the evaluation and management of an established patient that requires at least two of these three key components: a problem-focused history, a problem-focused exam, and straightforward medical decision making.																			
99213: Office or other outpatient office visit for the evaluation and management of an established patient that requires at least two of these three key components: an expanded problem-focused history, an expanded problem-focused exam, and medical decision making of low complexity.																			
99214: Office or other outpatient office visit for the evaluation and management of an established patient that requires at least two of these three key components: a detailed history, a detailed exam, and medical decision making of moderate complexity.																			
99215: Office or other outpatient office visit for the evaluation and management of an established patient that requires at least two of these three key components: a comprehensive history, a comprehensive exam, and medical decision making of high complexity.																			

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: CPT: Current Procedural Terminology.

Table 9 Average Payment per Claim and Other Metrics for Physical Medicine by All Providers^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average payment per claim	\$2,226	\$1,584	\$1,716	\$2,624	\$3,776	\$5,205	\$5,148	\$3,327	\$3,713	\$1,595	\$3,373	\$2,586	\$2,716	\$4,392	\$4,981	\$2,840	\$4,685	\$5,470	\$3,350
Percentage of claims	66.3%	73.6%	69.1%	71.6%	68.9%	72.6%	71.6%	67.3%	63.4%	61.4%	67.3%	65.6%	65.8%	70.9%	70.9%	71.2%	66.5%	70.9%	69.0%
Percentage of payments	13.8%	15.6%	9.2%	14.9%	16.3%	23.0%	21.6%	18.3%	15.4%	14.5%	24.4%	14.8%	16.9%	16.9%	23.9%	18.9%	17.9%	18.8%	16.9%
Average payment per service	\$34	\$29	\$25	\$39	\$55	\$48	\$65	\$48	\$42	\$27	\$39	\$53	\$35	\$43	\$41	\$49	\$51	\$92	\$42
Average number of services per claim	65.5	54.2	67.4	66.7	69.2	108.3	79.0	69.8	n/a	59.9	87.0	49.0	78.5	103.3	121.8	57.8	92.3	59.4	69.2
Average number of visits per claim	17.8	14.9	18.0	18.2	20.6	25.9	20.4	19.4	20.5	19.3	21.8	16.9	19.7	24.0	28.0	15.6	21.4	19.5	19.6
Average number of services per visit	3.7	3.6	3.7	3.7	3.4	4.2	3.9	3.6	n/a	3.1	4.0	2.9	4.0	4.3	4.3	3.7	4.3	3.0	3.7

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a Physical medicine by all providers includes physical medicine services billed by physical/occupational therapists, chiropractors, and physicians, and in hospital outpatient settings.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: n/a: not available.

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Table 10 Total Costs per Claim and Components

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
2015/2016 claims with more than 7 days of lost time																		
<i>Costs per claim</i>																		
Medical	\$10,919	\$7,178	\$12,478	\$11,794	\$16,279	\$15,542	\$17,143	\$11,524	\$15,407	\$6,578	\$9,121	\$11,418	\$10,841	\$15,624	\$13,838	\$10,261	\$17,491	\$19,594
Indemnity	\$6,566	\$9,854	\$8,011	\$12,313	\$7,835	\$9,567	\$6,700	\$8,225	\$10,367	\$8,222	\$6,067	\$6,793	\$12,716	\$6,692	\$11,450	\$8,189	\$8,622	\$5,976
Benefit delivery expenses	\$3,064	\$4,347	\$4,144	\$4,445	\$2,896	\$4,447	\$3,738	\$3,703	\$5,061	\$2,806	\$2,979	\$2,815	\$4,257	\$5,808	\$4,423	\$3,950	\$3,645	\$2,681
Vocational rehabilitation	\$5	\$25	\$14	\$7	\$11	\$10	\$8	\$4	\$30	\$9	\$16	\$626	\$18	\$4	\$6	\$3	\$16	\$7
Total	\$20,554	\$21,404	\$24,647	\$28,559	\$27,021	\$29,566	\$27,589	\$23,456	\$30,865	\$17,615	\$18,184	\$21,653	\$27,832	\$28,128	\$29,717	\$22,402	\$29,774	\$28,258
<i>Component share of total costs per claim</i>																		
Medical	53.1%	33.5%	50.6%	41.3%	60.2%	52.6%	62.1%	49.1%	49.9%	37.3%	50.2%	52.7%	39.0%	55.5%	46.6%	45.8%	58.7%	69.3%
Indemnity	31.9%	46.0%	32.5%	43.1%	29.0%	32.4%	24.3%	35.1%	33.6%	46.7%	33.4%	31.4%	45.7%	23.8%	38.5%	36.6%	29.0%	21.1%
Benefit delivery expenses	14.9%	20.3%	16.8%	15.6%	10.7%	15.0%	13.5%	15.8%	16.4%	15.9%	16.4%	13.0%	15.3%	20.6%	14.9%	17.6%	12.2%	9.5%
Vocational rehabilitation	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	2.9%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
2013/2016 claims with more than 7 days of lost time																		
<i>Costs per claim</i>																		
Medical	\$15,259	\$13,517	\$15,546	\$16,271	\$20,800	\$20,354	\$23,176	\$13,193	\$21,921	\$9,612	\$11,226	\$15,917	\$16,672	\$19,681	\$18,422	\$15,163	\$23,143	\$22,704
Indemnity	\$13,272	\$20,261	\$13,865	\$27,372	\$21,861	\$21,275	\$10,914	\$17,456	\$25,480	\$19,083	\$13,747	\$15,210	\$28,279	\$14,208	\$25,523	\$11,553	\$19,858	\$11,405
Benefit delivery expenses	\$4,663	\$10,037	\$6,301	\$7,199	\$5,462	\$7,180	\$4,623	\$5,965	\$9,260	\$4,502	\$4,784	\$5,133	\$6,871	\$7,933	\$7,558	\$5,941	\$5,909	\$4,101
Vocational rehabilitation	\$5	\$148	\$21	\$6	\$44	\$89	\$11	\$17	\$383	\$102	\$80	\$1,340	\$86	\$2	\$50	\$5	\$222	\$41
Total	\$33,200	\$43,963	\$35,734	\$50,848	\$48,166	\$48,898	\$38,725	\$36,631	\$57,044	\$33,298	\$29,837	\$37,601	\$51,908	\$41,824	\$51,553	\$32,662	\$49,133	\$38,250
<i>Component share of total costs per claim</i>																		
Medical	46.0%	30.7%	43.5%	32.0%	43.2%	41.6%	59.8%	36.0%	38.4%	28.9%	37.6%	42.3%	32.1%	47.1%	35.7%	46.4%	47.1%	59.4%
Indemnity	40.0%	46.1%	38.8%	53.8%	45.4%	43.5%	28.2%	47.7%	44.7%	57.3%	46.1%	40.5%	54.5%	34.0%	49.5%	35.4%	40.4%	29.8%
Benefit delivery expenses	14.0%	22.8%	17.6%	14.2%	11.3%	14.7%	11.9%	16.3%	16.2%	13.5%	16.0%	13.7%	13.2%	19.0%	14.7%	18.2%	12.0%	10.7%
Vocational rehabilitation	0.0%	0.3%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.7%	0.3%	0.3%	3.6%	0.2%	0.0%	0.1%	0.0%	0.5%	0.1%
Average benefit delivery expenses for 2013/2016 claims with more than 7 days of lost time and with benefit delivery expenses^a																		
Average benefit delivery expense per claim with expenses	\$4,672	\$10,069	\$6,476	\$7,227	\$5,512	\$7,264	\$4,643	\$6,000	\$9,363	\$4,573	\$4,881	\$5,164	\$6,917	\$8,004	\$7,599	\$6,007	\$5,962	\$4,137
Claims with MCC expenses (percentage)	96.7%	97.5%	92.3%	94.5%	96.0%	94.7%	97.3%	96.4%	94.9%	95.8%	92.8%	94.5%	95.1%	92.9%	97.0%	97.7%	96.6%	95.9%
Average MCC expense per claim with MCC expenses	\$3,302	\$4,523	\$3,160	\$3,272	\$2,901	\$4,012	\$3,507	\$3,357	\$4,749	\$2,451	\$2,937	\$2,168	\$3,705	\$5,857	\$3,580	\$4,411	\$3,687	\$2,409
Percentage of claims with defense attorney payments greater than \$500 (indexed) ^b	22.0%	41.9%	38.9%	43.0%	24.9%	42.1%	18.5%	28.1%	37.4%	24.7%	19.1%	24.5%	37.4%	53.4%	32.2%	13.3%	31.7%	14.1%
Average defense attorney payment per claim with defense attorney payments greater than \$500 (indexed) ^b	\$4,249	\$6,938	\$6,634	\$7,138	\$6,687	\$4,218	\$3,807	\$5,366	\$8,448	\$4,131	\$6,212	\$7,525	\$5,331	\$2,750	\$6,924	\$5,474	\$4,927	\$5,284
Claims with medical-legal expenses (percentage)	12.1%	30.9%	15.1%	17.1%	20.0%	32.8%	11.0%	32.2%	19.4%	27.2%	24.9%	22.0%	16.3%	47.7%	28.8%	32.4%	12.9%	27.2%
Average medical-legal expense per claim with medical-legal expenses	\$1,309	\$3,681	\$645	\$1,351	\$1,946	\$2,898	\$1,501	\$2,088	\$2,456	\$1,500	\$1,766	\$2,952	\$927	\$1,228	\$2,874	\$1,264	\$1,968	\$2,192

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

^a For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

^b A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See [CompScope™ Benchmarks: Technical Appendix, 17th Edition](#).

Key: MCC: medical cost containment.

Table 11 Selected Measures for ASC Facility Payments^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average payment per claim	\$3,126	\$3,267	\$7,365	\$7,166	\$7,003	\$8,257	\$10,237	\$7,018	\$11,483	\$3,607	\$2,783	\$7,455	\$5,113	\$6,674	\$2,538	\$4,637	\$9,618	\$8,029	\$7,010
Percentage of claims	18.0%	17.8%	19.8%	22.7%	14.8%	17.7%	16.8%	10.4%	12.1%	3.9%	8.0%	14.8%	14.5%	23.6%	11.6%	10.3%	15.1%	10.0%	14.8%
Percentage of payments	5.5%	7.7%	11.7%	13.0%	6.5%	8.9%	10.4%	6.1%	9.4%	2.1%	2.4%	9.9%	7.2%	9.9%	2.0%	4.5%	8.5%	3.9%	7.5%
Average number of visits per claim	1.3	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.3	1.2	1.1	1.1	1.1	1.4	1.3	1.1	1.2	1.3	1.2

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a ASC facility payments include payments to ASCs for both treatment/operating/recovery room services and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: ASC: ambulatory surgery center.

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Table 12 Trend of Selected Measures for ASC Facility Payments^a for Claims with More Than 7 Days of Lost Time (12 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average payment per claim																			
Cumulative percentage change from 2010/2011 to:																			
2011/2012	-9.8	7.1	6.3	11.8	5.4	0.8	12.8	30.0	14.9	19.0	12.5	8.9	13.7	-0.2	-2.3	8.8	8.2	11.1	8.8
2012/2013	24.0	9.0	19.0	5.4	10.8	-13.8	14.8	63.9	29.2	8.5	14.9	17.1	19.2	6.7	4.7	8.1	24.1	16.3	14.9
2013/2014	18.6	-17.9	20.9	14.5	24.3	-6.3	56.3	70.7	38.1	32.5	30.7	31.0	24.6	3.4	6.6	13.5	24.2	20.5	22.6
2014/2015	14.1	-20.5	27.8	23.1	50.9	-1.1	70.0	77.0	50.4	28.9	49.0	39.0	17.7	-6.1	12.0	17.6	42.3	33.9	28.3
2015/2016	13.3	-15.9	33.3	35.8	36.0	-4.9	84.4	101.0	61.6	34.5	46.6	48.5	-17.4	-10.3	16.4	19.7	62.6	28.1	33.9
Annual percentage change:																			
2010/2011 to 2011/2012	-9.8	7.1	6.3	11.8	5.4	0.8	12.8	30.0	14.9	19.0	12.5	8.9	13.7	-0.2	-2.3	8.8	8.2	11.1	8.8
2011/2012 to 2012/2013	37.5	1.8	12.0	-5.8	5.1	-14.4	1.8	26.1	12.4	-8.8	2.1	7.5	4.8	6.9	7.1	-0.6	14.7	4.7	4.9
2012/2013 to 2013/2014	-4.3	-24.7	1.7	8.7	12.2	8.7	36.1	4.2	6.9	22.1	13.7	11.8	4.5	-3.1	1.9	5.0	0.1	3.6	4.7
2013/2014 to 2014/2015	-3.8	-3.2	5.6	7.5	21.5	5.6	8.8	3.7	8.9	-2.7	14.1	6.2	-5.5	-9.1	5.0	3.6	14.6	11.1	5.6
2014/2015 to 2015/2016	-0.7	5.8	4.3	10.3	-9.9	-3.8	8.4	13.5	7.5	4.3	-1.7	6.8	-29.9	-4.5	3.9	1.8	14.3	-4.3	4.1
Percentage of claims																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	0.5	-0.3	1.8	-0.6	-1.4	-0.9	-2.0	-1.5	0.0	-0.9	1.4	-0.7	0.8	1.5	0.9	-0.4	0.4	-0.3	-0.3
2012/2013	0.2	1.5	1.0	2.2	0.4	0.4	-0.6	-1.4	0.4	-0.3	-0.3	1.4	0.6	2.0	1.0	-0.9	0.9	-1.4	0.4
2013/2014	1.6	0.4	1.0	3.6	0.2	2.7	0.5	0.3	0.2	-0.7	1.0	1.6	3.4	3.2	0.4	-0.5	1.9	0.5	0.8
2014/2015	1.6	0.0	2.6	1.6	0.2	2.8	1.6	-0.2	0.1	-0.6	0.6	1.6	3.8	4.8	-0.1	-1.3	1.4	0.9	1.2
2015/2016	0.7	-1.4	0.9	0.8	0.7	2.4	0.8	-0.6	1.0	-0.5	1.6	1.8	2.3	4.3	-0.2	-2.1	1.0	-1.0	0.8
Annual percentage point change:																			
2010/2011 to 2011/2012	0.5	-0.3	1.8	-0.6	-1.4	-0.9	-2.0	-1.5	0.0	-0.9	1.4	-0.7	0.8	1.5	0.9	-0.4	0.4	-0.3	-0.3
2011/2012 to 2012/2013	-0.2	1.8	-0.7	2.8	1.8	1.3	1.3	0.1	0.3	0.7	-1.7	2.1	-0.2	0.5	0.1	-0.5	0.5	-1.1	0.4
2012/2013 to 2013/2014	1.4	-1.0	0.0	1.4	-0.2	2.2	1.2	1.7	-0.2	-0.4	1.3	0.2	2.8	1.2	-0.6	0.4	1.0	1.9	1.1
2013/2014 to 2014/2015	0.0	-0.4	1.6	-2.0	0.0	0.1	1.0	-0.4	-0.1	0.0	-0.4	0.0	0.4	1.6	-0.6	-0.8	-0.5	0.4	0.0
2014/2015 to 2015/2016	-0.9	-1.4	-1.7	-0.8	0.5	-0.4	-0.8	-0.4	0.9	0.1	1.0	0.2	-1.5	-0.4	-0.1	-0.8	-0.4	-1.9	-0.4
Percentage of payments																			
Cumulative percentage point change from 2010/2011 to:																			
2011/2012	-0.4	0.1	0.6	0.3	-1.1	-0.1	-0.7	0.2	0.3	-0.1	0.4	0.1	1.1	0.4	0.1	-0.1	0.6	0.2	0.2
2012/2013	0.9	1.2	1.0	1.2	0.2	0.7	-0.1	1.3	1.3	0.0	0.1	1.5	1.3	0.9	0.1	-0.4	1.1	-0.2	0.9
2013/2014	0.8	-1.3	1.5	1.3	-0.1	2.3	2.0	2.6	1.9	0.2	0.5	1.7	3.8	1.1	-0.1	-0.3	1.5	0.4	1.2
2014/2015	0.5	-1.4	2.3	2.4	1.3	2.5	2.8	2.5	1.7	0.0	0.8	3.0	3.8	0.8	-0.1	-0.5	2.0	0.5	1.5
2015/2016	1.1	-1.3	1.8	2.7	1.1	1.8	4.4	2.5	2.9	0.2	1.0	4.0	1.1	0.0	-0.2	-0.6	3.0	-0.2	1.1
Annual percentage point change:																			
2010/2011 to 2011/2012	-0.4	0.1	0.6	0.3	-1.1	-0.1	-0.7	0.2	0.3	-0.1	0.4	0.1	1.1	0.4	0.1	-0.1	0.6	0.2	0.2
2011/2012 to 2012/2013	1.3	1.2	0.4	0.9	1.2	0.8	0.6	1.0	1.1	0.1	-0.3	1.4	0.2	0.5	0.0	-0.3	0.5	-0.4	0.6
2012/2013 to 2013/2014	-0.1	-2.5	0.5	0.1	-0.3	1.6	2.1	1.4	0.5	0.2	0.4	0.1	2.5	0.2	-0.2	0.1	0.4	0.6	0.3
2013/2014 to 2014/2015	-0.4	-0.1	0.8	1.1	1.4	0.2	0.8	-0.1	-0.1	-0.1	0.2	1.4	0.0	-0.3	0.0	-0.2	0.5	0.2	0.1
2014/2015 to 2015/2016	0.6	0.1	-0.5	0.3	-0.1	-0.7	1.6	0.0	1.2	0.2	0.2	1.0	-2.7	-0.9	-0.1	0.0	1.0	-0.7	0.0

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a ASC facility payments include payments to ASCs for both treatment/operating/recovery room services and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: ASC: ambulatory surgery center.

Table 13 Annual Percentage Change of Neurological/Neuromuscular Testing Average Payment per Claim and Other Selected Measures for Claims with More Than 7 Days of Lost Time (12 months)^a

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Nonhospital																		
Average payment per claim																		
Annual percentage change:																		
2010/2011 to 2011/2012	41.2	0.6	0.0	20.6	18.2	-7.0	0.9	4.3	-5.5	7.3	-4.2	1.0	13.1	11.6	-1.0	11.5	-9.9	8.3
2011/2012 to 2012/2013	-24.2	-3.8	0.4	4.8	-7.7	-26.6	0.5	-5.0	-4.8	-2.5	0.9	19.1	9.1	3.8	-10.2	1.0	7.2	-1.0
2012/2013 to 2013/2014	-25.8	-6.8	11.6	-34.2	-21.0	-12.9	-26.6	-0.3	-4.2	28.5	-5.3	-18.4	-9.8	-32.1	-25.3	-22.0	-19.2	-35.1
2013/2014 to 2014/2015	10.8	-23.9	5.7	7.3	9.8	-7.5	4.0	-17.0	12.7	9.3	-2.6	-8.7	-6.0	26.8	-14.4	-4.1	2.3	1.8
2014/2015 to 2015/2016	-21.2	6.5	-6.3	-6.1	-17.3	-6.5	18.1	-8.8	-10.7	-1.9	-20.6	-10.0	-4.9	-7.0	5.7	2.1	11.9	1.7
Percentage of medical payments made for neurological/neuromuscular testing services																		
Annual percentage change:																		
2010/2011 to 2011/2012	19.7	-4.9	-6.3	15.3	-10.5	-8.1	-3.0	-12.2	-6.8	20.5	-16.2	-3.0	-3.3	0.3	-9.7	-7.2	-0.1	2.9
2011/2012 to 2012/2013	-31.2	-6.5	-8.4	-3.3	-6.7	-13.9	-16.1	-11.3	-21.9	-3.3	-2.6	21.7	4.2	-5.7	-10.8	-11.1	-2.2	-12.6
2012/2013 to 2013/2014	-30.2	-7.4	1.3	-40.7	-35.6	-19.0	-27.1	6.0	6.5	19.0	-14.6	-40.6	-6.8	-33.6	-31.7	-31.3	-26.2	-36.5
2013/2014 to 2014/2015	2.3	-44.7	-9.9	9.9	8.8	-14.5	-10.3	-19.4	-9.0	2.3	-6.4	3.3	4.2	25.6	-23.4	-9.0	1.8	-5.0
2014/2015 to 2015/2016	-32.1	-6.6	-10.1	-12.8	-13.0	-14.3	21.3	-25.1	-7.6	-5.8	-24.7	-7.1	3.3	-12.1	1.3	-2.4	5.2	-15.5
Percentage of claims with neurological/neuromuscular testing services																		
Annual percentage point change:																		
2010/2011 to 2011/2012	-1.4	-0.3	0.2	0.0	-1.4	-0.6	1.2	-1.1	0.8	0.6	-0.7	-0.2	-1.6	-0.6	-1.1	-1.5	0.8	-0.2
2011/2012 to 2012/2013	-0.7	-0.9	-0.4	-1.0	-0.4	-0.1	-2.3	-0.3	-1.8	0.1	-0.7	0.3	-0.3	-0.5	0.8	-1.4	-0.1	-0.6
2012/2013 to 2013/2014	0.0	-1.7	-1.3	0.1	-0.5	-0.5	0.2	0.1	0.6	-0.4	-0.3	-1.6	-0.4	-0.2	-0.5	-0.8	-0.6	0.3
2013/2014 to 2014/2015	-0.5	-7.5	-0.7	-0.5	-0.3	-0.6	-1.2	-0.1	-1.1	0.0	-0.5	0.2	0.7	-0.1	-1.2	-0.4	0.1	0.4
2014/2015 to 2015/2016	-1.9	-2.3	-0.2	-0.7	0.0	-0.7	-1.1	-0.7	0.4	-0.3	-0.4	0.0	-0.5	-0.3	0.1	-1.0	-0.6	-1.9
Prices (based on price index)																		
Annual percentage point change:																		
2010/2011 to 2011/2012	8.7	2.1	1.6	13.9	10.8	-8.7	6.0	1.4	-2.1	6.0	-0.1	0.5	0.7	8.4	1.8	20.7	-1.0	-0.5
2011/2012 to 2012/2013	-0.4	-2.4	0.7	9.3	4.7	-23.8	4.1	2.3	4.2	16.2	5.2	12.6	13.2	2.3	-4.1	4.5	8.2	2.1
2012/2013 to 2013/2014	-37.5	4.0	0.8	-32.9	-39.4	6.8	-40.2	-6.0	-2.1	11.9	-11.5	-10.8	-2.3	-43.4	-34.7	-29.2	-34.5	-29.3
2013/2014 to 2014/2015	-4.7	-42.2	0.9	-6.3	18.5	-30.3	22.0	-16.8	4.8	4.2	7.9	-22.8	-0.7	21.4	-1.5	-2.4	13.2	3.4
2014/2015 to 2015/2016	9.8	7.7	0.1	2.0	2.7	6.3	-1.8	-8.1	-0.1	2.5	-24.9	-0.6	-3.1	4.9	1.2	1.7	3.9	-2.0
Utilization (based on utilization index)																		
Annual percentage point change:																		
2010/2011 to 2011/2012	22.1	-0.5	-2.4	5.3	13.5	3.9	-10.7	6.7	-2.2	2.0	-6.1	1.3	12.7	3.9	-4.6	-7.8	-8.0	4.0
2011/2012 to 2012/2013	-18.9	-1.9	-1.3	-5.8	-10.9	-8.8	4.5	-5.5	-3.3	-9.5	-6.6	4.6	-3.5	-0.2	-10.2	-8.7	-6.7	-8.2
2012/2013 to 2013/2014	-28.1	-9.9	9.7	-31.8	-30.0	-38.8	-20.0	-5.2	-11.4	-11.1	-16.8	-41.6	-34.5	-20.4	-25.9	-36.1	-7.1	-40.2
2013/2014 to 2014/2015	6.8	-18.5	2.8	0.7	-12.9	4.7	-15.5	-23.9	-2.6	5.7	-6.8	13.8	-10.7	5.5	-12.8	-7.7	-13.8	-5.4
2014/2015 to 2015/2016	-28.7	4.9	-4.6	-8.8	-7.0	-6.7	20.1	-17.9	0.4	6.7	-18.4	-14.0	-2.9	0.3	3.4	7.2	-3.3	3.1
Services per claim																		
Annual percentage change:																		
2010/2011 to 2011/2012	7.1	0.1	-0.3	3.3	15.2	4.0	-1.8	4.0	-5.0	4.5	-5.6	-2.2	11.4	5.4	-3.8	-7.2	-5.8	1.8
2011/2012 to 2012/2013	-7.3	-2.9	-3.7	-1.7	-9.3	-8.9	-1.1	-5.8	-2.6	-8.4	-3.5	3.4	-8.9	-5.6	-10.4	-13.6	-5.7	-1.4
2012/2013 to 2013/2014	-56.7	-12.2	7.7	-55.6	-52.4	-60.1	-45.0	-7.2	-20.6	-41.0	-30.8	-59.6	-54.3	-50.7	-56.3	-44.7	-52.7	-61.4
2013/2014 to 2014/2015	-16.2	-46.4	-1.3	-17.6	-13.3	-8.6	-15.8	-37.6	1.1	-9.3	-8.6	-9.2	-11.8	-9.7	-14.6	-3.8	-11.7	-12.4
2014/2015 to 2015/2016	-11.4	-3.6	-3.2	-1.0	-17.0	-4.6	10.4	-37.2	-1.5	2.6	-38.6	-0.7	5.9	2.8	5.4	4.8	-2.8	-4.1

continued

Table 13 Annual Percentage Change of Neurological/Neuromuscular Testing Average Payment per Claim and Other Selected Measures for Claims with More Than 7 Days of Lost Time (12 months)^a (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Visits per claim																		
Annual percentage change:																		
2010/2011 to 2011/2012	-3.7	0.5	4.6	0.9	2.6	-4.8	-1.4	-2.5	-4.8	1.4	-5.9	-3.1	3.3	1.9	-3.2	3.6	2.3	5.3
2011/2012 to 2012/2013	-4.3	-0.9	-2.4	0.7	-4.6	4.9	-5.7	4.1	-3.4	4.0	-1.9	3.5	-0.9	-4.2	2.3	-6.5	-3.7	-5.5
2012/2013 to 2013/2014	-10.6	-7.9	-2.7	-6.1	6.7	-13.6	-19.3	-16.6	3.2	-2.2	-1.7	1.3	0.7	-1.7	-0.2	3.0	-2.8	2.8
2013/2014 to 2014/2015	0.5	-4.3	-0.1	-1.5	-7.0	-3.1	-2.2	4.1	-2.2	3.7	2.1	1.9	8.3	-1.2	2.5	-0.6	2.3	6.5
2014/2015 to 2015/2016	1.0	-5.4	-3.0	8.7	2.4	-2.0	6.3	1.3	3.6	-4.2	-2.8	13.2	17.3	-0.9	-0.8	-3.9	3.8	-8.7
Services per visit																		
Annual percentage change:																		
2010/2011 to 2011/2012	11.3	-0.4	-4.6	2.4	12.3	9.3	-0.3	6.6	-0.2	3.0	0.4	0.9	7.9	3.4	-0.6	-10.4	-7.9	-3.4
2011/2012 to 2012/2013	-3.2	-2.0	-1.4	-2.4	-5.0	-13.2	4.9	-9.5	0.9	-11.9	-1.6	-0.1	-8.0	-1.4	-12.4	-7.6	-2.0	4.4
2012/2013 to 2013/2014	-51.5	-4.7	10.7	-52.7	-55.4	-53.8	-31.8	11.3	-23.0	-39.7	-29.6	-60.2	-54.6	-49.9	-56.2	-46.3	-51.3	-62.5
2013/2014 to 2014/2015	-16.7	-44.0	-1.2	-16.4	-6.7	-5.6	-13.9	-40.1	3.3	-12.6	-10.5	-10.8	-18.6	-8.6	-16.7	-3.3	-13.6	-17.8
2014/2015 to 2015/2016	-12.2	2.0	-0.1	-8.8	-18.9	-2.7	3.9	-38.0	-5.0	7.1	-36.8	-12.3	-9.7	3.7	6.2	9.0	-6.4	5.0
Resource intensity^b																		
Annual percentage point change:																		
2010/2011 to 2011/2012	15.3	-0.5	-2.4	2.0	-0.5	0.7	-9.1	2.6	2.7	-3.0	-0.4	2.9	1.1	-1.5	-0.6	-0.7	-1.9	2.1
2011/2012 to 2012/2013	-11.9	1.0	2.5	-4.2	-2.1	-0.2	6.0	0.3	-1.2	-1.1	-2.4	0.9	5.2	5.0	0.0	4.8	-1.2	-5.8
2012/2013 to 2013/2014	29.7	2.2	2.1	23.8	22.5	21.3	24.5	2.0	9.2	29.9	13.8	18.0	19.7	30.9	30.5	8.8	45.4	21.1
2013/2014 to 2014/2015	22.3	27.9	4.0	18.5	0.9	13.8	1.3	13.4	-3.7	15.0	1.6	22.7	1.3	14.5	1.6	-4.2	-2.1	7.5
2014/2015 to 2015/2016	-18.9	8.5	-1.5	-8.2	9.5	-2.9	10.3	19.6	1.8	4.3	20.1	-12.7	-9.0	-1.7	-1.8	2.6	-0.6	6.3

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a In January 2013, Medicare implemented a fundamental change in the coding for nerve conduction studies: previous procedure codes for nerve condition studies were deleted; the old codes were replaced with a series of code couplets, ranging from CPT code 95907 for 1–2 studies to 95913 for 13 or more studies. This coding change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Related to this coding change, many states experienced substantial decreases in prices paid for and utilization of neurological/neuromuscular testing services starting in 2013. For more details about this change and the methods we used to enhance comparability across states, see *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b Resource intensity of services indicates whether a state has a comparatively more or less resource-intensive service mix. It is the difference between the utilization index, which is computed as the number of services per claim weighted by RVUs, and the unweighted volume of services (services per claim). The RVU weights are based on Medicare's resource-based relative values from the 2014 list. For services billed with a CPT code that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period (a positive percentage point change in resource intensity). Similarly, a negative percentage point change indicates that the procedures used were less resource-intensive relative to the previous point in time. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

Key: CPT: Current Procedural Terminology; RVU: relative value unit.

Table 14 Selected Measures for Prescription Payments^a for Claims with More Than 7 Days of Lost Time, 2014/2016 (24 months)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average prescription payment per claim with prescriptions	\$620	\$644	\$1,147	\$977	\$530	\$1,211	\$518	\$639	\$1,449	\$466	\$513	\$428	\$884	\$505	\$1,219	\$698	\$902	\$508	\$641
Average number of prescriptions per claim with prescriptions	8.3	9.5	9.0	10.1	7.5	8.6	7.6	7.8	13.8	7.3	7.2	7.2	10.1	6.1	9.6	10.3	9.7	7.1	8.4
Average payment per prescription	\$75	\$68	\$127	\$97	\$71	\$141	\$68	\$82	\$105	\$64	\$71	\$59	\$87	\$83	\$127	\$68	\$93	\$72	\$78
Prescription payments as a percentage of total medical payments	2.9%	4.5%	5.5%	4.5%	1.4%	3.6%	1.6%	2.8%	5.0%	1.9%	2.8%	1.4%	3.8%	1.4%	4.3%	3.6%	2.3%	1.1%	2.9%

Note: 2014/2016 refers to claims arising from October 1, 2013, through September 30, 2014, evaluated as of March 31, 2016.

^a Prescription transactions included in this study are those for medications of prescription strengths and over-the-counter strengths with a National Drug Code (NDC), which are referred to as *prescriptions* throughout this report. These prescriptions could be filled or refilled by the injured worker at a pharmacy or physician's office and were paid for under workers' compensation. Prescription medications that were dispensed at a hospital, administered by a medical provider (e.g., injectable medications), compounded drugs, nutritional supplements, and medical supplies/equipment that were billed under NDCs are not considered prescriptions in this report. However, these additional medications are included in the WCRI service group "drugs" and are reflected in the overall medical payments in this study. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

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Table 15 Trend of Selected Measures for Prescription Payments^a for Claims with More Than 7 Days of Lost Time (at 24 months of experience)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Average prescription payment per claim with prescriptions																			
Cumulative percentage change from 2010/2012 to:																			
2011/2013	28.0	3.8	-2.4	-13.0	2.5	-0.7	15.0	4.1	12.0	3.8	-1.7	-5.7	-1.5	-8.2	13.7	-11.0	-0.2	8.0	1.2
2012/2014	10.3	9.4	1.4	-17.7	11.4	0.2	11.7	16.4	14.3	2.4	-12.0	-1.2	-2.6	-9.7	43.3	-22.4	1.7	26.6	2.0
2013/2015	9.3	-4.9	6.7	-5.0	11.3	24.1	4.3	-7.7	19.4	8.7	-9.9	-1.4	1.2	-2.1	49.3	-22.5	-2.6	18.1	2.7
2014/2016	30.6	-24.2	18.9	-2.4	3.5	36.7	6.1	-19.6	19.8	2.2	7.7	-12.3	-0.8	0.1	27.5	-20.3	4.9	17.8	4.2
Annual percentage change:																			
2010/2012 to 2011/2013	28.0	3.8	-2.4	-13.0	2.5	-0.7	15.0	4.1	12.0	3.8	-1.7	-5.7	-1.5	-8.2	13.7	-11.0	-0.2	8.0	1.2
2011/2013 to 2012/2014	-13.8	5.4	3.8	-5.4	8.6	0.9	-2.8	11.8	2.0	-1.4	-10.5	4.7	-1.1	-1.6	26.0	-12.8	1.9	17.1	1.4
2012/2014 to 2013/2015	-0.9	-13.1	5.3	15.4	-0.1	23.9	-6.7	-20.7	4.5	6.2	2.3	-0.2	3.9	8.4	4.2	-0.1	-4.2	-6.7	1.1
2013/2015 to 2014/2016	19.4	-20.3	11.4	2.8	-7.0	10.2	1.7	-12.9	0.4	-6.0	19.6	-11.1	-2.0	2.3	-14.6	2.8	7.6	-0.2	1.0
Average payment per prescription																			
Cumulative percentage change from 2010/2012 to:																			
2011/2013	8.5	7.3	1.9	-7.7	0.4	-2.7	6.2	9.8	3.6	3.1	-0.6	-1.9	0.0	-4.3	14.5	-5.7	2.3	6.4	2.1
2012/2014	7.7	16.5	10.4	-6.8	7.9	0.4	9.8	17.9	12.3	5.6	-4.6	4.5	1.5	0.0	40.7	-12.9	2.2	15.2	6.6
2013/2015	15.1	15.4	22.1	8.8	13.9	27.1	6.2	14.3	18.2	16.7	1.4	13.6	11.4	7.8	47.1	-12.1	4.8	17.1	14.1
2014/2016	39.0	7.3	39.2	20.8	17.4	48.7	18.5	15.1	31.1	22.1	25.7	8.4	18.4	17.6	36.5	-5.6	17.8	19.2	18.9
Annual percentage change:																			
2010/2012 to 2011/2013	8.5	7.3	1.9	-7.7	0.4	-2.7	6.2	9.8	3.6	3.1	-0.6	-1.9	0.0	-4.3	14.5	-5.7	2.3	6.4	2.1
2011/2013 to 2012/2014	-0.7	8.6	8.3	0.9	7.5	3.2	3.4	7.4	8.4	2.4	-4.0	6.5	1.4	4.5	22.8	-7.6	0.0	8.3	4.0
2012/2014 to 2013/2015	6.9	-1.0	10.6	16.7	5.5	26.6	-3.3	-3.1	5.2	10.6	6.3	8.7	9.8	7.8	4.6	0.9	2.5	1.7	5.9
2013/2015 to 2014/2016	20.8	-7.0	14.0	11.0	3.1	16.9	11.6	0.7	11.0	4.6	23.9	-4.6	6.2	9.2	-7.2	7.4	12.4	1.8	8.3
Average number of prescriptions per claim with prescriptions																			
Cumulative percentage change from 2010/2012 to:																			
2011/2013	18.0	-3.2	-4.2	-5.8	2.1	2.0	8.3	-5.2	8.2	0.7	-1.1	-3.9	-1.5	-4.1	-0.7	-5.6	-2.4	1.5	-1.3
2012/2014	2.4	-6.1	-8.1	-11.7	3.2	-0.2	1.8	-1.3	1.7	-3.0	-7.7	-5.5	-4.0	-9.7	1.9	-11.0	-0.5	9.9	-2.1
2013/2015	-5.0	-17.6	-12.6	-12.7	-2.3	-2.4	-1.8	-19.2	1.0	-6.9	-11.2	-13.2	-9.2	-9.1	1.5	-11.8	-7.0	0.9	-8.1
2014/2016	-6.1	-29.4	-14.6	-19.2	-11.9	-8.0	-10.5	-30.2	-8.6	-16.3	-14.3	-19.1	-16.2	-14.9	-6.6	-15.6	-10.9	-1.2	-14.4
Annual percentage change:																			
2010/2012 to 2011/2013	18.0	-3.2	-4.2	-5.8	2.1	2.0	8.3	-5.2	8.2	0.7	-1.1	-3.9	-1.5	-4.1	-0.7	-5.6	-2.4	1.5	-1.3
2011/2013 to 2012/2014	-13.2	-3.0	-4.1	-6.3	1.1	-2.2	-6.0	4.1	-6.0	-3.7	-6.7	-1.7	-2.5	-5.8	2.6	-5.7	1.9	8.2	-3.3
2012/2014 to 2013/2015	-7.3	-12.2	-4.8	-1.1	-5.3	-2.2	-3.5	-18.2	-0.7	-4.0	-3.7	-8.2	-5.4	0.6	-0.4	-0.9	-6.5	-8.2	-4.4
2013/2015 to 2014/2016	-1.1	-14.3	-2.3	-7.4	-9.8	-5.8	-8.9	-13.5	-9.5	-10.2	-3.5	-6.8	-7.7	-6.3	-8.0	-4.3	-4.2	-2.0	-7.1

continued

Table 15 Trend of Selected Measures for Prescription Payments^a for Claims with More Than 7 Days of Lost Time (at 24 months of experience) (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^b
Prescription payments as a percentage of total medical payments																			
Cumulative percentage point change from 2010/2012 to:																			
2011/2013	0.5	0.0	-0.8	-1.0	0.0	0.3	0.1	-0.3	0.5	0.0	-0.3	-0.1	-0.2	0.0	0.3	-0.8	0.2	0.1	0.0
2012/2014	0.0	0.6	-0.6	-1.3	0.1	0.7	-0.1	0.4	0.1	-0.1	-0.6	-0.1	-0.3	0.0	1.3	-1.5	-0.1	0.2	0.0
2013/2015	-0.3	0.3	-0.2	-0.9	-0.2	1.2	-0.2	-0.7	0.5	0.0	-0.7	-0.2	0.0	0.0	1.2	-1.7	-0.3	0.0	-0.2
2014/2016	0.2	-0.7	-0.4	-0.9	-0.4	1.5	-0.1	-1.4	0.2	-0.3	-0.2	-0.4	-0.2	0.0	0.2	-1.7	-0.3	0.0	-0.3
Annual percentage point change:																			
2010/2012 to 2011/2013	0.5	0.0	-0.8	-1.0	0.0	0.3	0.1	-0.3	0.5	0.0	-0.3	-0.1	-0.2	0.0	0.3	-0.8	0.2	0.1	0.0
2011/2013 to 2012/2014	-0.5	0.7	0.2	-0.3	0.1	0.4	-0.2	0.7	-0.3	-0.1	-0.4	0.0	-0.1	0.0	0.9	-0.7	-0.3	0.1	0.0
2012/2014 to 2013/2015	-0.3	-0.3	0.4	0.5	-0.2	0.5	-0.1	-1.1	0.3	0.0	-0.1	-0.2	0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.1
2013/2015 to 2014/2016	0.4	-1.0	-0.2	0.0	-0.2	0.3	0.1	-0.8	-0.3	-0.2	0.5	-0.1	-0.2	0.0	-1.0	0.0	0.0	0.0	-0.1

Notes: 2014/2016 refers to claims arising from October 1, 2013, through September 30, 2014, evaluated as of March 31, 2016; similar notation is used for other years. A trend of 0.0 means the change was less than 0.05 percent or percentage points.

^a Prescription transactions included in this study are those for medications of prescription strengths and over-the-counter strengths with a National Drug Code (NDC), which are referred to as *prescriptions* throughout this report. These prescriptions could be filled or refilled by the injured worker at a pharmacy or physician's office and were paid for under workers' compensation. Prescription medications that were dispensed at a hospital, administered by a medical provider (e.g., injectable medications), compounded drugs, nutritional supplements, and medical supplies/equipment that were billed under NDCs are not considered prescriptions in this report. However, these additional medications are included in the WCRI service group "drugs" and are reflected in the overall medical payments in this study. See *CompScope™ Medical Benchmarks: Technical Appendix, 18th Edition*.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 16 Average Medical Payment per Claim with More Than 7 Days of Lost Time at 12, 36, and 60 Months' Maturity

Total medical payments per claim																			
	MA	CA	MI	TX	NC	AR	MI	KY	GA	FL	PA	LA	IL	NJ	IA	IN	VA	WI	18-State Median ^a
2015/2016 (12 months' maturity)	\$6,578	\$7,178	\$9,121	\$10,261	\$10,841	\$10,919	\$11,418	\$11,524	\$11,794	\$12,478	\$13,838	\$15,407	\$15,542	\$15,624	\$16,279	\$17,143	\$17,491	\$19,594	\$12,136
	MA	MI	KY	CA	TX	AR	FL	MI	GA	NC	PA	NJ	IL	IA	LA	WI	VA	IN	18-State Median ^a
2013/2016 (36 months' maturity)	\$9,612	\$11,226	\$13,193	\$13,517	\$15,163	\$15,259	\$15,546	\$15,917	\$16,271	\$16,672	\$18,422	\$19,681	\$20,354	\$20,800	\$21,921	\$22,704	\$23,143	\$23,176	\$16,472
	MA	MI	KY	TX	AR	MI	FL	GA	PA	NC	CA	NJ	IA	IN	WI	IL	VA	LA	18-State Median ^a
2011/2016 (60 months' maturity)	\$9,804	\$10,910	\$13,971	\$14,756	\$15,397	\$16,336	\$16,564	\$17,563	\$17,772	\$18,680	\$18,701	\$19,799	\$20,389	\$21,402	\$22,055	\$22,826	\$23,449	\$24,544	\$18,226
Nonhospital payments per claim																			
	MA	MI	AR	CA	MN	KY	NC	TX	FL	PA	IA	LA	GA	VA	NJ	WI	IL	IN	18-State Median ^a
2015/2016 (12 months' maturity)	\$3,939	\$5,114	\$5,258	\$5,460	\$5,964	\$6,088	\$6,111	\$6,470	\$6,749	\$7,382	\$7,525	\$7,933	\$8,583	\$9,277	\$10,806	\$10,837	\$10,918	\$11,597	\$7,066
	MA	MI	KY	AR	MN	NC	FL	IA	TX	CA	PA	GA	LA	VA	IN	WI	NJ	IL	18-State Median ^a
2013/2016 (36 months' maturity)	\$5,705	\$5,959	\$6,789	\$7,012	\$7,778	\$8,204	\$8,410	\$9,463	\$9,663	\$9,741	\$10,200	\$10,550	\$11,190	\$12,349	\$12,565	\$12,747	\$13,651	\$13,794	\$9,702
	MI	MA	AR	KY	MN	NC	FL	IA	PA	TX	GA	IN	VA	WI	LA	CA	NJ	IL	18-State Median ^a
2011/2016 (60 months' maturity)	\$6,078	\$6,129	\$7,109	\$7,354	\$8,070	\$8,632	\$8,714	\$9,293	\$9,990	\$10,151	\$10,769	\$11,220	\$11,470	\$12,537	\$12,947	\$13,022	\$13,925	\$15,272	\$10,070
Hospital (inpatient and outpatient) payments per claim																			
	MA	CA	MI	KY	AR	TX	GA	NC	IN	PA	MN	IL	NJ	LA	IA	FL	VA	WI	18-State Median ^a
2015/2016 (12 months' maturity)	\$3,563	\$4,643	\$5,411	\$6,808	\$7,020	\$7,107	\$7,376	\$7,696	\$8,026	\$8,171	\$8,361	\$8,416	\$9,107	\$10,189	\$11,163	\$12,021	\$12,091	\$12,642	\$8,099
	MA	CA	MI	KY	GA	TX	AR	PA	IL	MN	NJ	NC	FL	LA	IA	IN	WI	VA	18-State Median ^a
2013/2016 (36 months' maturity)	\$4,332	\$6,028	\$6,314	\$6,669	\$8,130	\$8,148	\$8,824	\$8,975	\$9,537	\$10,653	\$10,890	\$11,325	\$11,445	\$12,593	\$13,133	\$13,520	\$13,727	\$15,083	\$10,095
	MA	MI	CA	KY	TX	PA	GA	AR	NJ	FL	IL	MN	IA	IN	LA	WI	NC	VA	18-State Median ^a
2011/2016 (60 months' maturity)	\$4,407	\$6,584	\$7,495	\$7,666	\$7,882	\$8,476	\$8,754	\$9,225	\$10,543	\$10,664	\$11,995	\$12,252	\$12,586	\$13,172	\$13,180	\$13,255	\$13,350	\$13,642	\$10,603

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 17a Percentage of Claims by Provider Type for Claims with More Than 7 Days of Lost Time, 2015/2016

	MN	MA	IL	MI	WI	IA	PA	KY	LA	TX	VA	NC	NJ	IN	GA	AR	CA	FL	18-State Median ^a
Physician	92%	93%	95%	95%	96%	96%	96%	97%	97%	97%	98%	98%	98%	98%	98%	98%	98%	99%	97%
	AR	GA	IN	KY	NC	VA	NJ	FL	MI	IA	LA	MA	IL	PA	WI	CA	MN	TX	
Chiropractor ^b	n/a	n/a	n/a	n/a	n/a	n/a	1%	1%	1%	2%	4%	5%	6%	7%	8%	9%	10%	10%	6%
	WI	MN	MA	IA	MI	AR	KY	LA	TX	IL	PA	VA	IN	NC	CA	FL	GA	NJ	
PT/OT	36%	38%	38%	45%	48%	49%	49%	50%	52%	53%	55%	56%	59%	61%	62%	64%	65%	65%	52%
	CA	GA	FL	TX	NJ	NC	VA	IL	AR	IN	MN	LA	MI	PA	KY	IA	WI	MA	
Total hospital	38%	45%	46%	52%	53%	56%	65%	65%	65%	66%	67%	67%	72%	74%	75%	75%	76%	77%	66%
	CA	FL	GA	TX	NJ	NC	AR	VA	IL	IN	MN	LA	MI	PA	IA	KY	WI	MA	
Hospital outpatient	37%	43%	43%	50%	50%	55%	63%	64%	64%	65%	65%	66%	71%	73%	73%	74%	75%	77%	65%
	CA	WI	MA	MN	IL	GA	VA	TX	NC	KY	IN	MI	PA	FL	LA	IA	NJ	AR	
Hospital inpatient	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	6%	6%	7%	7%	7%	7%	7%	6%

Table 17b Percentage of Claims for All Types of Providers for Claims with More Than 7 Days of Lost Time, 2015/2016

	CA	TX	GA	NC	MN	IN	IA	NJ	MI	IL	LA	WI	PA	AR	FL	KY	MA	VA	18-State Median ^a
Emergency department	25%	32%	33%	36%	36%	37%	38%	39%	40%	40%	41%	41%	41%	42%	43%	46%	49%	52%	40%
	MA	LA	MI	IL	KY	PA	MN	NC	VA	AR	TX	NJ	WI	IA	GA	CA	IN	FL	
Evaluation and management	93%	94%	95%	95%	96%	96%	96%	96%	96%	96%	97%	97%	97%	97%	97%	97%	97%	98%	96%
	IN	NC	GA	MA	TX	CA	MN	MI	NJ	VA	WI	PA	AR	IA	IL	FL	KY	LA	
Laboratory	16%	19%	21%	22%	24%	26%	26%	26%	27%	27%	29%	30%	30%	31%	31%	32%	35%	43%	27%
	MA	MN	CA	WI	IL	TX	MI	VA	IA	LA	NC	NJ	AR	GA	IN	KY	PA	FL	
Major radiology	42%	45%	45%	48%	49%	49%	50%	50%	51%	52%	52%	53%	53%	53%	54%	56%	58%	59%	51%
	MN	MA	WI	IA	PA	IN	IL	TX	MI	CA	NJ	KY	NC	VA	FL	GA	LA	AR	
Minor radiology	70%	72%	76%	77%	78%	78%	78%	78%	79%	79%	79%	79%	81%	82%	84%	84%	84%	85%	79%
	MA	LA	MN	NC	AR	VA	MI	KY	IA	FL	NJ	PA	WI	TX	IN	GA	IL	CA	
Physical medicine	61%	63%	66%	66%	66%	67%	67%	67%	69%	69%	71%	71%	71%	71%	72%	72%	73%	74%	69%

Table 17c Percentage of Claims for Services by Nonhospital Providers for Claims with More Than 7 Days of Lost Time, 2015/2016

	CA	TX	GA	NC	IA	MN	AR	LA	MI	NJ	IN	IL	MA	PA	WI	KY	FL	VA	18-State Median ^a
Emergency department	20%	21%	23%	24%	24%	24%	27%	27%	27%	28%	28%	29%	29%	29%	32%	34%	34%	41%	27%
	MN	MA	IA	MI	IL	KY	PA	LA	WI	AR	VA	NC	IN	NJ	TX	CA	GA	FL	
Evaluation and management	88%	89%	90%	91%	91%	94%	94%	94%	94%	94%	94%	95%	95%	96%	96%	97%	97%	97%	94%
	MA	MI	IN	PA	KY	NC	VA	MN	NJ	IA	GA	AR	WI	IL	CA	TX	FL	LA	
Laboratory	8%	9%	10%	11%	13%	13%	14%	15%	15%	16%	17%	17%	18%	18%	21%	22%	26%	26%	15%
	MA	MN	CA	WI	MI	IL	TX	IA	VA	AR	LA	NC	NJ	GA	IN	KY	PA	FL	
Major radiology	37%	41%	44%	44%	45%	46%	47%	48%	48%	48%	50%	51%	51%	52%	52%	55%	57%	48%	
	MA	MN	IA	WI	IL	MI	PA	KY	NJ	IN	TX	CA	VA	NC	LA	AR	FL	GA	
Minor radiology	60%	62%	69%	71%	71%	73%	73%	75%	75%	76%	77%	78%	78%	80%	80%	81%	82%	75%	
	MA	WI	MN	IA	MI	AR	KY	LA	VA	PA	NC	TX	IL	IN	FL	NJ	GA	CA	
Physical medicine	44%	46%	49%	50%	53%	56%	56%	56%	59%	61%	62%	63%	64%	64%	68%	68%	70%	71%	60%

continued

Table 17d Percentage of Claims for Services by Hospital Outpatient Providers for Claims with More Than 7 Days of Lost Time, 2015/2016 (continued)

	AR	CA	TX	GA	IN	NC	FL	IL	PA	NJ	MN	IA	WI	MI	LA	VA	KY	MA	18-State Median ^a
Emergency department	7%	21%	26%	27%	30%	31%	31%	31%	31%	32%	32%	33%	34%	35%	35%	38%	40%	44%	32%
	AR	LA	CA	GA	TX	NJ	FL	NC	VA	KY	IN	MI	PA	WI	IL	IA	MN	MA	
Evaluation and management	n/a	4%	4%	5%	5%	5%	7%	8%	10%	12%	12%	14%	17%	18%	19%	22%	22%	24%	12%
	TX	GA	IN	CA	NC	FL	MN	NJ	WI	MA	IL	VA	IA	AR	MI	PA	LA	KY	
Laboratory	4%	5%	7%	8%	9%	14%	14%	16%	17%	18%	19%	19%	20%	20%	22%	24%	28%	29%	18%
	CA	NJ	GA	FL	NC	TX	IN	IL	MN	MA	VA	LA	PA	IA	AR	KY	WI	MI	
Major radiology	6%	8%	9%	10%	11%	13%	16%	18%	18%	19%	19%	20%	20%	25%	25%	25%	29%	29%	18%
	CA	GA	TX	IN	NC	FL	NJ	MN	AR	LA	IL	VA	PA	MI	WI	KY	IA	MA	
Minor radiology	21%	21%	22%	27%	28%	29%	30%	33%	35%	40%	40%	40%	42%	44%	44%	45%	46%	49%	37%
	FL	CA	GA	NC	NJ	LA	VA	TX	IN	IL	AR	PA	KY	MI	MA	MN	IA	WI	
Physical medicine	4%	4%	5%	7%	7%	12%	12%	13%	15%	15%	17%	17%	19%	21%	25%	25%	28%	36%	15%

Table 17e Nonhospital Claims with More Than 7 Days of Lost Time, 2015/2016

	MN	MA	IL	MI	IA	WI	NC	VA	PA	IN	NJ	LA	KY	TX	AR	CA	GA	FL	18-State Median ^a
Percentage of claims	96%	97%	97%	98%	98%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	98.8%
	MN	MA	WI	AR	IA	KY	MI	TX	LA	VA	IN	FL	NC	CA	NJ	GA	IL	PA	
Visits per claim	16.3	17.0	17.4	18.4	18.9	20.2	20.8	22.1	22.6	22.7	22.7	22.9	23.1	23.5	23.8	23.9	26.3	27.1	22.6
	MA	WI	MN	KY	IA	TX	AR	CA	GA	NC	FL	IN	MI	LA	VA	NJ	PA	IL	
Services per visit	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.5	3.7	3.8	3.2

Table 17f Hospital Outpatient Claims with More Than 7 Days of Lost Time, 2015/2016

	CA	FL	GA	TX	NJ	NC	AR	VA	IL	IN	MN	LA	MI	PA	IA	KY	WI	MA	18-State Median ^a
Percentage of claims	37%	43%	43%	50%	50%	55%	63%	64%	64%	65%	65%	66%	71%	73%	73%	74%	75%	77%	64.6%
	FL	CA	GA	NC	NJ	LA	VA	TX	IN	KY	AR	IL	MA	MI	MN	PA	IA	WI	
Visits per claim	2.9	3.1	3.2	3.2	4.5	4.6	4.7	5.0	5.4	6.1	6.4	6.4	7.1	7.3	7.4	8.4	8.8	10.0	5.7
	IN	TX	CA	GA	MA	WI	IA	MN	NC	IL	MI	AR	VA	PA	KY	LA	NJ	FL	
Services per visit	2.6	2.7	2.7	2.8	2.8	3.1	3.1	3.1	3.4	3.6	3.7	3.8	3.9	4.2	4.2	4.3	4.4	4.8	3.5

Table 17g Percentage of Overall Medical Payments for Claims with More Than 7 Days of Lost Time, 2015/2016

	CA	GA	NJ	IN	TX	AR	IL	FL	NC	PA	MA	MI	VA	MN	KY	IA	WI	LA	18-State Median ^a
All hospital outpatient services	9%	12%	13%	18%	20%	20%	22%	23%	23%	27%	28%	30%	30%	32%	33%	35%	36%	37%	25.2%
	LA	WI	IL	IN	MA	MI	VA	KY	MN	TX	CA	IA	NC	NJ	GA	PA	FL	AR	
All hospital inpatient services	10%	12%	13%	14%	16%	16%	16%	17%	17%	17%	18%	18%	18%	19%	20%	23%	24%	29%	17%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, Kentucky, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

Key: n/a: not available; PT/OT: physical/occupational therapist.

Table 18 Payments per Claim, Payments per Service, and Number of Services per Claim for Hospital Outpatient Claims with More Than 7 Days of Lost Time, 2015/2016

Average payment per claim																			
	AR	MA	NC	MI	LA	IL	CA	KY	FL	IN	VA	NJ	IA	PA	GA	MN	TX	WI	18-State Median ^a
Evaluation and management	n/a	\$301	\$317	\$353	\$388	\$392	\$399	\$421	\$434	\$436	\$489	\$530	\$549	\$572	\$581	\$634	\$637	\$639	\$436
	CA	TX	IN	GA	AR	MA	MI	PA	KY	NC	MN	IL	NJ	LA	IA	VA	WI	FL	
Major radiology	\$540	\$762	\$777	\$830	\$870	\$1,006	\$1,152	\$1,469	\$1,574	\$1,676	\$1,935	\$2,099	\$2,285	\$2,564	\$2,725	\$3,243	\$3,498	\$4,118	\$1,625
	CA	AR	MA	MI	TX	GA	IN	PA	MN	IL	KY	NC	IA	LA	NJ	WI	FL	VA	
Minor radiology	\$96	\$157	\$205	\$237	\$273	\$309	\$315	\$325	\$339	\$403	\$404	\$426	\$528	\$535	\$543	\$655	\$747	\$782	\$371
	CA	MA	FL	GA	NC	TX	AR	MI	MN	IN	NJ	KY	IA	IL	LA	VA	PA	WI	
Physical medicine	\$914	\$1,160	\$1,531	\$1,624	\$1,653	\$1,748	\$1,986	\$2,343	\$2,383	\$2,477	\$2,706	\$2,907	\$3,079	\$3,698	\$4,148	\$4,454	\$4,708	\$4,886	\$2,430
	MA	AR	MI	CA	KY	PA	NJ	GA	NC	IN	MN	TX	IL	FL	IA	WI	VA	LA	
Treatment/operating/recovery room	\$2,117	\$2,445	\$3,177	\$3,410	\$3,949	\$4,055	\$4,880	\$4,900	\$5,349	\$5,714	\$5,767	\$6,156	\$6,157	\$6,511	\$6,567	\$7,984	\$8,186	\$8,422	\$5,532
	CA	MA	AR	GA	MI	TX	NJ	NC	IN	KY	PA	MN	IL	FL	IA	VA	LA	WI	
Overall hospital outpatient	\$1,773	\$2,424	\$3,384	\$3,421	\$3,895	\$4,241	\$4,340	\$4,533	\$4,798	\$4,884	\$5,423	\$5,628	\$5,688	\$6,793	\$7,704	\$8,248	\$8,575	\$9,985	\$4,841
Average payment per service																			
	AR	MA	CA	MI	KY	IL	PA	NC	IN	LA	FL	IA	VA	GA	MN	NJ	WI	TX	18-State Median ^a
Evaluation and management	n/a	\$82	\$94	\$94	\$99	\$105	\$119	\$121	\$131	\$134	\$140	\$143	\$149	\$150	\$160	\$164	\$164	\$166	\$134
	CA	TX	GA	AR	IN	MA	MI	PA	KY	NC	MN	NJ	IL	LA	IA	VA	FL	WI	
Major radiology	\$336	\$473	\$494	\$501	\$525	\$656	\$721	\$895	\$898	\$1,002	\$1,220	\$1,246	\$1,310	\$1,534	\$1,804	\$2,105	\$2,116	\$2,378	\$950
	CA	AR	MA	MI	TX	PA	GA	MN	KY	IN	IL	NC	IA	LA	NJ	WI	FL	VA	
Minor radiology	\$49	\$76	\$95	\$101	\$142	\$144	\$160	\$162	\$168	\$168	\$198	\$219	\$223	\$253	\$279	\$299	\$373	\$399	\$168
	CA	MA	NJ	AR	FL	MI	TX	GA	NC	KY	PA	IN	IL	MN	IA	LA	VA	WI	
Physical medicine	\$33	\$35	\$37	\$40	\$46	\$49	\$51	\$53	\$54	\$65	\$67	\$68	\$79	\$80	\$81	\$99	\$114	\$122	\$60
	MA	AR	PA	MI	KY	CA	NJ	NC	IL	MN	FL	IA	GA	LA	IN	WI	TX	VA	
Treatment/operating/recovery room	\$959	\$1,042	\$1,130	\$1,197	\$1,410	\$2,212	\$2,219	\$2,360	\$2,375	\$2,406	\$2,467	\$2,647	\$2,780	\$2,846	\$2,891	\$3,116	\$3,211	\$3,250	\$2,390
	MA	AR	MI	PA	KY	CA	NJ	MN	IL	IA	TX	WI	IN	GA	NC	LA	VA	FL	
Overall hospital outpatient	\$120	\$139	\$145	\$154	\$187	\$210	\$220	\$243	\$249	\$279	\$316	\$326	\$344	\$381	\$417	\$442	\$452	\$482	\$264

continued

Table 18 Payments per Claim, Payments per Service, and Number of Services per Claim for Hospital Outpatient Claims with More Than 7 Days of Lost Time, 2015/2016 (continued)

Average number of services per claim																			
	AR	NC	LA	FL	NJ	VA	IN	MA	IL	MI	TX	IA	GA	WI	MN	KY	CA	PA	18-State Median ^a
Evaluation and management	n/a	2.6	2.9	3.1	3.2	3.3	3.3	3.7	3.7	3.8	3.8	3.8	3.9	3.9	4.0	4.2	4.3	4.8	3.8
	WI	IN	IA	MA	VA	MN	MI	IL	CA	TX	PA	LA	NC	GA	AR	KY	NJ	FL	
Major radiology	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.6
	IN	TX	GA	NC	NJ	CA	VA	FL	IL	AR	MN	LA	MA	WI	PA	MI	IA	KY	
Minor radiology	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.0
	CA	MN	GA	NC	FL	MA	TX	IN	IA	VA	WI	LA	KY	IL	MI	AR	PA	NJ	
Physical medicine	27.9	29.7	30.5	30.6	33.3	33.5	34.3	36.2	37.9	39.0	40.1	41.9	44.5	47.0	47.6	49.6	70.8	72.3	38.4
	CA	GA	TX	IN	NJ	MA	NC	AR	MN	IA	VA	WI	IL	FL	MI	KY	LA	PA	
Treatment/operating/recovery room	1.5	1.8	1.9	2.0	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.6	2.7	2.8	3.0	3.6	2.4
	CA	GA	NC	TX	IN	FL	VA	LA	NJ	MA	IL	MN	AR	KY	MI	IA	WI	PA	
Overall hospital outpatient	8.4	9.0	10.9	13.4	14.0	14.1	18.2	19.4	19.7	20.1	22.8	23.2	24.3	26.1	26.8	27.6	30.6	35.2	19.9

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: n/a: not available.

Table 19 Average Payment per Claim to Physicians, Claims with More Than 7 Days of Lost Time, 2015/2016

Average payment per claim																			
	MA	AR	PA	NC	IL	FL	KY	LA	MI	IA	IN	NJ	VA	GA	MN	TX	CA	WI	18-State Median ^a
Evaluation and management	\$522	\$563	\$625	\$637	\$647	\$649	\$656	\$664	\$687	\$751	\$807	\$833	\$850	\$885	\$897	\$1,040	\$1,107	\$1,165	\$719
	MI	CA	AR	KY	NC	FL	TX	MN	PA	LA	GA	IA	VA	IN	MA	IL	NJ	WI	
Major surgery	\$1,720	\$1,783	\$1,962	\$2,125	\$2,316	\$2,351	\$2,363	\$2,541	\$2,553	\$2,737	\$3,382	\$3,944	\$4,250	\$5,404	\$5,591	\$5,735	\$8,083	\$8,149	\$2,645
	MI	TX	MA	AR	CA	KY	FL	MN	PA	GA	NJ	NC	LA	VA	IL	IA	IN	WI	
Major radiology	\$328	\$452	\$467	\$472	\$492	\$582	\$606	\$649	\$673	\$685	\$701	\$733	\$807	\$885	\$912	\$1,075	\$1,145	\$1,699	\$679
	MA	MI	TX	CA	PA	KY	NC	AR	FL	MN	GA	LA	NJ	IA	VA	IL	IN	WI	
Minor radiology	\$86	\$124	\$131	\$138	\$145	\$146	\$156	\$161	\$185	\$194	\$226	\$243	\$247	\$248	\$264	\$283	\$338	\$433	\$189
	CA	MI	TX	NC	MN	KY	PA	FL	AR	MA	GA	IA	VA	LA	IL	IN	NJ	WI	
Pain management injections	\$216	\$251	\$279	\$297	\$346	\$369	\$395	\$417	\$439	\$469	\$561	\$716	\$827	\$901	\$952	\$1,024	\$1,109	\$2,043	\$454
	FL	CA	MA	NC	MN	AR	GA	NJ	LA	KY	IA	TX	IN	MI	PA	VA	IL	WI	
Physical medicine	\$424	\$667	\$751	\$889	\$1,035	\$1,121	\$1,198	\$1,255	\$1,603	\$1,720	\$1,763	\$1,789	\$1,817	\$1,958	\$2,101	\$2,228	\$2,520	\$2,964	\$1,662
	MI	MA	AR	PA	NC	CA	KY	TX	MN	FL	LA	IA	GA	VA	IL	NJ	IN	WI	
Overall physicians	\$2,663	\$2,799	\$3,217	\$3,364	\$3,418	\$3,527	\$3,691	\$3,825	\$4,463	\$4,543	\$4,851	\$5,211	\$5,487	\$5,977	\$7,008	\$7,261	\$7,451	\$8,215	\$4,503
	FL	NJ	MA	NC	IA	LA	MN	AR	GA	VA	KY	PA	IN	WI	CA	TX	MI	IL	18-State Median ^a
Percentage of medical payments for physical medicine	0.5%	0.7%	1.0%	1.0%	1.2%	1.3%	1.3%	1.8%	1.8%	1.8%	1.9%	2.1%	2.2%	2.3%	2.3%	3.1%	3.1%	3.5%	1.8%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 20 Average Payment per Claim for Major Surgery and Percentage of Claims with More Than 7 Days of Lost Time with Surgery, Any Facility**Average payment per claim for surgery**

	MI	CA	AR	KY	NC	FL	TX	PA	MN	LA	GA	IA	VA	IN	MA	IL	NJ	WI	18-State Median ^a	Minimum of Study States	Maximum of Study States
2015/2016	\$1,739	\$1,845	\$1,986	\$2,144	\$2,340	\$2,386	\$2,421	\$2,539	\$2,599	\$2,772	\$3,413	\$4,019	\$4,289	\$5,445	\$5,573	\$5,819	\$8,126	\$8,201	\$2,685	\$1,739	\$8,201
	MI	CA	AR	KY	TX	FL	PA	MN	NC	LA	GA	IA	VA	IN	MA	IL	WI	NJ			
2014/2016	\$1,889	\$2,056	\$2,291	\$2,294	\$2,568	\$2,733	\$2,821	\$2,862	\$2,883	\$3,224	\$3,800	\$4,814	\$5,031	\$6,042	\$6,087	\$7,018	\$9,215	\$10,101	\$3,054	\$1,889	\$10,101
	MI	KY	CA	AR	TX	FL	PA	NC	MN	LA	GA	IA	VA	IN	MA	IL	WI	NJ			
2013/2016	\$1,854	\$2,295	\$2,335	\$2,428	\$2,843	\$2,900	\$3,006	\$3,104	\$3,144	\$3,448	\$3,766	\$5,001	\$6,091	\$6,328	\$6,800	\$7,249	\$8,994	\$10,838	\$3,296	\$1,854	\$10,838

Percentage of claims with surgery

	CA	MA	TX	FL	MN	VA	GA	NJ	LA	PA	MI	NC	IL	WI	KY	AR	IA	IN	18-State Median ^a	Minimum of Study States	Maximum of Study States
2015/2016	23%	23%	26%	26%	27%	28%	29%	30%	30%	31%	31%	31%	31%	31%	32%	33%	35%	37%	30%	23%	37%
	MA	CA	FL	MN	TX	GA	NC	NJ	MI	VA	LA	PA	IL	WI	KY	AR	IA	IN			
2014/2016	26%	27%	29%	30%	30%	32%	33%	33%	33%	34%	34%	34%	34%	35%	36%	37%	37%	39%	33%	26%	39%
	MA	FL	CA	TX	MN	NJ	GA	VA	IL	LA	NC	WI	MI	PA	AR	KY	IA	IN			
2013/2016	27%	28%	29%	31%	32%	32%	33%	34%	34%	34%	34%	34%	35%	35%	37%	37%	38%	38%	34%	27%	38%

Percentage of medical payments made for surgery

	FL	PA	LA	CA	KY	MI	TX	MN	AR	NC	VA	GA	IA	IL	IN	WI	NJ	MA	18-State Median ^a	Minimum of Study States	Maximum of Study States
2015/2016	4.8%	5.3%	5.5%	5.5%	5.6%	5.8%	5.9%	6.1%	6.2%	6.9%	7.3%	7.8%	8.7%	11.2%	11.7%	12.5%	14.9%	18.8%	6.5%	5%	19%
	FL	CA	LA	TX	PA	MN	MI	AR	KY	NC	VA	GA	IA	IN	IL	WI	NJ	MA			
2014/2016	5.3%	5.4%	5.5%	5.7%	5.7%	6.0%	6.1%	6.4%	6.8%	6.8%	7.7%	8.4%	9.2%	10.7%	12.1%	13.2%	17.4%	18.4%	6.8%	5%	18%
	CA	FL	PA	MI	TX	LA	AR	MN	NC	KY	GA	VA	IA	IN	IL	WI	NJ	MA			
2013/2016	5.2%	5.7%	5.8%	5.9%	6.0%	6.0%	6.1%	6.4%	7.0%	7.5%	8.1%	9.1%	9.1%	10.9%	12.2%	13.3%	17.4%	20.2%	7.3%	5%	20%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 21a Percentage of Medical Payments for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2015/2016

	IL	LA	PA	VA	IN	IA	FL	NJ	AR	KY	WI	NC	GA	MI	MA	MN	TX	CA	18-State Median ^a	Minimum of Study States	Maximum of Study States
Evaluation and management	4.3%	4.4%	5.0%	5.0%	5.1%	5.1%	5.3%	5.4%	5.4%	5.6%	6.1%	6.1%	7.2%	7.4%	8.2%	8.3%	10.2%	15.4%	5.5%	4.3%	15.4%
	PA	MA	AR	MI	CA	NJ	WI	TX	KY	IL	NC	VA	FL	IA	GA	MN	IN	LA			
Facility services (ASC and hospital outpatient)	9.0%	10.4%	10.7%	12.3%	12.6%	14.0%	16.1%	16.5%	16.7%	16.7%	17.8%	18.2%	18.6%	18.7%	19.0%	20.0%	20.8%	25.4%	16.7%	9.0%	25.4%
	LA	WI	IL	IN	MA	MI	VA	KY	MN	TX	CA	IA	NC	NJ	GA	PA	FL	AR			
Inpatient services	10.4%	11.8%	12.6%	14.2%	15.6%	15.7%	16.4%	17.2%	17.2%	17.3%	17.7%	18.1%	18.5%	19.4%	19.7%	22.5%	24.1%	29.5%	17.3%	10.4%	29.5%
	FL	PA	LA	CA	KY	MI	TX	MN	AR	NC	VA	GA	IA	IL	IN	WI	NJ	MA			
Major surgery (professional services)	4.8%	5.3%	5.5%	5.5%	5.6%	5.8%	5.9%	6.1%	6.2%	6.9%	7.3%	7.8%	8.7%	11.2%	11.7%	12.5%	14.9%	18.8%	6.5%	4.8%	18.8%
	TX	CA	GA	NJ	AR	IN	PA	IL	MI	MN	NC	MA	KY	LA	FL	VA	IA	WI			
Radiology (major and minor)	4.4%	5.2%	5.5%	5.6%	6.0%	6.3%	6.3%	7.1%	7.4%	7.4%	7.6%	8.0%	8.1%	8.6%	8.7%	9.2%	10.0%	11.5%	7.4%	4.4%	11.5%
	FL	AR	MA	MN	GA	LA	CA	IA	NJ	NC	VA	KY	WI	TX	IN	IL	PA	MI			
Physical medicine	9.2%	13.8%	14.5%	14.8%	14.9%	15.4%	15.6%	16.3%	16.9%	16.9%	17.9%	18.3%	18.8%	18.9%	21.6%	23.0%	23.9%	24.4%	16.9%	9.2%	24.4%
	IN	IA	WI	NJ	MA	IL	GA	VA	NC	MN	TX	MI	PA	CA	AR	KY	FL	LA			
All other services	20.4%	23.1%	23.2%	23.8%	24.6%	25.2%	25.9%	26.0%	26.2%	26.2%	26.6%	27.0%	27.9%	28.0%	28.5%	28.5%	29.4%	30.3%	26.2%	20.4%	30.3%

Table 21b Percentage of Medical Payments for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2013/2016

	IL	IN	NC	LA	AR	IA	NJ	VA	PA	KY	WI	FL	MI	GA	MN	MA	TX	CA	18-State Median ^a	Minimum of Study States	Maximum of Study States
Evaluation and management	4.1%	4.1%	4.7%	4.7%	4.9%	4.9%	5.0%	5.0%	5.4%	5.5%	5.9%	6.0%	7.3%	7.5%	7.5%	8.3%	9.3%	11.5%	5.5%	4.1%	11.5%
	PA	CA	MA	MI	AR	TX	WI	NJ	VA	IA	KY	IL	MN	GA	FL	NC	IN	LA			
Facility services (ASC and hospital outpatient)	8.3%	10.7%	11.2%	11.9%	12.6%	14.4%	15.2%	15.3%	15.4%	15.9%	16.5%	16.7%	17.9%	18.3%	18.3%	18.6%	20.4%	22.5%	15.6%	8.3%	22.5%
	LA	WI	IL	MI	MA	GA	CA	TX	KY	IN	PA	NC	NJ	FL	VA	MN	IA	AR			
Inpatient services	7.6%	11.4%	12.3%	14.4%	14.4%	14.8%	15.1%	16.3%	16.6%	16.7%	16.8%	18.2%	18.6%	19.4%	19.9%	20.4%	22.7%	25.5%	16.6%	7.6%	25.5%
	CA	FL	PA	MI	TX	LA	AR	MN	NC	KY	GA	VA	IA	IN	IL	WI	NJ	MA			
Major surgery (professional services)	5.2%	5.7%	5.8%	5.9%	6.0%	6.0%	6.1%	6.4%	7.0%	7.5%	8.1%	9.1%	9.1%	10.9%	12.2%	13.3%	17.4%	20.2%	7.3%	5.2%	20.2%
	TX	CA	NJ	GA	PA	IL	MA	MN	IN	AR	LA	MI	FL	NC	VA	KY	IA	WI			
Radiology (major and minor)	4.5%	5.2%	5.4%	6.2%	6.4%	6.8%	7.1%	7.1%	7.2%	7.5%	7.9%	8.0%	8.1%	8.2%	8.2%	8.5%	9.4%	11.2%	7.4%	4.5%	11.2%
	FL	CA	AR	MA	NC	NJ	IA	MN	GA	LA	VA	KY	IN	WI	TX	IL	PA	MI			
Physical medicine	9.8%	10.8%	13.0%	13.7%	13.8%	13.8%	14.4%	14.6%	15.3%	15.9%	16.5%	16.7%	17.4%	19.0%	20.4%	22.3%	24.4%	24.5%	15.6%	9.8%	24.5%
	IN	IA	WI	NJ	MA	IL	VA	MN	MI	KY	TX	NC	GA	AR	FL	PA	LA	CA			
All other services	23.1%	23.5%	24.1%	24.5%	25.1%	25.6%	25.9%	26.0%	27.9%	28.7%	29.2%	29.4%	29.9%	30.5%	32.6%	32.9%	35.4%	41.5%	28.3%	23.1%	41.5%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: ASC: ambulatory surgery center.

Table 22a Selected Measures for ASC Facility Payments^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	PA	MI	AR	CA	MA	TX	NC	NJ	IA	KY	GA	FL	MN	WI	IL	VA	IN	LA	18-State Median ^b
Average payment per claim	\$2,538	\$2,783	\$3,126	\$3,267	\$3,607	\$4,637	\$5,113	\$6,674	\$7,003	\$7,018	\$7,166	\$7,365	\$7,455	\$8,029	\$8,257	\$9,618	\$10,237	\$11,483	\$7,010
	MA	MI	WI	TX	KY	PA	LA	NC	IA	MN	VA	IN	IL	CA	AR	FL	GA	NJ	
Percentage of claims	3.9%	8.0%	10.0%	10.3%	10.4%	11.6%	12.1%	14.5%	14.8%	14.8%	15.1%	16.8%	17.7%	17.8%	18.0%	19.8%	22.7%	23.6%	14.8%
	PA	MA	MI	WI	TX	AR	KY	IA	NC	CA	VA	IL	LA	NJ	MN	IN	FL	GA	
Percentage of payments	2.0%	2.1%	2.4%	3.9%	4.5%	5.5%	6.1%	6.5%	7.2%	7.7%	8.5%	8.9%	9.4%	9.9%	9.9%	10.4%	11.7%	13.0%	7.5%

Table 22b Selected Measures for ASC Facility Payments^a for Claims with More Than 7 Days of Lost Time, 2013/2016 (36 months)

	PA	MI	CA	AR	MA	TX	KY	GA	IA	FL	WI	MN	NC	VA	NJ	IL	IN	LA	18-State Median ^b
Average payment per claim	\$2,626	\$2,785	\$3,627	\$3,783	\$4,143	\$4,613	\$6,416	\$6,543	\$6,839	\$7,319	\$7,487	\$7,495	\$7,691	\$8,267	\$8,780	\$9,279	\$10,052	\$10,459	\$7,079
	MA	MI	KY	WI	LA	PA	TX	NC	IA	MN	IN	VA	IL	FL	AR	CA	NJ	GA	
Percentage of claims	5.4%	8.6%	12.2%	12.5%	13.1%	13.8%	14.1%	16.6%	17.0%	17.5%	18.3%	19.3%	20.6%	21.4%	21.6%	23.6%	24.9%	26.9%	17.2%
	PA	MI	MA	WI	TX	IA	AR	KY	CA	VA	LA	MN	NC	IN	IL	NJ	FL	GA	
Percentage of payments	2.0%	2.2%	2.5%	4.1%	4.4%	5.5%	5.7%	6.4%	6.8%	7.1%	7.2%	8.6%	8.7%	8.9%	9.7%	11.1%	11.3%	12.2%	7.0%

Table 22c Selected Measures for Hospital Outpatient Facility Payments^a for Claims with More Than 7 Days of Lost Time, 2015/2016 (12 months)

	MA	AR	MI	CA	PA	KY	NJ	GA	NC	IN	MN	IL	TX	IA	FL	WI	VA	LA	18-State Median ^b
Average payment per claim	\$2,107	\$2,445	\$3,175	\$3,411	\$3,865	\$3,957	\$4,901	\$4,914	\$5,309	\$5,689	\$5,706	\$6,127	\$6,150	\$6,542	\$6,546	\$7,979	\$8,143	\$8,387	\$5,499
	CA	NJ	FL	GA	MN	VA	IL	TX	NC	AR	PA	MA	LA	MI	IA	IN	WI	KY	
Percentage of claims	10.7%	12.9%	13.6%	15.6%	19.9%	20.5%	20.8%	20.9%	21.0%	22.7%	25.3%	26.2%	28.8%	29.1%	29.5%	31.2%	31.6%	31.8%	21.8%
	NJ	CA	AR	GA	FL	PA	IL	MA	VA	MI	MN	IN	KY	NC	TX	IA	WI	LA	
Percentage of payments	4.3%	4.8%	5.2%	6.1%	6.9%	7.0%	7.8%	8.3%	9.7%	9.9%	10.1%	10.4%	10.6%	10.6%	12.1%	12.1%	12.2%	16.0%	9.8%

Table 22d Selected Measures for Hospital Outpatient Facility Payments^a for Claims with More Than 7 Days of Lost Time, 2013/2016 (36 months)

	MA	MI	KY	AR	PA	CA	GA	NJ	NC	MN	IL	TX	IA	FL	IN	VA	WI	LA	18-State Median ^b
Average payment per claim	\$2,565	\$3,212	\$3,498	\$3,781	\$3,792	\$3,846	\$4,737	\$5,200	\$5,437	\$5,810	\$6,263	\$6,357	\$6,769	\$6,986	\$7,557	\$7,596	\$7,850	\$9,082	\$5,624
	CA	FL	NJ	GA	IL	TX	VA	MN	AR	NC	PA	MA	IA	MI	WI	LA	IN	KY	
Percentage of claims	13.0%	14.1%	14.6%	19.3%	22.5%	23.5%	24.1%	24.6%	26.4%	26.8%	28.2%	30.8%	32.5%	32.6%	32.9%	33.0%	33.6%	35.8%	26.6%
	CA	NJ	GA	PA	AR	FL	IL	VA	MA	MN	MI	NC	TX	KY	IA	WI	IN	LA	
Percentage of payments	3.9%	4.3%	6.1%	6.3%	6.9%	7.0%	7.0%	8.3%	8.7%	9.3%	9.7%	9.9%	10.0%	10.1%	10.4%	11.1%	11.6%	15.3%	9.0%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

^a Facility payments include payments for both treatment/operating/recovery room services and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information.

^b The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: ASC: ambulatory surgery center.

Table 23 Selected Measures for Physical Medicine by Type of Provider, Claims with More Than 7 Days of Lost Time, 2015/2016

Average payment per claim for physical medicine																			
	FL	CA	MA	NC	MN	AR	GA	NJ	LA	KY	IA	TX	IN	MI	PA	VA	IL	WI	18-State Median ^a
Physician	\$424	\$667	\$751	\$889	\$1,035	\$1,121	\$1,198	\$1,255	\$1,603	\$1,720	\$1,763	\$1,789	\$1,817	\$1,958	\$2,101	\$2,228	\$2,520	\$2,964	\$1,662
	AR	GA	IN	KY	NC	VA	IA	FL	CA	MA	MI	WI	NJ	LA	MN	TX	IL	PA	
Chiropractor ^b	n/a	n/a	n/a	n/a	n/a	n/a	\$522	\$697	\$703	\$859	\$924	\$1,511	\$1,533	\$1,800	\$1,845	\$3,001	\$3,112	\$3,574	\$1,522
	CA	MA	FL	AR	MN	TX	GA	NC	KY	MI	LA	IA	PA	VA	NJ	WI	IL	IN	
PT/OT	\$1,376	\$1,576	\$1,646	\$1,991	\$2,013	\$2,262	\$2,401	\$2,618	\$2,913	\$3,126	\$3,248	\$3,417	\$4,099	\$4,121	\$4,345	\$4,669	\$4,720	\$5,134	\$3,020
	CA	MA	FL	GA	NC	TX	AR	MI	MN	IN	NJ	KY	IA	IL	LA	VA	PA	WI	
Hospital outpatient	\$914	\$1,160	\$1,531	\$1,624	\$1,653	\$1,748	\$1,986	\$2,343	\$2,383	\$2,477	\$2,706	\$2,907	\$3,079	\$3,698	\$4,148	\$4,454	\$4,708	\$4,886	\$2,430
Percentage of claims with physical medicine																			
	MA	NJ	IA	LA	NC	KY	VA	MN	PA	MI	FL	WI	AR	TX	GA	IN	IL	CA	18-State Median ^a
Physician	9%	10%	11%	12%	12%	13%	14%	15%	15%	15%	16%	16%	17%	18%	19%	21%	23%	26%	15%
	AR	GA	IN	KY	NC	VA	NJ	FL	MI	IA	LA	MA	IL	PA	CA	WI	TX	MN	
Chiropractor ^b	n/a	n/a	n/a	n/a	n/a	n/a	1%	1%	1%	2%	3%	5%	6%	7%	7%	8%	8%	9%	5%
	WI	MN	MA	IA	MI	AR	KY	LA	TX	IL	PA	VA	IN	NC	CA	FL	GA	NJ	
PT/OT	32%	36%	36%	44%	47%	47%	48%	49%	50%	51%	52%	54%	57%	59%	61%	63%	64%	65%	50%
	FL	CA	GA	NC	NJ	LA	VA	TX	IN	IL	AR	PA	KY	MI	MA	MN	IA	WI	
Hospital outpatient	4%	4%	5%	7%	7%	12%	12%	13%	15%	15%	17%	17%	19%	21%	25%	25%	28%	36%	15%
Percentage of overall medical payments for physical medicine																			
	FL	NJ	MA	NC	IA	LA	MN	AR	GA	VA	KY	PA	IN	WI	CA	TX	MI	IL	18-State Median ^a
Physician	0.5%	0.7%	1.0%	1.0%	1.2%	1.3%	1.3%	1.8%	1.8%	1.8%	1.9%	2.1%	2.2%	2.3%	2.3%	3.1%	3.1%	3.5%	1.8%
	AR	GA	IN	KY	NC	VA	FL	NJ	IA	MI	LA	WI	MA	CA	IL	MN	PA	TX	
Chiropractor ^b	n/a	n/a	n/a	n/a	n/a	n/a	0.0%	0.0%	0.1%	0.1%	0.4%	0.6%	0.7%	0.7%	1.1%	1.5%	1.6%	2.3%	0.6%
	MN	WI	FL	MA	AR	IA	LA	TX	CA	KY	GA	VA	PA	IL	NC	NJ	MI	IN	
PT/OT	6.3%	7.2%	8.0%	8.5%	8.8%	9.3%	10.5%	10.8%	11.2%	11.4%	12.2%	12.9%	14.3%	14.7%	14.7%	14.9%	15.7%	17.1%	11.3%
	FL	CA	GA	NC	NJ	TX	IN	VA	AR	LA	IL	MA	KY	MN	MI	IA	PA	WI	
Hospital outpatient	0.5%	0.6%	0.6%	1.0%	1.3%	2.1%	2.2%	3.0%	3.1%	3.2%	3.5%	4.2%	4.4%	5.3%	5.3%	5.3%	5.5%	8.5%	3.1%

continued

Table 23 Selected Measures for Physical Medicine by Type of Provider, Claims with More Than 7 Days of Lost Time, 2015/2016 (continued)

Visits per claim for physical medicine																			
	FL	CA	NC	NJ	MN	GA	IN	TX	IA	AR	MA	KY	VA	LA	WI	MI	PA	IL	18-State Median ^a
Physician	5	7	7	7	8	8	9	10	10	10	10	10	11	11	11	13	13	14	10
	AR	GA	IN	KY	NC	VA	CA	FL	IA	MI	TX	NJ	WI	LA	MA	MN	IL	PA	
Chiropractor ^b	n/a	n/a	n/a	n/a	n/a	n/a	8	9	10	13	13	14	15	15	16	19	20	27	14
	CA	TX	MN	AR	WI	GA	FL	KY	MA	IN	NC	LA	IA	MI	VA	IL	NJ	PA	
PT/OT	13	13	14	16	17	17	18	18	19	19	19	20	20	20	20	23	23	25	19
	CA	FL	NC	GA	TX	MN	VA	LA	IN	MA	KY	IA	AR	WI	MI	IL	NJ	PA	
Hospital outpatient	9	10	10	10	11	12	13	13	13	13	14	15	15	15	15	15	17	19	13

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, Kentucky, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

Key: n/a: not available; PT/OT: physical/occupational therapist.

Table 24a Selected Measures for Physical Medicine for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2015/2016

	CA	MA	FL	AR	MN	GA	NC	TX	KY	MI	LA	IA	NJ	VA	PA	IN	IL	WI	18-State Median ^a
Payments per claim	\$1,584	\$1,595	\$1,716	\$2,226	\$2,586	\$2,624	\$2,716	\$2,840	\$3,327	\$3,373	\$3,713	\$3,776	\$4,392	\$4,685	\$4,981	\$5,148	\$5,205	\$5,470	\$3,350
	MA	LA	MN	NC	AR	VA	MI	KY	IA	FL	NJ	PA	WI	TX	IN	GA	IL	CA	
Percentage of claims	61%	63%	66%	66%	66%	67%	67%	67%	69%	69%	71%	71%	71%	71%	72%	72%	73%	74%	69%
	FL	AR	MA	MN	GA	LA	CA	IA	NJ	NC	VA	KY	WI	TX	IN	IL	PA	MI	
Percentage of payments	9.2%	13.8%	14.5%	14.8%	14.9%	15.4%	15.6%	16.3%	16.9%	16.9%	17.9%	18.3%	18.8%	18.9%	21.6%	23.0%	23.9%	24.4%	16.9%
	CA	TX	MN	AR	FL	GA	MA	KY	WI	NC	IN	LA	IA	VA	MI	NJ	IL	PA	
Visits per claim	15	16	17	18	18	18	19	19	20	20	20	21	21	21	22	24	26	28	20
	MN	WI	MA	IA	KY	CA	GA	AR	TX	FL	IN	NC	MI	IL	LA	VA	NJ	PA	
Services per visit	2.9	3.0	3.1	3.4	3.6	3.6	3.7	3.7	3.7	3.7	3.9	4.0	4.0	4.2	4.3	4.3	4.3	4.3	3.7
	FL	MA	CA	AR	NC	MI	GA	PA	LA	NJ	KY	IL	TX	VA	MN	IA	IN	WI	
Payments per service	\$25	\$27	\$29	\$34	\$35	\$39	\$39	\$41	\$42	\$43	\$48	\$48	\$49	\$51	\$53	\$55	\$65	\$92	\$42

Table 24b Selected Measures for Physical Medicine for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2013/2016

	CA	MA	FL	AR	KY	NC	GA	MN	MI	TX	NJ	IA	LA	IN	VA	WI	PA	IL	18-State Median ^a
Payments per claim	\$1,856	\$1,955	\$2,015	\$2,724	\$2,987	\$3,078	\$3,207	\$3,364	\$3,908	\$4,221	\$4,374	\$4,399	\$4,828	\$5,096	\$5,629	\$6,120	\$6,144	\$6,161	\$4,064
	MA	LA	VA	MI	NC	MN	FL	KY	IA	AR	TX	WI	PA	GA	NJ	IL	CA	IN	
Percentage of claims	64%	65%	67%	68%	68%	68%	70%	70%	70%	70%	72%	72%	73%	73%	73%	74%	74%	75%	70%
	FL	CA	AR	MA	NC	NJ	IA	MN	GA	LA	VA	KY	IN	WI	TX	IL	PA	MI	
Percentage of payments	9.8%	10.8%	13.0%	13.7%	13.8%	13.8%	14.4%	14.6%	15.3%	15.9%	16.5%	16.7%	17.4%	19.0%	20.4%	22.3%	24.4%	24.5%	15.6%
	TX	AR	CA	FL	MN	KY	IN	GA	WI	MA	NC	IA	MI	LA	VA	NJ	IL	PA	
Visits per claim	19	20	21	21	22	22	22	23	23	24	24	25	26	26	27	28	32	37	24
	MN	WI	MA	IA	CA	AR	KY	GA	FL	IN	MI	NC	TX	IL	VA	PA	NJ	LA	
Services per visit	2.9	3.1	3.1	3.3	3.4	3.6	3.6	3.6	3.7	3.8	3.8	4.0	4.0	4.1	4.2	4.3	4.4	4.4	3.8
	FL	MA	CA	NC	NJ	AR	KY	GA	PA	MI	LA	IL	VA	MN	IA	TX	IN	WI	
Payments per service	\$26	\$26	\$27	\$32	\$36	\$37	\$38	\$38	\$39	\$40	\$42	\$47	\$49	\$53	\$53	\$54	\$61	\$85	\$39

continued

Table 24c Physical Medicine Claims with Surgery for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2013/2016 (continued)

	CA	MA	FL	AR	KY	NC	MN	GA	MI	IA	TX	LA	NJ	IN	VA	PA	WI	IL	18-State Median ^a
Payments per claim	\$3,005	\$3,060	\$3,311	\$3,999	\$4,456	\$4,471	\$4,749	\$5,020	\$5,748	\$6,457	\$6,588	\$7,087	\$7,217	\$7,503	\$8,442	\$8,751	\$9,592	\$10,113	\$6,102
	FL	MA	CA	MN	TX	MI	NJ	GA	WI	VA	PA	NC	IL	KY	LA	AR	IA	IN	
Percentage of claims	23%	23%	25%	26%	26%	28%	28%	28%	29%	29%	30%	30%	30%	30%	30%	31%	31%	33%	29%
	FL	CA	MA	MN	AR	NC	NJ	GA	IA	KY	VA	LA	IN	TX	WI	PA	MI	IL	
Percentage of payments	5.4%	5.9%	7.7%	8.0%	8.4%	8.8%	8.9%	9.4%	9.5%	10.6%	10.7%	10.8%	11.3%	11.7%	11.8%	14.1%	14.7%	14.9%	10.1%
	MN	AR	TX	KY	CA	IN	WI	FL	NC	GA	MA	IA	LA	MI	VA	NJ	IL	PA	
Visits per claim	29	30	31	32	32	33	34	34	35	36	36	37	38	38	41	46	51	51	36
	MN	WI	MA	IA	CA	AR	KY	GA	FL	IN	MI	NC	TX	VA	IL	PA	NJ	LA	
Services per visit	2.9	3.2	3.2	3.3	3.4	3.6	3.6	3.6	3.7	3.8	3.8	4.0	4.0	4.2	4.2	4.3	4.3	4.5	3.8
	FL	MA	CA	NC	NJ	AR	GA	KY	PA	MI	LA	IL	VA	IA	TX	MN	IN	WI	
Payments per service	\$26	\$26	\$27	\$31	\$36	\$37	\$38	\$38	\$39	\$40	\$42	\$48	\$50	\$53	\$53	\$56	\$60	\$89	\$40

Table 24d Physical Medicine Claims without Surgery for All Types of Providers, Claims with More Than 7 Days of Lost Time, 2013/2016

	CA	MA	FL	AR	KY	NC	GA	MN	NJ	MI	IA	TX	LA	IN	VA	IL	WI	PA	18-State Median ^a
Payments per claim	\$1,254	\$1,322	\$1,363	\$1,709	\$1,887	\$1,980	\$2,051	\$2,498	\$2,572	\$2,621	\$2,726	\$2,844	\$2,856	\$3,192	\$3,457	\$3,463	\$3,840	\$4,345	\$2,597
	LA	VA	IA	NC	AR	MI	KY	MA	MN	IN	PA	IL	WI	GA	NJ	TX	FL	CA	
Percentage of claims	35%	38%	39%	39%	39%	40%	40%	41%	42%	42%	43%	43%	44%	44%	45%	46%	46%	49%	42%
	FL	AR	CA	IA	NJ	LA	NC	VA	MA	GA	KY	IN	MN	WI	IL	TX	MI	PA	
Percentage of payments	4.4%	4.5%	4.9%	4.9%	5.0%	5.1%	5.1%	5.7%	5.9%	6.0%	6.0%	6.1%	6.6%	7.2%	7.4%	8.7%	9.7%	10.3%	5.9%
	AR	TX	IN	KY	FL	CA	GA	IA	NC	LA	NJ	WI	MA	MN	MI	VA	IL	PA	
Visits per claim	12	13	14	14	14	15	15	16	16	16	16	16	17	17	17	17	19	27	16
	MN	WI	MA	IA	CA	KY	AR	GA	FL	IN	MI	NC	IL	TX	PA	VA	LA	NJ	
Services per visit	3.0	3.0	3.0	3.2	3.3	3.6	3.6	3.6	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.2	4.3	4.4	3.7
	FL	MA	CA	NC	NJ	KY	AR	GA	PA	MI	LA	IL	VA	MN	IA	TX	IN	WI	
Payments per service	\$26	\$26	\$26	\$32	\$36	\$37	\$38	\$38	\$39	\$40	\$41	\$46	\$47	\$50	\$55	\$55	\$62	\$78	\$39

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. The metrics reflect when at least one physical medicine service was billed by any of the types of providers of physical medicine.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 25 Annual Average Percentage Change from 2010/2011 to 2015/2016 in Prices, Utilization, and Medical Payments for Nonhospital and Hospital Outpatient Services, Claims With More Than 7 Days of Lost Time at 12 Months of Experience

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median ^a	Minimum of Study States	Maximum of Study States
Medical Payments per claim	0.8%	-1.5%	2.9%	0.9%	4.7%	-2.3%	1.1%	2.1%	4.0%	1.7%	2.2%	1.0%	-2.8%	1.3%	4.6%	2.7%	3.3%	3.9%	1.9%	-2.8%	4.7%
Nonhospital payments per claim	1.3%	-1.8%	1.4%	3.3%	3.0%	-2.3%	6.7%	3.3%	2.7%	1.5%	2.6%	2.1%	-0.3%	2.2%	3.4%	0.6%	3.1%	3.0%	2.4%	-2.3%	6.7%
Nonhospital prices paid	0.3%	1.5%	-0.2%	2.8%	1.0%	-5.2%	3.0%	4.2%	0.6%	0.1%	-0.8%	0.8%	2.6%	0.4%	1.8%	2.7%	2.8%	3.6%	1.3%	-5.2%	4.2%
Nonhospital utilization	-1.1%	-0.7%	-0.2%	-0.6%	1.3%	0.1%	4.0%	-0.9%	0.7%	0.9%	1.8%	-1.1%	-1.0%	0.6%	-0.1%	-1.8%	-0.4%	-0.1%	-0.2%	-1.8%	4.0%
Physician payments per claim	-1.4%	-3.3%	1.8%	2.2%	1.3%	-3.9%	4.6%	2.7%	2.0%	0.3%	-1.2%	2.3%	-3.3%	-0.2%	-0.6%	0.2%	2.2%	1.6%	0.8%	-3.9%	4.6%
PT/OT payments per claim	3.1%	4.6%	0.4%	3.9%	6.8%	-2.4%	10.6%	4.9%	2.7%	2.1%	5.2%	1.8%	5.3%	7.9%	4.6%	3.1%	4.7%	8.9%	4.6%	-2.4%	10.6%
Hospital payments per claim	-0.6%	1.5%	7.3%	1.5%	4.7%	-2.7%	-5.2%	2.2%	3.5%	2.7%	0.4%	-0.6%	-6.0%	1.9%	5.7%	4.9%	2.7%	4.3%	2.1%	-6.0%	7.3%
Hospital outpatient payments per claim	-3.4%	0.4%	6.7%	-1.3%	5.1%	-2.8%	-6.3%	3.6%	5.2%	3.4%	0.0%	0.5%	-6.7%	2.2%	7.8%	4.8%	4.5%	4.7%	2.8%	-6.7%	7.8%
Hospital outpatient payments per service	-3.2%	2.9%	7.0%	10.8%	4.5%	-3.8%	4.8%	3.3%	8.6%	4.6%	2.7%	2.6%	5.1%	3.4%	5.7%	6.8%	6.4%	4.1%	4.5%	-3.8%	10.8%
Hospital outpatient services per claim	-0.2%	-2.4%	-0.3%	-10.9%	0.6%	1.1%	-10.6%	0.3%	-3.1%	-1.1%	-2.6%	-2.1%	-11.2%	-1.1%	2.0%	-1.9%	-1.8%	0.6%	-1.5%	-11.2%	2.0%
Hospital payments per inpatient episode	n/a	3.8%	9.1%	5.1%	6.6%	0.1%	-1.9%	4.6%	5.4%	2.1%	6.0%	5.2%	-2.6%	3.8%	5.4%	5.4%	5.3%	8.3%	5.2%	-2.6%	9.1%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: PT/OT: physical/occupational therapist.

Table 26a Cumulative Change from 2010/2011 to 2015/2016 in Percentage of Claims with Surgery (any facility), Claims with More Than 7 Days of Lost Time and 12 Months of Experience

	CA	MA	FL	TX	MN	VA	GA	NJ	LA	NC	PA	IL	KY	MI	AR	WI	IA	IN	18-State Median ^a
2010/2011	25.4%	21.4%	24.3%	26.6%	31.9%	30.6%	30.6%	30.0%	28.7%	33.7%	33.1%	33.2%	37.3%	34.3%	38.1%	38.6%	42.1%	38.2%	
2015/2016	21.7%	21.7%	23.5%	25.5%	27.7%	28.3%	28.3%	29.4%	29.5%	30.2%	31.7%	31.8%	32.6%	32.7%	35.4%	35.5%	39.8%	40.6%	
% point difference	-3.7%	0.3%	-0.8%	-1.1%	-4.2%	-2.3%	-2.3%	-0.5%	0.8%	-3.5%	-1.3%	-1.3%	-4.7%	-1.6%	-2.7%	-3.0%	-2.3%	2.3%	-2.0%

Table 26b Cumulative Change from 2010/2013 to 2013/2016 in Percentage of Claims with Surgery (any facility), Claims with More Than 7 Days of Lost Time and 36 Months of Experience

	MA	FL	CA	TX	NJ	VA	GA	LA	MN	NC	IL	MI	PA	AR	WI	KY	IN	IA	18-State Median ^a
2010/2013	26.6%	27.7%	30.7%	30.2%	31.8%	33.1%	34.2%	33.2%	36.4%	35.5%	36.7%	36.1%	35.4%	41.4%	41.5%	39.2%	40.4%	44.9%	
2013/2016	26.6%	26.6%	28.4%	29.8%	31.5%	32.3%	32.8%	33.1%	33.1%	34.2%	34.3%	35.5%	36.1%	37.9%	39.3%	40.0%	41.5%	41.6%	
% point difference	0.0%	-1.1%	-2.3%	-0.4%	-0.3%	-0.7%	-1.5%	-0.1%	-3.2%	-1.3%	-2.4%	-0.6%	0.7%	-3.5%	-2.2%	0.8%	1.1%	-3.3%	-0.9%

Table 26c Annual Average Change from 2010/2011 to 2015/2016 in the Average Payment per Claim with Major Surgery, Claims with More Than 7 Days of Lost Time and 12 Months of Experience

	MI	KY	CA	AR	TX	FL	PA	NC	MN	LA	GA	IA	IN	VA	MA	IL	WI	NJ	18-State Median ^a
2010/2011	\$1,666	\$2,095	\$1,994	\$2,242	\$2,110	\$2,223	\$2,342	\$2,668	\$2,355	\$2,772	\$2,991	\$3,481	\$4,465	\$4,129	\$5,086	\$7,375	\$6,907	\$8,479	
2015/2016	\$1,687	\$2,113	\$1,849	\$1,928	\$2,419	\$2,437	\$2,521	\$2,360	\$2,525	\$2,858	\$3,443	\$3,786	\$5,177	\$4,180	\$5,655	\$5,868	\$7,798	\$8,666	
Annual average % change	0.2%	0.2%	-1.5%	-3.0%	2.8%	1.9%	1.5%	-2.4%	1.4%	0.6%	2.9%	1.7%	3.0%	0.2%	2.1%	-4.5%	2.5%	0.4%	1.0%

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. States are sorted by 2015/2016 or 2013/2016 values.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Table 27a Percentage of Claims with ASC Facility Services, Claims with More Than 7 Days of Lost Time

	MA	MI	TX	KY	WI	PA	LA	NC	VA	MN	CA	IA	AR	FL	IL	IN	GA	NJ	18-State Median ^a
2010/2011	4%	7%	12%	11%	12%	12%	11%	12%	14%	13%	18%	17%	17%	17%	16%	18%	23%	20%	
2015/2016	4%	8%	10%	10%	11%	12%	12%	14%	15%	15%	17%	17%	17%	18%	18%	18%	23%	24%	
% point difference	0%	2%	-2%	-1%	-1%	0%	1%	2%	1%	2%	-1%	1%	1%	1%	2%	1%	1%	4%	1%

Table 27b Cumulative Change in Percentage of Claims with Hospital Outpatient Facility Services, Claims with More Than 7 Days of Lost Time

	CA	NJ	FL	GA	MN	IL	VA	TX	NC	MA	PA	AR	LA	MI	KY	IA	IN	WI	18-State Median ^a
2010/2011	14%	15%	13%	22%	26%	25%	26%	20%	32%	26%	27%	25%	29%	33%	36%	35%	33%	34%	
2015/2016	10%	13%	13%	15%	20%	21%	21%	21%	21%	25%	26%	26%	30%	30%	32%	33%	34%	34%	
% point difference	-4%	-2%	0%	-7%	-6%	-4%	-5%	1%	-11%	0%	-1%	1%	1%	-2%	-4%	-3%	1%	0%	-2%

Table 27c Cumulative Change from 2010/2011 to 2015/2016 in Percentage of Claims with Overall Facility Services (ASC and hospital outpatient), Claims with More Than 7 Days of Lost Time

	CA	MA	FL	TX	NC	MN	VA	NJ	GA	PA	IL	MI	LA	KY	AR	WI	IA	IN	18-State Median ^a
2010/2011	31%	29%	29%	31%	42%	38%	37%	33%	43%	37%	39%	38%	38%	46%	39%	44%	49%	48%	
2015/2016	26%	29%	30%	30%	34%	34%	34%	35%	36%	36%	37%	38%	40%	41%	41%	43%	48%	50%	
% point difference	-5%	-1%	1%	-1%	-8%	-4%	-3%	2%	-7%	-1%	-2%	-1%	2%	-5%	2%	-1%	-1%	2%	-1%

Table 27d Annual Average Percentage Change from 2010/2011 to 2015/2016 in Average Payment per Claim for ASC Facility Services, Claims with More Than 7 Days of Lost Time

	PA	MI	AR	CA	MA	TX	NC	NJ	IA	KY	GA	FL	MN	WI	IL	VA	IN	LA	18-State Median ^a
2010/2011	\$2,140	\$1,922	\$2,830	\$3,858	\$2,673	\$3,861	\$6,266	\$7,475	\$4,982	\$3,457	\$5,265	\$5,371	\$4,952	\$6,047	\$8,656	\$5,905	\$5,558	\$6,903	
2015/2016	\$2,490	\$2,817	\$3,207	\$3,245	\$3,594	\$4,621	\$5,174	\$6,706	\$6,774	\$6,947	\$7,149	\$7,159	\$7,354	\$7,744	\$8,233	\$9,603	#####	\$11,157	
Annual average % change	3.1%	7.9%	2.5%	-3.4%	6.1%	3.7%	-3.8%	-2.1%	6.3%	15.0%	6.3%	5.9%	8.2%	5.1%	-1.0%	10.2%	13.0%	10.1%	6.0%

Table 27e Annual Average Percentage Change from 2010/2011 to 2015/2016 in Average Payment per Claim for Hospital Outpatient Facility Services, Claims with More Than 7 Days of Lost Time

	MA	AR	MI	CA	PA	KY	NJ	GA	NC	IN	MN	TX	IL	FL	IA	WI	LA	VA	18-State Median ^a
2010/2011	\$1,758	\$3,453	\$3,182	\$3,044	\$2,530	\$3,032	\$4,304	\$4,075	\$4,406	\$5,936	\$4,501	\$4,804	\$6,432	\$5,695	\$5,063	\$5,997	\$6,051	\$5,372	
2015/2016	\$2,147	\$2,554	\$3,160	\$3,366	\$3,851	\$3,898	\$4,937	\$5,002	\$5,335	\$5,692	\$5,707	\$6,100	\$6,118	\$6,407	\$6,676	\$7,949	\$8,034	\$8,079	
Annual average % change	4.1%	-5.9%	-0.1%	2.0%	8.8%	5.2%	2.8%	4.2%	3.9%	-0.8%	4.9%	4.9%	-1.0%	2.4%	5.7%	5.8%	5.8%	8.5%	4.1%

Table 27f Annual Average Percentage Change from 2010/2011 to 2015/2016 in Average Payment per Claim for Overall Facility Services (ASC and hospital outpatient), Claims with More Than 7 Days of Lost Time

	MA	AR	MI	CA	PA	KY	NC	TX	NJ	GA	MN	IA	FL	IL	IN	WI	VA	LA	18-State Median ^a
2010/2011	\$1,887	\$3,212	\$2,962	\$3,507	\$2,414	\$3,134	\$4,911	\$4,451	\$5,966	\$4,684	\$4,651	\$5,037	\$5,510	\$7,298	\$5,798	\$6,010	\$5,556	\$6,291	
2015/2016	\$2,334	\$2,822	\$3,085	\$3,289	\$3,430	\$4,663	\$5,270	\$5,630	\$6,054	\$6,325	\$6,410	\$6,710	\$6,844	\$7,113	\$7,311	\$7,898	\$8,714	\$8,955	
Annual average % change	4.3%	-2.6%	0.8%	-1.3%	7.3%	8.3%	1.4%	4.8%	0.3%	6.2%	6.6%	5.9%	4.4%	-0.5%	4.7%	5.6%	9.4%	7.3%	4.8%

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. States are sorted by 2015/2016 values.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; the states change depending on the measure being evaluated.

Key: ASC: ambulatory surgery center.

Table 28a Cumulative Change from 2010/2011 to 2015/2016 in Percentage of Claims with Inpatient Episodes, Claims with More Than 7 Days of Lost Time

	AR ^a	CA	WI	IL	GA	MA	MN	KY	NC	VA	MI	IN	PA	FL	IA	TX	NJ	LA	17-State Median ^b
2010/2011	n/a	5.5%	5.7%	5.9%	6.5%	5.6%	8.2%	8.1%	7.4%	9.0%	7.5%	7.1%	7.8%	6.7%	8.1%	7.3%	8.3%	10.6%	
2015/2016	n/a	4.0%	4.9%	4.9%	5.0%	5.0%	5.1%	5.8%	5.9%	6.1%	6.2%	6.2%	6.3%	6.4%	6.5%	6.6%	6.8%	7.3%	
% point difference	n/a	-1.4%	-0.9%	-1.1%	-1.5%	-0.6%	-3.2%	-2.4%	-1.5%	-2.9%	-1.3%	-0.9%	-1.5%	-0.3%	-1.6%	-0.8%	-1.5%	-3.3%	-1.5%

Table 28b Cumulative Change from 2010/2011 to 2015/2016 in Percentage of Claims with Inpatient Surgical Episodes, Claims with More Than 7 Days of Lost Time

	AR ^a	CA	MN	GA	WI	TX	MA	FL	MI	IL	NC	IA	KY	IN	VA	LA	PA	NJ	17-State Median ^b
2010/2011	n/a	2.2%	4.3%	3.3%	3.1%	2.9%	2.5%	2.6%	4.0%	2.9%	3.5%	3.7%	3.4%	3.0%	4.4%	4.2%	3.8%	4.3%	
2015/2016	n/a	1.5%	1.8%	1.9%	2.0%	2.0%	2.1%	2.1%	2.2%	2.2%	2.2%	2.3%	2.3%	2.4%	2.4%	2.5%	2.6%	3.0%	
% point difference	n/a	-0.8%	-2.5%	-1.4%	-1.1%	-0.9%	-0.4%	-0.5%	-1.8%	-0.7%	-1.2%	-1.4%	-1.1%	-0.6%	-1.9%	-1.7%	-1.2%	-1.3%	-1.2%

Table 28c Cumulative Change from 2010/2013 to 2013/2016 in Percentage of Claims with Inpatient Episodes, Claims with More Than 7 Days of Lost Time

	AR ^a	CA	WI	MA	IL	GA	FL	MI	NC	KY	MN	IN	IA	PA	TX	VA	NJ	LA	17-State Median ^b
2010/2013	n/a	6.9%	6.4%	7.1%	7.6%	7.9%	7.2%	7.9%	8.3%	8.8%	9.7%	7.7%	8.5%	9.0%	8.5%	9.9%	9.3%	11.8%	
2013/2016	n/a	5.6%	5.7%	6.2%	6.2%	6.2%	6.4%	6.9%	6.9%	6.9%	7.0%	7.4%	7.5%	7.7%	7.9%	8.6%	8.7%	9.4%	
% point difference	n/a	-1.3%	-0.7%	-0.9%	-1.4%	-1.7%	-0.9%	-1.0%	-1.4%	-1.9%	-2.7%	-0.3%	-1.0%	-1.3%	-0.6%	-1.3%	-0.6%	-2.4%	-1.3%

Table 28d Cumulative Change from 2010/2013 to 2013/2016 in Percentage of Claims with Inpatient Surgical Episodes, Claims with More Than 7 Days of Lost Time

	AR ^a	FL	WI	CA	MI	MA	GA	TX	KY	NC	IL	IN	MN	PA	IA	VA	NJ	LA	17-State Median ^b
2010/2013	n/a	3.1%	3.7%	3.7%	4.5%	4.0%	4.9%	4.0%	4.3%	4.6%	4.6%	3.7%	5.9%	5.0%	4.4%	5.5%	5.6%	5.5%	
2013/2016	n/a	2.3%	2.7%	3.0%	3.0%	3.1%	3.3%	3.3%	3.3%	3.4%	3.5%	3.6%	3.6%	3.9%	3.9%	4.5%	4.7%	4.9%	
% point difference	n/a	-0.8%	-0.9%	-0.8%	-1.5%	-0.8%	-1.6%	-0.7%	-1.0%	-1.2%	-1.2%	-0.1%	-2.3%	-1.2%	-0.5%	-0.9%	-0.9%	-0.6%	-0.9%

Notes: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years. States are sorted by 2015/2016 and 2013/2016 values.

^a Trends in hospital inpatient measures are not shown for Arkansas because the cell sizes underlying the data are too small to support a trend analysis.

^b The 17-state median is the state ranked 9th on a given measure; the state changes depending on the measure being evaluated.

Key: n/a: not available.

LIST OF COMMON ABBREVIATIONS AND SYMBOLS¹

AAPC: Annual average percentage change.

ACOEM: American College of Occupational and Environmental Medicine.

ALAE: Allocated loss adjustment expenses.

APC: Ambulatory payment classification.

APS/AAPM: American Physical Society/American Academy of Pain Medicine.

ASC: Ambulatory surgery center.

ASTC: Ambulatory surgery treatment center.

Avg.: Average.

AWP: Average wholesale price.

BLS: Bureau of Labor Statistics.

CAT scan: Computed axial tomography scan.

CCO: Coordinated care organization.

Claims w/ > 7DLT: Claims with more than seven days of lost time.

CM: Case management.

CMS, CMMS: Centers for Medicare and Medicaid Services.

CPI-M: Consumer Price Index for Medical Care (multiple series calculated by the Bureau of Labor Statistics).

CPI-U: Consumer Price Index for All Urban Consumers (calculated by the Bureau of Labor Statistics).

CPT: Current Procedural Terminology codes, a system of coding used to identify procedures and services performed by physicians. CPT codes are published by the American Medical Association.

CT scan: Computerized tomography scan.

Cum.: Cumulative.

CY: Calendar year.

Diff.: Difference.

DRG, MS-DRG: Diagnosis-related group, Medicare severity diagnosis-related group.

E&M, Eval. & Mgmt: Evaluation and management (mainly office visits).

ED, ER: Emergency department, emergency room services.

¹ The abbreviations and symbols on this list are frequently used in this CompScope™ Medical Benchmarks report series.

Eff.: Effective.

Esp.: Especially.

FEC: Future earning capacity.

FS: Fee schedule.

Geo zip: Geographical area defined by U.S. Postal Service zip codes.

GH: Group health.

GPCI: Geographic practice cost index.

HB: House bill.

HCCI: Health Care Cost Institute.

HCFA: Health Care Financing Administration.

HCL: Hydrochloride, a chemical suffix found in prescription drug names, e.g., cyclobenzaprine HCL.

HCO: Health care organization.

HCPCS: Healthcare Common Procedure Coding System.

HEA: House enrolled act.

HMO: Health maintenance organization.

Hosp.: Hospital.

ICD or ICD-9: International Classification of Diseases codes, Ninth Revision, a system of coding used to identify diagnoses, symptoms, and reasons for medical treatment. **ICD-9-CM** (Clinical Modification) also includes common procedures associated with hospital utilization.

IMR: Independent medical review.

MAC: Medicaid administrative contractors.

MAR: Maximum allowable reimbursement.

Max.: Maximum.

MCC: Medical cost containment.

MCO, MCA, MCP: Managed care organization, managed care arrangement, managed care program.

MD or MD/DO: Medical doctor. The physician category includes surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors, such as doctors of osteopathic medicine.

MDRx: Physician-dispensed prescriptions.

MEA: Morphine equivalent amount.

MED: Morphine equivalent daily dose.

MEI: Medicare economic index.

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Mgmt.: Management.

Min.: Minimum.

M-L: Medical-legal.

MMI: Maximum medical improvement.

MPI, MPI-WC: Medical Price Index for Workers' Compensation. Refers to WCRI 2016 study by Yang and Fomenko (see bibliography).

MPN: Medical provider network.

MRI: Magnetic resonance imaging.

MS-DRG: Medicare severity diagnosis-related group.

MTG: Medical treatment guidelines.

NCCI: National Council on Compensation Insurance.

NDC: National Drug Code.

NSAIDs: Nonsteroidal anti-inflammatory drugs.

ODG: Official disability guidelines.

OMFS: Official medical fee schedule.

OPPS, HOPPS: (Hospital) outpatient prospective payment system.

OV: Office visits.

PAF: Payment on account factor.

PD: Permanent disability.

PDMP, PMP: Prescription (drug) monitoring program.

PDRx: Pharmacy-dispensed prescriptions.

PM or Phys. Med.: Physical medicine.

Pmt.: Payment.

PPA: Preferred provider agreement (variously: preferred provider association).

PPD: Permanent partial disability.

PPO: Preferred provider organization.

PPP: Preferred provider program.

PPT or ppt: Percentage point(s).

PT or PT/OT: Physical therapist and/or occupational therapist.

R code: Revenue code, one of a system of codes widely used to identify services and procedures delivered in hospital settings.

RBRVS: Resource-based relative value scale.

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RTW or SRTW: (Substantial) Return to work.

RVU: Relative value unit.

Rx: Prescriptions.

SAWW: Statewide average weekly wage.

SB: Senate bill.

SEA: Senate enrolled act.

SMSA: Standard metropolitan statistical area.

TD: Temporary disability.

TIN: Taxpayer identification number.

TOR or T/O/R: Treatment/operating/recovery room services.

U&C: Usual and customary.

UR: Utilization review.

URO: Utilization review organization.

Vol.: Voluntary.

VR: Vocational rehabilitation.

w/: With.

WC: Workers' compensation.

WCC: Workers' compensation commission.

%: Percent or percentage.

#: Number.

/: Per (as in cost/claim means cost per claim).

>: More than.

≤: Less than or equal to.

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GLOSSARY

access to medical care: The extent to which patients were able to obtain the medical care that they or their health care provider desired. In WCRI and many other surveys, access to medical care is evaluated in terms of the patients reporting that they encountered “no problems,” “small problems,” or “big problems” in this regard.

ambulatory payment classification: A payment methodology developed by Medicare to reimburse outpatient hospital and ambulatory surgery centers for services and procedures. The methodology categorizes visits according to clinical characteristics, typical resource use, and the costs associated with the diagnoses and procedures performed.

ASC facility payments: Includes payments to ambulatory surgery centers (ASCs) for both treatment/operating/recovery room and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information.

average medical payment per claim: The sum of medical payments divided by the number of claims. This is the result of utilization and prices paid. Similar averages may be presented on a provider type or service group basis by appropriately limiting the payments summed and claims counted for purposes of the calculation.

average medical payment per service: The sum of payments for each service (line item billing) divided by the total number of services for which payments were made. It is important to note that these are paid amounts, not charged amounts.

average number of prescriptions per claim with prescriptions: The average number of prescriptions per claim with more than seven days of lost time and at least one prescription.

average number of services per claim: The sum of the number of services billed divided by the number of claims. Similar averages may be presented on a provider type or service group basis by appropriately limiting the number of services summed and claims counted for purposes of the calculation.

average number of services per visit: The sum of the number of services billed at each visit divided by the number of visits. Similar averages may be presented on a provider type or service group basis by appropriately limiting the services summed and visits counted for purposes of the calculation.

average number of visits per claim: The number of visits, which is identified as unique dates of service within each claim counted across a complete set of claims, divided by the number of claims in the set. Similar averages may be presented on a provider type or service group basis by appropriately limiting the unique dates summed and claims counted for purposes of the calculation.

average payment per prescription: The average payment per prescription for claims with more than seven days of lost time and at least one prescription.

average payment per visit: The total amount paid for medical services divided by the number of visits made to receive services. Similar averages may be presented on a provider type or service group basis by appropriately limiting the amount summed and number of visits counted for purposes of the calculation.

average prescription payment per claim with prescriptions: The average prescription payment per claim with more than seven days of lost time and at least one prescription.

balance billing: A procedure under which providers of medical services can bill the injured worker for some

or all of the difference between bills submitted for services on a claim and the amounts paid for those services by the employer or insurer.

billing provider: The billing provider is the medical professional or entity that bills for the services rendered.

In some cases, the billing provider and rendering provider are the same. In some cases, the billing provider may have multiple rendering providers.

claims with more than seven days of lost time: WCRI methodology in multistate benchmarking studies that applies a waiting period of seven days before counting or including indemnity benefits paid, if a state law allows earlier payments. This approach provides a more appropriate multistate comparison because states that have a waiting period for benefits shorter than seven days will typically have lower average indemnity benefits per claim as a result.

closed formulary: A medical cost containment protocol that specifically prohibits certain drugs without prior authorization.

cost-to-charge ratio reimbursement: A ratio of the cost divided by the charges, generally used with acute inpatient or outpatient hospital services. Base cost-to-charge ratios are often calculated using the hospitals' declared revenue and expenses on the Medicare Cost Reports. The base cost-to-charge ratios are multiplied by charges to determine the reimbursement amount.

Current Procedural Terminology (CPT®) codes: A system of coding used to identify procedures and services performed by physicians. CPT codes are published by the American Medical Association.

Detailed Benchmark/Evaluation (DBE) database: Created by WCRI, this is the compilation of data used as the basis for the measures in these reports.

duration of temporary disability: The imputed length of time for which temporary disability benefits have been paid, estimated from amounts of benefits and average benefit rate.

emergency services: The services in this group include both facility and professional fees associated with visits to an emergency room or urgent care facility (when billing specified urgent care codes) and surcharges for emergency visits to physicians' offices. It also includes trauma response team services, advanced life support, and transport of emergency equipment and personnel to a patient's home on an emergency basis.

end caps: The maximum and minimum utilized in the North Carolina method of calculating inpatient hospital fees based on diagnostic-related groups (DRGs). Effective July 2009, for most hospitals the minimum was set at 75 percent of the hospital's itemized charges as shown on the UB-92 claim form (lowered from 77.07 percent); the maximum was set at 100 percent of the charges. Any DRG falling within the band limited by the maximum and minimum is paid as is.

evaluation date: The date as of which payments have been summarized for all claims from a particular accident year. In this study, selected evaluation dates falling 6, 18, 30, 42, and 54 months after the end of each accident year were used. However, we typically report on claims evaluated 6 months after the end of each accident year (an average maturity of 12 months). Accordingly, claims with dates of injury in accident years 2010 through 2015 were evaluated as of March 31, 2016, and on March 31 of each previous year (2011 through 2015) as applicable. The evaluation date may also be referred to as the valuation date.

facility payments: Payments to hospitals and ASCs for outpatient treatment, operating, and recovery room services usually provided in conjunction with surgical procedures. Surgeon fees and other surgery-related payments (such as supplies and equipment, and anesthesia) are not included in this measure.

fee schedule: A set of prescribed reimbursement levels for medical procedures provided by a wide range of

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practitioners, generally within nonhospital and/or hospital settings, to workers' compensation claimants. Fee schedules may also apply to durable medical supplies or pharmaceuticals. Fee schedules may be subject to negotiation or adjustment by agreement of the parties in some systems.

formulary drugs: A limited list of medications covered by insurance without prior authorization from the payor.

hospital inpatient episode: An episode is a separate incident of hospital inpatient care which is identified through revenue codes indicating a hospital overnight stay (i.e., codes identifying room and board). The episode is composed of room and board dates and adds one day before and one day after the day of the room and board charge in order to capture all other hospital services provided during the inpatient stay.

hospital inpatient payments: Payments made to the hospital for services rendered during an inpatient stay.

hospital outpatient payments: Payments made to the hospital for services that are delivered outside of an inpatient stay.

indemnity claim: A claim in which indemnity payments—payments for temporary disability, permanent disability, or death—have been made. Note that much of the report analysis focuses on claims with more than seven days of lost time and applies a waiting period of seven days before counting or including indemnity benefits paid if a state law allows earlier payments.

indemnity payments: Income replacement and/or disability benefit payments made to workers.

injury year: The 12-month period in which an injury occurred, also called *accident year*. We define an injury year to include the 12 months beginning October 1 of the previous calendar year through September 30 of the calendar year used to designate the injury year. For example, injury year 2015 includes claims with injuries arising from October 1, 2014, through September 30, 2015. Thus, the injury years used in this study do not align with specific calendar years.

International Classification of Diseases (ICD, ICD-9, or ICD-9-CM) codes: A system of coding used to identify diagnoses, symptoms, and reasons for treatment. ICD-9-CM (Clinical Modification) also includes procedures associated with hospital utilization.

low back cases: Low back cases with disc conditions are defined as low back claims with at least half of the medical dollars spent on a set of seven disc-related International Classification of Diseases (ICD) codes; the most frequent ICD-9 codes included are 722.10 (displacement of lumbar intervertebral disc without myelopathy) and 724.40 (thoracic or lumbosacral neuritis or radiculitis, unspecified) and their ICD-10 equivalents—M51.26, M51.27 (intervertebral disc displacement, lumbar region and lumbosacral region).

major radiology: Primarily computerized tomography (CT) scans and magnetic resonance imaging (MRIs) of all body parts, as distinguished from X rays and ultrasounds, which are categorized as minor radiology.

major surgery: Invasive surgeries, as opposed to surgical treatments and pain management injections (which are also included in the surgical section of the CPT manual). The most frequent surgeries in the major category are carpal tunnel, neuroplasty, arthroscopic surgery, laminectomies, and laminotomies.

managed care: An approach to health care cost containment that enables the payor to influence the delivery of health services before the services are provided. As used in this report, *managed care* refers to the use of designated entities, referred to as managed-care organizations, to deliver health care to injured workers. Techniques common to managed-care organizations include case management, physician

gatekeepers, provider networks, and components of utilization review (such as admission review, admission precertification, continued-stay review, discharge planning, mandatory second opinion programs, and quality assurance mechanisms).

mapping: One of the key methods we use to ensure the comparability of the benchmark measures across states. It involves categorizing different data source codes into a common structure based on the definitions of those codes.

marketbasket of procedures: A list of the most frequently used procedure codes for each of eight service groups. The list is held constant for all states and over time to help isolate the effects of price from utilization on observed differences in payments per claim.

maturity: The time between the date of injury and the evaluation date. In this study, we typically analyze claims with average maturities of 12, 24, and 36 months.

median study state: The state that ranks in the middle of the group of states included for a particular measure when the states are sorted from low to high values. For example, the median of 18 study states is the mid-point between the states that rank 9th and 10th on a given measure; those states change depending on the measure being analyzed. In WCRI studies, we consider values within 10 percent of the median value or within 3 percentage points of the median percentage measure to be *typical*—that is, similar to the median state.

medical cost containment expenses: All payments related to medical cost containment, including fees for bill review, utilization review, case management, and preferred-provider networks. Note that medical cost containment expenses are not included in the average medical payments per claim that we report.

medical payments: Payments to medical providers for the medical treatment of workers' injuries. These include payments to physicians, chiropractors, and physical therapists, and for hospital, pharmacy, nursing home, and medical rehabilitation services. The average medical payment per claim is the sum of medical payments made to all types of providers and for all types of services, divided by the total number of claims receiving any such services.

medical service: A single medical treatment or procedure billed by a medical provider. Multiple medical services may be delivered at one visit.

medical-only claim: An open or closed claim for which medical payments have been made, but no indemnity payments have been made or no indemnity reserves have been established.

minor radiology: Primarily X rays and ultrasounds for all body parts, as distinguished from major radiology, which includes CT scans and/or MRIs.

“N” drugs: Drugs with “N” or non-formulary status under the closed formulary adopted by the Texas Division of Workers' Compensation, which incorporates the pharmacy treatment parameters of Appendix A of the Official Disability Guidelines (ODG) Treatment in Workers' Compensation. Drugs on the ODG “N” list include highly addictive and expensive class 2 narcotics, dangerous hypnotics, and compound drugs that include “N” ingredients. Prior authorization through a prospective utilization review of medical necessity is required for prescribed N drugs before they can be dispensed.

National Drug Code (NDC): A unique 11-digit code assigned by the U.S. Food and Drug Administration to each medication in the United States that is intended for use on humans. The number identifies the specific drug product, its strength and dosage, package size, manufacturer, and repackaging firm.

network care: Health care rendered within a network of preferred medical providers who provide care under

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an agreement with the payor; such agreements may establish discounted reimbursement rates for services and require compliance with certain protocols for care.

neurological/neuromuscular testing: The services in this group are largely made up of sensory and motor nerve conduction tests but also include range of motion tests and application of neurostimulators. These services may be billed by physicians as well as by chiropractors and physical therapists.

nonhospital providers: Providers in this category include physicians, chiropractors, physical/occupational therapists, nurses, clinical social workers, and other ancillary practitioners. Ambulatory surgery centers are included in the physician category (unless the billing is done through a hospital).

operating room: This category includes operating, treatment, and recovery room services. Payments to these services capture the facility fees related to surgeries.

pain management injections: Includes injection procedures that are commonly used for pain management, such as epidural or steroid injections on nerve roots and muscles for lumbar, sacral, cervical, or thoracic areas.

payment on account factor (PAF): Represents a ratio of the net to gross private sector patient revenue for a hospital and is used to determine rates of payment for hospital services.

payor: The entity responsible for administering and making payments on a workers' compensation claim. Payors may be insurers, third-party administrators, or self-insured, self-administered employers.

physical medicine services: Services billed under CPT codes 97xxx and/or chiropractic or osteopathic manipulations billed under CPT codes 98xxx, regardless of the type of provider billing the codes (physician, physician's assistant, chiropractor, physical or occupational therapist, etc.). In some states, such as Louisiana, other state-specific codes are also included, such as codes beginning with "PT" and/or "OT." Such state-specific codes are mapped to individual service groups as appropriate.

premium (above Medicare): Refers to the dollar amount or percentage by which a state workers' compensation fee schedule rate exceeds the corresponding Medicare reimbursement rate for that state. In very few circumstances, the workers' compensation rate may be lower than the Medicare rate, in which case the premium is negative.

prescription payments as a percentage of total medical payments: This ratio has the total medical payments for claims with more than seven days of lost time as a denominator, and the total payments for prescriptions as defined above as a numerator.

price index: The ratio of the price per service in an individual state to the median state, where the price per service is constructed using a marketbasket approach to hold utilization of services constant.

primary provider: The medical professional who, according to the worker, made the decisions about the care that the worker needed and either provided that care or directed the worker to someone who could provide it.

procedure code: A code used to map a service group. This can be a CPT code, Healthcare Common Procedure Coding System (HCPCS) code, National Drug Code, revenue code, or other state- or company-specific code.

professional services: Nonhospital services billed by physicians, physical therapists, and chiropractors, excluding bills for ambulatory surgery center facilities, durable medical equipment, and pharmaceuticals.

provider type: One of six categories of medical providers (physician, chiropractor, physical/occupational therapist, hospital, other, unclassified) created in the DBE database. Provider type is one of the dimensions that form the detailed medical benchmark measures. Provider type is defined regardless

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of the type of service being provided.

PT/OT: Physical therapist and/or occupational therapist. Payments to PT/OTs are for all services they provide and bill (whether or not the services are considered physical medicine services, as previously defined).

relative value unit (RVU): A measure of the relative costs required to provide different medical services, with more complex, time-consuming services (like a shoulder arthroscopy) having higher unit values than less complex, less time-consuming services (such as an office visit).

resource intensity: Measures the relative complexity for a mix of services based on the weighted volume of services delivered. The weights are the Medicare resource-based relative value scale.

resource-intensive service: A service with a relatively high resource-based relative value scale.

revenue code (R code): One of a system of codes widely used to identify services and procedures delivered in hospital settings.

satisfaction with medical care: Patients' perceptions of the quality, effectiveness, and efficiency of their medical care. Satisfaction with medical care is measured in WCRI and many other surveys using questions that ask patients to rate their satisfaction as "very satisfied," "somewhat satisfied," "somewhat dissatisfied," or "very dissatisfied."

Schedule II opioid: A drug or other substance that has high potential for abuse, which may lead to severe psychological or physical dependence, and has a currently accepted medical use in treatment in the United States. Examples of specific drugs are Morphine (Avinza®), fentanyl (Duragesic®), oxycodone HCL (OxyContin®), oxycodone-acetaminophen (Percocet®), and methadone.

service group: One of 20 categories of medical services. Service group is one of the dimensions that form the detailed medical benchmark measures. Service group applies to categories of services regardless of the provider type(s) delivering the services.

service year: The calendar year in which a service was performed or prescription was filled.

treatment guidelines: Specifications for ranges and/or levels of service and the methods of treatment (protocols) that should be considered accepted medical practice for certain diagnoses or patient conditions.

trend: Rate and direction of change over time.

unclassified provider: A provider type—primarily a physician or hospital—that could not be mapped into a specific provider type because of missing information.

unclassified service: A service delivered by a nonhospital or hospital provider that could not be mapped into a specific service group because of missing information.

utilization index: The ratio of the average number of services per claim in an individual state to those of the median state. The average number of services per claim was weighted by the relative value unit (RVU) to hold the intensity of resource use constant in these comparisons.

utilization review: The assessment of a patient's medical care to ensure that it is medically necessary and reasonable. This assessment typically considers the appropriateness of the place of care; the level of care; and the duration, frequency, and/or quantity of services provided based on the accepted condition(s).

visit: An event in which a patient receives a service, or services, from a particular medical provider on a specific date.

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WORKERS' COMPENSATION STATUTE¹

Pennsylvania Workers' Compensation Act.

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¹ The citation provided is the basic workers' compensation statute. Amendments are not listed, and other state statutes may relate to workers' compensation requirements and processes.

COMPSCOPE™ MEDICAL BENCHMARKS: TECHNICAL APPENDIX, 18TH EDITION

Roman Dolinski

Karen Rothkin

October 2017

WORKERS COMPENSATION RESEARCH INSTITUTE
CAMBRIDGE, MASSACHUSETTS

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TECHNICAL APPENDIX

In this *Technical Appendix*, we describe in detail the concepts, measures, data, and methods used to construct benchmarking metrics reported in the CompScope™ Medical Benchmarks individual state reports, including how the price and utilization indices were created. Individual state reports summarize state-specific results and provide a summary description of our methodological approach. The 18 states included in this study are Arkansas, California, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, Virginia, and Wisconsin.

ORGANIZATION

This *Technical Appendix* is organized into six sections:

- **Section 1: Conceptual framework:** This section describes the conceptual framework that serves as the basis for formulating the measures used to analyze the cost and utilization of medical care in state workers' compensation systems, including the classification of medical services by provider type and by service group.
- **Section 2: Data set development:** This section describes how the data were developed. It covers methods for cleaning the data, establishing proper weights, and checking validity.
- **Section 3: Methods to construct the price index:** This section describes the marketbasket approach we used to construct the price index for nonhospital services. We discuss marketbasket procedures, frequency weights, and computation procedures.
- **Section 4: Methods to construct the utilization index:** This section describes the construction of the utilization index for nonhospital services. We discuss weighting procedures to include relative value unit (RVU) weights as well as computational procedures.
- **Section 5: Analyzing hospital services:** This section describes the approach used to analyze medical payments for hospital outpatient services and inpatient episodes.
- **Section 6: State-specific issues:** In this section, we discuss other technical, methodological, and comparability issues we encountered in the study that are specific to individual states.

SECTION 1: CONCEPTUAL FRAMEWORK

ANALYTIC APPROACH

CompScope™ Medical Benchmarks, 18th Edition examines key components underlying the medical costs per claim for medical services provided to injured workers. It is important to note that most cost measures are expressed on a per-claim basis. The CompScope™ Medical Benchmarks study helps to identify key service areas contributing to overall medical costs per claim, by provider type and by service group, to determine whether price, utilization, or both influence medical costs per claim. [Figure TA.1](#) depicts the basic analytic framework applied in this 18th edition of the study.

At the most basic level, medical costs per claim are equal to the price of a medical service multiplied by the number of times that service was provided. Costs could thus change because of changes in prices and/or

changes in utilization of services.

If all services were the same, it would be relatively straightforward to decompose any rise in costs per claim between utilization (i.e., number of services) and price. Complicating the matter, however, is that each claim has a unique mix of services. Therefore, utilization can affect costs per claim in two ways: a change in the number of services and/or a change in the types of services provided.

To control for differences in service mix when estimating unit prices, we construct the price index for nonhospital providers.¹ With this approach, the differences in prices for physical medicine services, for example, reflect the differences in unit prices of individual Current Procedural Terminology (CPT®) procedures, holding quantity and service mix constant.²

To accurately represent utilization per claim—that is, the volume and resource intensity of services provided—we construct a utilization index for nonhospital providers. The utilization index incorporates several aspects of medical care as shown in [Figure TA.1](#), including number of visits per claim, number of services per visit, and the resource intensity of the services. The utilization index is computed as the number of services per claim weighted by the RVU for each service. The resource intensity measures the relative complexity for a mix of services based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. If a combination of services required more resources than typical, utilization would be more intense than the volume alone would have indicated. This would be captured by a positive resource-intensity indicator. We report the utilization index by provider type and service group. The methods used to construct the price and utilization indices are discussed in detail in Sections 3 and 4 of this *Technical Appendix*.³

Although this approach provides more rigorous analysis of price and utilization than if we were to simply decompose the average costs into average payment per service times volume of services, we should note that the changes or differences in the components of price and utilization will not necessarily add up to the changes in average medical payments per claim. The following section explains more on this issue.

To maintain the accuracy of the price and utilization indices, we exclude services for which accurate unit prices and/or unit-resource values could not be determined. Such services (for example, supplies) have broadly defined CPT or revenue codes. The services included in the construction of the price and utilization indices, the Group A services (see the discussion in “Classification of Provider Types and Service Groups”), make up 46 to 74 percent of total medical payments to nonhospital providers (depending on the state) and are representative of the services included in most states.

As mentioned earlier, we apply the analysis of the price and utilization indices to nonhospital services. For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services, we report the average payment per service and number of services per claim. For hospital inpatient services, we rely on payments per episode for the medical costs and utilization analysis (see Section 5 for more detail).

¹ The measures of medical payments in this report are not adjusted for inflation and reflect actual prices paid for the medical services rendered.

² CPT® is a registered trademark of the American Medical Association. Each CPT code identifies an individual medical procedure. See the CPT books, published annually by the American Medical Association.

³ It is important to note that there is another measure of utilization—the percentage of claims with a specific provider type or service group involvement (see [Figure TA.1](#)). The percentage of claims with a specific provider type or service group is not explicitly factored into the utilization index. Rather, it is discussed separately.

DECOMPOSING THE TREND IN THE AVERAGE MEDICAL PAYMENT PER CLAIM INTO CHANGES IN PRICE AND UTILIZATION

Compared with an approach reporting payments per service and services per claim directly, our price-index approach more accurately reflects unit-price differences and price changes within a state by holding utilization constant, and our utilization-index approach more accurately reflects differences or changes in utilization by taking the resource intensity of services provided into consideration (see Sections 3 and 4).

There is, however, a necessary trade-off between separating costs directly into average payment per service and volume of services and using the price and utilization indices. We have chosen the latter as our method because it allows for better comparability across states. For this reason, as previously described, only services for which accurate unit prices and/or unit-resource values can be measured are included in the price and utilization indices. In addition, to hold the mix of services constant across states, we adopt the marketbasket method. To better capture the impact of price regulation changes that often come into effect by calendar year, we chose to base our price index on the calendar year instead of an injury/evaluation year, which is used for all other measures in this report. Our utilization index takes the resource intensity of services into consideration by weighting the volume of services by the RVUs of those services. Because of all these factors, the changes in average medical payment over time are not simply the products of the changes in the price index and the utilization index.

Although the tables that contain average payment per claim and the price and utilization indices often “add up,” this should not be expected to be the norm. Rather, the price and utilization indices are independent measures that provide the most comparable measures of both a state’s relative prices and price changes over time and a state’s relative utilization and utilization changes over time.

CLASSIFICATION OF PROVIDER TYPES AND SERVICE GROUPS

In examining medical costs and utilization, it is important to distinguish between services delivered by hospital providers and nonhospital providers for three reasons. First, individual services billed by hospital providers are more difficult to identify than are those billed by nonhospital providers. Second, service groups are not comparable across the two provider types. Third, policy considerations also make it necessary to separate nonhospital providers from hospital providers because states often regulate the medical prices differently for the two types of providers.

Generally, states regulate the reimbursement rate for nonhospital providers by setting fee schedule rates based on CPT codes. This type of regulation can also affect some hospital providers to the extent that they bill using CPT codes. State regulation of hospital inpatient prices often takes the form of per diem rates, diagnosis-related groups (DRGs), or percentage discounts from charges.⁴ Prices for hospital outpatient services take many forms and are often regulated based on charges, ambulatory payment classification (APC) groups, or not at all.⁵

[Figure TA.2](#) shows how medical services are grouped, by provider type and service group. At the top level, medical goods and services are grouped into two broad categories of provider type: nonhospital and hospital providers. The figure also includes a third provider type, unknown providers, which are providers

⁴ DRG is a classification system that groups patients’ medical conditions into approximately 500 mutually exclusive and exhaustive disease categories or groups.

⁵ APC is a classification system that groups procedures into approximately 800 mutually exclusive groups based on the resource mix required to perform the procedures.

whose specialty or provider type cannot be identified.⁶ The unknown provider group is small, accounting for 0.2 to 1.5 percent of the medical payments, depending on the state.

[Figure TA.2](#) also shows the detailed breakout within the nonhospital provider and hospital provider groups. For nonhospital providers, we group services by provider type and service group. Nonhospital providers include physicians, chiropractors, physical or occupational therapists (PT/OTs), nurses, clinical social workers, and other ancillary practitioners. The physician category includes surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors, such as doctors of osteopathic medicine. Ambulatory surgery centers (ASCs) are included in the physician category (unless the billing is done through a hospital). Chiropractor and PT/OT are mutually exclusive categories. Other nonhospital providers in our study include pharmacies, medical equipment suppliers, nurses and other ancillary providers (such as psychologists, social workers, acupuncturists), diagnostic centers (such as MRI and imaging centers), interpreters, home care, and other providers.

We classify all services provided by nonhospital providers into 17 service groups, including, but not limited to, emergency, evaluation and management, major radiology, minor radiology, neurological and neuromuscular testing, laboratory, physical medicine, major surgery, and pain management injections. As noted in [Figure TA.2](#), we have two broad service groups for nonhospital services: Group A and Group B. Only the Group A services were included in the analysis of price and utilization indices. Group A services are the focus of the analysis in this study. [Table TA.1](#) lists the definitions for each of the eight service groups included in Group A. Major surgery is a WCRI defined service group that is a subset of the surgery section of the CPT manual. This service group includes invasive surgical procedures, as opposed to surgical treatments and pain management injections (which are also included in the surgery section of the CPT manual). The definition of major surgery procedures in this study is also generally consistent with the Centers for Medicare & Medicaid Services (CMS) Medicare global code 090, which identifies major surgery events with a 1-day preoperative period and 90-day postoperative period. The most frequent surgeries in this service group include (but are not limited to) arthroscopic surgeries of the shoulder or knee, laminectomies, laminotomies, discectomies, carpal tunnel surgeries, neuroplasty, and hernia repair. [Table TA.2](#) lists the 100 most common major surgeries in 2014 and 2015 across the 18 states included in this CompScope™ Medical Benchmarks study. This table specifies the procedure code, the percentage of payments, and the percentage of services for a given procedure, as well as the brief description for a given procedure. As [Table TA.2](#) shows, the 100 most common major surgeries represent about 80 percent of total payments and services within the major surgery service group.

The Group B services were not reported for the price and utilization indices but were included in the overall average payment per claim. For multistate comparisons, we report the percentage of claims and the percentage of payments for the Group B services altogether. These services mainly include anesthesia, drugs, legal and special reports, supplies and equipment, miscellaneous services billed by stand-alone ambulatory surgery centers, and other miscellaneous defined medical and/or diagnostic services and testing. We did not report the Group B services for the price and utilization indices because these services are too broadly defined

⁶ We identify provider type using company-specific codes indicating provider specialty. When the information needed to identify provider specialties was either missing or ambiguous, we used the master provider table, which we established based on the available data, to match providers with the same tax identification number for maximum identification of provider type. It is important to note that the provider type was identified as the billing source in each case. For example, sometimes a physician who was part of a hospital network billed through the hospital and therefore was identified as a hospital provider. The extent to which a billing source was not the actual provider may have had an impact on the comparability of the groups.

and have large variations that prevent us from constructing price and utilization indices. See Section 3 for detail on the volume of Group B procedures.

Hospital providers include facilities, trauma centers, and inpatient and outpatient hospital treatment centers. As [Figure TA.2](#) shows, we divided hospital services into hospital outpatient services and hospital inpatient services. The hospital outpatient services were further separated into 15 outpatient service groups. Hospital outpatient Group A services include clinic/evaluation and management, emergency, laboratory, major radiology, minor radiology, treatment/operating/recovery room, and physical medicine. Like Group B of the nonhospital services, hospital outpatient services in Group B were excluded from the detailed analysis of the payments per service and services per claim but were included in overall medical payments. For multistate comparisons, we report the average medical payment per claim, the percentage of claims, and the percentage of payments for the Group B services altogether. Hospital outpatient Group B services include miscellaneous hospital ambulatory surgical care, supplies and equipment, undefined hospital outpatient services, hospital drugs/pharmaceuticals, anesthesia, surgery, pain management injections, and other miscellaneous defined medical and/or diagnostic services and testing. Note that we have a separate list of measures for Group A and Group B services for nonhospital providers and hospital outpatient services (see [Figure TA.2](#)).

Hospital inpatient care is a unique area in terms of billing practices. We did not classify inpatient services into specific groups. Instead, we measured inpatient services by inpatient episode or hospital overnight stays. These episode costs are defined as all payments made to the hospital during the period of the inpatient stay as identified by the presence of room and board charges (see Section 5 for more detail).

MEASURES USED IN THE COMPSCOPE™ MEDICAL BENCHMARKS

[Table TA.3](#) lists the CompScope™ Medical Benchmarks measures we used in the state reports. As the table shows, the measures are summarized in terms of medical area of analysis. We started with overall medical costs per claim for all paid claims, claims with more than seven days of lost time, and claims with less than or equal to seven days of lost time. The analyses in the state reports mainly focus on measures for claims with more than seven days of lost time and claims with an average of 12 months of experience. However, for inpatient analysis, we used claims with 24 months of experience. We note in the report and tables where there may be differences in the benchmark analysis based on longer duration claims—those with, on average, 36 months of experience.

In addition to analyses of nonhospital providers, hospital outpatient services, and hospital inpatient services, we report results on cost and utilization measures that compare certain types of medical services by various providers. Physical medicine, for example, is one of the most common service groups in workers' compensation medical care. We compare the costs and utilization of physical medicine by chiropractors and other providers (mostly PT/OTs).

SECTION 2: DATA SET DEVELOPMENT

Constructing the analysis data is a critical step to ensure meaningful and credible results for any empirical study. [Figure TA.3](#) illustrates the framework of our methodology and data adjustments to ensure comparability. The data were standardized using uniform definitions across data sources and states. A subset of claims with more than seven days of lost time was analyzed. We focused on claims with relatively complete bill review data in this report. We controlled for injury and industry mix and applied data capping to address

the issue of outliers with extreme values. After these adjustments, the differences in the report measures across states should primarily reflect differences in system features, including, but not limited to, regulations governing price and utilization of medical services, managed care/networks, other medical cost containment strategies, safety programs, return-to-work programs, and dispute resolution procedures, as well as the history and culture relating to workers' compensation. Another factor influencing any potential difference in results is the behavior of system participants.

In this section, we describe the steps taken to develop an accurate database that adequately represents all workers' compensation medical claims and enhance the comparability of the results across various states in detail. These steps include

- establishing inclusion/exclusion criteria for claims selection;
- constructing a weighting system to ensure that the data are representative of the full market in a state;
- adjusting for injury and industry mix;
- data capping; and
- conducting verification checks to ensure reliability.

WHAT'S NEW IN THE 18TH EDITION

In the 18th edition of CompScope™ Medical Benchmarks we introduce measures of prescription drugs for claims with more than seven days of lost time. The prescription transactions included in this study are those for medications of prescription strengths and over-the-counter strengths with a National Drug Code (NDC), which are referred to as *prescriptions* throughout this report. These prescriptions could be filled or refilled by the injured worker at a pharmacy or physician's office and were paid for under workers' compensation. Prescription medications that were dispensed at a hospital,⁷ administered by a medical provider (e.g., injectable medications), compounded drugs, nutritional supplements, and medical supplies/equipment that were billed under NDCs are not considered prescriptions in this report. However, these additional medications are included in the WCRI service group "drugs" and are reflected in the overall medical payments in this study.

There are four prescription (Rx) measures included in this report.

- **Average prescription payment per claim with prescriptions:** The average prescription payment per claim with more than seven days of lost time and at least one prescription.
- **Average payment per prescription:** The average payment per prescription for claims with more than seven days of lost time and at least one prescription.
- **Average number of prescriptions per claim with prescriptions:** The average number of prescriptions per claim with more than seven days of lost time and at least one prescription.
- **Prescription payments as a percentage of total medical payments:** This ratio has the total medical payments for claims with more than seven days of lost time as a denominator, and the total payments for prescriptions as defined above as a numerator.

⁷ Prescriptions dispensed by hospitals are not included in the prescription measures reported in this study because they are often bundled with other procedures into hospital revenue codes and usually lack NDC information.

Note that we do not report the percentage of claims with more than seven days of lost time that had at least one prescription paid under workers' compensation in this study, because a large part of the interstate variations in this measure are reflective of certain external factors and not workers' compensation system features. For example, some initial prescriptions may be paid for by non-workers' compensation payors, and some patients may be using medications that they already have on hand for treating their work injury.⁸

To provide meaningful interstate comparisons on these prescription measures, we implemented the techniques to increase the comparability from state to state as used in the rest of the report (described in the subsequent sections).

These prescription measures underwent a rigorous data quality assurance process. We employed the same multistage process for reviewing the quality of the data underlying the variables as used in this CompScope™ Medical Benchmarks report (described in the subsequent sections). We checked the completeness of the data and the consistency of these measures over time, and we performed an intercompany comparison review to identify any data sources where a measure is substantially different from other data sources and excluded these outliers from these prescription metrics.

We also validated these measures with data published by other research organizations. For example, the National Council on Compensation Insurance, Inc. (NCCI) publication *Workers Compensation and Prescription Drugs: 2016 Update* reported that drug costs represented about 7 percent of total medical payments for 2014 injuries with 24 months of experience nationwide. This projected prescription share was based on all claims from 41 states. In comparison, the percentage of total medical payments that were for prescriptions in this study ranged from 1 to 6 percent across the 18 study states, with the 18-state median at about 3 percent. These results reflect prescription payments for 2014 claims with more than seven days of lost time and experience as of March 2016. There are several differences in the definition and methods underlying the NCCI numbers and our prescription measures. For instance, the WCRI definition of a prescription excludes compounds, injected drugs, and any prescriptions dispensed by hospitals, while the NCCI measure includes those. Also, our prescription measures in this report are for claims with more than seven days of lost time, while the NCCI measure is based on all claims. In addition, the NCCI numbers are based on projected models, while ours reflect the actual payments. When we tried to approximate the NCCI definition of prescriptions by including compounds, injected drugs, and any prescriptions dispensed by any provider, we estimated the average prescription share of total medical payments was about 6 percent for 2014 claims with more than seven days of lost time and 24 months of maturity based on our data in 18 states. This estimate is consistent with the NCCI result.

CLAIM INCLUSION OR EXCLUSION

We created two analysis data sets in this 18th edition of the study: Data Set I supports analysis for overall medical costs and utilization and detailed analysis for nonhospital providers, and Data Set II supports detailed hospital analysis. The two data sets are not mutually exclusive; that is, one claim may be included in both data sets. Both data sets were extracted from WCRI's Detailed Benchmark/Evaluation (DBE) database.

⁸ See a more detailed discussion in the WCRI study *Prescription Benchmarks, 2nd Edition: Trends and Interstate Comparisons* (Wang and Liu, 2011).

SUBSET OF CLAIMS WITH RELATIVELY COMPLETE BILL REVIEW DATA AND IDENTIFIABLE HOSPITAL SERVICES

The detailed medical data used in the CompScope™ Medical Benchmarks study are from medical bills that went through each individual payor's bill review system. Because not all bills are sent for bill review, the bill payments recorded in the detailed medical data do not always add up to the total amount paid for medical treatments reported in the payment-transaction data. Additionally, some bills may have gone through bill review but have not yet been paid. The type and proportion of missing payments may vary from claim to claim, data source to data source, and state to state. To ensure that the detailed medical data for Data Set I adequately reflected all medical services provided in a state, we extracted the medical detail for claims with relatively complete bill review data. Specifically, a claim and its associated medical detail would be excluded from our analysis data if any of the following conditions held:

- Bill review data were completely missing for the claim.
- The total medical payments exceeded the total bill review payments by more than 20 percent of medical payments.
- The total bill review payments exceeded the total medical payments by more than 35 percent.⁹

To ensure the representativeness of the data, we also excluded a data source if the data source's claims with complete bill review data were deemed biased and did not reasonably represent all claims from that data source. That is, if the average medical payment for claims with complete bill review data was substantially higher or lower than the average medical payment across all claims (those with and without complete bill review data), the claims from that data source were not included. Following the good bill review and bias test exclusions, the relative share of claims from each data source in the sample may be altered from that in the population; thus, share weights were applied to the sample to maintain the existing relative shares in the population.

For Data Set II, used in the detailed analysis of hospital services, we excluded data sources for which hospital services could not be identified, in addition to the exclusions previously described. This occurred when revenue codes were missing from a given data source. Although the size of Data Set II is smaller than the basic sample data set as a result of the additional exclusion, the sample data in Data Set II are still largely representative of the population. [Table TA.4](#) shows the indemnity claim volume and representation of the population in each state for the two analysis data sets used in the 18th edition of the CompScope™ Medical Benchmarks study as well as the analysis data underlying the 18th edition of the CompScope™ study.¹⁰

As the table shows, Data Set I contains a total of 214,996 indemnity claims across the 18 states with injuries arising from October 2014 through September 2015, covering from 27 percent (Wisconsin) to 60 percent (Texas) of all indemnity claims in each state. Data Set II has a total of 121,350 indemnity claims arising from October 2014 through September 2015, representing from 11 percent (California) to 33 percent (Massachusetts) of all indemnity claims in each state. Notice that the CompScope™ data set represents a much larger proportion of claims in each state, from 40 percent in Arkansas to 70 percent in Texas. The difference in claims representation between the CompScope™ and CompScope™ Medical data sets is due to

⁹ The criteria for payment-transaction data exceeding bill review data and for bill review data exceeding payment-transaction data are based on data-driven, retrospective review and validation.

¹⁰ In [Table TA.4](#), the number of claims in the two analysis data sets from this CompScope™ Medical Benchmarks study is based on claims with more than seven days of lost time. The number of claims from the CompScope™ study in this table is based on incurred indemnity claims (i.e., claims with paid and reserved indemnity benefits) in order to best estimate the percentage of population claims we have in the sample.

the claim exclusions described earlier to ensure the adequacy and representativeness of the data for the analysis. Despite a large reduction of the claim representation, we believe that the two CompScope™ Medical data sets are representative of the full workers' compensation market in each state, as the interstate rankings of the study states based on medical payments per claim for claims included in the CompScope™ data and those based on medical payments per claim for claims included in the CompScope™ Medical data are essentially the same (see [Figure TA.4](#) and the section "Comparing the Medical Payments and Other Claim Characteristics of the CompScope™ Medical and CompScope™ Data Sets"). Moreover, the injured workers' age and gender for claims included in the CompScope™ data and those included in the CompScope™ Medical data are very similar, as is the distribution of claims across different industry categories and injury groups (see [Table TA.13](#)). It is important to note that the data used in the CompScope™ Benchmarks (which we used to compare with the CompScope™ Medical data) have been validated using published data from external sources, including state workers' compensation agencies, rating bureaus, and other sources. To ensure the results from the CompScope™ Benchmarks are representative of the state as a whole, we validated the WCRI data on a number of key system performance measures (for example, incurred medical and indemnity benefits per claim) as well as on the claim characteristics in terms of injury and industry composition, workers' age, gender, and marital status. These comparisons led to the conclusion that the data used for the CompScope™ Benchmarks and the CompScope™ Medical Benchmarks are valid and sufficiently representative of the full workers' compensation market in each study state.

SUBSET OF CLAIMS WITH MORE THAN SEVEN DAYS OF LOST TIME

The statutory waiting period for indemnity benefits varies from state to state at either three, five, or seven days. A state that has a three-day waiting period may have more indemnity claims that are less serious compared with a state that has a seven-day waiting period. To improve interstate comparability, we made adjustments for differences across the states in the statutory waiting period for indemnity claims by focusing on claims with more than seven days of lost time. [Table TA.5](#) compares the average medical payment per claim for indemnity claims versus claims with more than seven days of lost time and indicates the number of days of the statutory waiting period for each of the 18 states. As the table shows, adjusting for the waiting period had an impact on six states in which the statutory waiting period is less than seven days: California, Illinois, Iowa, Massachusetts, Minnesota, and Wisconsin. We used the medical payments per claim to demonstrate the effect of the waiting period. This adjustment of more than seven days of lost time reduced the percentage of indemnity claims by 2 to 4 percentage points (i.e., the percentage of claims with more than seven days of lost time is less than the percentage of indemnity claims by 2 to 4 percentage points in those six states) and increased the average medical payment per claim by 6 to 17 percent in those six states.

WEIGHTING MARKET SEGMENTS TO REPRESENT THE FULL MARKET

Both Data Set I and Data Set II generally contain claims from all market segments in each state, including the voluntary market, self-insured market, residual market, and state-fund market, as applicable. To make the sample data representative of the population in each state, we applied statistical techniques to weight the claims in the sample up or down to reflect the population proportions of the market segments in the state. [Table TA.6](#) shows the market-segment proportions of all indemnity claims in 2015, by state.

The market-segment weight was calculated as a ratio of the market-segment proportion between the population claims and the CompScope™ Medical Benchmarks sample. Because claim volume changes over

time, we calculated the market-segment weights by injury year within each state. For example, if the proportion of voluntary market claims was 70 percent in the state population and 48 percent in the CompScope™ Medical Benchmarks sample, the market-segment weight for voluntary claims would be 1.46.

ADJUSTING FOR CASE MIX IN INJURY AND INDUSTRY DISTRIBUTION

Injury and industry mix is a critical area in case-mix adjustment. Industry or occupation is often associated with the risk and severity of an injury. The nature of the injury influences how a claim is handled, the type and intensity of medical treatment, and outcomes. To the extent that two states have very different distributions of industry and injury, all else being equal, we would expect average and median costs per claim and its components to vary. To enhance the comparability of our data across states, we applied the injury and industry case-mix adjustment to the measures used in the interstate comparisons.

Note that the trends reported in the CompScope™ Medical studies were based on the data weighted to represent the full workers' compensation insurance market in each state. Adjustments for the interstate differences in injury and industry mix were not made, since the unadjusted performance measures provide the most relevant information on how the system performed in each state over time. Similarly, the trends in payment measures reported in this study were not adjusted for inflation because unadjusted numbers are more comparable to the experience of the system stakeholders in each state. [Table TA.7](#) provides a summary list of measures that are reported unadjusted (i.e., for trends analysis) and adjusted (i.e., for interstate comparisons) in this report.

MAPPING INJURY AND INDUSTRY GROUPS

We mapped our sample data into 12 injury groups and 7 industry groups. The 12 injury groups are spine (back and neck) sprains, strains, and nonspecific pain; other sprains and strains; carpal tunnel; fractures, lower extremity; fractures, upper extremity; inflammations; lacerations and contusions; hand lacerations; knee derangement; neurological spine pain; skin; and other injuries. The seven industry groups are clerical and professional, construction, manufacturing, trade, high-risk services, low-risk services, and other industries. [Table TA.8](#) lists the major components in each industry group.

We created the 12 injury groups based on two sources: primary International Classification of Diseases (ICD-9 or ICD-10) codes from medical bills and a combination of nature of injury/body part reported by the insurance claims adjusters.¹¹ The ICD-9 codes provided the primary source of information in our injury mapping.¹² In the event that ICD-9 or ICD-10 codes were not populated or were ambiguous about either the medical condition or part of body, we used the nature of injury and body part reported by the insurance claims adjusters instead.¹³ For the seven industry groups, we used the four-digit, industry-standard worker-

¹¹ ICD-9 codes are published in Medicode's *International Classification of Diseases* (1998). The codes, which identify a patient's specific medical condition, are used for reimbursement purposes, so accuracy is critical. We defined the primary ICD-9 code as the one that received the most payments. Often a single ICD-9 code adequately identified the need for care; when necessary, we listed codes in order of importance.

¹² Note that beginning on October 1, 2015, many medical providers began using ICD-10 codes in lieu of ICD-9 codes. In this 18th edition of CompScope™ Medical Benchmarks, our data capture claim transactions and medical services rendered through March 31, 2016, and thus our injury classification is based on both ICD-9 and ICD-10 codes from medical bills (depending largely on the timing of the service provided and the billing practice of the provider) as well as the nature of injury/part of body reported by the insurance claims adjuster.

¹³ Our decision was based on WCRI research that shows that defining injury groups solely on the basis of part-of-body and nature-of-injury codes listed on first reports of injury underestimates the actual proportion of sprains, strains, and certain types of other injuries (Johnson, Baldwin, and Marcus, 1999).

and governing-class codes and standard industrial classification (SIC) codes.¹⁴ For certain industries, we also used incidence rates, published by the Bureau of Labor Statistics, to further classify occupations that are in the same industry but bear very different risk factors. [Table TA.9a](#) and [Table TA.9b](#) show the trends in the percentage of claims by industry group and by injury group, respectively, for each of the 18 study states from 2010 to 2015 for claims with more than seven days of lost time with 12 months of experience.

ADJUSTING FOR INJURY AND INDUSTRY CASE MIX

The intent of the injury and industry mix adjustment is to adjust the sample of claims in each state so that the claim distribution across injury and industry categories looks the same across the states. To accomplish this goal, we first determined the distribution of claims by injury and industry combinations for the pooled sample of the 18 states and for the sample claims in each individual state, based on claims with more than seven days of lost time. Next, we compared the sample distribution in each state with the pooled state distribution and calculated a unique set of injury and industry weights for each state as a ratio of the injury and industry proportion between the pooled sample of the 18 states and the sample of claims for each state. Finally, we used those weights to adjust the sample of claims in each state in calculating the performance measures, so that the measures reflect an injury and industry mix that is constant across the states.

[Table TA.10](#) provides an example to illustrate how we calculated the injury/industry weights, based on the subset of claims with more than seven days of lost time and with relatively complete bill review data. The top section of the table shows the *typical* case mix—the claim distribution of injury and industry groups in the 18-state, pooled sample. The middle section shows the claim distribution in California, and the bottom section shows the injury/industry weights we created for California. For each combination of injury and industry group, as the example shows, we basically divided the claim proportion in the 18-state, pooled sample by the claim proportion in California. Note that to ensure equal representation of states in the WCRI sample (i.e., that no state is over- or underrepresented in the sample due to its size), we weighted each state to have an equal share in the pooled sample.

In addition, we realize that our industry groups cover a broad spectrum of risk. This is especially true of manufacturing. The risk of injury inherent in a company that builds computer chips, for example, is substantially less than the risk in a steel manufacturing plant. Further disaggregation within each group would increase the accuracy of the adjustments. Unfortunately, despite the large volume of claims in the DBE database, adjusting for industry at a finer level of detail would make cell sizes too small to allow for reliable analysis. This is especially true when we combine the injury and industry adjustment with the other adjustments we make to improve comparability across the states.

DATA CAPPING

A small proportion of the claims in the data had unusually large values in medical payments. While these are legitimate claims and payments, the extreme values contributed disproportionately to the average because the distribution was skewed. To mitigate the influence of the extreme values on the average medical payments, we

¹⁴ A workers' compensation claim is assigned a classification code based on the injured worker's occupation and the payroll exposure reports of the employer. Classification codes in most states are defined using a common set of basic classifications subject to individual state exceptions, but some states use independently established sets of basic classifications. In Pennsylvania, for example, classification codes are set out in the Pennsylvania Compensation Rating Bureau's *Pennsylvania Basic Manual*. To convert the Pennsylvania codes to industry-standard codes, we used a classification comparison provided to us by the rating bureau.

applied data capping. We established the upper bound of the data capping within each state and by injury and evaluation year for each measure. The threshold was set as the dollar amount at the 99th percentile of the variable multiplied by a factor of five. We capped the dollar amount at the threshold if the original value was greater than the threshold. We also established the lower bound of the data capping to exclude claims with extremely small values in medical payments since they are likely to be data errors. The threshold was set as the dollar amount at half of the first percentile of the variable for most service and provider groups. For major surgeries, the threshold was set at the dollar amount at the second percentile of the variable.

For hospital inpatient services, we constructed the analysis data to reflect hospital inpatient stays so that each record corresponded to a hospital inpatient stay or inpatient episode. The threshold for the upper bound for hospital measures was set as the dollar amount at the 95th percentile of the variable multiplied by a factor of five. In addition to capping medical payments as described above, we excluded the inpatient records if the amount paid for an inpatient episode was below \$300 (a level deemed not likely to include all costs associated with an inpatient stay).

[Table TA.11](#) shows the effect of the data capping on medical payments overall, by provider type for nonhospital providers, and by inpatient and outpatient care for hospital providers. In general, capping affected a small percentage of claims with more than seven days of lost time (up to 2.8 percent of claims affected by capping across the 18 states). The differences in medical payments per claim before and after capping were generally within 5.5 percent across states for most nonhospital providers (such as physicians, chiropractors, and physical therapists), and within 15 percent for hospitals and other nonhospital providers.

COMPARING THE MEDICAL PAYMENTS AND OTHER CLAIM CHARACTERISTICS OF THE COMPSCOPE™ MEDICAL AND COMPSCOPE™ DATA SETS

We used the CompScope™ analysis data for the overall medical payments per claim as a reference point to validate the sample data we used in the CompScope™ Medical Benchmarks study. [Figure TA.4](#) provides the results of a comparison of interstate rankings based on the average medical payment per claim in the 17th edition of the CompScope™ study and the average bill review payment per claim from this CompScope™ Medical analysis data. The medical payments used in the CompScope™ study are based on the payment transactions recorded in payors' data systems, and the bill review payments are from the detailed medical bill review data. In the state reports, we often use the term *medical payments* to refer to the bill review payments in the detailed analysis. However, we make this distinction here when we discuss potential selection issues. Note that the interstate ranking of the study states based on the average medical payment for claims included in the CompScope™ report and the ranking based on the average bill review payment per claim from this CompScope™ Medical report are essentially the same.

As [Figure TA.4](#) shows, the relative rankings of states do not change materially whether the rankings are based on CompScope™ Medical analysis data or on CompScope™ analysis data. In other words, if a state was in the lower or higher group of states based on the CompScope™ Medical analysis data, it was also in the lower or higher group of states based on the CompScope™ analysis data. The median state values based on CompScope™ Medical analysis data and on CompScope™ analysis data were very similar (the difference in medians was 3.6 percent). We also compared the annual average percentage change in medical payments per claim between the CompScope™ data and the CompScope™ Medical data during the 2010/2011 to 2015/2016 study period. As shown in [Table TA.12](#), the trend results matched well for all states, as the differences in trends were within 1.4 percentage points. Readers should keep these differences in mind when reviewing the detailed medical benchmarks for a given state. These differences come from several sources. First, claim

inclusion and exclusion were different between the two types of analysis data. Second, not all medical bills underwent bill review. Third, on occasion, information from the bill review process did not reach WCRI. Fourth, a time lag occurred between bill review and payment.

In addition to comparing average medical payments per claim, we compared the results for key claim characteristics between the CompScope™ data and the CompScope™ Medical data to further test the representativeness of the sample used in this analysis. As [Table TA.13](#) shows, the CompScope™ data and the CompScope™ Medical data yield very similar results on injured workers' age and gender and on the mix of claims in terms of injury and occupation.

CONSISTENCY OF DATA BETWEEN THE 18TH AND 17TH EDITION OF COMPSCOPE™ MEDICAL BENCHMARKS

It is important to note that one may notice small differences between the data of two editions of CompScope™ Medical Benchmarks covering the same time period. Such small differences between the data of the two editions result from several factors, such as the different mix of data sources, the different claims submitted from the same data sources for the same injury years, and the revisions for the same claims submitted by the same data sources (even though these replacement claims were largely similar in most cases). The data also reflect shifts in insurance business portfolios from year to year, particularly for third-party administrators of self-insured employers. Therefore, in some cases, the data may reflect the addition and/or deletion of claims resulting from transferred business. As a result, the reader may notice minor differences in trend analysis results, for example, for a given state and time period between two editions of CompScope™ Medical Benchmarks. Such differences, however, are relatively small in magnitude and do not change any of the major findings.

SECTION 3: METHODS TO CONSTRUCT THE PRICE INDEX

ESTABLISHING THE MARKETBASKET

To isolate price trends and interstate differences in price independently from utilization, we created a price index that measures unit-price differences. To construct the price index, we used the marketbasket approach. Two major steps are involved in this approach: developing a marketbasket that captures common procedures and computing a price index based on the prices¹⁵ for individual procedures selected in the marketbasket. It is important to note that we only use a price-index method for services provided by nonhospital providers. Because revenue codes used in a hospital setting (both outpatient and inpatient) are too broadly defined to support a robust marketbasket of services, we report the average payment per service and number of services per claim for services provided in hospital outpatient and inpatient settings, described in Section 5.

A key feature of the price index is to isolate the differences or changes in price from those in utilization. We do this by holding utilization constant across the states or across the index years. To do so, we applied the same marketbasket of services to each state, and we created weights at two levels: the individual procedure level and the service-group level. We used frequency weights to calculate the average price across the marketbasket procedures within each service group. Then we used service-group-frequency weights to

¹⁵ Price information is reported on a calendar-year basis, as opposed to injury/evaluation-year basis, as is the case for the other metrics in this study. Price information is based on all paid claims, i.e., claims with more than seven days of lost time and medical-only claims. The rest of the information in this report focuses primarily on claims with more than seven days of lost time.

aggregate the price from service groups to overall provider level.

It is critical to have a set of well-balanced detailed medical data to develop a marketbasket that adequately represents all goods or services in a market. To create such a data set and avoid potential bias in services and expenditure distribution, we selected the medical bill review data associated with claims with relatively complete bill review data, and we selected companies in which the claims with complete bill review data represented all claims from the same company. The percentage of overall expenditures in the state-pooled data and the percentage of total expenditures across the study states in 2013 and 2014 represented by the medical services in the marketbasket by service group are shown in [Tables TA.15](#) and [TA.16](#).

SELECTING MARKETBASKET CODES

The marketbasket for nonhospital services contains a set of procedures commonly provided in nonhospital settings, often recorded using CPT codes. The marketbasket procedure codes (CPT codes) were selected within a service group based on the rankings of the total expenditures associated with the codes. As discussed earlier in Section 1, we separated the 17 nonhospital service groups into Group A and Group B (see [Figure TA.2](#) for the groupings). The marketbasket procedures were selected from service groups in Group A only; Group B services were excluded from the price-index analysis because the inherent large variations among those broadly defined services prevent us from accurately measuring unit price.

[Table TA.14a](#) shows that the Group A services made up 43 to 79 percent of the payments to physicians, and in general more than 78 percent of the payments to chiropractors or physical therapists, depending on the state. Most Group B services billed by physicians were for anesthesia, supplies, miscellaneous ambulatory surgical care, and other services. In California and Texas, special reports also made up a substantial portion of the Group B services billed by physicians. ASCs are included in the physician provider group (unless the billing is done through a hospital), and the percentage of payments for facility (i.e., treatment/operating/recovery room) services and miscellaneous ambulatory surgical care under the medical doctor provider group represents a substantial portion of the Group B services under this provider group. Tables 11 and 12 in the state benchmarking reports show interstate comparisons and trends of ASC facility payments per claim.¹⁶ For providers classified as other providers (for example, equipment suppliers), most of the payments are for Group B services.

For each of the eight service groups in Group A, we selected the most common medical procedure codes (based on the rankings of the total expenditures associated with the codes) so that at least 80 percent of expenditures in each service group were represented by selected codes.¹⁷ There were four exceptions: major surgery, minor radiology, neurological/neuromuscular testing, and pain management injections, where the codes in the marketbasket captured 44, 76, 78, and 79 percent of total expenditures in those groups, respectively ([Table TA.15](#)). These exceptions arose because there was a broader list of codes in these groups, and adding additional codes adds only small percentages of payments. Overall, the marketbasket includes 108 unique procedure codes included in the price analysis ([Table TA.15](#)). [Table TA.17](#) provides the full list of procedure codes included in the marketbasket and their descriptions.

Two things are worth noting regarding the procedure codes: (1) most state-specific CPT codes are

¹⁶ ASC facility payments include payments to ambulatory surgery centers for both treatment/operating/ recovery room services and miscellaneous ambulatory surgical care. ASCs are identified based on provider coding information.

¹⁷ Expenditure is the product of price per service and number of services. By using the expenditure (rather than frequency) in the ranking, we put more weight on both more expensive and less expensive, but frequent, procedures.

converted and crosswalked to standard CPT codes, and (2) some CPT codes become obsolete and are replaced by new codes over the period of our analysis. First, some states (such as California, Louisiana, Massachusetts, North Carolina, and Texas) have their own state-specific codes for some services. For those states, we crosswalked the state-specific codes to the common definitions wherever possible. When we could not do this, we excluded the services from the analysis. For example, in Louisiana, where physical medicine services by physical therapists were billed using state-specific PT/OT codes, we mapped Louisiana code PT010/OT010 for hot or cold packs to CPT code 97010. Louisiana's PT/OT codes for therapeutic exercises or activities could not be mapped and thus were not included in the price analysis. Because of this, historically, the codes in the marketbasket for physical medicine services in Louisiana represented a lower percentage of the total expenditures than in other study states. In July 2013, use of these Louisiana Worker's Compensation proprietary physical and occupational (PT/OT) codes were discontinued, and therapists in the state were required to use national CPT codes and billing guidelines. After this change, the representativeness of the marketbasket codes for physical medicine in Louisiana improved. From January 2013 to December 2014, the marketbasket codes for physical medicine services in Louisiana represented 86 percent of the total expenditures, compared with 79 to 98 percent in other study states ([Table TA.16](#)). Second, to maintain the continuity of the same services identified by the CPT codes, we combined certain CPT codes to reflect changes in the coding system over the study period. For example, codes 97250, 97260, 97261, and 97265 were combined with 97140 (manual therapy techniques, a new code introduced in the 1999 CPT manual) and labeled as 97140 in our analysis.

COMPUTING MARKETBASKET WEIGHTS

The procedure-level frequency weight for a marketbasket code was calculated as the total number of services with the code divided by the total number of services across all marketbasket procedures within the service group. The frequency weight for a service group is the percentage of the total count of nonhospital services associated with this service group divided by the total count of all nonhospital services. Because we selected the marketbasket codes from the pooled data of study states, one may be concerned that the distribution of service frequencies in relatively larger states (such as California and Texas) might dominate the whole distribution in the pooled data and hence introduce potential bias in the marketbasket weights. To prevent this, we further adjusted for the differences in the mix of service frequencies across the states in the pooled data, so that each state had essentially the same influence in the computation of marketbasket weights.

Another important issue is whether the selected marketbasket codes based on the pooled data were representative for each of the states. [Table TA.16](#) shows the result of a sensitivity test for the marketbasket. The nonhospital marketbasket represents 70 to 100 percent of the included expenditures for emergency, evaluation and management, major radiology, and physical medicine services. The marketbasket represents 67 to 81 percent of the included expenditures for minor radiology, 51 to 93 percent of the included expenditures for neurological/neuromuscular testing, 69 to 84 percent of the included expenditures for pain management injections, and 33 to 51 percent of the included expenditures for surgery services.

COMPUTING PRICE AND PRICE INDEX

Based on the established marketbasket, we computed the unit prices and price indices for the medical services represented by the marketbasket procedures. The following is a summary of the major computation steps:

- Determine calendar year prices for individual procedure codes by computing average amount paid for

individual procedures selected in the marketbasket.

- Determine aggregate prices across marketbasket codes within a service group by using the procedure-level frequency weights.
- Calculate the price at overall provider group level by using the service-group-frequency weights to get the weighted average price across all service groups.
- For interstate comparisons, calculate price indices against the 18-state median prices at both service-group and overall provider-group levels for each state.

Note that the service-group-frequency weights are the share of the number of services within each service group as a percentage of the total number of all professional services in the eight service groups, not limited to procedures captured by the marketbasket. Hence, the computed state-level indices reflect the relative importance of each service group as observed in the data and not distorted by differences in the proportion of services captured in the marketbasket for each service group. In particular, the marketbasket procedures for major surgery represented a substantially smaller fraction of all major surgery services than the marketbasket procedures for other service groups. If price growth for surgical services was higher than for other services in a state, the state-level price index would have underestimated the actual price growth if the frequency of the surgical services were based on services selected in the marketbasket.¹⁸

A few issues are worth noting regarding the computation of the unit price and the price index. First, a small proportion of the lines in the data had unusually large or small values in medical payments. To mitigate the influence of the extreme values on the average medical payments and ensure meaningful results, we applied a *price data cleaning* technique to trim the *outlier* values at both extremes of the distribution of the paid amounts across all services with the same procedure code. To remove outliers for marketbasket procedures associated with all service groups, except major surgery, pain management injections, and minor and major radiology, we excluded 5 percent of the services at the lower and upper end of the price distribution for each procedure, year, and state. The data cleaning procedures for major surgery, pain management injections, and minor and major radiology service groups are discussed later in this section.

Second, some physical medicine modalities and procedures may be billed in multiple units. For example, the therapeutic exercise (CPT 97110) is normally billed for every 15 minutes of treatment. Sometimes there were no accurate indications of how many units of service were provided. Hence, it is necessary to adjust the data for these multiple-unit billings. To identify the multiple units of service, we first looked at the units of service field provided in each data source file. If the units of service field was populated with a value greater than one, we treated that number as the number of services for which the payments were paid in a given line. For physical medicine procedures (which are commonly billed in multiple units) where the units of service field was missing or equal to one, we did a further check on multiple units of service using *prevailing prices*. Prevailing price, by definition, is one or more of the most frequently paid prices for each procedure code picked from a data source within a calendar year. Once prevailing prices for each procedure code were picked, we then checked line items with that procedure against the respective prevailing prices. If the paid amount in a line item was a whole multiple of any of the prevailing prices for this procedure, we assumed that line indicated that multiple of services at that prevailing price, and the number of services was reset to the whole multiple. We performed the units of service adjustment for each procedure code in each year for each data

¹⁸ This approach implicitly relies on an assumption that the price trends of services captured in the marketbasket for each service group are representative of all services observed in the data for a respective service group.

source.

Third, major and minor radiology procedure codes often have modifiers to distinguish the technical component (e.g., using the radiology machine/devices) from the professional component (e.g., reviewing the results) of the whole procedure. For the same procedure, these components are paid at different levels—usually 20 to 30 percent of the price for the whole procedure is paid for the professional component, and 70 to 80 percent of the price for the whole procedure is paid for the technical component. However, the modifier codes are missing for many services in the data. Without a modifier, a paid amount can be for one of the following three things: the professional component, the technical component, or the whole procedure. To solve this issue we developed an algorithm to identify radiology services that are billed and paid as the professional component separately from those billed and paid as the whole procedure.

In this algorithm, for each radiology procedure in the marketbasket, we captured the services that had only a single service billed on a day. These services accounted for the vast majority of all the services for each procedure, indicating they are either professional components that were billed by nonhospital providers or whole procedures that were billed by nonhospital providers. Then, we estimated a threshold of the maximum price for the professional component for each radiology procedure code in a state and identified all the payments below this threshold as prices paid for the professional component. Since the professional components of radiology services are commonly reimbursed at 20 to 30 percent of the fee schedule rate for the whole procedure, and to accommodate the potential deviation of the actual prices paid from the fee schedule rates, the threshold of the maximum price for the professional component was computed as 1.4 times the professional-component fee schedule rate for a particular procedure in a fee schedule state.¹⁹ For non-fee schedule states, since a fee schedule rate was not available, we relied on the price distribution observed in the services with the modifier code for the professional component specified, and captured the amount paid at the 90th percentile of this distribution for each procedure code. We then multiplied this amount paid by 1.4 to arrive at the threshold of the maximum price for the professional component for a particular procedure in a non-fee schedule state.²⁰ Payments below the threshold of the maximum price for the professional component were identified as prices paid for the professional component, and payments above this threshold were classified as prices paid for the whole procedure. To trim outliers, we excluded 5 percent of the services at the lower and upper ends of the price distribution of the professional component for each procedure, state, and year; we applied the same data trimming method to the price distributions for the whole procedures as well. The average price paid for the professional component and the average price paid for the whole procedure for each marketbasket radiology procedure in a state was computed based on the final trimmed distributions. Note that the relative frequency of the professional component and the whole procedure for each marketbasket code was held constant across states and years when computing the average price at the service group level for radiology services.

¹⁹ This method takes into consideration potential negotiated prices for the professional component above the fee schedule rate and the potential negotiated prices for the whole procedure below the fee schedule rate. Using the multiplier of 1.4 allows an up to 40 percent mark-up above the fee schedule rate to be paid for the professional component, and will not result in the whole-procedure prices being misidentified as the professional-component prices, even if the actual prices paid for the whole procedure reflected a 50 percent discount of the fee schedule rate.

²⁰ We also applied the multiplier of 1.4 to compute the threshold of the maximum price for the professional component in non-fee schedule study states, as prices paid in non-fee schedule states often exhibit large variation. This multiplier allows the actual prices paid for the professional component to be up to 40 percent higher than the 90th percentile of the price distribution for services with the professional-component modifier specified. We also did a sensitivity analysis using an alternative multiplier of 1.2 to make sure that the classification of the whole-procedure prices was not sensitive to the choice of multiplier value. The results proved to not be sensitive to the choice between 1.2 and 1.4 for a multiplier value. We chose the multiplier of 1.4 to have consistency between the methods used for fee schedule and non-fee schedule states.

Fourth, surgical procedures also have a set of commonly used modifiers to identify modified or reduced payments for surgical procedures. In particular, in the case of multiple surgical procedures performed at the same operative session, modifiers indicate which surgical procedure was primary. Additional or non-primary surgical procedures are commonly reimbursed at about 50 percent of the full rate—the rate at which the same procedure is reimbursed when performed as a primary procedure by a primary surgeon.²¹ Also, modifiers are used to identify payments for services of a primary surgeon versus assistant surgeon. Services of an assistant surgeon are typically reimbursed at about 15–25 percent of the full rate. Unfortunately, the modifiers are not always consistently and accurately reported in the data, and they are often missing. Because of the incompleteness of the modifiers, we focus on the prices paid for services of a primary surgeon performing the primary surgery procedure only.

An algorithm is applied to isolate the payments to the primary surgeon for the primary procedure. This algorithm has two steps. First, following reimbursement rules establishing discounted rates for secondary procedures and services of assistant surgeons, we considered all surgical services provided on a surgery day and kept the one with the highest payment. This approach removed reduced payments for non-primary surgical services and payments for assistant surgeon services. Second, incomplete billing information, especially missing payments for the primary surgery for the primary surgeon services, was likely to result in discounted payments remaining in the price distribution prior to the second step. Therefore, we removed unusually high values and remaining reduced payments. The developed trimming method relied on the estimated threshold of the maximum price for modified services for each surgical procedure code in a state and eliminated all payments below this threshold as modified payments. Since non-primary surgical procedures are commonly reimbursed at about 50 percent of the full rate, and services of an assistant surgeon are typically reimbursed at about 15–25 percent of the full rate, the threshold of the maximum price for modified services was computed as 50 percent of the full fee schedule rate for a particular procedure in a fee schedule state. For non-fee schedule states, since a fee schedule rate was not available, we relied on a typical price observed for the primary procedure performed by a primary surgeon, which was computed in the earlier step, by keeping the most expensive procedure for each operative session. Hence, in order to compute maximum price for modified services for each surgical procedure in a state without a fee schedule, the threshold was defined as 50 percent of the median of the paid price for primary procedures as identified after the first step. To address the issue of misclassified facility payments, the trimming technique restricted the final price distribution by eliminating surgical procedures with payments above 2.5 times the full fee schedule rate for a particular procedure for a fee schedule state.²² In non-fee schedule states, we relied on the typical price observed for the primary procedure performed by a primary surgeon as identified in the first step. Hence, to exclude misclassified facility payments for each surgical procedure in a state without a fee schedule, prices above 2.5 times the median price for primary procedures were dropped from the analysis. The average price paid for each marketbasket surgical procedure in a state was computed based on the final trimmed distribution of prices paid to the primary surgeon performing the primary procedure.

Fifth, it is also common to have multiple pain management injection procedures during a single visit,

²¹ The discount rates for reduced payments are based on state fee schedule regulations.

²² Fee schedule rates for facility services associated with common surgeries are substantially greater than the fee schedule amounts for the relevant professional services of surgeons. In particular, in 2009, the Texas fee schedule rate for facility services related to common shoulder arthroscopy (APC=42 or CPT=29826) was \$6,472, while the fee schedule rate for surgeons' services was \$1,143 (see Coomer and Liu, 2010; and Coomer, 2010a). In Tennessee, the facility rate associated with a common shoulder arthroscopy was \$4,679 versus \$1,668 for the relevant professional services.

and some of the multiple procedures can be subject to a reduced reimbursement rule. In some cases, the multiple procedure codes (CPT codes) billed during a visit are multiple levels of the same procedure, where the single level and each additional level are recorded under different CPT codes. Typically, billing multiple units is not allowed under single-level procedure codes. However, billing for multiple services associated with procedure codes identified as “each additional level” is common and requires a modifier 59 (an indication that an additional procedure was provided during the same visit and it should be reimbursed at a reduced rate).²³ In this case, a reduced reimbursement rule for multiple procedures will apply. It is also possible to have different multiple pain management injection procedures during a single visit, which are also likely to be subject to a reduced reimbursement rule for secondary procedures. Similar to the methods applied to surgical procedures, to isolate full prices paid for the pain management injection procedures in the marketbasket, we focused on the prices paid for a primary pain management injection procedure during a visit, since it is not subject to a reduced reimbursement rule. To isolate the payments for the primary procedure, we considered all pain management injections administered during a single visit and kept the one with the highest payment. To remove outliers for pain management injection procedures, we excluded 5 percent of the primary services at the lower end of the price distribution and 10 percent at the upper end of the price distribution for each procedure, year, and state.²⁴

Sixth, Medicare implemented a fundamental change in 2013 in the coding for nerve conduction studies. Previous procedure codes for sensory conduction studies, motor conduction studies with or without an F-wave test, or H-reflex tests have been deleted (CPT codes 95900, 95903, 95904, 95934, and 95936). These have been replaced with the code couplets in the table on the next page (CPT 95907–95913). This code change affected the most commonly billed procedures in the neurological/neuromuscular testing service group. Under the new coding system, a single nerve conduction study includes a sensory nerve conduction test, a motor nerve conduction test with or without an F-wave test, or an H-reflex test. Essentially, the new coding system combines various types of nerve conduction studies (i.e., a sensory nerve conduction test, a motor nerve conduction test with or without an F-wave test, or an H-reflex test) and assigns a specific code depending on the number of multiple separate nerve conduction tests performed during a visit. To determine which code to use, only the numbers of the separate tests should be added, and, when multiple sites on the same nerve are stimulated or recorded, each type of nerve conduction study is counted only once. The old approach did not have this clear rule limiting the number of multiple nerve conduction studies, making interpretation of the number of multiple services ambiguous. Since, under the old rule, the number of multiple services included both testing multiple sites on a single nerve and multiple separate studies, a direct crosswalk at the CPT level to the new coding system is impossible. To maintain continuity, for nerve conduction studies, we implemented a visit-level approach that combines all payments associated with nerve conduction studies under a single visit-level measure. The other two procedures included in the marketbasket for neurological/neuromuscular testing services follow the standard procedure-level method for price computation. Note that because of this visit-level approach, some of the observed changes in the prices paid for neurological/neuromuscular testing services may also reflect changes in utilization and/or billing patterns

²³ For example, a physician would be paid at the full rate for one injection into the lumbar/sacral spine per visit. However, if the physician administers a pain injection into the cervical/thoracic spine during the same visit, this procedure would be paid at a reduced rate. To indicate to the payer that the procedure should be compensated, the line for the second injection should include modifier 59.

²⁴ A larger percentage of services were removed from the upper end of the price distribution to exclude misclassified facility payments.

of nerve conduction studies. Since this change was made in an effort to address the duplication of time (and therefore payments) when billing for multiple units under the retired codes, one might expect to see a decrease in prices and utilization after this change. In this report, we observed that most study states experienced substantial decreases in payments per claim, prices paid, and number of services billed for neurological/neuromuscular testing services starting in 2013 (see Table 13 in the state reports).

CPT Code	Definition
95907	Nerve conduction studies; 1–2 studies
95908	Nerve conduction studies; 3–4 studies
95909	Nerve conduction studies; 5–6 studies
95910	Nerve conduction studies; 7–8 studies
95911	Nerve conduction studies; 9–10 studies
95912	Nerve conduction studies; 11–12 studies
95913	Nerve conduction studies; 13 or more studies

SECTION 4: METHODS TO CONSTRUCT THE UTILIZATION INDEX

The utilization index takes into account both the volume of services and the resource intensity of services (i.e., the relative complexity for a mix of services). It is defined as the weighted average number of services per claim. The weights are the RVU values. As with the price index, we only included the Group A services (see [Figure TA.2](#)) in the utilization index analysis for the same reason as discussed earlier. However, for the utilization index, all procedures within a given Group A service were considered, rather than relying on the set of selected procedures in the marketbasket supporting the price index.

Comparability issues often arise from a simple comparison of the average number of services per claim in a state against the median state. Without adjusting for differences in case mix across the states, one could argue that a state with a higher number of services per claim may simply have more medically severe cases. We applied the injury and industry mix adjustment (described earlier) in constructing the utilization index and its components, such as volume of services, visits per claim, and services per visit. This adjustment, although not perfect, helps make interstate comparisons more meaningful.

Another comparability issue is related to the mix of services in terms of the intensity of resources utilized in providing those services. Different medical services often require different resources or different intensities of resource usage, including time and effort of medical providers, equipment, facilities, and other overhead. Assume two states treated similar conditions with a similar number of medical services (physical medicine, for example) but that most services used by one state were much less resource intensive than the ones used by the other. Then the simple average number of services per claim would be an overestimate of the actual utilization of medical services in the first state and an underestimate in the second state. We applied the RVU values as weights to reflect the differences in resource intensity of services provided across states.²⁵ The RVU data were obtained from the 2014 *Physician Fee Schedule (PFS) Relative Value Files* from CMS and then merged with the detailed medical analysis data for nonhospital services by matching the procedure codes

²⁵ RVU is a resource-based relative value system. A procedure that is less resource intensive has a lower relative value, and the relative value is higher for a procedure that is more resource intensive.

(CPT codes). In this 18th edition of the study, the 2014 *Physician Fee Schedule (PFS) Relative Value Files* from CMS was the primary source of RVU values in the computation of the utilization index. In cases when a provider bills for a service that does not have a 2014 RVU value, we use an RVU value from either 2015 or 2016, or from the most recent list on which the code appeared. The resulting set of RVU values is used across all states and all study years.

The major steps we took to construct the utilization index for nonhospital services for the 18 states included in the study are as follows:

- Determine the number of services, from the detailed line items associated with good bill review claims,²⁶ for individual procedure codes.
- Aggregate the total number of services across procedure codes within a given service group, weighted by the RVU weights.
- Calculate the average number of services per claim by applying the RVU weights as well as the market-segment and injury/industry weights.
- For interstate comparisons, calculate utilization indices against the 18-state median utilization at both service-group and overall provider-group levels for each state.

The resource intensity measures the relative complexity for a mix of services based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. The resource intensity of services provided is responsible for the difference between the utilization index and the volume of services. It indicates the relative intensity of resources used in providing medical services in the interstate comparisons. For example, if the utilization index for evaluation and management services (office visits) in a state was 118 and the volume was 105, then the resource intensity was 13. In other words, if one did not consider the relative intensity of resources for the billed office visits, the volume of services in this state was fairly typical compared with the median of all study states. However, if one took the relative intensity of resources into consideration, the utilization index value of the services in this state was higher than the median of the study states. The factor that contributed to higher utilization in this state was higher resource intensity. A positive resource intensity number suggests that the mix of office visits billed in that state was more resource intensive relative to the median state in the study. This may reflect that, in this state, a larger proportion of established patient office visits was billed for procedures with higher relative resource-based values, such as those for patients with presenting problems of moderate to high severity, with medical decision making of moderate or high complexity (CPT codes 99214 and 99215, respectively), and a smaller proportion of established patient office visits was billed for procedures with lower relative resource-based values, such as those for patients with presenting problems of low to moderate severity, with medical decision making of low complexity (CPT code 99213). In the trend analysis, the changes in resource intensity capture the differences between the changes in utilization and sheer volume. For example, an increase in utilization combined with no change in the volume of services indicates that there were more resource-intensive procedures used during the period.

²⁶ The phrase *good bill review claims* refers to relatively complete bill review claims based on the criteria of total medical payments exceeding total bill review payments by not more than 20 percent, or total bill review payments exceeding total medical payments by not more than 35 percent.

SECTION 5: ANALYZING HOSPITAL SERVICES

In the CompScope™ Medical Benchmarks study, we separate services provided by hospitals into two sub-categories: services provided in hospital outpatient settings and services related to hospital inpatient stays ([Figure TA.2](#)). For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services, we decomposed medical payments into the average payment per service and number of services per claim, which we further decomposed into number of visits per claim and number of services per visit.

For hospital inpatient services, we relied on payments per episode for the medical costs and utilization analysis. Unlike nonhospital services, hospital inpatient care is a unique area for costs and utilization analysis. First, prices for hospital inpatient care are often regulated differently, frequently in the forms of per diem rates, DRGs, or percentage discounts from charges. The medical data for inpatient services may also have various forms, depending on how inpatient hospital bills are submitted and reviewed and how subsequent payments for the hospital inpatient services are made and recorded in a data system. A hospital may bill in a bundle for inpatient services during the entire hospital stay. Even if hospital bills for inpatient services are itemized, the payments may be made in a bundle without itemization. In such cases, the total payment for the hospital stay is accurately recorded, but the data lack details to identify specific services provided and amounts paid for those services. Therefore, we analyze hospital inpatient payments per episode without the detailed services breakout.

To analyze costs and utilization of hospital inpatient services, we constructed hospital inpatient data based on Data Set II, and we treated an inpatient episode or overnight stay as the unit of analysis. Specifically, we identified hospital inpatient care based on revenue codes indicating hospital overnight stays (i.e., codes identifying room and board). The service dates, which include one day before and one day after the date of the room and board charge, were used to capture all other hospital services provided during the inpatient stay. Then we measured costs and utilization of hospital inpatient services as payments per episode and number of inpatient episodes. Note that the majority of the claims only had one episode of inpatient care, so the cost and utilization measures per episode could be used as a proxy to analyze cost and utilization of hospital inpatient payments per claim in most cases. Because of the nature of hospital inpatient care, we focused on claims with, on average, 24 months of experience for hospital inpatient analysis. Readers should keep in mind that the cost per inpatient episode is highly correlated with the length of stay. Since the data in this report do not allow us to control for the length of stay, the differences in costs per episode—particularly over time within a state—are partly a function of differing lengths of stay in addition to the unit cost of those days.

SECTION 6: STATE-SPECIFIC ISSUES

[Table TA.18](#) lists specific comparability issues with respect to certain states for the interstate comparisons and trend analysis. These comparability issues are also noted in the state reports on relevant figures and/or tables.

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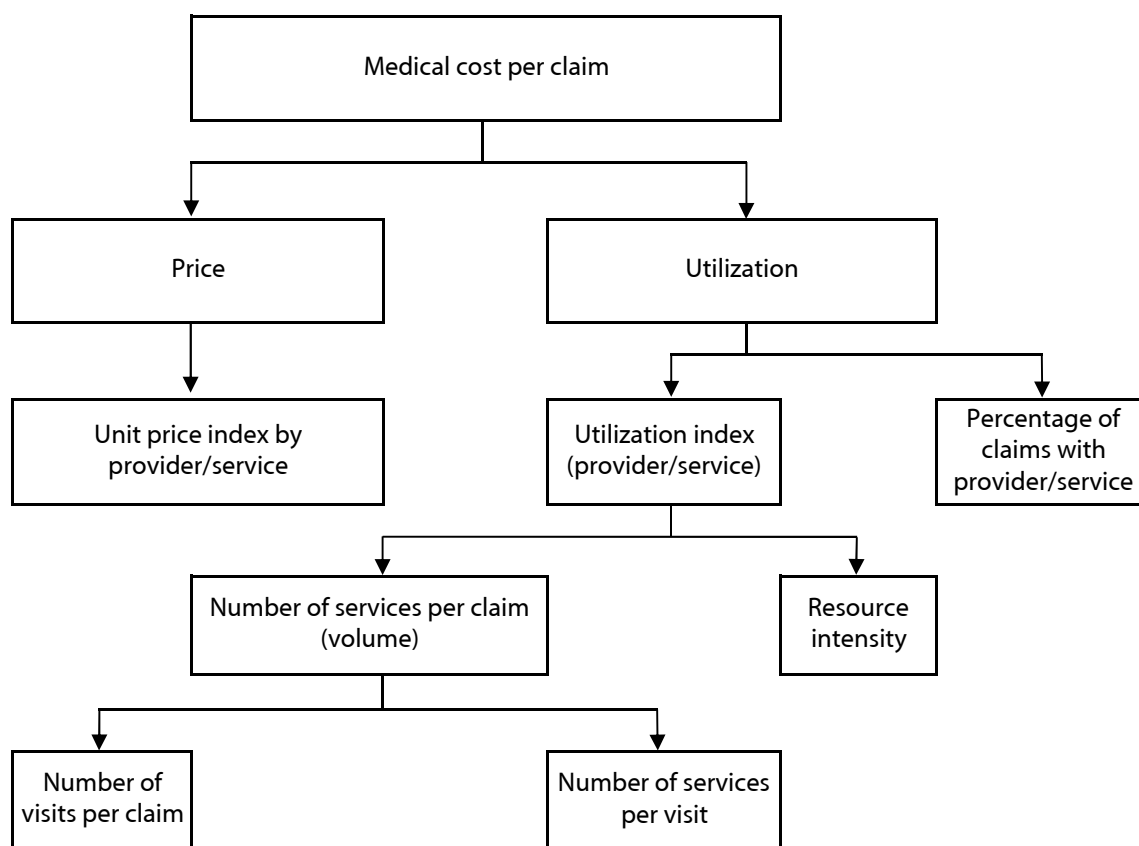
Figure TA.1 Medical Price and Utilization: Analytic Framework

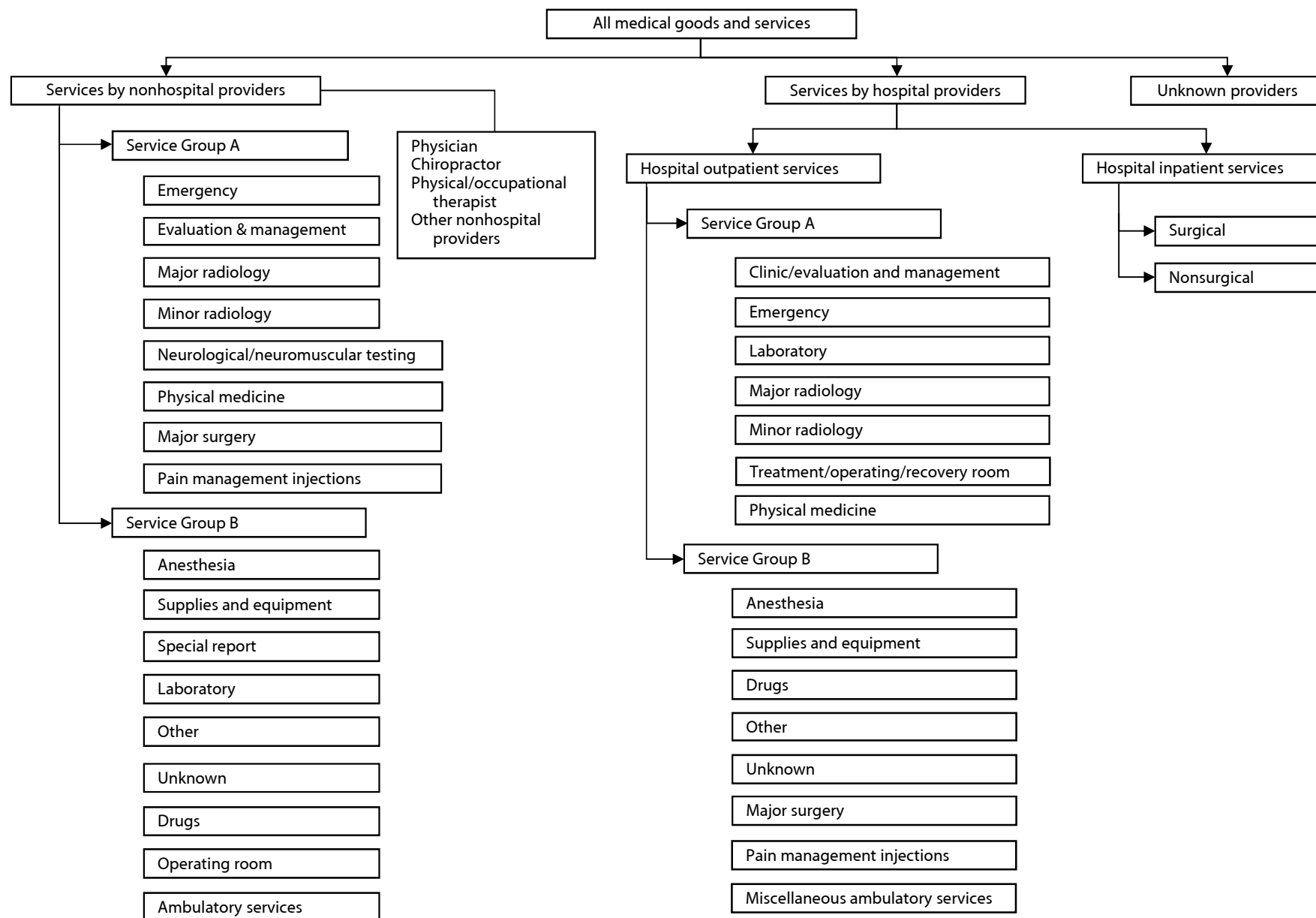
Figure TA.2 Defining Provider Type and Service Group

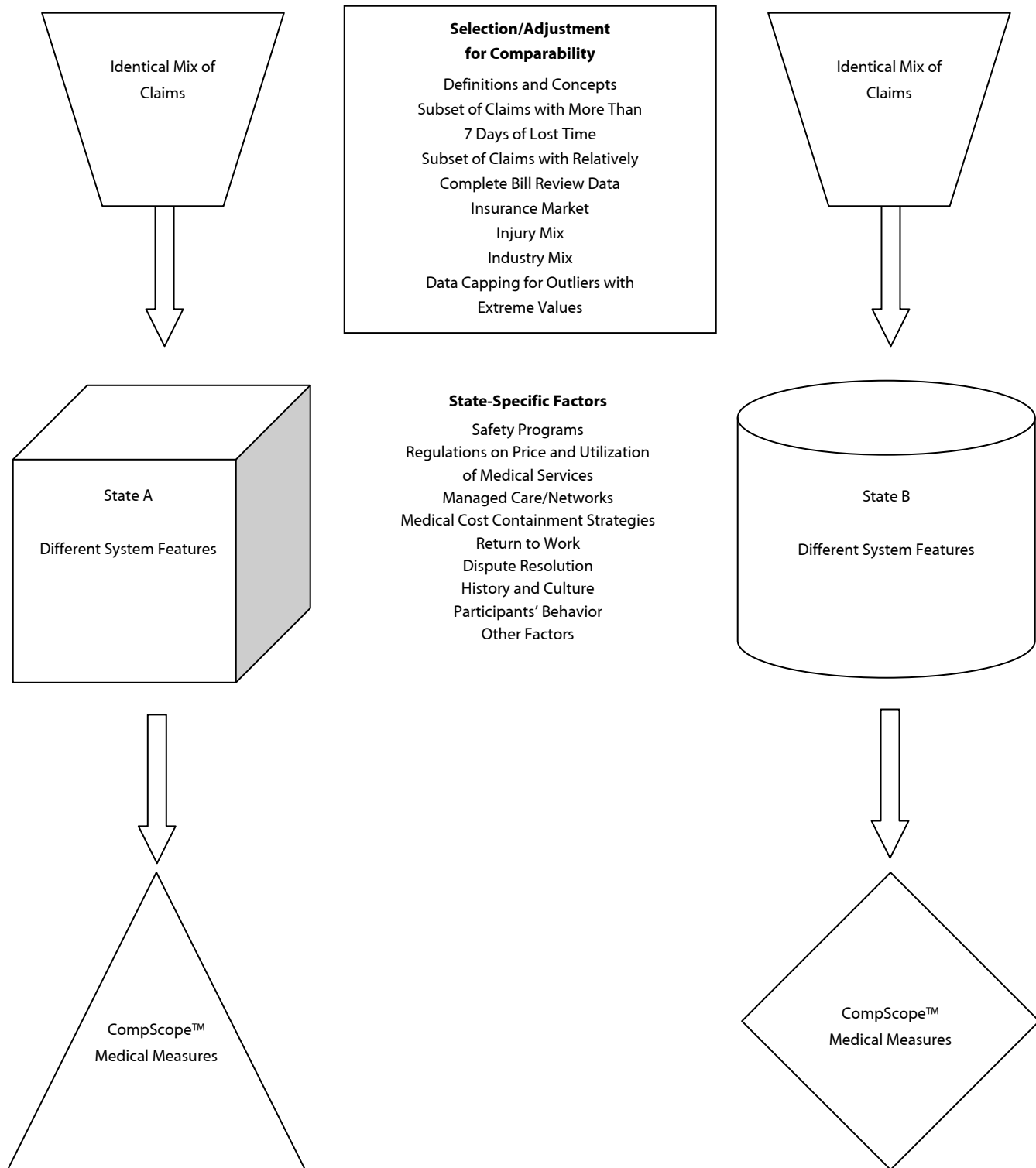
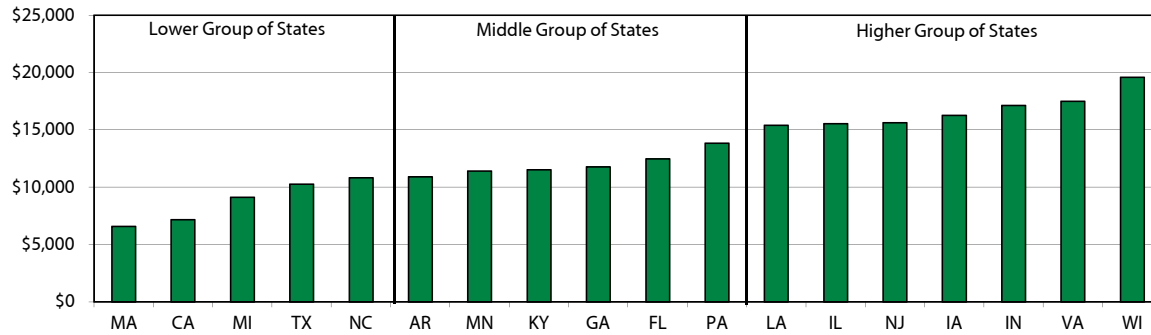
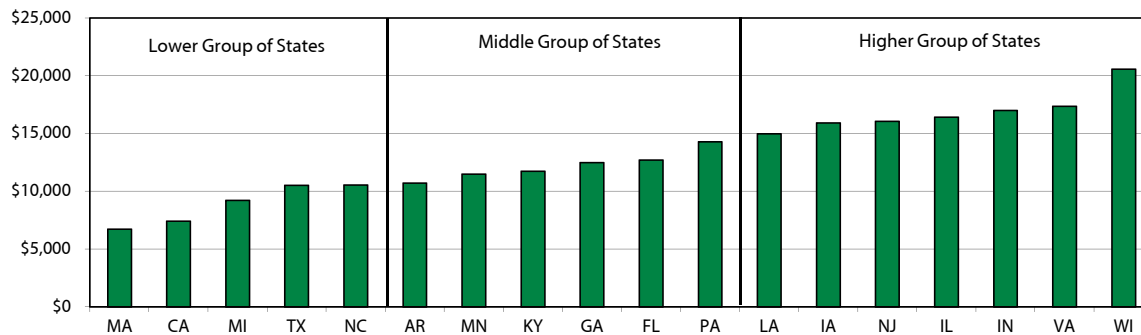
Figure TA.3 CompScope™ Medical Multistate Methodology and Data Adjustments: The Concept

Figure TA.4 A Comparison of Interstate Rankings Based on Medical Payments per Claim: CompScope™ Medical and CompScope™, 2015/2016 Claims with More Than 7 Days of Lost Time, Adjusted for Injury and Industry Mix

Average Medical Payment per Claim for Claims Included in the CompScope™ Data, 2015/2016



Average Payment per Claim Based on Medical Bills for Claims Included in the CompScope™ Medical Data, 2015/2016



Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

Table TA.1 Brief Definitions of Service Groups in Group A

Service Group	Definition
Emergency services	The services in this group include emergency department visits for patients with various levels of severity and office services provided on an emergency basis.
Evaluation and management	The services in this group are primarily new and established patient office visits. These consist of office visits that require at least two of three parts: a problem focused history, a problem focused examination, and straightforward medical decision making of various complexities.
Major radiology	The services in this group mostly include magnetic resonance imaging (MRIs) and computed tomography (CT) scans of various areas, including, but not limited to, spinal canal and contents, cervical, lumbar, and any joint of the upper or lower extremity.
Minor radiology	The services in this group mostly include radiologic exams (X rays or ultrasounds) involving at least two views of various areas of the body, including, but not limited to, the spine, lumbosacral, shoulder, and wrist.
Neurological/neuromuscular testing	The services in this group include neurological and neuromuscular testing. They are largely made up of sensory and motor nerve conduction studies but also include range of motion tests and application of neurostimulators. These services may be billed by physicians as well as by chiropractors and physical therapists.
Physical medicine	The services in this group include physical medicine procedures, modalities, therapeutic activities and manual therapy techniques involving one or more areas, electronic stimulation, and work hardening/conditioning, as well as chiropractic care and manipulations. These services may be provided by physical therapists and occupational therapists as well as chiropractors. Physical medicine codes may be billed by physicians, chiropractors, or physical therapists and occupational therapists.
Major surgery	The services in this group include invasive surgical procedures, as opposed to surgical treatments and pain management injections (which are also included in the surgery section of the Current Procedural Terminology [CPT] manual). The most frequent surgeries in this service group include, but are not limited to, arthroscopic surgeries of the shoulder or knee, laminectomies, laminotomies, discectomies, carpal tunnel surgeries, neuroplasty, and hernia repair.
Pain management injections	The services in this group include injection procedures that are commonly used for pain management, such as epidural or steroid injections on nerve roots and muscles for lumbar, sacral, cervical, or thoracic areas.

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Table TA.2 The 100 Most Common Major Surgeries in 2014 and 2015

Sequence Number	CPT Code	% of Payments ^a	% of Services ^b	Brief Procedure Description
1	29827	8.5%	5.9%	Arthroscopy, shoulder; with rotator cuff repair
2	29826	6.0%	8.6%	Arthroscopy, shoulder; decompression of subacromial space with partial acromioplasty
3	29881	4.8%	4.7%	Arthroscopy, knee; with meniscectomy
4	22551	2.8%	1.1%	Arthrodesis, anterior interbody, including disc space preparation, discectomy, etc.
5	63030	2.8%	1.7%	Laminotomy (hemilaminectomy), with decompression of nerve root(s)
6	29824	2.6%	4.2%	Arthroscopy, shoulder; distal claviclectomy
7	29823	2.5%	3.2%	Arthroscopy, shoulder; debridement, extensive
8	64721	2.3%	3.1%	Neuroplasty and/or transposition; median nerve at carpal tunnel
9	63047	2.0%	1.3%	Laminectomy, facetectomy and foraminotomy
10	29888	1.8%	1.2%	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
11	29880	1.8%	1.6%	Arthroscopy, knee; with meniscectomy
12	22851	1.8%	2.2%	Application of intervertebral biomechanical device(s) to vertebral defect or interspace
13	22845	1.7%	1.4%	Anterior instrumentation; 2 to 3 vertebral segments
14	22633	1.7%	0.6%	Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy; lumbar
15	29807	1.4%	0.9%	Arthroscopy, shoulder; repair of slap lesion
16	29822	1.4%	2.2%	Arthroscopy, shoulder; debridement, limited
17	23412	1.3%	1.0%	Repair of ruptured musculotendinous cuff (e.g., rotator cuff) open; chronic
18	23430	1.3%	1.6%	Tenodesis of long tendon of biceps
19	22612	1.2%	0.6%	Arthrodesis, posterior or posterolateral technique, single level; lumbar
20	29828	1.2%	1.5%	Arthroscopy, shoulder; biceps tenodesis
21	22558	1.1%	0.5%	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22	27447	1.0%	0.5%	Arthroplasty, knee, condyle and plateau
23	29806	1.0%	0.6%	Arthroscopy, shoulder; capsulorrhaphy
24	22840	1.0%	0.8%	Posterior non-segmental instrumentation (e.g., Harrington rod technique, pedicle fixation across 1 interspace, etc.)
25	24342	1.0%	0.9%	Reinsertion of ruptured biceps or triceps tendon
26	22842	0.9%	0.6%	Posterior segmental instrumentation; 3 to 6 vertebral segments
27	49505	0.8%	1.1%	Repair initial inguinal hernia
28	64718	0.8%	0.9%	Neuroplasty and/or transposition; ulnar nerve at elbow
29	26951	0.7%	0.8%	Amputation, finger or thumb, primary or secondary, any joint or phalanx; with direct closure
30	29877	0.7%	0.7%	Arthroscopy, knee; debridement/shaving of articular cartilage (chondroplasty)
31	63042	0.7%	0.4%	Laminotomy (hemilaminectomy), with decompression of nerve root(s); lumbar
32	29876	0.7%	0.6%	Arthroscopy, knee; synovectomy, major, 2 or more compartments
33	23410	0.6%	0.5%	Repair of ruptured musculotendinous cuff open; acute
34	29879	0.6%	0.6%	Arthroscopy, knee; abrasion arthroplasty or multiple drilling or microfracture
35	26418	0.6%	0.7%	Repair, extensor tendon, finger
36	49650	0.6%	0.7%	Laparoscopy; repair initial inguinal hernia
37	29848	0.6%	0.6%	Endoscopy, wrist, with release of transverse carpal ligament
38	26356	0.5%	0.3%	Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath
39	63048	0.5%	0.8%	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root(s)), single vertebral segment; each additional segment, cervical, thoracic, or lumbar
40	29846	0.5%	0.5%	Arthroscopy, wrist; excision and/or repair of triangular fibrocartilage and/or joint debridement
41	29999	0.5%	0.4%	Arthroscopy of joint
42	23420	0.5%	0.3%	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic
43	63650	0.5%	0.4%	Percutaneous implantation of neurostimulator electrode array, epidural
44	14040	0.4%	0.5%	Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, etc.
45	23472	0.4%	0.2%	Arthroplasty, glenohumeral joint; total shoulder
46	27814	0.4%	0.5%	Open treatment of bimalleolar ankle fracture
47	22552	0.4%	0.5%	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots
48	29825	0.4%	0.5%	Arthroscopy, shoulder; with lysis and resection of adhesions
49	22614	0.4%	0.5%	Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment
50	63056	0.4%	0.2%	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s); lumbar
51	24359	0.4%	0.4%	Tenotomy, elbow, lateral or medial (e.g., epicondylitis, tennis elbow, golfer's elbow)
52	15240	0.4%	0.3%	Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, etc.
53	27792	0.4%	0.3%	Open treatment of distal fibular fracture
54	26952	0.4%	0.4%	Amputation, finger or thumb, any joint or phalanx
55	27759	0.4%	0.2%	Treatment of tibial shaft fracture by intramedullary implant
56	29875	0.3%	0.5%	Arthroscopy, knee; synovectomy
57	23120	0.3%	0.7%	Claviclectomy; partial
58	15100	0.3%	0.3%	Split-thickness autograft, trunk, arms, legs
59	63081	0.3%	0.1%	Vertebral corpectomy, anterior approach with decompression of spinal cord and/or nerve root(s); cervical
60	64831	0.3%	0.4%	Suture of digital nerve, hand or foot
61	27130	0.3%	0.2%	Arthroplasty, acetabular and proximal femoral prosthetic replacement
62	49999	0.3%	0.0%	Abdomen, peritoneum and omentum surgery procedure

continued

Table TA.2 The 100 Most Common Major Surgeries in 2014 and 2015 (continued)

Sequence Number	CPT Code	% of Payments ^a	% of Services ^b	Brief Procedure Description
63	22630	0.3%	0.1%	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace; lumbar
64	29898	0.3%	0.3%	Arthroscopy, ankle
65	15004	0.3%	0.5%	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar
66	49585	0.3%	0.4%	Repair umbilical hernia
67	20936	0.3%	0.6%	Autograft for spine surgery only
68	22554	0.3%	0.2%	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace; cervical below c2
69	25447	0.3%	0.2%	Arthroplasty, interposition, intercarpal or carpometacarpal joints
70	25320	0.3%	0.2%	Capsulorrhaphy or reconstruction, wrist, open
71	20930	0.2%	0.7%	Allograft, morselized, or placement of osteopromotive material, for spine surgery only
72	27829	0.2%	0.3%	Open treatment of distal tibiofibular joint (syndesmosis) disruption
73	15101	0.2%	0.2%	Split-thickness autograft, trunk, arms, legs
74	22856	0.2%	0.1%	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophyctectomy for nerve root or spinal cord decompression and microdissection); cervical
75	15120	0.2%	0.2%	Split-thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits
76	29882	0.2%	0.2%	Arthroscopy, knee; with meniscus repair (medial or lateral)
77	13132	0.2%	0.4%	Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet
78	26410	0.2%	0.3%	Repair, extensor tendon, hand
79	26540	0.2%	0.2%	Repair of collateral ligament, metacarpophalangeal or interphalangeal joint
80	27385	0.2%	0.3%	Suture of quadriceps or hamstring muscle rupture; primary
81	27822	0.2%	0.1%	Open treatment of trimalleolar ankle fracture
82	26445	0.2%	0.3%	Tenolysis, extensor tendon, hand or finger
83	26525	0.2%	0.2%	Capsulectomy or capsulotomy
84	27650	0.2%	0.2%	Repair, primary, open or percutaneous, ruptured achilles tendon
85	22600	0.2%	0.1%	Arthrodesis, posterior or posterolateral technique, single level; cervical below c2 segment
86	64910	0.2%	0.2%	Nerve repair; with synthetic conduit or vein allograft
87	24341	0.2%	0.2%	Repair, tendon or muscle, upper arm or elbow
88	64708	0.2%	0.3%	Neuroplasty, major peripheral nerve, arm or leg, open
89	27698	0.2%	0.2%	Repair, secondary, disrupted ligament, ankle, collateral
90	15002	0.2%	0.4%	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar
91	26440	0.2%	0.2%	Tenolysis, flexor tendon; palm or finger, each tendon
92	22585	0.2%	0.3%	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace
93	26350	0.2%	0.1%	Repair or advancement, flexor tendon
94	15003	0.2%	0.5%	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar
95	27446	0.2%	0.1%	Arthroplasty, knee, condyle and plateau; medial or lateral compartment
96	63090	0.2%	0.1%	Vertebral corpectomy
97	29891	0.2%	0.1%	Arthroscopy, ankle, surgical, excision of osteochondral defect of talus and/or tibia, including drilling of the defect
98	24358	0.2%	0.2%	Tenotomy, elbow, lateral or medial; debridement, soft tissue and/or bone, open
99	63045	0.1%	0.1%	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s]), single vertebral segment; cervical
100	22846	0.1%	0.1%	Anterior instrumentation; 4 to 7 vertebral segments
	All 100	82.1%	79.4%	

Notes : This table shows the 100 most common major surgeries within calendar year 2014 and 2015 using the pooled data of the 18 study states. To compute the percentage of payments and percentage of services for each major surgery, equal weights were applied to each of the study states. The 100 most common major surgeries represent about 80 percent of total payments and services within the major surgery service group. The top one-third of these most common major surgeries represent approximately 60 percent of total payments and services within the major surgery service group.

^a The percentage of payments for a given procedure (i.e., CPT code) is calculated as the total payments for that procedure divided by the total payments for all procedures within the major surgery service group.

^b The percentage of services for a given procedure (i.e., CPT code) is calculated as the total number of services for that procedure divided by the total number of services for all procedures within the major surgery service group.

Key: CPT: Current Procedural Terminology.

Table TA.3 Defining Key CompScope™ Medical Measures

Measure	Definition
Overall medical payments, based on the CompScope™ data	
Average medical payment per all paid claims	The sum of medical payments for all paid claims divided by the total number of all paid claims.
Average medical payment per claim with more than 7 days of lost time	The sum of medical payments for claims with more than 7 days of lost time divided by the total number of claims with more than 7 days of lost time.
Average medical payment per claim with 7 days or fewer of lost time	The sum of medical payments for claims with 7 days or fewer of lost time divided by the total number of claims with 7 days or fewer of lost time.
Medical costs and utilization based on the CompScope™ Medical Data Set I^a for nonhospital services	
Percentage of claims with a type of service	The number of claims that have received at least one service for a particular service type divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a type of service	The sum of medical payments made for the type of service divided by the sum of total medical payments.
Average medical payment per claim for a type of service	The sum of medical payments for the particular service across the claims receiving that service divided by the total number of claims with that service.
Price index for a type of service	The ratio of the price per service between an individual state and the median state, where the price per service was constructed using the marketbasket approach to hold utilization constant.
Utilization index for a type of service	The ratio of the average number of services per claim, weighted by the RVU, between an individual state and the median state. The utilization index incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided.
Resource intensity of a type of service	The relative complexity for a mix of services based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. It is responsible for the difference between the RVU-weighted utilization index and the volume of services, which is calculated based on the unweighted average number of services per claim.
Average number of visits for a type of service per claim with that type of service	The total number of visits for a particular service divided by the total number of claims with the particular type of service.
Average number of services for a type of service per visit for that type of service	The total number of services for a particular service divided by the total number of visits for claims involving the particular type of service.
Nonhospital services, based on the CompScope™ Medical Data Set I^a	
<i>Nonhospital services by provider type (physician, chiropractor, physical/occupational therapist, and other)</i>	
Percentage of claims with a provider type	The number of claims that have received at least one service from a particular provider type divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a provider type	The sum of medical payments made to a provider type divided by the sum of total medical payments.
Average medical payment per claim for a provider type	The sum of medical payments across the claims involving the provider type divided by the total number of claims with the same provider type.
Price index for services by a provider type	The ratio of the price per service for the provider type between an individual state and the median state, where the price per service was constructed using the marketbasket approach to hold utilization constant.
Utilization index for services by a provider type	The ratio of the average number of services per claim with the provider type, weighted by the RVU, between an individual state and the median state. The utilization index incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided.
Resource intensity of services by a provider type	The relative complexity for a mix of services by a provider type based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. It is responsible for the difference between the RVU-weighted utilization index for services by a provider type and the volume of services, which is calculated based on the unweighted average number of services per claim with services by the provider type.
Average number of visits to a provider type per claim with services by that provider type	The total number of visits to a particular provider type divided by the total number of claims with at least one visit to that provider type.
Average number of services by a provider type per visit to that provider type	The total number of services by a particular provider type divided by the total number of visits for claims involving the provider type.

continued

Table TA.3 Defining Key CompScope™ Medical Measures (continued)

Measure	Definition
Nonhospital services, based on the CompScope™ Medical Data Set I^a	
<i>Nonhospital services by service group, Group A</i>	
Percentage of claims with a service group	The number of claims that have received at least one service for a particular Group A nonhospital service group divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a service group	The sum of medical payments made for the service group divided by the sum of total medical payments.
Average medical payment per claim with a service group	The sum of medical payments across the claims involving the service group divided by the total number of claims with the same service group.
Price index for a service group	The ratio of the price per service for the service group between an individual state and the median state, where the price per service was constructed using the marketbasket approach to hold utilization constant.
Utilization index for a service group	The ratio of the average number of services per claim involving the service group, weighted by the RVU, between an individual state and the median state. The utilization index incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided.
Resource intensity of a service group	The relative complexity for a mix of services involving a service group based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. It is responsible for the difference between the RVU-weighted utilization index for a service group and the volume of services, which is calculated based on the unweighted average number of services per claim with services in the service group.
Average number of visits for a service group per claim with that service group	The total number of visits divided by the total number of claims, for claims with the same service group.
Average number of services for a service group per visit for that service group	The total number of services divided by the total number of visits, for claims involving the same service group.
<i>Nonhospital services by service group, Group B</i>	
Percentage of claims with a service group	The number of claims that have received at least one service for a particular Group B nonhospital service group divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a service group	The sum of medical payments made for the service group divided by the sum of total medical payments.
Average medical payment per claim with a service group	The sum of medical payments made for the service group divided by the number of claims involving the same service group.
Average number of visits for a service group per claim with that service group	The total number of visits for the service group divided by the total number of claims involving the same service group.
Average medical payment per visit for a service group	The sum of medical payments for the service group divided by the total number of visits for the same service group.
Hospital outpatient services, based on the CompScope™ Medical Data Set II^b	
<i>Hospital outpatient services by service group, Group A</i>	
Percentage of claims with a service group	The number of claims that have received at least one service for a particular Group A hospital outpatient service group divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a service group	The sum of medical payments made for the service group divided by the sum of total medical payments.
Average medical payment per claim with a service group	The sum of medical payments across the claims involving the service group divided by the total number of claims with the same service group.
Average medical payment per service for a service group ^c	The sum of medical payments for the particular service divided by the total number of services involving the same service group.
Average number of services for a service group per claim with that service group ^c	The total number of services divided by the total number of claims involving the same service group.
Average number of visits for a service group per claim with that service group	The total number of visits divided by the total number of claims, for claims with the same service group.
Average number of services for a service group per visit for that service group	The total number of services divided by the total number of visits, for claims involving the same service group.

continued

Table TA.3 Defining Key CompScope™ Medical Measures (continued)

Measure	Definition
Hospital outpatient services, based on the CompScope™ Medical Data Set II^b	
<i>Hospital outpatient services by service group, Group B</i>	
Percentage of claims with a service group	The number of claims that have received at least one service for a particular Group B hospital outpatient service group divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for a service group	The sum of medical payments made for the service group divided by the sum of total medical payments.
Average medical payment per claim with a service group	The sum of medical payments made for the service group divided by the total number of claims involving the same service group.
Average number of visits for a service group per claim with that service group	The total number of visits for the service group divided by the total number of claims involving the same service group.
Average medical payment per visit for a service group	The sum of medical payments for the service group divided by the total number of visits for claims involving the same service group.
Hospital inpatient services, based on the CompScope™ Medical Data Set II^b	
Percentage of claims with inpatient care	The number of claims that have received at least one hospital inpatient service divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for hospital inpatient services	The sum of medical payments paid to hospital inpatient services divided by the sum of total medical payments.
Percentage of inpatient episodes with surgery	The number of inpatient episodes with surgery divided by the total number of inpatient episodes.
Average hospital payment per inpatient episode	The sum of medical payments to the hospital for inpatient services divided by the total number of inpatient episodes.
Percentage of claims with inpatient surgery	The number of claims that have received at least one inpatient surgery divided by the number of all claims with more than 7 days of lost time and medical payments.
Average hospital payment per inpatient episode with surgery	The sum of medical payments to the hospital for surgical and other services during the inpatient stay divided by the total number of inpatient episodes with surgery.
Outpatient services (hospital and nonhospital), based on the CompScope™ Medical Data Set I^a and Data Set II^b	
Average medical payment per visit for outpatient services	The sum of medical payments for outpatient services divided by the total number of visits for the outpatient services.
Physical medicine services (chiropractor and other providers), based on the CompScope™ Medical Data Set I^a	
Percentage of claims with physical medicine services	The number of claims that have received at least one physical medicine service divided by the number of all claims with more than 7 days of lost time and medical payments.
Percentage of total medical payments paid for physical medicine	The sum of medical payments paid for physical medicine services divided by the sum of total medical payments.
Average medical payment per claim with physical medicine	The sum of medical payments paid for physical medicine services divided by the number of claims involving physical medicine services.
Price index for physical medicine	The ratio of the price per physical medicine service between an individual state and the median state, where the price per service was constructed using the marketbasket approach to hold utilization constant.
Utilization index for physical medicine	The ratio of the average number of physical medicine services per claim, weighted by the RVU, between an individual state and the median state. The utilization index incorporates several aspects of medical care: number of visits per claim, number of services per visit, and the resource intensity of services provided.
Resource intensity of physical medicine	The relative complexity for a mix of physical medicine services based on different resources required or different intensities of resource usage, such as time and effort of medical providers, equipment, facilities, and other overhead. It is responsible for the difference between the RVU-weighted utilization index for physical medicine services and the volume of services, which is calculated based on the unweighted average number of physical medicine services per claim with those services.
Average medical payment per visit for physical medicine	The sum of medical payments paid for the type of physical medicine divided by the total number of visits, involving the type of physical medicine service.
Average number of visits for physical medicine per claim with physical medicine	The total number of visits with physical medicine divided by the total number of claims with physical medicine.
Average number of services for physical medicine per visit for physical medicine	The total number of physical medicine services divided by the total number of visits involving physical medicine services.

continued

Table TA.3 Defining Key CompScope™ Medical Measures (continued)

^a CompScope™ Medical Data Set I is the analysis data that we used to construct performance measures for medical services overall and by provider type. The data set was also used for detailed analysis of nonhospital services.

^b CompScope™ Medical Data Set II is the analysis data that we used for detailed analysis of hospital services, including hospital outpatient services and hospital inpatient services.

^c For hospital outpatient services, because the revenue codes often used in hospital billing are too broadly defined to support a robust marketbasket of services and an estimate of the relative intensity of services, we report the average payment per service and number of services per claim.

Key: RVU: relative value unit.

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Table TA.4 Claim Volume and Representation by State, 2015/2016 Indemnity Claims

State	Number of All Indemnity Claims in Population ^a	CompScope™ ^b		CompScope™ Medical Data Set I ^c		CompScope™ Medical Data Set II ^d	
		Number of Claims	% of Population Claims	Number of Claims	% of Population Claims	Number of Claims	% of Population Claims
Arkansas	4,650	1,842	40%	1,456	31%	961	21%
California	180,041	76,979	43%	51,831	29%	20,110	11%
Florida	54,717	24,838	45%	18,759	34%	8,704	16%
Georgia	22,878	10,656	47%	8,065	35%	3,676	16%
Illinois	47,121	23,849	51%	16,301	35%	10,957	23%
Indiana	15,598	7,552	48%	5,565	36%	3,739	24%
Iowa	13,654	5,750	42%	3,816	28%	2,920	21%
Kentucky	12,018	5,681	47%	3,901	32%	2,933	24%
Louisiana	10,796	4,746	44%	3,502	32%	2,369	22%
Massachusetts	23,597	13,509	57%	9,597	41%	7,701	33%
Michigan	23,202	10,112	44%	8,368	36%	6,138	26%
Minnesota	20,762	10,018	48%	6,859	33%	4,764	23%
New Jersey	34,434	19,232	56%	14,139	41%	7,535	22%
North Carolina	22,480	10,764	48%	7,210	32%	4,099	18%
Pennsylvania	38,949	18,168	47%	14,462	37%	10,796	28%
Texas	48,102	33,774	70%	28,763	60%	15,046	31%
Virginia	13,649	6,782	50%	5,730	42%	3,772	28%
Wisconsin	24,329	10,270	42%	6,672	27%	5,131	21%
Total	610,978	294,522	48%	214,996	35%	121,350	20%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

^a Data on the population of indemnity claims in each state are estimated generally based on the number of insured claims, weighted to account for self-insured claims. Notes in Table TA.4 of *CompScope™ Benchmarks: Technical Appendix, 17th Edition* (https://www.wcrinet.org/images/uploads/files/technical_appendix_CS_17.pdf) describe the external data sources and methods used for estimating the population claim volume and distribution by market segment for all claims. The same approach is used here for indemnity claims.

^b Number of claims shown in this table is based on paid and reserved indemnity claims. For similar information based on all claims, see Table TA.3 in *CompScope™ Benchmarks: Technical Appendix, 17th Edition* (https://www.wcrinet.org/images/uploads/files/technical_appendix_CS_17.pdf).

^c CompScope™ Medical Data Set I is the analysis data that we used to construct performance measures for medical services overall and by provider type. The data set was also used for detailed analysis of nonhospital services. Number of claims reflects claims with more than seven days of lost time.

^d CompScope™ Medical Data Set II is the analysis data that we used for detailed analysis of hospital services, including hospital outpatient services and hospital inpatient services. Number of claims reflects claims with more than seven days of lost time.

Table TA.5 Effect of Selecting a Subset of Claims with More Than 7 Days of Lost Time, 2015/2016 Claims

Measures	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Statutory waiting period for indemnity benefits (days)	7	3	7	7	3	3	7	7	7	5	7	3	7	7	7	7	7	3
Before 7-day waiting period adjustment																		
Indemnity claims as percentage of all paid claims	17%	29%	21%	21%	23%	29%	15%	17%	24%	33%	16%	22%	19%	26%	19%	23%	16%	23%
Average medical payment per indemnity claim	\$11,843	\$6,310	\$12,017	\$11,261	\$15,296	\$14,238	\$17,148	\$11,170	\$15,567	\$6,105	\$8,994	\$10,117	\$10,821	\$15,625	\$13,761	\$10,435	\$17,649	\$16,719
After 7-day waiting period adjustment																		
Claims with more than 7 days of lost time as percentage of all paid claims	17%	26%	21%	21%	20%	27%	15%	17%	24%	31%	16%	20%	19%	26%	19%	23%	16%	19%
Average medical payment per claim with more than 7 days of lost time	\$11,843	\$6,866	\$12,017	\$11,261	\$16,879	\$15,205	\$17,148	\$11,170	\$15,567	\$6,472	\$8,994	\$11,225	\$10,821	\$15,625	\$13,761	\$10,435	\$17,649	\$19,516
Effect of subsetting claims																		
Change in frequency before and after the waiting period adjustment (percentage points)	0	-3	0	0	-3	-2	0	0	0	-2	0	-3	0	0	0	0	0	-4
Change in payments per claim before and after waiting period adjustment (percentage)	0%	9%	0%	0%	10%	7%	0%	0%	0%	6%	0%	11%	0%	0%	0%	0%	0%	17%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

Table TA.6 Estimated Population Distribution of Market Segment by State, 2015 Indemnity Claims

State	Private Voluntary		State Fund		Private Residual		Self-Insured		All Market Segments	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Arkansas	3,339	72%	0	0%	158	3%	1,153	25%	4,650	100%
California	115,204	64%	12,160	7%	0	0%	52,677	29%	180,041	100%
Florida	37,515	69%	0	0%	168	0%	17,034	31%	54,717	100%
Georgia	16,891	74%	0	0%	218	1%	5,768	25%	22,878	100%
Illinois	34,622	74%	0	0%	618	1%	11,881	25%	47,121	100%
Indiana	13,125	84%	0	0%	691	4%	1,782	11%	15,598	100%
Iowa	10,362	76%	0	0%	334	2%	2,958	22%	13,654	100%
Kentucky	6,749	56%	1,508	13%	0	0%	3,761	31%	12,018	100%
Louisiana	6,414	59%	855	8%	0	0%	3,527	33%	10,796	100%
Massachusetts	16,335	69%	0	0%	2,581	11%	4,681	20%	23,597	100%
Michigan	13,762	59%	0	0%	647	3%	8,793	38%	23,202	100%
Minnesota	14,795	71%	0	0%	590	3%	5,377	26%	20,762	100%
New Jersey	25,360	74%	0	0%	1,806	5%	7,269	21%	34,434	100%
North Carolina	16,554	74%	0	0%	464	2%	5,463	24%	22,480	100%
Pennsylvania	29,144	75%	1,257	3%	0	0%	8,548	22%	38,949	100%
Texas	27,959	58%	10,577	22%	0	0%	9,566	20%	48,102	100%
Virginia	10,351	76%	0	0%	297	2%	3,001	22%	13,649	100%
Wisconsin	20,233	83%	0	0%	895	4%	3,201	13%	24,329	100%

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Table TA.7 WCRI Measures Adjusted and Unadjusted

WCRI Measure	Adjusted	Unadjusted
Average medical payment per claim		
Overall	Figures 2, 3; Table 2	Figures 30, 31; Table 3
Nonhospital	Figure 4; Table 2	Figure 32; Table 3
By provider type	Figure 5; Table 2	Figures 36, 42, 48; Table 3
By service group	Figure 9; Table 2	Figures 54, 57, 60, 63, 66, 69; Table 3
Hospital	Figures 4, 17; Table 2	Figure 33; Table 3
Hospital outpatient	Figures 17, 18; Table 2	Figure 73
By service group	Figure 18; Table 2	Figures 74–80
Hospital inpatient	Figure 17; Table 2	Figure 72
Percentage of claims		
Nonhospital	Figure 4; Table 2	Figure 32; Table 3
By provider type	Figure 5; Table 2	Figures 36, 42, 48; Table 3
By service group	Figure 10; Table 2	Figures 54, 57, 60, 63, 66, 69; Table 3
Hospital	Figure 4; Table 2	Figure 33; Table 3
Hospital outpatient	Figure 17; Table 2	Figure 73
By service group	Figure 19; Table 2	Figure 74–80
Hospital inpatient	Figure 17; Table 2	Figure 72
Percentage of medical payments		
Nonhospital	Figure 4; Table 2	Figure 32; Table 3
By provider type	Figure 5; Table 2	Figures 36, 42, 48; Table 3
By service group	Figure 11; Table 2	Figures 54, 57, 60, 63, 66, 69; Table 3
Hospital	Figure 4; Table 2	Figure 33; Table 3
Hospital outpatient	Table 2	Figure 73
By service group	Figure 20; Table 2	Figures 74–80
Hospital inpatient	Table 2	Figure 72
Average price/payment per service		
Nonhospital	Figure 6	Figure 34; Table 3
By provider type	Figure 6; Table 2	Figures 37, 43, 49; Table 3
By service group	Figure 12; Table 2	Figures 55, 58, 61, 64, 67, 70; Table 3
Hospital		Table 3
Hospital outpatient	Figure 21	Figure 73
By service group	Figure 22; Table 2	Figures 74–80
Utilization/services per claim		
Nonhospital	Figure 6	Figure 35; Table 3
By provider type	Figure 6; Table 2	Figures 38, 44, 50; Table 3
By service group	Figure 13; Table 2	Figures 56, 59, 62, 65, 68, 71; Table 3
Hospital		Table 3
Hospital outpatient	Figure 21	Figure 73
By service group	Figure 23; Table 2	Figures 74–80
Visits per claim		
Nonhospital	Figure 7	Figure 35
By provider type	Figure 7; Table 2	Figures 39, 45, 51; Table 3
By service group	Figure 14; Table 2	Figures 56, 59, 62, 65, 68, 71; Table 3
Hospital outpatient		Figure 73
By service group	Figure 24	Figures 74–80
Services per visit		
Nonhospital	Figure 7	Figure 35
By provider type	Figure 7; Table 2	Figures 40, 46, 52; Table 3
By service group	Figure 15; Table 2	Figures 56, 59, 62, 65, 68, 71; Table 3
Hospital outpatient		Figure 73
By service group	Figure 25	Figures 74–80
Resource intensity		
Nonhospital	Figure 7	Figure 35
By provider type	Figure 7	Figures 41, 47, 53
By service group	Figure 16	Figures 56, 59, 62, 65, 68, 71

continued

Table TA.7 WCRI Measures Adjusted and Unadjusted (continued)

WCRI Measure	Adjusted	Unadjusted
Payments for network care	Figure 29	Figure 81
Physical medicine services by provider type: payments, price, and utilization	Figure 8	
Comparison of payments per visit for nonhospital and hospital outpatient services	Figure 26	
Payments to hospitals per inpatient episode	Figure 27	
Average total medical payment per episode for surgical low back cases with disc conditions	Figure 28	
Percentage of overall medical payments by provider and service type	Table 4	
Percentage of services and average prices for new and established office visits CPT codes	Table 8	
Average payment per claim and other metrics for physical medicine by all providers	Table 9	
Selected measures for ASC facility payments	Table 11	Table 12
Annual percentage change of neurological/neuromuscular testing average payment per claim		Table 13
Selected measures for prescription payments	Table 14	Table 15

Key: ASC: ambulatory surgery center; CPT: Current Procedural Terminology.

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Table TA.8 Industry Categories**Clerical and professional**

Clerical

Instructional professions

Construction

Erection

Shipbuilding

Miscellaneous construction

Manufacturing

Food and tobacco

Textiles

Cloth products

Leather

Rubber/bone products

Paper/pulp products, printing

Wood

Metallurgy

Metal forming

Machine shops/fine machines

Vehicles

Stone products

Clay products

Glass products

Chemicals

Miscellaneous manufacturing

Trade

Retail trade

Wholesale trade

High-risk services

Laundering, cleaning, and dyeing

Stevedoring/freight handling; explosives or ammunition shipping; refrigerator car loading or unloading

Railroad operations

Package delivery; hauling (long-distance or local)

Electric light or power; steam light or power; waterworks operation; sewage disposal plant operation; recycling and garbage collection

Automobile hauling; automobile sales and services

Warehousing and storage

Health care facility-related services: nursing home, home care (excluding physician and dentist services)

Building maintenance; janitorial services; elevator services; sign installation; window cleaning

Hotels, restaurants, clubs

Low-risk services

Telephone, telegraph, internet access providers; computer data processing; radio/TV broadcasting; cable TV; motion picture productions; recording studios

Automobile parking and garage

Physicians/dentists

Insurance; real estate; travel agencies; addressing; mailing; mail packaging; advertising

Schools; museums; day care centers

Commercial service and repair; architect or engineer consulting

Property management; leasing services

Dinner theater/theater operations

Amusement park or exhibition operations; dog shows; horse shows; racetrack operations

Personal service, such as beauty salons and hair styling

Other industries

Agriculture

Mining and oil/gas production

Quarrying, stone/sand/clay

Miscellaneous occupations

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Table TA.9a Percentage of Claims with More Than 7 Days of Lost Time by Industry Group

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Industry classification (percentage)																		
<i>Clerical and professional</i>																		
2010	4%	11%	8%	7%	9%	5%	5%	5%	23%	8%	7%	10%	5%	7%	7%	8%	7%	8%
2011	3%	12%	8%	6%	11%	5%	5%	6%	22%	7%	6%	8%	5%	7%	7%	7%	8%	7%
2012	3%	11%	8%	7%	10%	4%	5%	5%	21%	8%	5%	8%	6%	6%	7%	6%	7%	5%
2013	4%	11%	7%	6%	10%	4%	4%	4%	17%	7%	6%	8%	7%	7%	6%	6%	7%	5%
2014	4%	10%	7%	5%	9%	6%	5%	4%	16%	7%	6%	7%	7%	7%	7%	6%	7%	5%
2015	4%	9%	6%	6%	9%	5%	4%	4%	13%	8%	5%	7%	5%	7%	7%	6%	7%	5%
<i>Construction</i>																		
2010	10%	9%	5%	6%	8%	5%	5%	5%	12%	11%	4%	5%	8%	8%	7%	14%	11%	6%
2011	10%	9%	5%	5%	8%	6%	5%	5%	14%	12%	4%	5%	7%	8%	7%	15%	11%	5%
2012	13%	9%	6%	6%	8%	6%	6%	5%	14%	13%	5%	5%	8%	10%	7%	16%	12%	5%
2013	10%	10%	6%	5%	7%	6%	5%	5%	14%	13%	4%	6%	7%	9%	7%	16%	11%	5%
2014	10%	10%	6%	5%	7%	5%	6%	5%	14%	12%	4%	6%	8%	9%	7%	16%	11%	5%
2015	9%	10%	6%	6%	8%	6%	5%	5%	13%	12%	5%	6%	8%	9%	7%	15%	10%	6%
<i>Manufacturing</i>																		
2010	22%	11%	7%	14%	25%	18%	30%	22%	9%	12%	23%	21%	18%	11%	20%	14%	11%	35%
2011	22%	10%	7%	14%	26%	18%	29%	22%	9%	13%	24%	22%	19%	13%	21%	15%	12%	36%
2012	25%	11%	7%	14%	27%	19%	32%	24%	9%	14%	25%	23%	19%	12%	21%	17%	13%	40%
2013	27%	12%	8%	15%	26%	19%	31%	23%	9%	14%	25%	21%	19%	13%	21%	17%	12%	37%
2014	23%	12%	7%	16%	26%	18%	32%	25%	10%	13%	24%	21%	19%	12%	21%	16%	13%	38%
2015	25%	12%	7%	17%	28%	18%	33%	25%	10%	14%	24%	22%	19%	12%	22%	16%	13%	38%
<i>Trade</i>																		
2010	14%	15%	17%	18%	12%	14%	14%	18%	14%	14%	13%	15%	18%	17%	15%	13%	15%	11%
2011	15%	15%	18%	19%	12%	13%	13%	19%	14%	14%	12%	15%	17%	17%	15%	13%	14%	12%
2012	15%	16%	18%	21%	13%	14%	13%	17%	15%	14%	12%	16%	16%	19%	17%	14%	14%	11%
2013	15%	17%	18%	20%	12%	14%	13%	18%	16%	15%	13%	15%	17%	20%	18%	14%	16%	12%
2014	14%	18%	18%	21%	12%	14%	13%	18%	15%	16%	13%	17%	16%	19%	18%	13%	16%	13%
2015	15%	18%	19%	20%	12%	14%	14%	19%	17%	16%	14%	16%	16%	22%	18%	14%	16%	13%
<i>High-risk services</i>																		
2010	27%	25%	29%	25%	21%	29%	27%	26%	19%	28%	28%	27%	23%	26%	24%	22%	29%	23%
2011	26%	25%	29%	26%	22%	29%	28%	23%	20%	28%	30%	27%	23%	26%	24%	22%	29%	23%
2012	27%	25%	29%	26%	20%	30%	27%	23%	21%	28%	30%	27%	23%	26%	26%	23%	28%	23%
2013	26%	24%	29%	25%	21%	29%	30%	23%	22%	27%	28%	27%	23%	26%	26%	23%	29%	24%
2014	26%	24%	28%	24%	22%	28%	28%	24%	21%	29%	28%	26%	23%	26%	27%	23%	28%	22%
2015	29%	25%	28%	25%	19%	27%	27%	22%	21%	28%	27%	25%	23%	25%	25%	24%	29%	22%
<i>Low-risk services</i>																		
2010	10%	15%	16%	13%	15%	14%	11%	10%	11%	13%	16%	14%	16%	12%	11%	12%	15%	9%
2011	12%	14%	16%	14%	13%	14%	11%	11%	10%	15%	15%	14%	17%	12%	11%	12%	15%	10%
2012	10%	14%	17%	13%	14%	14%	10%	10%	11%	14%	16%	14%	16%	13%	11%	11%	15%	9%
2013	11%	13%	17%	15%	14%	14%	10%	11%	13%	14%	15%	15%	15%	12%	11%	11%	14%	10%
2014	13%	13%	17%	14%	14%	14%	11%	11%	14%	14%	16%	15%	16%	13%	11%	11%	15%	11%
2015	12%	12%	17%	14%	15%	13%	11%	11%	15%	13%	16%	15%	15%	12%	11%	11%	14%	11%
<i>Other industries</i>																		
2010	13%	15%	18%	16%	10%	15%	8%	15%	11%	13%	9%	9%	13%	18%	16%	18%	13%	8%
2011	11%	15%	17%	15%	10%	15%	9%	14%	10%	11%	9%	9%	12%	17%	15%	17%	12%	7%
2012	7%	14%	15%	13%	9%	14%	7%	16%	9%	10%	7%	7%	11%	14%	12%	14%	10%	7%
2013	8%	13%	15%	13%	10%	14%	6%	15%	9%	10%	8%	8%	11%	13%	11%	14%	10%	6%
2014	10%	13%	16%	14%	9%	14%	6%	13%	10%	9%	9%	9%	11%	14%	9%	14%	9%	6%
2015	7%	13%	16%	13%	9%	15%	6%	13%	10%	9%	9%	8%	14%	13%	10%	14%	11%	6%

Notes: 2015 refers to injury year/evaluation 2015/2016 and includes claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016. We denote other injury year/evaluations similarly.

Table TA.9b Percentage of Claims with More Than 7 Days of Lost Time by Injury Group

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Injury classification (percentage)																		
<i>Fractures lower extremity</i>																		
2010	5%	3%	4%	4%	4%	4%	6%	5%	5%	4%	5%	4%	6%	5%	4%	5%	7%	4%
2011	6%	3%	4%	4%	4%	4%	6%	5%	5%	4%	5%	4%	5%	5%	4%	5%	6%	4%
2012	6%	3%	4%	4%	4%	4%	5%	6%	5%	4%	5%	4%	5%	4%	4%	5%	6%	4%
2013	6%	3%	4%	4%	5%	4%	6%	5%	5%	4%	5%	5%	5%	5%	4%	5%	6%	4%
2014	7%	3%	4%	4%	5%	4%	7%	5%	5%	5%	5%	4%	5%	5%	5%	6%	6%	5%
2015	8%	3%	4%	4%	5%	4%	6%	6%	5%	4%	6%	5%	5%	5%	5%	6%	7%	5%
<i>Fractures upper extremity</i>																		
2010	5%	4%	5%	5%	5%	4%	7%	6%	5%	5%	5%	4%	7%	5%	5%	7%	7%	5%
2011	7%	4%	5%	5%	6%	5%	7%	6%	5%	5%	6%	5%	6%	5%	5%	7%	6%	6%
2012	7%	4%	5%	5%	6%	5%	6%	5%	5%	5%	5%	4%	6%	6%	5%	7%	6%	5%
2013	7%	4%	5%	5%	7%	5%	6%	5%	6%	6%	6%	5%	6%	6%	5%	7%	6%	5%
2014	7%	4%	5%	5%	6%	5%	7%	6%	5%	5%	6%	4%	7%	6%	5%	7%	7%	5%
2015	7%	4%	5%	5%	6%	5%	7%	6%	5%	5%	6%	5%	7%	6%	5%	7%	7%	5%
<i>Hand lacerations</i>																		
2010	4%	3%	3%	3%	2%	2%	3%	2%	2%	4%	2%	2%	3%	3%	2%	3%	3%	2%
2011	3%	3%	3%	3%	3%	2%	3%	3%	2%	4%	3%	2%	3%	4%	2%	3%	3%	3%
2012	3%	3%	3%	3%	3%	3%	3%	2%	2%	4%	3%	2%	3%	4%	2%	3%	3%	2%
2013	3%	3%	3%	3%	2%	3%	3%	2%	2%	4%	2%	2%	3%	3%	2%	3%	3%	2%
2014	3%	3%	3%	2%	2%	3%	3%	2%	2%	4%	2%	2%	3%	4%	2%	3%	3%	3%
2015	3%	3%	3%	2%	2%	3%	3%	2%	2%	4%	2%	2%	3%	3%	2%	3%	3%	3%
<i>Inflammation</i>																		
2010	7%	10%	7%	10%	9%	9%	9%	7%	5%	8%	9%	9%	8%	9%	8%	6%	7%	10%
2011	6%	10%	8%	9%	10%	9%	9%	8%	6%	8%	8%	9%	8%	8%	8%	6%	7%	10%
2012	6%	10%	8%	10%	9%	9%	9%	8%	6%	8%	9%	8%	8%	8%	8%	6%	7%	9%
2013	6%	10%	7%	10%	9%	9%	9%	9%	6%	8%	9%	8%	8%	9%	9%	6%	7%	10%
2014	7%	10%	7%	9%	9%	9%	10%	8%	6%	9%	8%	7%	8%	8%	8%	6%	7%	8%
2015	7%	10%	8%	10%	10%	9%	9%	9%	7%	9%	8%	8%	8%	9%	8%	6%	7%	9%
<i>Knee derangement</i>																		
2010	4%	4%	4%	4%	5%	5%	5%	4%	3%	4%	5%	5%	4%	5%	4%	4%	4%	6%
2011	4%	4%	5%	4%	5%	4%	5%	4%	3%	4%	4%	4%	4%	5%	4%	4%	4%	6%
2012	4%	4%	5%	4%	6%	4%	5%	5%	4%	4%	4%	4%	4%	5%	4%	5%	4%	6%
2013	5%	4%	5%	4%	5%	4%	6%	5%	4%	4%	4%	5%	4%	5%	4%	5%	5%	6%
2014	4%	4%	5%	4%	5%	4%	5%	5%	4%	4%	4%	4%	4%	5%	4%	4%	4%	6%
2015	5%	4%	4%	4%	5%	4%	5%	5%	4%	3%	4%	4%	3%	5%	4%	4%	4%	5%
<i>Lacerations and contusions</i>																		
2010	9%	8%	10%	9%	6%	8%	8%	7%	9%	8%	7%	5%	9%	9%	8%	10%	9%	5%
2011	9%	8%	9%	8%	6%	8%	7%	7%	9%	8%	8%	5%	9%	9%	8%	11%	9%	6%
2012	8%	7%	9%	8%	6%	8%	8%	6%	9%	7%	7%	5%	9%	9%	8%	10%	8%	6%
2013	8%	8%	9%	8%	6%	7%	7%	6%	9%	7%	7%	5%	8%	9%	7%	10%	9%	5%
2014	9%	8%	9%	8%	5%	8%	7%	6%	10%	7%	7%	5%	8%	9%	7%	11%	9%	6%
2015	8%	8%	9%	8%	5%	8%	8%	7%	8%	8%	8%	6%	8%	9%	8%	11%	8%	6%
<i>Neurologic spine pain</i>																		
2010	7%	9%	7%	10%	6%	9%	7%	7%	10%	7%	6%	7%	8%	11%	8%	7%	7%	6%
2011	8%	9%	7%	10%	5%	9%	7%	7%	10%	7%	6%	7%	7%	10%	7%	6%	6%	6%
2012	7%	8%	8%	9%	6%	9%	7%	8%	10%	7%	6%	7%	7%	10%	8%	6%	7%	6%
2013	7%	8%	7%	10%	6%	9%	7%	8%	11%	8%	6%	6%	6%	10%	8%	6%	7%	6%
2014	8%	8%	8%	9%	6%	9%	7%	7%	12%	7%	6%	6%	6%	10%	8%	5%	7%	6%
2015	6%	7%	7%	8%	5%	8%	6%	6%	11%	7%	6%	7%	7%	10%	7%	5%	6%	6%

continued

Table TA.9b Percentage of Claims with More Than 7 Days of Lost Time by Injury Group (continued)

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
<i>Other injuries</i>																		
2010	16%	14%	14%	13%	16%	14%	16%	16%	16%	13%	15%	15%	15%	13%	15%	13%	14%	16%
2011	17%	15%	13%	13%	15%	14%	16%	17%	17%	13%	14%	15%	16%	13%	15%	14%	15%	15%
2012	17%	14%	13%	13%	16%	14%	16%	16%	16%	14%	15%	16%	15%	13%	15%	14%	14%	17%
2013	15%	14%	13%	12%	15%	14%	16%	14%	15%	14%	14%	16%	15%	13%	15%	14%	15%	17%
2014	16%	14%	14%	13%	16%	13%	15%	16%	14%	14%	13%	17%	14%	13%	14%	14%	15%	17%
2015	16%	14%	14%	13%	17%	13%	16%	14%	15%	14%	15%	17%	15%	12%	15%	15%	15%	17%
<i>Other sprains and strains</i>																		
2010	21%	22%	24%	22%	25%	24%	24%	25%	23%	23%	25%	22%	22%	21%	24%	24%	24%	24%
2011	21%	22%	24%	23%	26%	24%	24%	25%	21%	23%	25%	23%	23%	22%	26%	23%	25%	25%
2012	23%	22%	24%	23%	26%	24%	24%	26%	22%	23%	25%	24%	24%	23%	25%	23%	25%	24%
2013	24%	22%	25%	24%	26%	24%	25%	26%	21%	22%	27%	24%	25%	22%	26%	23%	24%	25%
2014	24%	23%	25%	24%	28%	26%	25%	27%	23%	23%	28%	26%	27%	23%	27%	23%	26%	26%
2015	23%	24%	25%	25%	27%	26%	27%	27%	22%	24%	28%	24%	26%	24%	27%	24%	26%	27%
<i>Skin</i>																		
2010	3%	2%	2%	2%	2%	2%	3%	2%	3%	2%	2%	2%	2%	2%	2%	2%	3%	2%
2011	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	3%	2%
2012	3%	2%	2%	2%	2%	2%	2%	2%	3%	2%	1%	2%	2%	2%	2%	2%	2%	2%
2013	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	1%	2%	2%	2%	2%	2%	2%	1%
2014	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2015	3%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<i>Spine sprains, strains, and non-specific pain</i>																		
2010	15%	20%	18%	18%	14%	17%	13%	16%	18%	21%	17%	22%	16%	16%	16%	18%	16%	15%
2011	14%	19%	18%	17%	14%	16%	13%	16%	18%	20%	16%	21%	16%	16%	16%	17%	16%	15%
2012	15%	19%	19%	17%	13%	17%	12%	14%	15%	20%	17%	20%	16%	16%	15%	17%	17%	16%
2013	14%	20%	18%	16%	13%	17%	12%	15%	16%	19%	16%	19%	16%	15%	15%	17%	15%	15%
2014	13%	20%	17%	17%	12%	16%	11%	15%	17%	19%	16%	19%	15%	15%	15%	17%	15%	14%
2015	13%	19%	17%	17%	11%	16%	11%	16%	16%	18%	14%	18%	15%	15%	14%	16%	14%	14%
<i>Upper extremity neurologic</i>																		
2010	4%	3%	1%	2%	5%	3%	2%	2%	1%	1%	3%	4%	1%	1%	3%	1%	0%	4%
2011	3%	3%	1%	2%	4%	2%	2%	2%	1%	1%	3%	3%	1%	1%	2%	1%	0%	4%
2012	2%	3%	1%	2%	4%	2%	2%	2%	1%	1%	3%	3%	1%	1%	2%	1%	0%	3%
2013	2%	3%	1%	2%	3%	2%	2%	2%	1%	1%	2%	3%	1%	1%	3%	0%	0%	3%
2014	2%	2%	1%	2%	3%	2%	2%	2%	1%	1%	2%	3%	1%	1%	2%	0%	0%	3%
2015	1%	2%	1%	2%	3%	2%	2%	1%	1%	1%	3%	3%	1%	1%	2%	0%	0%	3%

Notes: 2015 refers to injury year/evaluation 2015/2016 and includes claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016. We denote other injury year/evaluations similarly.

Table TA.10 Case-Mix Adjustment Example: Distribution of Percentage of Claims by Injury and Industry in California, 2015/2016 Claims with More Than 7 Days of Lost Time**a. Injury/Industry Case-Mix Adjustment: Distribution of Injury and Industry for the All-State Pooled Sample**

Industry Group	Injury Type											
	Fractures - Lower Extremity	Fractures - Upper Extremity	Hand Lacerations	Inflammation	Knee Derangement	Lacerations and Contusions	Neurologic Spine Pain	Other	Other Sprains and Strains	Skin	Spine Sprains, Strains, and Non-Specific Pain	Upper Extremity Neurologic
Manufacturing	0.70	1.27	0.77	1.68	0.73	1.41	1.01	2.55	3.78	0.42	1.93	0.56
Construction	0.71	0.87	0.39	0.63	0.51	0.83	0.64	1.62	1.98	0.24	1.18	0.06
Clerical and professional	0.44	0.46	0.08	0.68	0.32	0.50	0.49	0.84	1.73	0.09	1.05	0.25
Trade	0.78	0.77	0.38	1.27	0.67	1.46	1.19	1.95	3.82	0.22	2.76	0.20
High-risk services	1.01	1.13	0.80	1.98	0.99	2.00	1.85	2.78	6.52	0.68	4.79	0.19
Low-risk services	0.63	0.71	0.22	1.20	0.71	0.95	1.05	1.61	3.54	0.15	2.41	0.22
Other	0.57	0.68	0.32	1.10	0.59	1.25	0.82	1.71	3.54	0.20	2.17	0.12

b. Injury/Industry Case-Mix Adjustment: Distribution of Injury and Industry for a Single State (California)

Industry Group	Injury Type											
	Fractures - Lower Extremity	Fractures - Upper Extremity	Hand Lacerations	Inflammation	Knee Derangement	Lacerations and Contusions	Neurologic Spine Pain	Other	Other Sprains and Strains	Skin	Spine Sprains, Strains, and Non-Specific Pain	Upper Extremity Neurologic
Manufacturing	0.38	0.72	0.64	1.46	0.48	0.99	0.81	1.63	2.63	0.21	1.88	0.33
Construction	0.64	0.98	0.52	0.68	0.56	1.03	0.61	1.56	2.29	0.21	1.73	0.05
Clerical and professional	0.35	0.37	0.10	1.18	0.29	0.73	0.74	1.06	2.26	0.11	1.79	0.50
Trade	0.60	0.61	0.45	1.58	0.69	1.56	1.18	1.80	3.82	0.23	3.26	0.32
High-risk services	0.69	0.75	0.91	2.27	0.90	2.08	1.72	2.43	6.32	0.60	5.14	0.30
Low-risk services	0.43	0.44	0.23	1.48	0.58	0.96	1.04	1.43	3.39	0.15	2.71	0.34
Other	0.48	0.66	0.38	1.15	0.58	1.68	0.78	1.80	3.63	0.20	2.60	0.18

c. Injury/Industry Case-Mix Adjustment: Adjustment Weights for the State (California)

Industry Group	Injury Type											
	Fractures - Lower Extremity	Fractures - Upper Extremity	Hand Lacerations	Inflammation	Knee Derangement	Lacerations and Contusions	Neurologic Spine Pain	Other	Other Sprains and Strains	Skin	Spine Sprains, Strains, and Non-Specific Pain	Upper Extremity Neurologic
Manufacturing	1.84	1.76	1.19	1.15	1.51	1.42	1.25	1.57	1.44	2.01	1.02	1.73
Construction	1.10	0.88	0.73	0.92	0.90	0.80	1.04	1.03	0.86	1.11	0.68	1.22
Clerical and professional	1.23	1.25	0.79	0.57	1.11	0.68	0.66	0.79	0.76	0.75	0.58	0.50
Trade	1.31	1.26	0.83	0.80	0.97	0.93	1.01	1.08	1.00	0.95	0.84	0.61
High-risk services	1.47	1.52	0.88	0.87	1.11	0.96	1.07	1.15	1.03	1.14	0.93	0.65
Low-risk services	1.45	1.62	0.99	0.81	1.23	0.99	1.01	1.13	1.05	1.04	0.89	0.64
Other	1.20	1.03	0.83	0.95	1.02	0.74	1.05	0.95	0.98	0.98	0.84	0.67

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

Table TA.11 Effect of Data Capping on Medical Payments, 2015/2016 Claims with More Than 7 Days of Lost Time

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Claims with caps on medical payments (percentage)																		
Medical payments overall	2.2	2.2	1.8	2.7	2.0	2.1	2.0	2.8	2.8	1.6	1.9	0.8	1.9	1.9	2.3	2.2	2.2	1.9
Nonhospital	0.3	0.3	0.7	0.6	0.4	0.5	0.4	0.7	0.6	0.1	0.4	0.4	0.6	0.6	0.6	0.9	0.5	0.4
Physician	0.7	0.4	0.2	0.4	0.6	0.3	0.3	0.5	0.2	0.6	0.7	0.5	0.5	0.3	0.5	0.4	0.5	0.5
Chiropractor	0.0	0.4	1.2	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.2	0.0	0.4	0.3	0.3	0.0	0.0
Physical/occupational therapist	0.0	0.4	0.3	0.2	0.3	0.2	0.4	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.3	0.3	0.2	0.2
Other	0.0	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.4	0.2	0.3	0.1	0.4	0.4	0.3	0.2	0.2	0.3
Hospital inpatient	0.0	0.4	0.7	0.9	0.0	0.0	0.2	0.0	0.2	0.0	0.6	0.0	0.0	0.5	0.5	0.3	0.0	0.4
Hospital outpatient	0.2	0.3	0.3	0.6	0.3	0.2	0.6	0.8	0.3	0.1	0.3	0.4	0.3	0.4	0.4	0.6	0.2	0.4
Percentage change after data caps applied^a																		
Medical payments overall	-5.4	-3.3	-4.2	-4.1	-0.8	-0.7	-1.0	-6.6	-2.3	-0.8	-2.9	-0.5	-1.4	-2.2	-6.6	-2.6	-1.2	-1.0
Nonhospital	0.0	-1.4	-0.2	-0.5	-0.6	-0.1	0.0	0.0	-0.3	-0.1	-0.3	0.0	-0.1	-0.1	-0.3	-0.5	-0.6	0.0
Physician	0.7	0.4	0.2	0.4	0.6	0.1	0.3	0.5	0.2	0.6	0.5	0.5	0.5	0.3	0.1	0.3	-0.1	0.5
Chiropractor	0.0	0.4	1.2	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.2	0.0	0.4	0.3	0.3	0.0	0.0
Physical/occupational therapist	0.0	-5.5	0.2	0.2	0.3	0.2	0.4	0.1	0.1	-0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.2
Other	0.0	-5.3	-1.7	-3.6	-8.3	0.2	-1.0	0.3	-3.5	0.0	-0.9	-1.6	-0.6	-4.8	-0.1	-2.1	0.2	-3.5
Hospital inpatient	0.0	-1.3	-4.9	-2.5	0.0	0.0	-0.6	0.0	-15.1	0.0	-2.8	0.0	0.0	-3.4	-9.8	-3.9	0.0	-0.5
Hospital outpatient	-0.6	-1.2	-1.1	-2.5	0.3	-0.4	0.4	-10.0	0.3	-0.3	-0.3	0.2	0.3	-0.2	-0.4	0.3	-0.3	0.4

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016. A value of 0.0 means the number of claims affected by data capping was less than 0.05 percentage points, or the changes in payments after data caps applied were less than 0.05 percent.

^aThe effects of data capping may be negative or positive since we applied both upper and lower bounds. A positive number means that more claims with extremely small values were below the lower bound and excluded, and no claims with large values were above the upper bound.

Table TA.12 A Comparison of Trend Results: CompScope™ Medical and CompScope™, Claims with More Than 7 Days of Lost Time at 12 Months' Maturity, 2010/2011–2015/2016, Not Adjusted for Injury and Industry Mix

Measures ^a	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Average annual percentage change from 2010/2011 to 2015/2016																		
Average medical payment per claim for claims included in the CompScope™ data	0.8%	-1.5%	2.9%	0.9%	4.7%	-2.3%	1.1%	2.1%	4.0%	1.7%	2.2%	1.0%	-2.8%	1.3%	4.6%	2.7%	3.3%	3.9%
Average payment per claim based on medical bills from claims included in the CompScope™ Medical data	-0.1%	-2.0%	3.2%	1.6%	3.3%	-2.8%	1.5%	2.7%	3.0%	1.5%	1.6%	0.4%	-4.1%	1.4%	4.2%	2.4%	2.1%	4.1%
Percentage point difference	-0.9	-0.5	0.2	0.7	-1.4	-0.5	0.4	0.4	-0.9	-0.2	-0.6	-0.6	-1.4	0.1	-0.4	-0.4	-1.1	0.2

Notes: 2010/2011 refers to claims with injuries arising from October 1, 2009, to September 30, 2010, evaluated as of March 31, 2011. 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

^a In our data, we have two sources of payments for medical services—the medical payments paid out by the payors for the medical services, and the medical bills charged by medical providers and subsequently reviewed and repriced through the bill review process. In this table, the average medical payment per claim was calculated based on the payment transaction data, and the average bill-review payment per claim was based on the detailed medical bill review data. We make this distinction in this table to analyze the difference between the two sources of data. We use the terms *medical payments* and *bill review payments* interchangeably elsewhere in the detailed analysis of medical services.

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Table TA.13 A Comparison of Claim Characteristics: CompScope™ Medical and CompScope™, 2015/2016 Claims with More Than 7 Days of Lost Time

Comparison	State Results																		18-State Median ^a
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	
Workers' characteristics																			
Average age (years)																			
CompScope™	44	43	45	42	45	44	44	44	43	44	44	44	44	44	45	43	44	44	44
CompScope™ Medical	44	43	45	42	44	44	44	43	43	44	44	44	45	44	44	43	43	44	44
Gender (percentage male)																			
CompScope™	73%	62%	60%	60%	66%	65%	65%	64%	64%	68%	60%	61%	62%	67%	66%	71%	62%	64%	64%
CompScope™ Medical	72%	64%	64%	63%	66%	67%	65%	64%	65%	71%	61%	62%	64%	69%	67%	69%	64%	63%	65%
Industry classification (percentage)																			
Clerical and professional																			
CompScope™	4%	9%	6%	6%	9%	5%	4%	4%	13%	8%	5%	7%	5%	7%	7%	6%	7%	5%	6%
CompScope™ Medical	4%	9%	7%	6%	9%	6%	4%	4%	6%	8%	5%	6%	4%	6%	7%	6%	7%	5%	6%
Construction																			
CompScope™	9%	10%	6%	6%	8%	6%	5%	5%	13%	12%	5%	6%	8%	9%	7%	15%	10%	6%	7%
CompScope™ Medical	10%	11%	7%	6%	8%	7%	6%	4%	15%	13%	5%	7%	8%	10%	7%	16%	10%	8%	8%
Services ^b																			
CompScope™	55%	55%	64%	59%	46%	54%	52%	53%	53%	57%	57%	57%	54%	60%	54%	48%	59%	45%	55%
CompScope™ Medical	53%	53%	62%	58%	47%	53%	50%	52%	56%	55%	56%	56%	52%	58%	52%	47%	58%	47%	53%
Manufacturing																			
CompScope™	25%	12%	7%	17%	28%	18%	33%	25%	10%	14%	24%	22%	19%	12%	22%	16%	13%	38%	19%
CompScope™ Medical	26%	12%	8%	17%	29%	19%	35%	25%	12%	14%	25%	22%	20%	13%	22%	16%	14%	34%	19%
Other industries																			
CompScope™	7%	13%	16%	13%	9%	15%	6%	13%	10%	9%	9%	8%	14%	13%	10%	14%	11%	6%	11%
CompScope™ Medical	8%	14%	17%	13%	7%	16%	5%	15%	12%	10%	9%	9%	16%	13%	11%	15%	11%	6%	12%
Injury classification (percentage)																			
Sprains, strains, and nonspecific pain ^c																			
CompScope™	36%	44%	42%	42%	39%	42%	37%	43%	38%	42%	42%	42%	42%	38%	42%	40%	40%	40%	42%
CompScope™ Medical	35%	43%	41%	42%	39%	42%	37%	42%	38%	42%	41%	41%	41%	38%	42%	40%	41%	39%	41%
Fractures ^d																			
CompScope™	15%	7%	10%	9%	11%	9%	12%	12%	11%	10%	12%	10%	12%	11%	10%	13%	13%	10%	11%
CompScope™ Medical	17%	8%	11%	10%	11%	9%	13%	12%	12%	10%	12%	10%	13%	11%	11%	14%	14%	11%	11%
Inflammations, lacerations, and contusions ^e																			
CompScope™	18%	21%	20%	20%	17%	19%	19%	17%	17%	20%	18%	16%	18%	22%	18%	20%	18%	18%	18%
CompScope™ Medical	18%	22%	19%	20%	16%	20%	19%	17%	16%	20%	18%	15%	18%	22%	18%	21%	18%	18%	18%
Carpal tunnel ^f																			
CompScope™	1%	2%	1%	2%	3%	2%	2%	1%	1%	1%	3%	3%	1%	1%	2%	0%	0%	3%	2%
CompScope™ Medical	1%	2%	1%	2%	4%	2%	3%	2%	1%	1%	3%	3%	1%	1%	2%	0%	0%	3%	2%
Other injuries ^g																			
CompScope™	30%	26%	27%	27%	30%	28%	29%	27%	33%	27%	26%	30%	27%	29%	28%	26%	28%	29%	28%
CompScope™ Medical	29%	24%	27%	26%	30%	27%	29%	27%	33%	27%	26%	30%	26%	28%	28%	25%	27%	30%	27%

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016. Used in the comparison is the CompScope™ Medical Data Set I, the analysis data we used to construct performance measures for medical services overall and by provider type.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

^b The services industry classification is based on data for the high-risk services, low-risk services, and trade industry categories. See Table TA.8 for a detailed description of the industry categories.

^c The sprains, strains, and nonspecific pain injury classification is based on data for the spine (back and neck) sprains, strains, and nonspecific pain and other sprains and strains injury categories.

^d The fractures injury classification is based on data for the fractures (at lower extremity) and fractures (at upper extremity) injury categories.

^e The inflammations, lacerations, and contusions injury classification is based on data for the inflammations, lacerations, and contusions and hand lacerations injury categories.

^f The carpal tunnel injury classification is based on data for the carpal tunnel injury category.

^g The other injuries classification is based on data for the knee derangement, neurological spine pain, skin, and other injury categories.

Table TA.14a Summary of Medical Payment Distribution for Group A and Group B Procedures by Provider Type,^a 2015/2016 Claims with More Than 7 Days of Lost Time

Group	AR ^b	CA	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	Median
Chiropractors																			
Group A	n/a	78.3%	91.8%	n/a	92.0%	93.6%	n/a	96.7%	96.2%	95.9%	98.4%	97.8%	n/a	96.9%	91.6%	96.5%	n/a	96.5%	96.2%
Group B	n/a	21.7%	8.2%	n/a	8.0%	6.4%	n/a	3.3%	3.8%	4.1%	1.6%	2.2%	n/a	3.1%	8.4%	3.5%	n/a	3.5%	3.8%
Anesthesia	n/a	0.0%	0.0%	n/a	4.6%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	0.0%
Laboratory	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.1%	n/a	0.0%	0.0%
Special report	n/a	15.3%	0.0%	n/a	0.0%	0.3%	n/a	0.0%	0.2%	0.1%	0.0%	0.0%	n/a	0.0%	0.0%	1.2%	n/a	0.0%	0.0%
Supplies and equipment	n/a	0.5%	7.1%	n/a	0.0%	2.8%	n/a	2.5%	0.7%	1.3%	0.1%	0.3%	n/a	0.9%	3.5%	1.4%	n/a	0.9%	0.9%
Other medical/diagnostic services	n/a	0.8%	1.1%	n/a	0.2%	2.9%	n/a	0.7%	0.3%	2.1%	1.6%	0.6%	n/a	2.2%	4.9%	0.6%	n/a	2.4%	1.1%
Drugs	n/a	0.1%	0.0%	n/a	0.0%	0.3%	n/a	0.0%	0.0%	0.1%	0.0%	0.0%	n/a	0.0%	0.0%	0.1%	n/a	0.0%	0.0%
Miscellaneous ambulatory surgical care	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	0.0%
Treatment/operating/recovery room	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	0.0%
Unclassified services	n/a	4.8%	0.0%	n/a	3.1%	0.1%	n/a	0.0%	2.5%	0.6%	0.0%	1.3%	n/a	0.0%	0.0%	0.2%	n/a	0.2%	0.2%
Physical/occupational therapists																			
Group A	96.0%	90.5%	98.2%	98.1%	97.8%	98.5%	97.8%	98.9%	98.3%	94.0%	97.8%	94.5%	98.5%	98.6%	97.8%	97.0%	99.0%	96.4%	97.8%
Group B	4.0%	9.5%	1.8%	1.9%	2.2%	1.5%	2.2%	1.1%	1.7%	6.0%	2.2%	5.5%	1.5%	1.4%	2.2%	3.0%	1.0%	3.6%	2.2%
Anesthesia	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
Laboratory	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Special report	0.2%	0.5%	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.7%	0.1%	0.0%	0.0%	0.8%	0.0%	0.0%	0.1%
Supplies and equipment	0.5%	0.8%	0.6%	0.7%	1.0%	0.5%	1.3%	0.5%	0.8%	1.1%	0.4%	2.8%	0.6%	0.3%	0.8%	0.7%	0.6%	1.1%	0.7%
Other medical/diagnostic services	0.5%	1.2%	0.4%	0.4%	0.2%	0.6%	0.5%	0.4%	0.3%	0.5%	0.4%	0.8%	0.3%	0.6%	0.4%	0.5%	0.2%	0.7%	0.4%
Drugs	0.1%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.4%	0.2%	0.1%	0.0%	0.1%	0.1%	0.2%	0.1%	0.4%	0.1%
Miscellaneous ambulatory surgical care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment/operating/recovery room	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.1%	0.0%	0.2%	1.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.7%	0.0%
Unclassified services	2.6%	6.5%	0.5%	0.4%	0.0%	0.2%	0.1%	0.0%	0.1%	2.5%	1.0%	0.6%	0.4%	0.3%	0.8%	0.7%	0.0%	0.3%	0.4%
Physicians																			
Group A	57.2%	58.6%	43.2%	50.8%	60.9%	56.4%	58.4%	57.6%	51.8%	79.4%	69.5%	50.4%	59.6%	58.2%	68.0%	63.2%	55.6%	70.7%	58.3%
Group B	42.8%	41.4%	56.8%	49.2%	39.1%	43.6%	41.6%	42.4%	48.2%	20.6%	30.5%	49.6%	40.4%	41.8%	32.0%	36.8%	44.4%	29.3%	41.7%
Anesthesia	4.9%	2.7%	2.6%	2.7%	6.5%	4.6%	5.4%	7.7%	4.0%	4.8%	6.5%	8.7%	4.1%	8.4%	6.2%	4.6%	6.5%	6.8%	5.2%
Laboratory	0.3%	0.5%	0.7%	0.6%	0.3%	0.5%	0.1%	0.5%	1.2%	0.3%	0.2%	0.5%	0.3%	0.2%	0.5%	0.7%	0.3%	0.5%	0.5%
Special report	2.6%	8.0%	1.5%	0.7%	0.7%	1.2%	0.5%	0.6%	0.7%	0.9%	1.3%	0.6%	1.4%	0.4%	0.9%	7.7%	0.4%	0.7%	0.8%
Supplies and equipment	5.6%	2.7%	4.9%	3.1%	2.9%	3.6%	3.0%	4.0%	3.1%	1.6%	2.3%	3.2%	2.4%	2.2%	4.8%	2.1%	3.7%	1.6%	3.1%
Other medical/diagnostic services	9.3%	5.4%	6.0%	7.8%	6.9%	6.2%	6.8%	6.9%	5.6%	7.1%	8.8%	6.1%	7.1%	7.7%	8.4%	7.4%	6.9%	8.4%	7.0%
Drugs	1.0%	3.6%	6.3%	3.4%	0.7%	5.0%	0.8%	1.3%	2.6%	0.3%	2.2%	0.8%	1.1%	0.4%	1.4%	1.1%	1.0%	0.5%	1.1%
Miscellaneous ambulatory surgical care	8.3%	1.5%	6.8%	5.3%	10.6%	3.4%	5.7%	13.4%	19.1%	0.7%	0.5%	15.3%	10.2%	12.4%	3.6%	0.0%	11.0%	2.3%	6.2%
Treatment/operating/recovery room	10.1%	15.3%	27.1%	25.2%	10.1%	18.5%	18.5%	7.6%	11.1%	4.5%	8.2%	12.3%	12.6%	9.8%	5.4%	12.7%	14.1%	7.9%	11.7%
Unclassified services	0.7%	1.7%	1.0%	0.5%	0.3%	0.5%	0.7%	0.4%	0.7%	0.3%	0.5%	2.1%	1.2%	0.3%	0.8%	0.5%	0.4%	0.7%	0.6%

continued

Table TA.14a Summary of Medical Payment Distribution for Group A and Group B Procedures by Provider Type,^a 2015/2016 Claims with More Than 7 Days of Lost Time (continued)

Group	AR ^b	CA	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	Median
Other providers																			
Group A	8.9%	17.4%	7.6%	7.1%	21.6%	13.0%	13.8%	6.4%	8.2%	18.1%	6.2%	16.3%	9.4%	15.4%	10.2%	12.4%	16.4%	21.1%	12.7%
Group B	91.1%	82.6%	92.4%	92.9%	78.4%	87.0%	86.2%	93.6%	91.8%	81.9%	93.8%	83.7%	90.6%	84.6%	89.8%	87.6%	83.6%	78.9%	87.3%
Anesthesia	3.3%	0.8%	2.0%	3.3%	4.9%	2.5%	2.9%	5.3%	3.5%	1.6%	4.6%	10.8%	2.5%	1.8%	1.8%	4.0%	2.0%	7.1%	3.1%
Laboratory	0.7%	4.1%	3.2%	1.5%	1.6%	4.4%	1.3%	1.8%	3.4%	0.8%	1.4%	0.3%	0.9%	2.1%	2.1%	3.9%	2.1%	1.0%	1.7%
Special report	0.2%	2.4%	0.1%	0.2%	0.2%	0.9%	0.1%	0.0%	0.0%	1.1%	0.6%	0.8%	0.1%	0.8%	0.2%	0.3%	0.3%	0.8%	0.3%
Supplies and equipment	19.5%	24.0%	19.9%	31.1%	28.0%	33.1%	31.6%	29.8%	24.3%	26.9%	43.5%	23.0%	25.5%	33.0%	27.7%	21.9%	27.8%	30.3%	27.8%
Other medical/diagnostic services	43.5%	24.2%	26.3%	29.0%	17.0%	14.3%	23.9%	29.2%	20.8%	19.5%	20.7%	20.1%	27.7%	19.6%	15.2%	20.5%	19.6%	18.1%	20.6%
Drugs	23.4%	18.0%	36.2%	25.3%	17.9%	27.2%	23.2%	24.0%	35.7%	24.2%	20.2%	20.5%	29.4%	17.5%	38.7%	34.1%	28.7%	16.8%	24.1%
Miscellaneous ambulatory surgical care	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment/operating/recovery room	0.2%	0.0%	0.1%	0.0%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.3%	0.3%	0.0%	0.3%	0.2%	0.1%
Unclassified services	0.4%	2.9%	3.0%	1.9%	1.0%	2.9%	0.8%	1.9%	1.5%	1.2%	0.9%	5.2%	2.3%	1.2%	2.2%	2.0%	1.2%	1.6%	1.7%
All other services ^c	0.0%	6.0%	1.5%	0.6%	7.5%	1.2%	2.5%	1.5%	2.4%	6.6%	1.8%	2.7%	2.0%	8.3%	1.7%	1.0%	1.6%	2.9%	1.9%
Hospital outpatient																			
Group A	61.7%	85.1%	66.9%	78.3%	73.9%	75.5%	83.8%	68.4%	72.3%	79.5%	76.3%	71.1%	73.6%	73.4%	65.4%	88.7%	70.1%	81.0%	73.8%
Group B	38.3%	14.9%	33.1%	21.7%	26.1%	24.5%	16.2%	31.6%	27.7%	20.5%	23.7%	28.9%	26.4%	26.6%	34.6%	11.3%	29.9%	19.0%	26.2%
Anesthesia	8.2%	1.1%	7.1%	1.8%	3.9%	5.4%	1.6%	3.9%	5.6%	3.9%	5.3%	4.1%	7.4%	3.8%	3.5%	1.1%	5.4%	4.9%	4.0%
Drugs	9.1%	1.8%	6.4%	3.8%	4.8%	4.8%	1.4%	5.0%	5.2%	2.1%	4.0%	5.3%	3.5%	2.5%	4.5%	1.0%	4.8%	4.2%	4.4%
Supplies and equipment	12.7%	2.7%	10.8%	6.0%	9.3%	8.2%	5.6%	17.2%	12.7%	7.8%	9.6%	9.9%	10.0%	8.5%	10.0%	2.7%	15.0%	6.8%	9.4%
Other medical/diagnostic services	6.2%	6.5%	6.9%	7.9%	4.4%	4.1%	4.8%	4.4%	2.5%	3.5%	3.6%	4.7%	3.9%	5.3%	2.5%	4.9%	3.2%	2.2%	4.4%
Major surgery	0.6%	1.0%	0.2%	0.4%	0.6%	0.5%	0.5%	0.1%	0.2%	0.2%	0.3%	0.9%	0.2%	0.2%	0.2%	0.3%	0.1%	0.2%	0.3%
Pain management injections	0.1%	0.1%	0.2%	0.2%	0.8%	0.2%	0.7%	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
Miscellaneous ambulatory services	0.0%	0.4%	0.3%	0.6%	0.3%	0.2%	0.4%	0.4%	0.5%	0.3%	0.0%	1.8%	0.4%	4.9%	0.5%	0.0%	0.5%	0.0%	0.4%
Unclassified services	1.2%	1.1%	1.2%	1.1%	1.7%	1.0%	1.2%	0.4%	0.9%	2.4%	0.8%	2.0%	0.9%	1.3%	13.3%	1.0%	0.5%	0.3%	1.1%
All other services ^c	0.1%	0.1%	0.1%	0.0%	0.3%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.3%	0.1%	0.1%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

^a Note that the percentage of payments within each provider type across Group A and Group B services will equal 100 percent.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c All other services by other providers includes other facility services such as hospice, skilled nursing facilities that are not hospital based, etc. This category represents a small percentage of payments for other providers, and it is not included in the analysis or Figure TA.2. All other services by hospital outpatient includes undefined services provided in a hospital outpatient setting. These payments represent such a small percentage of total payments made to hospital outpatient settings that they are not meaningful in the analysis and are not included in Figure TA.2.

Key: n/a: not available.

Table TA.14b Percentage of Claims with Group A and Group B Procedures by Provider Type, 2015/2016 Claims with More Than 7 Days of Lost Time ^a

Group	AR ^b	CA	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	Median
Chiropractors																			
Group A	n/a	97.0%	100.0%	n/a	97.8%	99.9%	n/a	100.0%	98.5%	100.0%	100.0%	99.7%	n/a	99.4%	99.7%	91.5%	n/a	100.0%	99.7%
Group B	n/a	41.1%	29.9%	n/a	9.2%	34.3%	n/a	17.7%	21.4%	18.4%	5.1%	29.5%	n/a	8.5%	31.8%	45.4%	n/a	23.9%	23.9%
Anesthesia	n/a	0.0%	0.0%	n/a	3.0%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.1%	0.1%	n/a	0.0%	0.0%
Laboratory	n/a	0.7%	0.0%	n/a	0.0%	1.1%	n/a	0.0%	1.2%	0.3%	0.0%	0.2%	n/a	0.0%	0.3%	0.4%	n/a	0.4%	0.3%
Special report	n/a	34.1%	0.0%	n/a	1.4%	5.7%	n/a	0.0%	2.6%	1.3%	0.0%	0.3%	n/a	0.0%	0.0%	38.0%	n/a	0.6%	0.6%
Supplies and equipment	n/a	5.1%	20.0%	n/a	0.0%	13.9%	n/a	13.2%	12.8%	14.2%	2.5%	8.5%	n/a	4.9%	22.4%	9.1%	n/a	17.0%	12.8%
Other medical/diagnostic services	n/a	4.7%	15.0%	n/a	1.2%	15.2%	n/a	6.2%	4.0%	2.1%	2.7%	6.1%	n/a	3.4%	14.4%	6.0%	n/a	8.5%	6.0%
Drugs	n/a	1.7%	0.6%	n/a	0.0%	1.9%	n/a	0.7%	0.0%	1.5%	0.0%	1.0%	n/a	0.0%	0.7%	1.3%	n/a	0.4%	0.7%
Miscellaneous ambulatory surgical care	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	0.3%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	0.0%
Treatment/operating/recovery room	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	0.0%
Unclassified services	n/a	4.9%	0.0%	n/a	3.6%	10.0%	n/a	0.8%	5.9%	2.3%	0.0%	17.7%	n/a	1.5%	0.6%	3.9%	n/a	2.6%	2.6%
Physical/occupational therapists																			
Group A	99.6%	99.8%	99.8%	99.6%	99.5%	99.2%	100.0%	99.6%	99.5%	99.2%	99.9%	98.0%	99.5%	99.8%	99.3%	99.2%	99.8%	98.5%	99.6%
Group B	19.2%	27.6%	14.3%	22.3%	17.4%	27.6%	29.9%	19.1%	23.2%	18.1%	26.7%	45.0%	20.7%	22.8%	25.2%	30.1%	18.2%	36.8%	23.0%
Anesthesia	0.0%	0.1%	0.1%	0.0%	0.2%	0.1%	1.2%	0.1%	0.5%	0.3%	0.1%	0.2%	0.3%	0.0%	0.1%	0.1%	0.1%	0.6%	0.1%
Laboratory	0.4%	0.5%	0.5%	0.4%	0.5%	0.5%	0.2%	0.8%	0.6%	0.8%	0.4%	0.1%	0.3%	0.3%	0.7%	0.8%	0.6%	0.9%	0.5%
Special report	4.3%	8.6%	0.7%	1.0%	0.6%	0.6%	0.8%	0.1%	0.6%	0.1%	0.4%	2.8%	1.5%	0.1%	0.1%	12.0%	0.0%	0.8%	0.7%
Supplies and equipment	8.5%	12.9%	9.9%	17.4%	10.6%	17.0%	21.6%	11.6%	16.5%	11.6%	13.0%	17.5%	11.5%	17.6%	17.2%	11.3%	13.1%	24.2%	13.0%
Other medical/diagnostic services	6.4%	11.9%	4.6%	4.9%	6.7%	12.6%	12.9%	8.1%	7.7%	6.6%	16.4%	12.8%	8.4%	8.1%	9.0%	7.1%	5.6%	17.3%	8.1%
Drugs	1.2%	3.2%	1.8%	1.8%	2.6%	2.6%	5.0%	2.1%	1.3%	4.4%	6.2%	3.0%	2.0%	1.9%	6.3%	2.4%	1.5%	3.4%	2.5%
Miscellaneous ambulatory surgical care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment/operating/recovery room	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.1%	0.1%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%	0.0%
Unclassified services	2.9%	1.9%	0.6%	1.0%	0.9%	2.6%	1.8%	0.9%	1.4%	2.2%	1.3%	25.7%	1.7%	0.6%	2.1%	5.6%	1.3%	3.8%	1.7%
Physicians																			
Group A	100.0%	99.6%	99.9%	100.0%	100.0%	99.9%	100.0%	100.0%	99.8%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Group B	83.3%	95.8%	89.6%	85.5%	72.8%	80.9%	82.5%	74.9%	77.1%	58.7%	80.7%	75.0%	80.1%	79.3%	75.9%	93.5%	76.5%	72.1%	79.7%
Anesthesia	31.4%	23.6%	26.6%	28.2%	32.1%	31.5%	37.2%	30.3%	32.1%	24.3%	33.9%	29.1%	32.9%	35.0%	33.2%	27.6%	31.0%	30.8%	31.2%
Laboratory	16.3%	15.7%	22.6%	15.1%	14.2%	16.0%	8.3%	11.3%	23.3%	7.4%	7.7%	15.5%	12.3%	11.8%	8.3%	18.1%	11.2%	15.7%	14.7%
Special report	49.8%	87.6%	35.3%	13.3%	9.1%	10.2%	11.3%	2.8%	11.3%	4.0%	3.3%	4.9%	26.2%	5.3%	3.0%	82.9%	4.8%	13.1%	10.8%
Supplies and equipment	31.0%	48.6%	43.5%	43.5%	33.1%	43.7%	42.4%	26.7%	32.7%	19.0%	30.6%	29.0%	37.9%	43.2%	31.4%	34.7%	38.3%	28.4%	33.9%
Other medical/diagnostic services	49.4%	44.1%	57.6%	55.6%	47.8%	50.9%	55.1%	52.9%	50.7%	40.6%	51.1%	47.6%	50.7%	54.7%	51.3%	47.1%	52.2%	48.5%	50.8%
Drugs	27.6%	49.1%	51.5%	47.4%	28.1%	43.0%	37.7%	34.2%	24.3%	13.7%	39.7%	24.7%	29.5%	34.5%	31.2%	28.4%	31.9%	23.5%	31.5%
Miscellaneous ambulatory surgical care	8.1%	1.6%	4.3%	3.9%	7.8%	3.1%	5.1%	6.5%	7.1%	0.6%	0.2%	8.9%	5.6%	13.8%	3.9%	0.0%	7.2%	2.1%	4.7%
Treatment/operating/recovery room	10.9%	16.6%	16.6%	19.4%	7.6%	15.5%	12.5%	4.5%	5.6%	3.5%	8.0%	7.7%	9.6%	10.3%	8.2%	10.5%	8.5%	8.1%	9.0%
Unclassified services	5.1%	14.2%	8.2%	7.9%	4.9%	12.1%	6.0%	3.8%	9.1%	2.9%	5.2%	41.2%	5.2%	4.3%	4.6%	6.3%	6.9%	7.5%	6.2%

continued

Table TA.14b Percentage of Claims with Group A and Group B Procedures by Provider Type, 2015/2016 Claims with More Than 7 Days of Lost Time ^a (continued)

Group	AR ^b	CA	FL	GA ^b	IA	IL	IN ^b	KY	LA	MA	MI	MN	NC ^b	NJ	PA	TX	VA ^b	WI	Median
Other providers																			
Group A	27.7%	31.6%	18.9%	21.5%	27.0%	32.4%	26.1%	14.3%	25.5%	37.3%	21.8%	23.6%	22.8%	31.7%	29.1%	17.3%	30.0%	31.2%	26.6%
Group B	93.1%	95.6%	97.4%	97.1%	93.6%	92.5%	95.1%	97.5%	95.1%	86.3%	95.8%	94.7%	96.2%	91.2%	94.9%	98.6%	92.6%	92.3%	95.0%
Anesthesia	10.7%	3.6%	11.2%	17.0%	7.5%	7.0%	5.1%	9.9%	14.3%	4.6%	21.3%	16.1%	16.0%	3.1%	10.3%	12.9%	4.1%	9.2%	10.1%
Laboratory	3.2%	13.1%	11.3%	6.1%	4.8%	9.5%	4.5%	5.1%	8.9%	2.3%	3.2%	2.2%	3.2%	9.8%	6.2%	9.4%	6.3%	6.2%	6.1%
Special report	1.0%	9.6%	1.0%	0.7%	0.4%	1.5%	0.3%	0.0%	0.0%	1.4%	0.8%	0.6%	0.4%	1.7%	0.4%	2.7%	0.2%	1.2%	0.7%
Supplies and equipment	27.7%	32.4%	29.7%	34.5%	32.2%	35.6%	35.6%	38.9%	29.7%	33.4%	37.7%	28.8%	37.3%	38.9%	41.5%	27.6%	31.9%	30.3%	32.9%
Other medical/diagnostic services	16.7%	27.0%	27.1%	20.1%	18.9%	26.0%	19.9%	23.6%	20.7%	20.9%	19.9%	16.2%	21.0%	26.4%	24.1%	18.6%	21.9%	19.8%	20.8%
Drugs	75.3%	74.7%	80.8%	80.0%	74.4%	69.0%	79.6%	73.4%	77.8%	57.0%	73.1%	70.7%	77.9%	66.5%	74.1%	87.4%	75.9%	70.3%	74.5%
Miscellaneous ambulatory surgical care	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Treatment/operating/recovery room	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	0.0%	0.0%
Unclassified services	3.9%	11.8%	7.5%	7.4%	6.3%	14.8%	5.8%	10.8%	5.2%	4.7%	5.6%	10.2%	8.4%	6.8%	5.7%	5.6%	5.9%	5.4%	6.1%
All other services ^c	0.0%	0.3%	0.2%	0.2%	0.2%	0.3%	0.2%	0.3%	0.0%	0.6%	0.3%	0.4%	0.2%	0.6%	0.4%	0.1%	0.2%	0.5%	0.2%
Hospital outpatient																			
Group A	99.4%	97.2%	98.7%	96.2%	99.2%	98.8%	97.2%	99.1%	99.6%	99.6%	99.5%	98.5%	97.6%	97.5%	91.8%	98.3%	98.9%	99.7%	98.8%
Group B	72.4%	46.4%	79.1%	59.0%	71.9%	76.9%	55.1%	80.5%	77.1%	65.9%	74.9%	72.0%	60.4%	71.5%	77.1%	43.5%	73.7%	72.0%	72.0%
Anesthesia	20.1%	1.5%	17.5%	4.4%	23.6%	20.2%	7.1%	28.6%	30.3%	16.5%	32.2%	18.4%	15.8%	11.6%	23.7%	2.9%	21.1%	25.7%	19.2%
Drugs	50.9%	11.5%	65.7%	21.2%	57.9%	59.7%	18.4%	68.0%	65.2%	41.4%	63.1%	53.8%	34.1%	46.4%	59.3%	8.4%	59.0%	57.9%	55.8%
Supplies and equipment	40.8%	5.9%	37.8%	15.5%	35.3%	38.7%	16.7%	54.6%	45.6%	25.9%	41.4%	40.5%	26.1%	31.6%	36.0%	8.4%	34.6%	40.4%	35.6%
Other medical/diagnostic services	44.5%	34.9%	42.6%	42.7%	33.2%	35.2%	36.5%	39.6%	34.7%	29.8%	34.0%	32.4%	31.8%	35.4%	35.4%	31.9%	34.5%	28.0%	34.8%
Major surgery	1.2%	0.7%	0.4%	0.5%	0.9%	0.5%	0.5%	0.4%	0.4%	0.2%	0.7%	1.1%	0.4%	0.1%	1.1%	0.3%	0.4%	0.4%	0.4%
Pain management injections	1.5%	0.4%	0.9%	0.6%	2.5%	1.1%	2.5%	1.1%	0.4%	0.8%	1.1%	1.1%	1.0%	0.4%	1.1%	0.9%	0.7%	1.1%	1.0%
Miscellaneous ambulatory services	0.0%	0.2%	0.1%	0.3%	0.5%	0.3%	0.5%	0.5%	0.7%	0.4%	0.0%	2.1%	0.6%	4.3%	2.3%	0.1%	0.7%	0.0%	0.5%
Unclassified services	7.5%	4.0%	11.3%	6.6%	15.2%	13.9%	5.8%	19.0%	7.7%	30.7%	13.3%	11.7%	7.7%	19.8%	30.2%	3.7%	10.6%	10.5%	10.9%
All other services ^c	3.0%	3.3%	1.0%	0.4%	2.2%	2.3%	0.9%	1.6%	0.8%	0.9%	1.2%	1.2%	0.7%	0.2%	0.9%	1.5%	1.4%	1.5%	1.2%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, to September 30, 2015, evaluated as of March 31, 2016.

^a Since a claim can be associated with multiple services (e.g., may have both Group A and Group B services), the percentage of claims with Group A and with Group B services will not add up to 100 percent within a provider group. For the same reason, the sum of the percentage of claims for each individual Group B service will not add up to the overall percentage of claims with a Group B service.

^b The cell sizes underlying the data in Arkansas, Georgia, Indiana, North Carolina, and Virginia for chiropractic measures at the claim level are too small to support an interstate comparison.

^c All other services by other providers includes other facility services such as hospice, skilled nursing facilities that are not hospital based, etc. This category represents a small percentage of payments for other providers, and it is not included in the analysis or Figure TA.2. All other services by hospital outpatient includes undefined services provided in a hospital outpatient setting. These payments represent such a small percentage of total payments made to hospital outpatient settings that they are not meaningful in the analysis and are not included in Figure TA.2.

Key: n/a: not available.

Table TA.15 Description of Marketbasket Contents

Service Group (SG)	Number of CPT Codes	% of Expenditures in Each SG Captured by Marketbasket Codes	% of Overall Expenditures in Marketbasket Represented by Each SG	% of Services in Each SG Captured by Marketbasket Codes	% of Overall Services in Marketbasket Represented by Each SG
Emergency	5	95%	2%	89%	1%
Evaluation and management	13	95%	26%	96%	17%
Major radiology	14	90%	8%	86%	1%
Minor radiology	24	76%	4%	82%	5%
Neurological/neuromuscular testing	11	78%	2%	77%	1%
Physical medicine	19	94%	36%	95%	73%
Major surgery	13	44%	20%	41%	1%
Pain management injections	9	79%	2%	85%	1%

Key: CPT: Current Procedural Terminology; SG: service group.

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Table TA.16 Sensitivity Test: Percentage of Nonhospital Expenditures Captured by the Marketbasket, January 2013 to December 2014

Nonhospital Service Group ^a	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Emergency	94%	91%	70%	90%	100%	93%	99%	100%	98%	97%	99%	100%	97%	98%	96%	99%	91%	98%
Evaluation and management	95%	92%	96%	97%	95%	94%	96%	96%	91%	95%	96%	96%	94%	93%	95%	96%	95%	95%
Major radiology	87%	92%	90%	90%	91%	90%	91%	88%	89%	91%	89%	90%	90%	89%	91%	86%	89%	90%
Minor radiology	80%	67%	73%	79%	77%	74%	78%	78%	74%	71%	81%	77%	77%	71%	78%	79%	74%	77%
Neurological/ neuromuscular testing	70%	76%	86%	72%	93%	71%	82%	88%	57%	77%	92%	87%	85%	51%	73%	65%	69%	90%
Physical medicine	96%	79%	94%	95%	98%	98%	97%	98%	86%	94%	97%	92%	94%	96%	91%	85%	97%	95%
Major surgery	36%	42%	36%	43%	43%	46%	47%	45%	38%	51%	40%	47%	44%	45%	46%	33%	39%	51%
Pain management injections	78%	84%	78%	81%	84%	79%	74%	82%	77%	82%	76%	69%	79%	76%	78%	76%	80%	76%

^a Included here are those Group A services that were captured by the marketbasket for nonhospital services. Table TA.14 shows the percentage of payments represented by Group A services.

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Table TA.17 Marketbasket Procedure Codes and Descriptions

Service Group	% of Services	CPT Code	Description
Emergency			
1	47.8%	99283	Emergency department visit, moderate severity
2	32.2%	99284	Emergency department visit, high severity, urgent evaluation
3	10.5%	99285	Emergency department visit, high severity, immediate significant threat
4	8.0%	99282	Emergency department visit, low–moderate severity
5	1.6%	99281	Emergency department visit, self-limited/minor
Evaluation and management			
6	42.3%	99213	Established patient office visit, low–moderate severity, 15 minutes
7	21.9%	99214	Established patient office visit, moderate–high severity, 25 minutes
8	10.7%	99203	New patient office visit, moderate severity, 30 minutes
9	7.4%	99204	New patient office visit, moderate–high severity, 45 minutes
10	7.4%	99212	Established patient office visit, self-limited/minor, 10 minutes
11	2.7%	99202	New patient office visit, low–moderate severity, 20 minutes
12	2.1%	99215	Established patient office visit, moderate–high severity, 40 minutes
13	1.2%	99243	Office consultation, new/established patient, moderate severity, 40 minutes
14	1.2%	99232	Subsequent hospital care, minor complication, 25 minutes
15	1.1%	99244	Office consultation, new/established patient, moderate–high severity, 60 minutes
16	0.9%	99205	New patient office visit, moderate–high severity, 60 minutes
17	0.7%	99211	Established patient office visit, no physician necessary, 5 minutes
18	0.5%	99245	Office consultation, new/established patient, moderate–high severity, 80 minutes
Major radiology			
19	21.1%	73221	MRI, any joint of upper extremity, without contrast material
20	19.1%	73721	MRI, any joint of lower extremity, without contrast material
21	16.6%	72148	MRI, spinal canal and contents, lumbar, without contrast material
22	10.3%	70450	Computed tomography, head or brain, without contrast material
23	8.1%	72141	MRI, spinal canal and contents, cervical, without contrast material
24	5.3%	72125	Computed tomography, cervical spine, without contrast material
25	4.0%	73222	MRI, any joint of upper extremity, with contrast material
26	2.7%	72131	Computed tomography, lumbar spine, without contrast material
27	2.4%	72158	MRI, spinal canal and contents, without then with contrast material, lumbar
28	2.3%	74177	Computed tomography, abdomen and pelvis, with contrast material
29	2.2%	73700	Computed tomography, lower extremity, without contrast material
30	2.1%	73718	MRI, lower extremity, other than joint, without contrast material
31	2.1%	72146	MRI, spinal canal and contents, thoracic, without contrast material
32	1.8%	73218	MRI, upper extremity, other than joint, without contrast material
Minor radiology			
33	10.7%	73030	Radiologic exam, shoulder, complete, minimum of two views
34	7.7%	73140	Radiologic exam, finger(s), minimum of two views
35	7.6%	72100	Radiologic exam, spine, lumbosacral, two or three views
36	7.6%	73610	Radiologic exam, ankle, complete, minimum of three views
37	7.3%	73130	Radiologic exam, hand, minimum of three views
38	7.3%	73110	Radiologic exam, wrist, complete, minimum of three views
39	7.2%	73630	Radiologic exam, foot, complete, minimum of three views
40	5.0%	73562	Radiologic exam, knee, three views
41	3.9%	73560	Radiologic exam, knee, one or two views
42	3.5%	76942	Ultrasonic guidance for needle placement, imaging supervision and interpretation

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Table TA.17 Marketbasket Procedure Codes and Descriptions (continued)

Service Group	% of Services	CPT Code	Description
43	3.4%	72040	Radiologic exam, spine, cervical, two or three views
44	3.3%	72110	Radiologic exam, spine, lumbosacral, minimum of four views
45	3.0%	73080	Radiologic exam, elbow, complete, minimum of three views
46	3.0%	73564	Radiologic exam, knee, complete, four or more views
47	2.9%	71020	Radiologic exam, chest, two views, frontal and lateral
48	2.1%	71010	Radiologic exam, chest, single view, frontal
49	2.1%	73590	Radiologic exam, tibia and fibula, two views
50	2.0%	73510	Radiologic examination, hip, unilateral; complete, minimum of two views
51	1.8%	73070	Radiologic examination, elbow, two views
52	1.8%	72170	Radiologic exam, pelvis, one or two views
53	1.7%	73100	Radiologic exam, wrist, two views
54	1.7%	72050	Radiologic exam, spine, cervical, minimum of four views
55	1.6%	73090	Radiologic exam, forearm, two views
56	1.5%	72070	Radiologic exam, spine, thoracic, two views
Neurological/neuromuscular testing			
57	43.2%	95886	Needle electromyography, each extremity, with related paraspinal areas, done with nerve conduction, amplitude and latency/velocity study
58–64	39.7%	NCS	Nerve conduction study (i.e., CPT codes 95907–95913)
65	7.1%	95851	ROM measurements and report, each extremity (excluding hand) or each trunk section
66	5.9%	95831	Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk
67	4.0%	95885	Needle EMG, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; limited (list separately in addition to code for primary procedure)
Physical medicine			
68	45.8%	97110	Therapeutic procedure, one or more areas, each 15 minutes, therapeutic exercises
69	15.7%	97140	Manual therapy techniques, one or more regions, each 15 minutes
70	7.9%	97530	Therapeutic activities, direct patient contact, each 15 minutes
71	6.2%	97014	Electrical stimulation (unattended), one or more areas
72	5.0%	97112	Therapeutic procedure, one or more areas, each 15 minutes, neuromuscular re-education of movement
73	4.9%	97010	Hot/cold packs, one or more areas
74	3.2%	97035	Ultrasound, one or more areas, each 15 minutes
75	1.6%	97001	Physical therapy evaluation
76	1.2%	98940	Chiropractic manipulative treatment, spinal, one to two regions
77	1.1%	97032	Electric stimulation, one or more areas, each 15 minutes
78	1.0%	97124	Therapeutic procedure, one or more areas, each 15 minutes, massage
79	1.0%	98941	Chiropractic manipulative treatment, spinal, three to four regions
80	0.9%	97546	Work hardening/conditioning, each additional hour
81	0.9%	97012	Traction, mechanical, one or more areas
82	0.8%	97545	Work hardening/conditioning, initial two hours
83	0.8%	97113	Therapeutic procedure, one or more areas, each 15 minutes, aquatic therapy with therapeutic exercises
84	0.8%	97002	Physical therapy re-evaluation
85	0.7%	97033	Iontophoresis, one or more areas, each 15 minutes
86	0.6%	97750	Physical performance test or measurement, with written report, each 15 minutes

continued

Table TA.17 Marketbasket Procedure Codes and Descriptions (continued)

Service Group	% of Services	CPT Code	Description
Major surgery			
87–90	33.3%	Shoulder arthroscopies	Arthroscopic shoulder surgery (i.e., CPT codes 29823, 29824, 29826, and 29827)
91	18.7%	29881	Arthroscopy, knee surgery, with meniscectomy, medial or lateral
92	15.4%	64721	Neuroplasty and/or transposition, median nerve at carpal tunnel
93	6.6%	29880	Arthroscopy, knee surgery, with meniscectomy, medial and lateral
94	5.6%	63030	Laminotomy with decompression of nerve root, one interspace, lumbar
95	5.3%	49505	Repair initial inguinal hernia, age five years or over, reducible
96	4.4%	29888	Arthroscopically aided ACL repair, augmentation, reconstruction
97	3.8%	23412	Repair of ruptured musculotendinous cuff, chronic
98	3.8%	22551	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophyctectomy and decompression of spinal cord and/or nerve roots; cervical below C2
99	3.1%	63047	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s] [e.g., spinal or lateral recess stenosis]), single vertebral segment; lumbar
Pain management injections			
100	22.9%	20552	Injection(s), single or multiple trigger point(s), one or two muscle(s)
101	21.3%	64415	Injection, anesthetic agent, brachial plexus, single
102	16.5%	64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
103	13.4%	62311	Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid, lumbar, sacral (caudal)
104	6.7%	64493	Injections, diagnostic or therapeutic agent, paravertebral facet joint (or nerves innervating that joint) with image guidance, lumbar or sacral, single level
105	6.3%	62310	Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid, cervical or thoracic
106	5.5%	64450	Injection, anesthetic agent, other peripheral nerve or branch
107	5.4%	20553	Injection(s), single or multiple trigger point(s), three or more muscle(s)
108	2.0%	62284	Injection procedure for myelography and/or computed tomography, spinal (other than C1–C2 and posterior fossa)

Key: ACL: anterior cruciate ligament; CPT: Current Procedural Terminology; CT: computed tomography; EMG: electromyography; MRI: magnetic resonance imaging; NCS: nerve conduction studies; ROM: range of motion.

Table TA.18 Interstate Comparability Concerns

State	Source of Concern (provider type/service group)	Issue
All	Provider type categories	The billing source is the identifying information for provider type. If, for example, a physician bills through a hospital, he or she may be categorized as a hospital provider.
All	Average payment per inpatient episode	The average payment per inpatient episode is highly dependent on length of stay. The data details do not allow us to control for length of stay at this time; however, we are able to provide measures for certain types of claims (by surgery or ICD-9/ICD-10 codes).
All	Laboratory tests/pathology and neurological/neuromuscular testing	Billing for laboratory tests and neurological/neuromuscular testing can differ across states. For example, a relatively high number of services per claim may indicate that tests are broken out more finely in bills in those states than in other states.
All	Special reports	Special reports are primarily made up of service code 99080, which is defined as "special reports such as insurance forms, more than the information conveyed in the usual medical communication or standard reporting form." California and Texas also have a high percentage of codes 99455 and 99456, which are defined as "work related or medical disability exam by the treating physician and completion of necessary documentation/certificates and report."
All	Miscellaneous hospital ambulatory care	This is a broadly defined category encompassing miscellaneous charges for hospital ambulatory surgical care not defined under other categories and typically billed using hospital revenue codes 490 and 499.
All, hospital providers	Supplies and equipment	Supplies and equipment as billed by hospitals, in particular, may not be comparable across states because of different billing practices. In some states, charges for supplies are unbundled—that is, hospitals bill for individual supplies. In other states, hospitals group supply charges, which affects per-service payments and the number of services in this service group.
LA	Physical medicine services	Up to July 2013, physical medicine services provided by PT/OTs and chiropractic services in Louisiana were billed using state-specific PT/OT codes or chiropractor codes. Although many of these codes can be directly mapped to standard physical therapy services, some cannot (i.e., codes for therapeutic exercises and activities). We only include those codes that can be directly mapped in the price analysis. Because of this, historically, the codes in the marketbasket for physical medicine services in Louisiana represented a lower percentage of the total expenditures than in other study states. After this change, the representativeness of the marketbasket codes for physical medicine in Louisiana improved. In 2013, the marketbasket codes for physical medicine services in Louisiana represented 77 percent of the total expenditures, compared with 82 to 98 percent in the other study states. In 2014, this metric in Louisiana became 98 percent, the highest percentage among the study states.
AR, GA, IN, NC, and VA	Payments per claim and other metrics for chiropractors	The numbers in Arkansas, Georgia, Indiana, North Carolina, and Virginia for payments per claim and other metrics for chiropractors are not shown because cell sizes are too small to support an interstate comparison or trend analysis.

continued

Table TA.18 Interstate Comparability Concerns (continued)

State	Source of Concern (provider type/service group)	Issue
FL, IA, KY, LA, MI, and NJ	Payments per claim and other metrics for chiropractors	The numbers for payments per claim and other metrics for chiropractors in Florida, Iowa, Kentucky, Louisiana, Michigan, and New Jersey should be used with caution in interstate comparisons and trend analyses because of relatively few claims with chiropractic treatment in these states.
AR	Hospital outpatient clinic/evaluation and management average payment per claim and other metrics	The numbers in Arkansas for hospital outpatient clinic/evaluation and management measures are not shown because cell sizes underlying the data are too small to support an interstate comparison or trend analysis.
LA	Hospital outpatient clinic/evaluation and management payments per claim and other metrics	The numbers in Louisiana for hospital outpatient clinic/evaluation and management measures should be used with caution in interstate comparisons because of relatively small cell sizes underlying the measures.
AR, IA, IN, KY, LA, MN, and WI	Low back cases with disc conditions metrics	We have excluded numbers for Arkansas from all low back cases with disc conditions measures due to very small cell sizes. Louisiana has been excluded from the percentage of surgical cases with outpatient surgery and average total medical payment per episode for disc cases with outpatient surgery due to very small cell sizes; Iowa, Kentucky, Louisiana, Minnesota, and Wisconsin have been excluded from the percentage of surgical cases with inpatient surgery, average total medical payment per episode for disc cases with inpatient surgery, and average hospital payment per episode for disc cases with inpatient surgery due to very small cell sizes; Indiana, Iowa, Kentucky, Louisiana, and Wisconsin have been excluded from the percentage of cases with inpatient care due to very small cell sizes.
FL, GA, KY, MA, MI, MN, NC, VA, and WI	Low back cases with disc conditions metrics	The numbers in Florida, Georgia, Kentucky, Massachusetts, Michigan, Minnesota, North Carolina, Virginia, and Wisconsin for low back cases with disc conditions measures should be used with caution because of relatively small cell sizes.
AR	Hospital inpatient measures	The numbers for hospital inpatient measures (including payments per inpatient episode, percentage of payments, and percentage of claims) are not shown for Arkansas because the cell sizes underlying the data are too small to support an interstate comparison or trend analysis.

Key: ICD-9/ICD-10: International Classification of Diseases; PT/OT: physical/occupational therapist.

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Sharon E. Belton
Roman Dolinski
William Monnin-Browder
Evelina Radeva
Karen Rothkin
Bogdan Savych
Carol A. Telles
Rui Yang

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Workers Compensation Research Institute
955 Massachusetts Avenue
Cambridge, MA 02139

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