

A WCRI FLASHREPORT

Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments

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COMPARING PAYMENTS TO AMBULATORY SURGERY CENTERS AND HOSPITAL OUTPATIENT DEPARTMENTS

INTRODUCTION

The goal of this Workers Compensation Research Institute (WCRI) FlashReport is to inform policy debates about how payments for common workers' compensation outpatient surgeries conducted in ambulatory surgery center (ASC)¹ settings compare with the payments for similar surgeries performed in hospital outpatient settings. This analysis is important since evidence about ASC surgeries from other payors (Medicare or group health insurance) may not apply in workers' compensation settings. Some studies using data from other payors indicate that ASCs provide care that is less expensive than services provided in hospital; others found that patients spend less time at the facility when surgeries are done at ASCs than when they are done in hospital outpatient settings (Munnich and Parente, 2014 and 2018; Hair, Hussey, and Wynn, 2012). Furthermore, ASCs have been estimated to provide substantial savings to the Medicare program and Medicare beneficiaries because ASC rates are frequently lower than outpatient department rates for surgical procedures (Ambulatory Surgery Center Association and University of California-Berkeley, 2013; U.S. Department of Health and Human Services, 2014). The question still remains whether this evidence from other payors applies to worker' compensation surgeries.

The study focuses on two common questions raised by workers' compensation policymakers and stakeholders: (1) How do workers' compensation payments for surgeries conducted at ASCs compare with the payments for surgeries performed at hospital outpatient departments? (2) How have workers' compensation payments for outpatient surgeries at these two types of facilities changed over time?

We extend prior analyses in <u>Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient</u> <u>Departments</u> (Savych, 2014a and 2016a) by including information on surgeries that happened through 2016. As in the prior studies, we examine payments to ASC and hospital outpatient departments by looking at the most common groups of surgeries conducted in outpatient settings—knee and shoulder arthroscopies. We show information on all payments to these two types of facilities (ASCs and hospital outpatient departments) within a surgical episode,² excluding payments to surgeons or other medical professionals.³ This WCRI FlashReport includes information for 18 states—California, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.⁴ These states were selected because they are geographically

¹ In 2016, 5,532 ASCs were certified to provide services to Medicare beneficiaries nationwide, a substantial increase from about 2,200 ASCs certified to provide services to Medicare beneficiaries in 1996 (Medicare Payment Advisory Commission [MedPac], 2018).

² For the definition of surgical episode, see the section "Data and Methods."

³ Payments to surgeons are excluded because reimbursements for these services are often determined separately from payments to facilities, a main focus of this report. Prices paid to surgeons are discussed in <u>WCRI Medical Price Index for</u> <u>Workers' Compensation, 10th Edition</u> (Yang and Fomenko, 2018).

⁴ In the future, we intend to incorporate the key measures discussed in this FlashReport into the regular WCRI CompScope™ Medical Benchmarks study, which is an annual series of reports that compare medical payments, prices,

diverse; represent a range of system features; and represent the range of states that are higher, near the middle, and lower on costs per claim.

The rest of this WCRI FlashReport is organized as follows. First, we present key findings from the comparisons of ASC and hospital outpatient payments across study states and over time. Then, we provide figures and tables for the measures captured in this report. After that we describe the data and methods used for this analysis. Finally, we conclude with a discussion of limitations and caveats that one should keep in mind about this analysis. Please note that we do not intend to identify causal relationships; instead, we highlight possible policy implications by describing associations between observed empirical patterns and policy regimes.

Key FINDINGS

In this section we discuss the results of comparing payments to ASCs and hospital outpatient departments for similar surgeries across states. We also look at the trends in payments to these two types of facilities for common knee and shoulder surgeries from 2011 to 2016. We describe the potential factors that may be contributing to the interstate comparison and trend findings, and we discuss several states' specific results to illustrate the point. For the trend analysis, we highlight results from the states with substantial changes in workers' compensation fee schedules for outpatient services to provide a more targeted discussion. We present the changes in ASC and hospital outpatient payments per episode in each of the study states in Figures 3.1-3.35.

COMPARING PAYMENTS TO ASCS AND HOSPITAL OUTPATIENT DEPARTMENTS FOR SIMILAR SURGERIES ACROSS STATES

We found that in many states payments to ASCs for knee and shoulder surgeries were lower than payments to hospital outpatient departments for similar surgeries, with a few exceptions. We use the terms *lower* and *higher* when differences in the measures are at least 10 percent; when the differences are less than 10 percent we call the measures *similar*.

- In 14 states, payments for knee surgeries done at ASCs were at least 21 percent lower than payments for hospital outpatient surgeries in 2016 (Figure 1 and Table 1). In 3 states, the payments were similar, and in Indiana, payments for ASC surgeries were 59 percent higher than payments for hospital outpatient surgeries.
- In 11 states, payments for shoulder surgeries done at ASCs were at least 10 percent lower than payments for hospital outpatient surgeries in 2016 (Figure 2 and Table 1). In 5 states, the payments were similar, and in two states (Georgia and Indiana), payments for ASC surgeries were higher than payments for hospital outpatient surgeries.

and utilization overall and by provider type and service type across a number of states and show how those metrics of medical costs and care have changed over a six-year time span or longer. The most recent edition (the 19th) includes Arkansas, California, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin. All of these states are included in this FlashReport except Arkansas, for which cell sizes for the key measures are insufficient to support a meaningful analysis. In addition, New York is included in this FlashReport since the state recently implemented a major fee schedule change. WCRI also publishes an annual benchmarking report that monitors the trends in key performance metrics of the New York workers' compensation benefit delivery system.





Percentage difference between average payments to ASCs and hospital outpatient departments for knee surgical episodes																	
PA	wi	МІ	IA	FL	NC	MN	VA	тх	CA	MA	LA	IL	NJ	TN	GA	NY	IN
-76%	-58%	-58%	-51%	-47%	-43%	-42%	-33%	-32%	-30%	-29%	-27%	-25%	-21%	-6%	3%	9%	59%

Note: States are sorted by percentage differences in average ASC and hospital outpatient payments.

Key: ASC: ambulatory surgery center.



Figure 2 Average Payments to ASCs and Hospital Outpatient Departments for Shoulder Surgical Episodes, Calendar Year 2016

Percen	Percentage difference between average payments to ASCs and hospital outpatient departments for shoulder surgical episodes																
PA	МІ	NC	тх	CA	NJ	FL	VA	WI	IA	MA	LA	TN	MN	NY	IL	GA	IN
-71%	-46%	-35%	-29%	-28%	-20%	-20%	-19%	-19%	-15%	-10%	-7%	1%	3%	4%	7%	34%	81%

Note: States are sorted by percentage differences in average ASC and hospital outpatient payments.

Key: ASC: ambulatory surgery center.

These results suggest that evidence from other payors does not always apply to workers' compensation. Workers' compensation payments for ASC surgeries are not always lower than payments for similar surgeries performed in hospital outpatient departments. A number of factors may contribute to differences in payments for surgeries done in ASCs and hospital outpatient departments.

Often, the difference in payments for ASC and hospital outpatient surgeries may be attributed to the fee schedule regulations that apply in different states. In some states, fee schedule rates for ASC surgeries are set lower than rates for similar hospital outpatient surgeries. Other states use different fee schedule approaches to determine payments for ASC and hospital outpatient surgeries, which may lead to differences in payments. General approaches toward regulating facility fees for ASC and hospital outpatient departments are provided in <u>Table 2</u>. In Indiana, higher payments for ASC surgeries than for hospital outpatient surgeries may be explained by the nature of Indiana's regulations—while payments for hospital outpatient surgeries are determined through a fixed-amount fee schedule, there is no fee schedule for ASC surgeries.

In the prior study <u>Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient</u> <u>Departments, 2nd Edition</u>, we highlighted two other factors that may contribute to differences in average payments to ASCs and hospital outpatient departments. One factor is the difference in the likelihood that ASCs and hospital outpatient departments were part of networks. The other factor is the difference in the likelihood that multiple surgical procedures were billed within each surgical episode. Even though our analysis focuses on a narrowly defined set of knee and shoulder surgeries, we sometimes observed differences in the likelihood that multiple surgical procedures were billed for the same surgery conducted in ASC and hospital outpatient settings. These factors for each of the analysis states can be examined in Figures 3.1–3.35.

TRENDS IN PAYMENTS TO ASCS AND HOSPITAL OUTPATIENT DEPARTMENTS FOR SIMILAR SURGERIES 2011-2016

We found that growth in payments to ASCs and hospital outpatient departments for common knee and shoulder surgeries from 2011 to 2016 varied widely across states (see <u>Table 3</u>).

- Changes in the average payment to ASCs for knee surgeries between 2011 and 2016 ranged from a 55 percent decrease in North Carolina to a 54 percent increase in New York. The average ASC payment for knee surgeries decreased more than 10 percent in six of the study states and increased more than 10 percent in four of the study states.
- Trends in the average payment for hospital outpatient knee surgeries also showed wide variation across states. From 2011 to 2016, changes in this measure ranged from a 36 percent decrease in Indiana to a 58 percent increase in New York.
- Payments for shoulder surgeries showed similar results. Between 2011 and 2016, the average ASC payment for shoulder surgeries decreased more than 10 percent in five of the study states and increased more than 10 percent in eight of the study states. For shoulder surgeries performed in hospital outpatient departments, the average payment decreased more than 10 percent in five study states and increased more than 10 percent in seven study states.

Trends in payments to ASCs and hospital outpatient departments for surgeries may be attributed to multiple factors. Changes in workers' compensation fee schedules are one of them. The following discussion points highlight the study states with substantial changes in workers' compensation fee schedules for outpatient services between 2011 and 2016.

- In California, payments per episode to ASCs decreased 25 and 29 percent for knee and shoulder surgeries, respectively, between 2012 and 2013, while hospital outpatient payments per episode remained stable (see Figure 3.1 and Figure 3.2). The differences in payment trends for ASC and hospital outpatient knee and shoulder arthroscopies reflect the ASC fee schedule change in 2013.⁵
- Georgia changed its reimbursement approach for ASC and hospital outpatient services in 2014.⁶ This resulted in little change in the average payment to ASCs for knee surgeries and a 15 percent increase in the average payment to ASCs for shoulder surgeries between 2013 and 2014 (see Figure 3.5 and Figure 3.6). As discussed in more detail in the prior WCRI study *Payments for Ambulatory Surgery Centers in Georgia*, these findings reflect important differences across surgery groups—large increases for some surgeries but little change for other surgeries (Savych, 2018). The average hospital outpatient payment per episode decreased 6 and 7 percent for knee and shoulder surgeries, respectively, in 2014.
- Effective July 2014, Indiana adopted a hospital fee schedule with reimbursement rates set at 200 percent of Medicare, while payments to ASCs remained unregulated. Following this policy change, the average payment per episode for hospital outpatient knee surgeries decreased 42 percent between 2013 and 2015, while the average ASC payment per episode for knee surgeries changed little (see Figure 3.9). Results for shoulder surgeries showed similar trends (see Figure 3.10).
- In New York, average payments for knee surgeries in 2016 increased 50 percent for ASCs and 44 percent for hospital outpatient departments (see Figure 3.22). Payments for shoulder surgeries also experienced large increases in both settings (see Figure 3.23). These trends may reflect changes in the state's ASC and hospital outpatient fee schedules. Effective October 1, 2015, New York transitioned from a Products of Ambulatory Surgery (PAS) based reimbursement method to an Enhanced Ambulatory Patient Groups (EAPG) based methodology.⁷
- In North Carolina, average payments for knee surgeries decreased 55 percent for ASCs and 35 percent for hospital outpatient departments between 2012 and 2016 (see Figure 3.24). Large decreases in payments were also seen in ASC and hospital outpatient shoulder surgeries (see Figure 3.25). These trends may reflect changes in fee schedules that were implemented in several stages over this time period.⁸

⁵ Legislative changes that went into effect in January 2013 in California introduced differential payments for ASC and hospital outpatient surgeries. In 2011, California regulated payments for ASC and hospital outpatient services with an ambulatory payment classification (APC) based fee schedule. The maximum allowable payment rate was the product of the Medicare APC relative weight, the state conversion factor, and a 1.2 multiplier. Effective January 2013, the multiplier for ASC surgeries in California was reduced from 1.2 to 0.8, while the rates for hospital outpatient surgeries were not changed. For more information, see California Senate Bill 863.

⁶ Effective May 1, 2014, Georgia changed its ASC and hospital outpatient fee schedule from being based on International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) to being based on Medicare's Hospital Outpatient Prospective Payment System (OPPS) ambulatory payment classification (APC). The new fee schedule method set ASC and hospital outpatient facility fee schedule rates at 2.25 times the Medicare OPPS rates that applied to hospital outpatient departments (Georgia State Board of Workers' Compensation, 2014). Effective April 1, 2018, Georgia set ASC facility fee schedule rates at 2.1 times the Medicare OPPS rates without changing the multiplier for similar surgeries done in hospital outpatient departments (Georgia State Board of Workers' Compensation, 2018).

⁷ Note that differences in ASC and hospital outpatient payment trends in New York before 2013 are discussed in the prior WCRI study <u>*Crossing State Lines for Ambulatory Surgical Care: Exploring Claims from New York.*</sub></u>

⁸ North Carolina underwent several changes to its ASC and hospital outpatient fee schedules in 2013. On February 1, 2013, charges for ASC and hospital outpatient services were frozen at rates set by each facility as of June 30, 2012. Prior to this change, workers' compensation ASC and hospital outpatient services were paid at 79 percent of charges for most facilities. By freezing charges for ASC and hospital outpatient services, North Carolina effectively moved away from a charge-based fee schedule to a fee schedule that can be characterized as a fixed-amount fee schedule. On April 1, 2013, these frozen rates were further decreased by 15 percent. In August 2013, House Bill 92 was signed into law. This legislation requires ASC and hospital outpatient so be based on Medicare methodology. Effective April 1, 2015, the fee

Other factors that may influence the trends in payments to ASCs and hospital outpatient departments for surgeries are network participation rates and negotiated prices. For example, in New Jersey, ASC payments for both knee and shoulder arthroscopies were growing slower than hospital outpatient payments, reflecting in part an increase in the network participation rate for ASCs (see Figure 3.20 and Figure 3.21).

Some of the year-to-year changes in average payments may also reflect general changes in reimbursement rules that may affect payments for workers' compensation surgeries. As an example, compare the percentage of surgical knee episodes with multiple procedures between 2011 and 2012 across states. The decrease in this measure can be traced to changes in the definitions of the knee Current Procedural Terminology (CPT®) codes.⁹

Furthermore, payments for ASC and hospital outpatient surgeries may also change due to changes in Medicare rules introducing comprehensive ambulatory payment classification (C-APC) groups (implemented by Medicare in 2015). When services are performed and billed for a comprehensive procedure, this procedure represents a primary service and no other services are warranted or reimbursed. All supporting services as well as secondary surgical procedures are not reimbursed separately but packaged in a payment for the C-APC. The idea is that one payment covers all services provided during an outpatient encounter. For the shoulder surgeries examined in our analysis, C-APCs were introduced in 2016.¹⁰ This may be reflected in the changes we observed in the states that closely follow Medicare's methodology, such as Texas or Tennessee.

FIGURES AND TABLES (RESULTS)

- Figure 1 Average Payments to ASCs and Hospital Outpatient Departments for Knee Surgical Episodes, Calendar Year 2016
- Figure 2 Average Payments to ASCs and Hospital Outpatient Departments for Shoulder Surgical Episodes, Calendar Year 2016
- <u>Table 1</u> Average Payments to ASCs and Hospital Outpatient Departments for Common Surgeries, Calendar Year 2016
- <u>Table 2</u> Comparing Fee Schedule Approaches toward ASC and Hospital Outpatient Facility Fees across Study States (as of 2016)
- Table 3Summary of Changes in Average and Median ASC and Hospital Outpatient Payments between2011 and 2016
- Figure 3.1–3.35 Trends in Payments to ASC and Hospital Outpatient Providers for Knee and Shoulder Arthroscopies by State, Calendar Years 2011 to 2016

schedule rate for both ASC and hospital outpatient facility services was set at 220 percent of the ASC-specific or hospitalspecific facility amount set by Medicare. Then, the percentage of the Medicare amount was decreased to 210 percent for the fee schedule rate effective January 1, 2016, and was further decreased to 200 percent for the fee schedule rate effective January 1, 2017.

⁹ For instance, in 2012, CPT codes 29881 (partial medial or lateral meniscectomy) and 29880 (partial medial and lateral meniscectomy) were redefined to include code 29877 (debridement or shaving articular cartilage) so that code 29877 could no longer be billed for surgical procedures billed with CPT codes 29881 or 29880. The relative value unit (RVU) for code 29881 was reduced from 18.82 in 2011 to 16.16 in 2012. RVUs are a measure of value used by the Medicare program to determine reimbursement for physician services. RVUs are a part of the resource-based relative value scale (RBRVS) that determines how much medical providers should be paid by Medicare and nearly all health maintenance organizations. CPT® is a registered trademark of the American Medical Association.

¹⁰ For knee surgeries examined in our analysis, C-APCs were introduced in 2017, beyond the time frame of our study.

State	Trends in Payments to ASCs and Hospital Outpatient Providers							
California	<u>Knee</u>	<u>Shoulder</u>						
Florida	<u>Knee</u>	<u>Shoulder</u>						
Georgia	<u>Knee</u>	<u>Shoulder</u>						
Illinois	<u>Knee</u>	<u>Shoulder</u>						
Indiana	<u>Knee</u>	<u>Shoulder</u>						
lowa	Knee	<u>Shoulder</u>						
Louisiana	Knee	а						
Massachusetts	Knee	<u>Shoulder</u>						
Michigan	Knee	<u>Shoulder</u>						
Minnesota	Knee	<u>Shoulder</u>						
New Jersey	Knee	<u>Shoulder</u>						
New York	Knee	<u>Shoulder</u>						
North Carolina	Knee	<u>Shoulder</u>						
Pennsylvania	Knee	<u>Shoulder</u>						
Tennessee	Knee	<u>Shoulder</u>						
Texas	Knee	<u>Shoulder</u>						
Virginia	Knee	<u>Shoulder</u>						
Wisconsin	Knee	<u>Shoulder</u>						

State Trend Figures

^a Louisiana is excluded from the trend analysis for shoulder surgeries due to insufficient cell sizes in earlier years.

-	-				-				-									
	CA	FL	GA	IA	IL	IN	LA	МА	мі	MN	NC	NJ	NY	PA	TN	тх	VA	WI
Knee surgeries																		
ASC	\$2,431	\$4,894	\$5,369	\$3,992	\$5,788	\$7,777	\$7,642	\$1,813	\$1,487	\$4,195	\$2,662	\$4,986	\$3,016	\$1,355	\$3,655	\$3,209	\$6,784	\$4,596
Hospital outpatient	\$3,465	\$9,214	\$5,200	\$8,174	\$7,673	\$4,895	\$10,416	\$2,554	\$3,555	\$7,262	\$4,668	\$6,314	\$2,767	\$5,538	\$3,885	\$4,718	\$10,184	\$11,017
Percentage difference	-30%	-47%	3%	-51%	-25%	59%	-27%	-29%	-58%	-42%	-43%	-21%	9%	-76%	-6%	-32%	-33%	-58%
Shoulder surgeries																		
ASC	\$5,057	\$15,301	\$11,369	\$11,500	\$14,389	\$15,802	\$18,610	\$4,926	\$3,603	\$14,088	\$5,093	\$8,696	\$4,240	\$3,037	\$7,968	\$6,154	\$17,415	\$13,994
Hospital outpatient	\$7,014	\$19,016	\$8,459	\$13,474	\$13,481	\$8,734	\$19,977	\$5,502	\$6,729	\$13,733	\$7,874	\$10,851	\$4,063	\$10,480	\$7,897	\$8,690	\$21,421	\$17,187
Percentage difference	-28%	-20%	34%	-15%	7%	81%	-7%	-10%	-46%	3%	-35%	-20%	4%	-71%	1%	-29%	-19%	-19%

Table 1 Average Payments to ASCs and Hospital Outpatient Departments for Common Surgeries, Calendar Year 2016

Notes: Knee surgeries include surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition). Shoulder surgeries include surgical episodes with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Key: APC: ambulatory payment classification; ASC: ambulatory surgery center.

Type of ASC and Hospital Outpatient Facility Fee Schedule	Number of Study States	Study States
No fee schedule	4	IA, NJ, VAª, WI
Percent-of-charge-based fee schedule	2	LA, MN
Fixed-amount fee schedule with similar fee schedule rates	4	GA [♭] , MA, NY, TN
Fixed-amount fee schedule with different fee schedule rates	5	CA, FL, IL, NC, TX
Different fee schedule approaches for ASC and hospital outpatient surgeries:		
Fixed-amount fee schedule for ASC surgeries and charge-based or other type of fee schedule for hospital outpatient surgeries	2	MI, PA
No fee schedule for ASC surgeries and fixed-amount fee schedule for hospital outpatient surgeries	1	IN

Table 2 Comparing Fee Schedule Approaches toward ASC and Hospital Outpatient Facility Fees across Study States (as of 2016)

^a Virginia implemented medical fee schedule effective January 1, 2018.

^b Georgia reduced the fee schedule rates for ASCs effective in April 2018.

Key: ASC: ambulatory surgery center.

		Knee S	urgeries		Shoulder Surgeries						
.	A	sc	Hospital C	Dutpatient	AS	SC	Hospital C	Dutpatient			
State	Change in Average Payment	Change in Median Payment									
California	-31%	-31%	3%	7%	-32%	-37%	1%	-10%			
Florida	9%	1%	17%	17%	72%	72%	28%	18%			
Georgia	-10%	-1%	-2%	8%	15%	25%	-16%	-10%			
Illinois	-18%	-17%	-8%	-19%	-10%	-6%	-19%	-19%			
Indiana	23%	21%	-36%	-39%	43%	53%	-36%	-24%			
lowa	6%	29%	29%	26%	30%	30%	-5%	-10%			
Louisiana	16%	25%	7%	7%	n/a	n/a	n/a	n/a			
Massachusetts	-42%	-33%	26%	34%	5%	0%	32%	34%			
Michigan	7%	31%	-5%	4%	9%	7%	-3%	6%			
Minnesota	2%	20%	14%	15%	34%	38%	6%	12%			
New Jersey	-24%	-13%	5%	2%	-19%	-17%	17%	11%			
New York	54%	96%	58%	75%	58%	89 %	51%	70%			
North Carolina	-55%	-55%	-29%	-26%	-59%	-56%	-38%	-25%			
Pennsylvania	9%	12%	50%	45%	21%	12%	35%	37%			
Tennessee	6%	14%	12%	13%	-6%	-12%	-4%	-6%			
Texas	2%	13%	2%	11%	-12%	-5%	-16%	-9%			
Virginia	13%	15%	27%	26%	47%	34%	33%	41%			
Wisconsin	-26%	-20%	36%	40%	-3%	-8%	16%	12%			
18-state median ^a	4%	13%	9%	12%	7%	7%	1%	6%			

 Table 3 Summary of Changes in Average and Median ASC and Hospital Outpatient Payments between 2011 and 2016

Notes:

Knee surgeries include surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition). Shoulder surgeries include surgical episodes with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Louisiana is excluded from the trend analysis for shoulder surgeries due to insufficient cell sizes in earlier years.

^a The 18-state median is the average of the states ranked 9th and 10th on a given measure.

Key: APC: ambulatory payment classification; ASC: ambulatory surgery center; n/a: not available.



Figure 3.1 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in California, Calendar Years 2011 to 2016

-	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,514	\$3,473	\$2,612	\$2,468	\$2,440	\$2,431
Hospital outpatient	\$3,372	\$3,383	\$3,358	\$3,339	\$3,354	\$3,465
B. Median Payment per Episode						
ASC	\$3,254	\$3,234	\$2,346	\$2,269	\$2,248	\$2,248
Hospital outpatient	\$2,915	\$2,983	\$2,998	\$2,993	\$3,087	\$3,132
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	visode					
ASC		-1%	-25%	-5%	-1%	0%
Hospital outpatient		0%	-1%	-1%	0%	3%
D. Change in Median Payment per Epi	isode					
ASC		-1%	-27%	-3%	-1%	0%
Hospital outpatient		2%	1%	0%	3%	1%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures				
ASC	60%	54%	47%	34%	32%	30%
Hospital outpatient	53%	44%	37%	27%	26%	27%
Percentage of surgical episodes with at lea	ast three surgical p	procedures				
ASC	24%	19%	15%	6%	5%	5%
Hospital outpatient	21%	16%	12%	5%	3%	3%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	7%	5%	4%	1%	1%	1%
Hospital outpatient	4%	2%	3%	1%	1%	0%
Percentage of payments within networks						
ASC	52%	65%	73%	65%	69%	70%
Hospital outpatient	78%	84%	89%	85%	89%	87%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.2 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in California, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$7,458	\$7,641	\$5,419	\$5,202	\$5,083	\$5,057
Hospital outpatient	\$6,961	\$6,910	\$6,785	\$6,950	\$6,584	\$7,014
B. Median Payment per Episode						
ASC	\$7,503	\$7,643	\$5,305	\$5,110	\$4,758	\$4,735
Hospital outpatient	\$6,839	\$6,801	\$6,552	\$6,794	\$6,024	\$6,179
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		2%	-29%	-4%	-2%	-1%
Hospital outpatient		-1%	-2%	2%	-5%	7%
D. Change in Median Payment per Epi	isode					
ASC		2%	-31%	-4%	-7%	0%
Hospital outpatient		-1%	-4%	4%	-11%	3%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ist two surgical pr	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ist three surgical p	procedures				
ASC	73%	72%	67%	49%	48%	49%
Hospital outpatient	72%	60%	59 %	43%	39%	39%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	36%	33%	28%	15%	13%	15%
Hospital outpatient	27%	18%	23%	11%	8%	6%
Percentage of payments within networks						
ASC	57%	62%	66%	71%	74%	71%
Hospital outpatient	77%	84%	95%	88%	84%	85%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.3 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Florida, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$4,500	\$4,650	\$4,498	\$4,646	\$4,717	\$4,894
Hospital outpatient	\$7,888	\$8,384	\$9,333	\$9,626	\$9,588	\$9,214
B. Median Payment per Episode						
ASC	\$3,536	\$3,474	\$3,215	\$3,389	\$3,300	\$3,568
Hospital outpatient	\$7,430	\$7,525	\$8,343	\$8,235	\$8,850	\$8,713
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	visode					
ASC		3%	-3%	3%	2%	4%
Hospital outpatient		6%	11%	3%	0%	-4%
D. Change in Median Payment per Epi	isode					
ASC		-2%	-7%	5%	-3%	8%
Hospital outpatient		1%	11%	-1%	7%	-2%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	55%	46%	40%	33%	33%	30%
Hospital outpatient	56%	40%	35%	26%	30%	30%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	15%	12%	12%	11%	12%	10%
Hospital outpatient	13%	8%	7%	5%	4%	6%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	3%	2%	2%	2%	3%	4%
Hospital outpatient	2%	2%	1%	1%	1%	1%
Percentage of payments within networks						
ASC	70%	74%	77%	69%	66%	68%
Hospital outpatient	84%	81%	87%	79%	82%	89%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.4 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Florida, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$8,911	\$10,437	\$10,760	\$11,178	\$13,030	\$15,301
Hospital outpatient	\$14,882	\$17,047	\$15,711	\$17,062	\$17,654	\$19,016
B. Median Payment per Episode						
ASC	\$8,529	\$10,019	\$9,955	\$10,729	\$12,169	\$14,659
Hospital outpatient	\$14,872	\$15,045	\$13,412	\$16,095	\$16,694	\$17,497
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epi	sode					
ASC		17%	3%	4%	17%	17%
Hospital outpatient		15%	-8%	9%	3%	8%
D. Change in Median Payment per Epis	ode					
ASC		17%	-1%	8%	13%	20%
Hospital outpatient		1%	-11%	20%	4%	5%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute t	o Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at leas	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at leas	st three surgical p	rocedures				
ASC	59%	57%	60%	56%	59%	63%
Hospital outpatient	56%	55%	60%	55%	57%	56%
Percentage of surgical episodes with at leas	st four surgical pr	ocedures				
ASC	14%	17%	20%	19%	26%	25%
Hospital outpatient	9%	17%	15%	14%	15%	17%
Percentage of payments within networks						
ASC	66%	73%	73%	69%	72%	71%
Hospital outpatient	88%	75%	84%	83%	90%	88%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.5 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Georgia, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$5,939	\$5,163	\$4,854	\$4,785	\$4,972	\$5,369
Hospital outpatient	\$5,311	\$5,393	\$5,108	\$4,791	\$5,140	\$5,200
B. Median Payment per Episode						
ASC	\$5,165	\$4,744	\$4,717	\$4,705	\$4,700	\$5,121
Hospital outpatient	\$4,746	\$4,744	\$4,744	\$4,744	\$4,687	\$5,147
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per E	pisode					
ASC		-13%	-6%	-1%	4%	8%
Hospital outpatient		2%	-5%	-6%	7%	1%
D. Change in Median Payment per Ep	isode					
ASC		-8%	-1%	0%	0%	9%
Hospital outpatient		0%	0%	0%	-1%	10%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at le	ast two surgical pro	ocedures				
ASC	42%	22%	16%	15%	15%	13%
Hospital outpatient	41%	26%	24%	24%	28%	19%
Percentage of surgical episodes with at le	ast three surgical p	rocedures				
ASC	7%	3%	2%	2%	2%	0%
Hospital outpatient	5%	4%	1%	2%	5%	1%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	1%	0%	0%	0%	0%	0%
Hospital outpatient	1%	0%	0%	0%	1%	0%
Percentage of payments within networks						
ASC	66%	71%	70%	69%	73%	80%
Hospital outpatient	76%	80%	82%	74%	78%	78%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.6 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Georgia, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$9,903	\$10,734	\$10,231	\$11,762	\$12,430	\$11,369
Hospital outpatient	\$10,125	\$9,470	\$9,347	\$8,727	\$9,555	\$8,459
B. Median Payment per Episode						
ASC	\$8,477	\$9,305	\$8,728	\$10,215	\$10,983	\$10,635
Hospital outpatient	\$9,273	\$8,709	\$8,055	\$7,794	\$9,343	\$8,386
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		8%	-5%	15%	6%	-9 %
Hospital outpatient		-6%	-1%	-7%	9%	-11%
D. Change in Median Payment per Epi	sode					
ASC		10%	-6%	17%	8%	-3%
Hospital outpatient		-6%	-8%	-3%	20%	-10%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ist two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ist three surgical p	rocedures				
ASC	57%	64%	53%	51%	50%	54%
Hospital outpatient	54%	54%	54%	48%	45%	48%
Percentage of surgical episodes with at lea	ist four surgical pr	ocedures				
ASC	12%	15%	10%	14%	6%	15%
Hospital outpatient	10%	12%	11%	7%	11%	11%
Percentage of payments within networks						
ASC	71%	69%	74%	81%	82%	90%
Hospital outpatient	71%	83%	86%	81%	79%	73%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.7 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Illinois, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$7,068	\$5,572	\$5,671	\$5,718	\$5,895	\$5,788
Hospital outpatient	\$8,347	\$7,471	\$7,192	\$7,301	\$7,477	\$7,673
B. Median Payment per Episode						
ASC	\$6,541	\$5,185	\$5,222	\$5,302	\$5,392	\$5,403
Hospital outpatient	\$8,299	\$6,662	\$6,490	\$6,573	\$6,782	\$6,735
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epi	isode					
ASC		-21%	2%	1%	3%	-2%
Hospital outpatient		-10%	-4%	2%	2%	3%
D. Change in Median Payment per Epi	sode					
ASC		-21%	1%	2%	2%	0%
Hospital outpatient		-20%	-3%	1%	3%	-1%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	st two surgical pro	ocedures				
ASC	51%	36%	33%	28%	26%	27%
Hospital outpatient	50%	33%	32%	25%	24%	26%
Percentage of surgical episodes with at lea	st three surgical p	rocedures				
ASC	14%	7%	8%	8%	6%	7%
Hospital outpatient	12%	5%	6%	5%	5%	3%
Percentage of surgical episodes with at lea	st four surgical pr	ocedures				
ASC	2%	1%	1%	1%	0%	1%
Hospital outpatient	1%	0%	1%	1%	0%	0%
Percentage of payments within networks						
ASC	45%	51%	55%	58%	49%	64%
Hospital outpatient	77%	78%	85%	81%	90%	91%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.8 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Illinois, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$16,037	\$15,358	\$16,432	\$15,578	\$15,464	\$14,389
Hospital outpatient	\$16,562	\$15,369	\$15,230	\$13,804	\$13,046	\$13,481
B. Median Payment per Episode						
ASC	\$15,048	\$14,825	\$16,337	\$15,012	\$14,983	\$14,075
Hospital outpatient	\$16,434	\$15,155	\$15,491	\$13,267	\$12,890	\$13,268
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epi	isode					
ASC		-4%	7%	-5%	-1%	-7%
Hospital outpatient		-7%	-1%	-9%	-5%	3%
D. Change in Median Payment per Epis	sode					
ASC		-1%	10%	-8%	0%	-6%
Hospital outpatient		-8%	2%	-14%	-3%	3%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	st three surgical p	rocedures				
ASC	73%	75%	77%	73%	72%	74%
Hospital outpatient	71%	70%	69%	63%	61%	68%
Percentage of surgical episodes with at lea	st four surgical pr	ocedures				
ASC	29%	34%	36%	34%	32%	33%
Hospital outpatient	27%	31%	27%	25%	23%	25%
Percentage of payments within networks						
ASC	42%	40%	54%	58%	56%	65%
Hospital outpatient	71%	79%	77%	84%	86%	90%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.9 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Indiana, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$6,312	\$5,686	\$7,096	\$7,266	\$7,106	\$7,777
Hospital outpatient	\$7,590	\$7,933	\$8,068	\$6,804	\$4,717	\$4,895
B. Median Payment per Episode						
ASC	\$6,328	\$5,728	\$7,084	\$7,450	\$7,504	\$7,666
Hospital outpatient	\$7,420	\$7,410	\$7,831	\$6,436	\$4,142	\$4,521
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		-10%	25%	2%	-2%	9%
Hospital outpatient		5%	2%	-16%	-31%	4%
D. Change in Median Payment per Ep	isode					
ASC		-9%	24%	5%	1%	2%
Hospital outpatient		0%	6%	-18%	-36%	9%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	46%	26%	27%	24%	21%	22%
Hospital outpatient	43%	23%	17%	14%	14%	16%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	7%	4%	4%	4%	2%	1%
Hospital outpatient	5%	3%	3%	2%	2%	6%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	0%	1%	0%	1%	1%	0%
Hospital outpatient	1%	0%	0%	1%	0%	1%
Percentage of payments within networks						
ASC	70%	68%	71%	70%	74%	74%
Hospital outpatient	88%	90%	85%	90%	90%	94%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.10 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Indiana, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$11,021	\$13,233	\$15,561	\$17,771	\$17,085	\$15,802
Hospital outpatient	\$13,603	\$14,160	\$13,133	\$11,822	\$9,261	\$8,734
B. Median Payment per Episode						
ASC	\$9,498	\$11,944	\$14,444	\$15,408	\$16,306	\$14,575
Hospital outpatient	\$12,208	\$13,133	\$12,283	\$10,842	\$8,495	\$9,232
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epi	sode					
ASC		20%	18%	14%	-4%	-8%
Hospital outpatient		4%	-7%	-10%	-22%	-6%
D. Change in Median Payment per Epis	sode					
ASC		26%	21%	7%	6%	-11%
Hospital outpatient		8%	-6%	-12%	-22%	9%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute t	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at leas	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at least	st three surgical p	rocedures				
ASC	61%	66%	72%	60%	62%	62%
Hospital outpatient	52%	67%	61%	52%	48%	58%
Percentage of surgical episodes with at least	st four surgical pr	ocedures				
ASC	13%	19%	20%	18%	16%	16%
Hospital outpatient	18%	24%	18%	15%	11%	17%
Percentage of payments within networks						
ASC	80%	63%	67%	67%	71%	76%
Hospital outpatient	88%	88%	87%	93%	83%	94%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.11 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Iowa, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,757	\$3,810	\$4,264	\$4,084	\$4,106	\$3,992
Hospital outpatient	\$6,352	\$6,530	\$6,797	\$7,169	\$8,018	\$8,174
B. Median Payment per Episode						
ASC	\$2,867	\$3,055	\$3,404	\$3,314	\$3,464	\$3,692
Hospital outpatient	\$6,155	\$6,433	\$6,623	\$7,261	\$7,972	\$7,770
- · · ·		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		1%	12%	-4%	1%	-3%
Hospital outpatient		3%	4%	5%	12%	2%
D. Change in Median Payment per Ep	isode					
ASC		7%	11%	-3%	5%	7%
Hospital outpatient		5%	3%	10%	10%	-3%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	33%	10%	14%	11%	7%	7%
Hospital outpatient	34%	20%	15%	15%	11%	12%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	4%	1%	0%	2%	2%	1%
Hospital outpatient	2%	2%	1%	1%	1%	0%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	0%	0%	0%	0%	0%	1%
Hospital outpatient	0%	0%	1%	0%	1%	0%
Percentage of payments within networks						
ASC	80%	86%	81%	89%	83%	97%
Hospital outpatient	87%	85%	89%	91%	84%	92%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.12 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Iowa, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$8,851	\$10,091	\$9,875	\$11,325	\$11,986	\$11,500
Hospital outpatient	\$14,180	\$14,441	\$14,548	\$15,692	\$14,301	\$13,474
B. Median Payment per Episode						
ASC	\$8,371	\$8,880	\$9,439	\$10,284	\$10,604	\$10,882
Hospital outpatient	\$13,602	\$13,784	\$13,557	\$15,954	\$13,113	\$12,266
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	bisode					
ASC		14%	-2%	15%	6%	-4%
Hospital outpatient		2%	1%	8%	-9%	-6%
D. Change in Median Payment per Ep	isode					
ASC		6%	6%	9%	3%	3%
Hospital outpatient		1%	-2%	18%	-18%	-6%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	56%	53%	45%	49%	44%	56%
Hospital outpatient	59%	53%	45%	44%	47%	50%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	11%	19%	15%	11%	15%	15%
Hospital outpatient	9%	9%	7%	11%	13%	9%
Percentage of payments within networks						
ASC	60%	78%	89%	93%	98%	100%
Hospital outpatient	91%	78%	82%	85%	85%	90%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.13 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Louisiana, Calendar Years 2011 to 2016

-	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$6,615	\$7,031	\$8,046	\$6,868	\$7,091	\$7,642
Hospital outpatient	\$9,752	\$9,908	\$8,902	\$10,272	\$9,512	\$10,416
B. Median Payment per Episode						
ASC	\$5,636	\$6,868	\$7,470	\$6,316	\$6,511	\$7,028
Hospital outpatient	\$9,055	\$9,025	\$8,049	\$10,061	\$9,090	\$9,693
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		6%	14%	-15%	3%	8%
Hospital outpatient		2%	-10%	15%	-7%	10%
D. Change in Median Payment per Ep	isode					
ASC		22%	9 %	-15%	3%	8%
Hospital outpatient		0%	-11%	25%	-10%	7%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures				
ASC	41%	20%	30%	26%	15%	19%
Hospital outpatient	39%	28%	23%	18%	21%	20%
Percentage of surgical episodes with at lea	ast three surgical p	procedures				
ASC	6%	1%	8%	3%	0%	4%
Hospital outpatient	7%	3%	2%	5%	5%	1%
Percentage of surgical episodes with at lea	ast four surgical pr	rocedures				
ASC	0%	0%	0%	2%	0%	0%
Hospital outpatient	1%	0%	0%	1%	1%	1%
Percentage of payments within networks						
ASC	24%	36%	26%	41%	28%	39%
Hospital outpatient	30%	37%	34%	53%	43%	53%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Trends in Louisiana are only presented for knee surgeries. Louisiana is excluded from the trend analysis for shoulder surgeries due to insufficient cell sizes in earlier years.



Figure 3.14 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Massachusetts, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,121	\$2,208	\$2,067	\$2,058	\$2,531	\$1,813
Hospital outpatient	\$2,023	\$2,076	\$2,208	\$2,255	\$2,284	\$2,554
B. Median Payment per Episode						
ASC	\$1,929	\$1,929	\$1,739	\$1,286	\$1,929	\$1,286
Hospital outpatient	\$1,800	\$1,731	\$1,938	\$2,073	\$2,050	\$2,409
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		-29%	-6%	0%	23%	-28%
Hospital outpatient		3%	6%	2%	1%	12%
D. Change in Median Payment per Ep	isode					
ASC		0%	-10%	-26%	50%	-33%
Hospital outpatient		-4%	12%	7%	-1%	18%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures				
ASC	65%	55%	61%	55%	73%	56%
Hospital outpatient	49%	37%	36%	38%	37%	35%
Percentage of surgical episodes with at lea	ast three surgical p	orocedures				
ASC	35%	29%	31%	29%	46%	33%
Hospital outpatient	14%	15%	13%	14%	18%	15%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	17%	15%	16%	14%	19%	18%
Hospital outpatient	3%	5%	4%	3%	5%	5%
Percentage of payments within networks						
ASC	13%	9%	10%	43%	33%	38%
Hospital outpatient	59%	52%	54%	61%	62%	69%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Massachusetts had the lowest percentage of claims with ASC facility services among the study states included in *CompScope™ Medical Benchmarks, 19th Edition* (Belton et al., 2018). Results shown here should be used with caution due to relatively smaller cell sizes in the state.





	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$4,680	\$4,639	\$5,292	\$5,657	\$4,815	\$4,926
Hospital outpatient	\$4,183	\$4,370	\$4,428	\$4,555	\$4,949	\$5,502
B. Median Payment per Episode						
ASC	\$4,564	\$4,349	\$4,728	\$4,258	\$4,715	\$4,575
Hospital outpatient	\$3,735	\$3,800	\$4,085	\$4,085	\$4,295	\$5,011
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	pisode					
ASC		-1%	14%	7%	-15%	2%
Hospital outpatient		4%	1%	3%	9%	11%
D. Change in Median Payment per Ep	isode					
ASC		-5%	9%	-10%	11%	-3%
Hospital outpatient		2%	8%	0%	5%	17%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ast three surgical p	procedures				
ASC	78%	69%	75%	72%	75%	84%
Hospital outpatient	74%	71%	66%	61%	62%	65%
Percentage of surgical episodes with at le	ast four surgical pi	rocedures				

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

47%

28%

12%

51%

32%

23%

28%

57%

41%

30%

11%

53%

47%

23%

10%

59%

28%

25%

5%

45%

Massachusetts had the lowest percentage of claims with ASC facility services among the study states included in *CompScope™ Medical Benchmarks, 19th Edition* (Belton et al., 2018). Results shown here should be used with caution due to relatively smaller cell sizes in the state.

Key: APC: ambulatory payment classification; ASC: ambulatory surgery center.

35%

27%

1%

41%

ASC

ASC

Hospital outpatient

Hospital outpatient

Percentage of payments within networks



Figure 3.16 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Michigan, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$1,393	\$1,295	\$1,497	\$1,639	\$1,468	\$1,487
Hospital outpatient	\$3,760	\$3,759	\$3,478	\$3,682	\$3,520	\$3,555
B. Median Payment per Episode						
ASC	\$1,182	\$1,171	\$1,557	\$1,557	\$1,548	\$1,548
Hospital outpatient	\$3,342	\$3,536	\$3,313	\$3,608	\$3,437	\$3,471
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	bisode					
ASC		-7%	16%	9%	-10%	1%
Hospital outpatient		0%	-7%	6%	-4%	1%
D. Change in Median Payment per Ep	isode					
ASC		-1%	33%	0%	-1%	0%
Hospital outpatient		6%	-6%	9 %	-5%	1%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures				
ASC	48%	26%	26%	20%	17%	20%
Hospital outpatient	45%	28%	26%	20%	18%	19%
Percentage of surgical episodes with at lea	ast three surgical p	procedures				
ASC	8%	2%	4%	2%	4%	0%
Hospital outpatient	8%	4%	3%	2%	1%	1%
Percentage of surgical episodes with at lea	ast four surgical pl	rocedures				
ASC	1%	0%	0%	0%	0%	0%
Hospital outpatient	1%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	61%	43%	37%	39%	57%	56%
Hospital outpatient	81%	80%	79%	80%	78%	78%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.17 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Michigan, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,302	\$2,962	\$4,133	\$3,737	\$3,604	\$3,603
Hospital outpatient	\$6,928	\$7,211	\$6,327	\$6,629	\$6,617	\$6,729
B. Median Payment per Episode						
ASC	\$2,973	\$2,645	\$3,915	\$3,773	\$3,306	\$3,187
Hospital outpatient	\$6,201	\$6,644	\$5,966	\$6,176	\$5,844	\$6,597
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		-10%	40%	-10%	-4%	0%
Hospital outpatient		4%	-12%	5%	0%	2%
D. Change in Median Payment per Epi	isode					
ASC		-11%	48%	-4%	-12%	-4%
Hospital outpatient		7%	-10%	4%	-5%	13%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ist two surgical pr	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ist three surgical p	procedures				
ASC	52%	55%	49%	45%	46%	50%
Hospital outpatient	51%	50%	45%	39%	39%	43%
Percentage of surgical episodes with at lea	st four surgical pr	rocedures				
ASC	10%	7%	13%	12%	7%	15%
Hospital outpatient	19%	17%	12%	10%	11%	9%
Percentage of payments within networks						
ASC	51%	49%	59%	49%	49%	55%
Hospital outpatient	84%	77%	76%	72%	76%	73%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.18 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Minnesota, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$4,124	\$3,922	\$3,931	\$3,617	\$4,223	\$4,195
Hospital outpatient	\$6,360	\$6,779	\$7,217	\$7,418	\$7,057	\$7,262
B. Median Payment per Episode						
ASC	\$3,429	\$3,460	\$3,755	\$3,621	\$4,001	\$4,121
Hospital outpatient	\$6,194	\$6,923	\$7,107	\$7,305	\$7,057	\$7,112
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per E	pisode					
ASC		-5%	0%	-8%	17%	-1%
Hospital outpatient		7%	6%	3%	-5%	3%
D. Change in Median Payment per Ep	isode					
ASC		1%	9%	-4%	10%	3%
Hospital outpatient		12%	3%	3%	-3%	1%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at le	ast two surgical pr	ocedures				
ASC	35%	9%	8%	2%	7%	5%
Hospital outpatient	33%	8%	8%	9%	9%	3%
Percentage of surgical episodes with at le	ast three surgical p	orocedures				
ASC	1%	2%	1%	0%	2%	1%
Hospital outpatient	1%	0%	0%	0%	1%	0%
Percentage of surgical episodes with at le	ast four surgical pr	ocedures				
ASC	0%	0%	0%	0%	0%	0%
Hospital outpatient	0%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	29%	58%	50%	54%	41%	42%
Hospital outpatient	65%	68%	62%	73%	59%	68%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.19 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Minnesota, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$10,481	\$12,833	\$13,162	\$13,315	\$12,292	\$14,088
Hospital outpatient	\$13,016	\$14,007	\$14,192	\$13,864	\$14,532	\$13,733
B. Median Payment per Episode						
ASC	\$9,889	\$12,439	\$12,930	\$12,611	\$11,413	\$13,649
Hospital outpatient	\$12,337	\$14,670	\$14,495	\$14,188	\$14,618	\$13,841
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		22%	3%	1%	-8%	15%
Hospital outpatient		8%	1%	-2%	5%	-6%
D. Change in Median Payment per Epi	sode					
ASC		26%	4%	-2%	-10%	20%
Hospital outpatient		19%	-1%	-2%	3%	-5%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in Av	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	st three surgical p	rocedures				
ASC	60%	69%	54%	57%	47%	59%
Hospital outpatient	54%	57%	65%	53%	43%	50%
Percentage of surgical episodes with at lea	st four surgical pro	ocedures				
ASC	19%	26%	16%	18%	8%	15%
Hospital outpatient	27%	27%	20%	17%	12%	11%
Percentage of payments within networks						
ASC	53%	57%	57%	60%	58%	68%
Hospital outpatient	69%	77%	75%	74%	71%	74%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.20 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in New Jersey, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$6,597	\$6,149	\$5,673	\$5,058	\$4,835	\$4,986
Hospital outpatient	\$6,025	\$6,015	\$6,082	\$6,755	\$6,488	\$6,314
B. Median Payment per Episode						
ASC	\$5,420	\$5,128	\$4,700	\$4,218	\$4,170	\$4,698
Hospital outpatient	\$5,334	\$5,448	\$5,428	\$6,095	\$5,620	\$5,443
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		-7%	-8%	-11%	-4%	3%
Hospital outpatient		0%	1%	11%	-4%	-3%
D. Change in Median Payment per Ep	isode					
ASC		-5%	-8%	-10%	-1%	13%
Hospital outpatient		2%	0%	12%	-8%	-3%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	61%	44%	32%	28%	31%	24%
Hospital outpatient	51%	34%	34%	20%	22%	21%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	14%	7%	5%	4%	3%	3%
Hospital outpatient	11%	8%	5%	2%	2%	5%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	1%	1%	1%	1%	0%	0%
Hospital outpatient	1%	1%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	35%	48%	83%	86%	90%	95%
Hospital outpatient	86%	88%	92%	90%	94%	93%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).





	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$10,769	\$11,354	\$11,765	\$10,695	\$9,725	\$8,696
Hospital outpatient	\$9,295	\$11,043	\$10,149	\$9,998	\$10,089	\$10,851
B. Median Payment per Episode						
ASC	\$9,329	\$9,879	\$9,298	\$8,171	\$8,083	\$7,740
Hospital outpatient	\$8,980	\$10,284	\$9,328	\$8,564	\$9,240	\$9,946
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	bisode					
ASC		5%	4%	-9%	-9%	-11%
Hospital outpatient		19%	-8%	-1%	1%	8%
D. Change in Median Payment per Ep	isode					
ASC		6%	-6%	-12%	-1%	-4%
Hospital outpatient		15%	-9%	-8%	8%	8%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ast three surgical p	orocedures				
ASC	70%	73%	74%	72%	67%	68%
Hospital outpatient	59%	71%	74%	72%	57%	60%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	22%	26%	31%	29%	27%	25%
Hospital outpatient	21%	27%	29%	30%	17%	23%
Percentage of payments within networks						
ASC	36%	47%	75%	81%	83%	92%
Hospital outpatient	82%	87%	93%	98%	95%	92%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).



Figure 3.22 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in New York, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A Average Bayment per Enisode					2010	
	\$1.062	¢2.601	\$2.641	¢2 /20	\$2.017	\$2.016
Hospital outpatient	\$1,905	\$2,091	\$2,041	\$2,429	\$2,017	\$3,010
	۲ ۲ /,۱ ډ	\$1,780	J1,792	J1,/ <i>J</i> 1	ş1,920	<i>32,101</i>
B. Median Payment per Episode	64 F 44	<i>ta ca</i> 2	<i>ta ca</i> 2	<i>ta ca</i> 2	<i>ta ca</i> 2	\$2.02 <i>c</i>
ASC	\$1,541	\$1,612	\$1,612	\$1,612	\$1,612	\$3,026
Hospital outpatient	\$1,657	\$1,657	\$1,657	\$1,676	\$1,719	\$2,908
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		37%	-2%	-8%	-17%	50%
Hospital outpatient		1%	1%	0%	7%	44%
D. Change in Median Payment per Epi	isode					
ASC		5%	0%	0%	0%	88%
Hospital outpatient		0%	0%	1%	3%	69%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in Av	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	63%	52%	49%	49%	50%	52%
Hospital outpatient	50%	45%	41%	41%	38%	34%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	28%	22%	19%	19%	18%	18%
Hospital outpatient	20%	17%	13%	12%	11%	9%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	10%	6%	5%	5%	5%	5%
Hospital outpatient	5%	4%	4%	3%	3%	2%
Percentage of payments within networks						
ASC	29%	32%	32%	29%	34%	31%
Hospital outpatient	56%	61%	64%	67%	66%	70%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).



Figure 3.23 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in New York, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$2,677	\$3,989	\$4,471	\$3,949	\$3,299	\$4,240
Hospital outpatient	\$2,693	\$2,709	\$2,553	\$2,608	\$2,747	\$4,063
B. Median Payment per Episode						
ASC	\$2,227	\$2,500	\$2,387	\$2,375	\$2,563	\$4,212
Hospital outpatient	\$2,532	\$2,470	\$2,296	\$2,360	\$2,440	\$4,299
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		49%	12%	-12%	-16%	29%
Hospital outpatient		1%	-6%	2%	5%	48%
D. Change in Median Payment per Epi	sode					
ASC		12%	-5%	-1%	8%	64%
Hospital outpatient		-2%	-7%	3%	3%	76%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ist two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ist three surgical p	procedures				
ASC	73%	68%	55%	52%	51%	52%
Hospital outpatient	66%	65%	46%	45%	44%	45%
Percentage of surgical episodes with at lea	ist four surgical pr	ocedures				
ASC	32%	26%	16%	13%	14%	13%
Hospital outpatient	29%	25%	11%	10%	10%	10%
Percentage of payments within networks						
ASC	24%	24%	26%	32%	43%	33%
Hospital outpatient	54%	65%	72%	70%	69%	72%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.24 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in North Carolina, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$5,964	\$5,903	\$5,394	\$5,077	\$3,337	\$2,662
Hospital outpatient	\$6,618	\$7,147	\$6,250	\$6,021	\$4,849	\$4,668
B. Median Payment per Episode						
ASC	\$5,523	\$5,155	\$5,117	\$4,808	\$2,484	\$2,476
Hospital outpatient	\$6,204	\$6,823	\$5,532	\$5,483	\$4,292	\$4,595
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per E	pisode					
ASC		-1%	-9%	-6%	-34%	-20%
Hospital outpatient		8%	-13%	-4%	-19%	-4%
D. Change in Median Payment per Ep	oisode					
ASC		-7%	-1%	-6%	-48%	0%
Hospital outpatient		10%	-19%	-1%	-22%	7%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	e to Changes in Av	verage Payment pe	r Episode			
Percentage of surgical episodes with at le	ast two surgical pro	ocedures				
ASC	41%	29%	28%	24%	18%	15%
Hospital outpatient	43%	27%	29%	26%	20%	21%
Percentage of surgical episodes with at le	ast three surgical p	rocedures				
ASC	5%	4%	5%	3%	1%	2%
Hospital outpatient	9%	7%	6%	3%	3%	3%
Percentage of surgical episodes with at le	ast four surgical pro	ocedures				
ASC	0%	0%	0%	0%	0%	0%
Hospital outpatient	1%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	88%	84%	65%	75%	84%	73%
Hospital outpatient	86%	78%	81%	80%	75%	89%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.25 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in North Carolina, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$12,395	\$14,023	\$14,604	\$13,741	\$8,712	\$5,093
Hospital outpatient	\$12,612	\$14,594	\$12,757	\$12,677	\$10,422	\$7,874
B. Median Payment per Episode						
ASC	\$11,770	\$13,750	\$13,717	\$13,267	\$7,418	\$5,202
Hospital outpatient	\$11,980	\$13,070	\$11,024	\$11,505	\$9,319	\$8,999
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epis	ode					
ASC		13%	4%	-6%	-37%	-42%
Hospital outpatient		16%	-13%	-1%	-18%	-24%
D. Change in Median Payment per Epis	ode					
ASC		17%	0%	-3%	-44%	-30%
Hospital outpatient		9%	-16%	4%	-19%	-3%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute to	o Changes in Av	verage Payment per	r Episode			
Percentage of surgical episodes with at leas	t two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at leas	t three surgical p	rocedures				
ASC	66%	74%	77%	70%	58%	48%
Hospital outpatient	71%	75%	74%	71%	57%	46%
Percentage of surgical episodes with at leas	t four surgical pro	ocedures				
ASC	17%	21%	30%	23%	15%	7%
Hospital outpatient	36%	24%	28%	23%	16%	7%
Percentage of payments within networks						
ASC	85%	82%	74%	84%	86%	80%
Hospital outpatient	83%	82%	84%	90%	83%	89%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.26 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Pennsylvania, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$1,238	\$1,273	\$1,270	\$1,280	\$1,553	\$1,355
Hospital outpatient	\$3,686	\$4,028	\$4,076	\$4,680	\$4,922	\$5,538
B. Median Payment per Episode						
ASC	\$1,083	\$1,102	\$1,138	\$1,163	\$1,199	\$1,214
Hospital outpatient	\$3,349	\$3,610	\$3,437	\$4,007	\$4,209	\$4,865
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	visode					
ASC		3%	0%	1%	21%	-13%
Hospital outpatient		9%	1%	15%	5%	13%
D. Change in Median Payment per Epi	isode					
ASC		2%	3%	2%	3%	1%
Hospital outpatient		8%	-5%	17%	5%	16%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	28%	15%	18%	17%	12%	9%
Hospital outpatient	32%	21%	18%	17%	14%	15%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	5%	2%	2%	2%	1%	1%
Hospital outpatient	7%	3%	2%	1%	1%	2%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	1%	0%	0%	0%	0%	0%
Hospital outpatient	0%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	58%	60%	58%	74%	68%	73%
Hospital outpatient	59%	66%	62%	70%	72%	75%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.27 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Pennsylvania, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$2,518	\$3,002	\$2,980	\$3,183	\$3,544	\$3,037
Hospital outpatient	\$7,761	\$8,009	\$8,396	\$9,254	\$9,956	\$10,480
B. Median Payment per Episode						
ASC	\$2,308	\$2,534	\$2,620	\$2,680	\$2,929	\$2,584
Hospital outpatient	\$7,126	\$7,309	\$8,101	\$8,442	\$9,221	\$9,774
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		19%	-1%	7%	11%	-14%
Hospital outpatient		3%	5%	10%	8%	5%
D. Change in Median Payment per Epi	sode					
ASC		10%	3%	2%	9%	-12%
Hospital outpatient		3%	11%	4%	9%	6%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	st three surgical p	rocedures				
ASC	51%	59%	57%	49%	54%	53%
Hospital outpatient	60%	56%	57%	50%	47%	51%
Percentage of surgical episodes with at lea	st four surgical pr	ocedures				
ASC	14%	16%	15%	14%	14%	11%
Hospital outpatient	18%	16%	16%	16%	13%	12%
Percentage of payments within networks						
ASC	57%	53%	64%	60%	66%	81%
Hospital outpatient	59%	57%	61%	59%	67%	73%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.28 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Tennessee, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,442	\$3,324	\$3,354	\$3,420	\$3,331	\$3,655
Hospital outpatient	\$3,482	\$3,376	\$3,378	\$3,424	\$3,406	\$3,885
B. Median Payment per Episode						
ASC	\$3,096	\$3,112	\$3,167	\$3,234	\$3,163	\$3,522
Hospital outpatient	\$3,191	\$3,127	\$3,167	\$3,234	\$3,227	\$3,593
- · ·		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per E	pisode					
ASC		-3%	1%	2%	-3%	10%
Hospital outpatient		-3%	0%	1%	-1%	14%
D. Change in Median Payment per Ep	pisode					
ASC		1%	2%	2%	-2%	11%
Hospital outpatient		-2%	1%	2%	0%	11%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	e to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at le	east two surgical pro	ocedures				
ASC	46%	23%	18%	23%	18%	14%
Hospital outpatient	34%	16%	18%	17%	11%	12%
Percentage of surgical episodes with at le	east three surgical p	orocedures				
ASC	7%	5%	4%	6%	4%	3%
Hospital outpatient	4%	0%	3%	1%	3%	0%
Percentage of surgical episodes with at le	east four surgical pr	ocedures				
ASC	0%	1%	2%	1%	0%	0%
Hospital outpatient	1%	0%	0%	0%	1%	0%
Percentage of payments within networks	:					
ASC	82%	80%	81%	82%	84%	89%
Hospital outpatient	77%	80%	85%	87%	89%	95%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.29 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Tennessee, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$8,482	\$8,930	\$8,626	\$8,319	\$8,540	\$7,968
Hospital outpatient	\$8,223	\$9,066	\$7,835	\$8,393	\$7,815	\$7,897
B. Median Payment per Episode						
ASC	\$8,511	\$9,094	\$8,742	\$8,643	\$8,437	\$7,472
Hospital outpatient	\$7,954	\$8,726	\$7,864	\$8,062	\$6,942	\$7,473
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		5%	-3%	-4%	3%	-7%
Hospital outpatient		10%	-14%	7%	-7%	1%
D. Change in Median Payment per Ep	isode					
ASC		7%	-4%	-1%	-2%	-11%
Hospital outpatient		10%	-10%	3%	-14%	8%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	63%	66%	62%	58%	47%	51%
Hospital outpatient	53%	57%	47%	45%	35%	42%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	19%	19%	17%	14%	9%	11%
Hospital outpatient	15%	13%	16%	10%	2%	4%
Percentage of payments within networks						
ASC	76%	80%	83%	82%	89%	88%
Hospital outpatient	89%	85%	88%	84%	86%	94%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.30 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Texas, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$3,139	\$3,053	\$3,113	\$2,971	\$2,926	\$3,209
Hospital outpatient	\$4,644	\$4,561	\$4,522	\$4,475	\$4,354	\$4,718
B. Median Payment per Episode						
ASC	\$2,704	\$2,780	\$2,762	\$2,774	\$2,708	\$3,053
Hospital outpatient	\$4,158	\$4,157	\$4,195	\$4,223	\$4,177	\$4,634
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		-3%	2%	-5%	-2%	10%
Hospital outpatient		-2%	-1%	-1%	-3%	8%
D. Change in Median Payment per Ep	isode					
ASC		3%	-1%	0%	-2%	13%
Hospital outpatient		0%	1%	1%	-1%	11%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	47%	32%	32%	30%	23%	24%
Hospital outpatient	42%	28%	25%	23%	22%	19%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	11%	5%	4%	4%	4%	3%
Hospital outpatient	12%	7%	3%	4%	3%	3%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	3%	0%	1%	1%	2%	0%
Hospital outpatient	3%	1%	0%	0%	1%	0%
Percentage of payments within networks						
ASC	15%	19%	26%	35%	30%	37%
Hospital outpatient	27%	34%	39%	41%	49%	48%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.31 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Texas, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$7,015	\$7,060	\$6,803	\$7,108	\$6,937	\$6,154
Hospital outpatient	\$10,306	\$10,287	\$9,646	\$9,274	\$8,809	\$8,690
B. Median Payment per Episode						
ASC	\$6,570	\$6,802	\$6,600	\$6,909	\$7,183	\$6,258
Hospital outpatient	\$9,986	\$10,041	\$9,825	\$8,593	\$8,516	\$9,061
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	oisode					
ASC		1%	-4%	4%	-2%	-11%
Hospital outpatient		0%	-6%	-4%	-5%	-1%
D. Change in Median Payment per Ep	isode					
ASC		4%	-3%	5%	4%	-13%
Hospital outpatient		1%	-2%	-13%	-1%	6%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	58%	55%	66%	60%	61%	59%
Hospital outpatient	54%	51%	50%	46%	41%	43%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	20%	19%	23%	24%	24%	20%
Hospital outpatient	18%	17%	14%	11%	10%	13%
Percentage of payments within networks						
ASC	13%	26%	35%	29%	33%	36%
Hospital outpatient	26%	33%	41%	40%	46%	47%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.32 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Virginia, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$5,989	\$5,884	\$5,845	\$5,705	\$6,621	\$6,784
Hospital outpatient	\$8,044	\$8,154	\$8,853	\$8,809	\$8,610	\$10,184
B. Median Payment per Episode						
ASC	\$5,400	\$5,562	\$4,600	\$4,927	\$6,893	\$6,212
Hospital outpatient	\$7,177	\$7,162	\$7,747	\$7,794	\$7,686	\$9,032
- · · ·		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	bisode					
ASC		-2%	-1%	-2%	16%	2%
Hospital outpatient		1%	9%	0%	-2%	18%
D. Change in Median Payment per Ep	isode					
ASC		3%	-17%	7%	40%	-10%
Hospital outpatient		0%	8%	1%	-1%	18%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pr	ocedures	-			
ASC	49%	28%	23%	26%	24%	20%
Hospital outpatient	54%	26%	25%	25%	16%	15%
Percentage of surgical episodes with at lea	ast three surgical p	procedures				
ASC	9%	8%	3%	4%	3%	2%
Hospital outpatient	11%	5%	2%	3%	1%	2%
Percentage of surgical episodes with at lea	ast four surgical pi	rocedures				
ASC	2%	1%	0%	0%	0%	0%
Hospital outpatient	0%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	64%	77%	80%	80%	70%	83%
Hospital outpatient	88%	85%	88%	84%	93%	96%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.33 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Virginia, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$11,818	\$12,563	\$11,632	\$14,189	\$16,539	\$17,415
Hospital outpatient	\$16,141	\$15,009	\$15,900	\$18,867	\$17,761	\$21,421
B. Median Payment per Episode						
ASC	\$11,371	\$11,108	\$11,105	\$12,937	\$14,865	\$15,289
Hospital outpatient	\$12,398	\$12,863	\$14,986	\$17,669	\$15,316	\$17,511
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	isode					
ASC		6%	-7%	22%	17%	5%
Hospital outpatient		-7%	6%	19%	-6%	21%
D. Change in Median Payment per Epi	sode					
ASC		-2%	0%	16%	15%	3%
Hospital outpatient		4%	17%	18%	-13%	14%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in Av	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	st two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at lea	st three surgical p	rocedures				
ASC	54%	56%	56%	56%	49%	51%
Hospital outpatient	61%	53%	61%	47%	50%	47%
Percentage of surgical episodes with at lea	st four surgical pro	ocedures				
ASC	16%	24%	15%	18%	13%	16%
Hospital outpatient	15%	13%	14%	6%	15%	11%
Percentage of payments within networks						
ASC	61%	61%	76%	70%	76%	86%
Hospital outpatient	91%	81%	92%	88%	94%	96%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

Figure 3.34 Trends in Payments to ASC and Hospital Outpatient Providers for Knee Arthroscopies in Wisconsin, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$6,229	\$5,052	\$5,130	\$4,774	\$4,941	\$4,596
Hospital outpatient	\$8,101	\$8,896	\$9,232	\$10,389	\$10,313	\$11,017
B. Median Payment per Episode						
ASC	\$5,639	\$4,449	\$4,449	\$4,449	\$4,487	\$4,520
Hospital outpatient	\$7,747	\$8,408	\$8,741	\$10,229	\$9,363	\$10,854
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Ep	bisode					
ASC		-19%	2%	-7%	4%	-7%
Hospital outpatient		10%	4%	13%	-1%	7%
D. Change in Median Payment per Ep	isode					
ASC		-21%	0%	0%	1%	1%
Hospital outpatient		9%	4%	17%	-8%	16%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute	to Changes in A	verage Payment pe	r Episode			
Percentage of surgical episodes with at lea	ast two surgical pro	ocedures				
ASC	44%	14%	6%	11%	10%	2%
Hospital outpatient	37%	19%	14%	15%	13%	9%
Percentage of surgical episodes with at lea	ast three surgical p	rocedures				
ASC	3%	2%	0%	2%	1%	0%
Hospital outpatient	4%	1%	2%	1%	1%	0%
Percentage of surgical episodes with at lea	ast four surgical pr	ocedures				
ASC	1%	0%	0%	0%	0%	0%
Hospital outpatient	0%	0%	0%	0%	0%	0%
Percentage of payments within networks						
ASC	70%	85%	72%	88%	71%	75%
Hospital outpatient	77%	72%	80%	78%	77%	88%

Note: Sample includes common knee surgical episodes with level I knee arthroscopies (primary procedure classified as APC code 41 using the 2012 APC definition).

Figure 3.35 Trends in Payments to ASC and Hospital Outpatient Providers for Shoulder Arthroscopies in Wisconsin, Calendar Years 2011 to 2016

	2011	2012	2013	2014	2015	2016
A. Average Payment per Episode						
ASC	\$14,383	\$13,201	\$13,811	\$13,875	\$14,159	\$13,994
Hospital outpatient	\$14,805	\$15,638	\$16,139	\$16,667	\$18,068	\$17,187
B. Median Payment per Episode						
ASC	\$13,911	\$12,289	\$13,821	\$13,048	\$11,968	\$12,747
Hospital outpatient	\$15,074	\$15,465	\$15,669	\$15,870	\$17,738	\$16,869
		2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016
C. Change in Average Payment per Epis	sode					
ASC		-8%	5%	0%	2%	-1%
Hospital outpatient		6%	3%	3%	8%	-5%
D. Change in Median Payment per Epis	ode					
ASC		-12%	12%	-6%	-8%	7%
Hospital outpatient		3%	1%	1%	12%	-5%
	2011	2012	2013	2014	2015	2016
E. Other Factors That May Contribute to	o Changes in Av	verage Payment per	r Episode			
Percentage of surgical episodes with at leas	t two surgical pro	ocedures				
ASC	100%	100%	100%	100%	100%	100%
Hospital outpatient	100%	100%	100%	100%	100%	100%
Percentage of surgical episodes with at leas	t three surgical p	rocedures				
ASC	68%	61%	70%	56%	61%	55%
Hospital outpatient	60%	66%	66%	62%	57%	54%
Percentage of surgical episodes with at leas	t four surgical pro	ocedures				
ASC	17%	16%	19%	19%	13%	14%
Hospital outpatient	14%	22%	19%	19%	13%	13%
Percentage of payments within networks						
ASC	73%	74%	78%	63%	78%	78%
Hospital outpatient	78%	65%	76%	77%	74%	84%

Note: Sample includes common shoulder surgical episodes billed with a combination of level I and level II arthroscopies that were performed as part of the episode (primary and secondary procedures classified as APC 41 and 42 using the 2012 APC definition).

DATA AND METHODS

To facilitate comparison of payments to ASCs and payments to hospital outpatient departments, this study provides information on average payments to these facilities for the most common surgeries provided to injured workers for treating common diagnostic conditions in workers' compensation. To accomplish this, we used approaches developed and tested in prior WCRI studies to select a narrow group of surgical episodes and compared the payments to facilities for those episodes over time and across two different settings where an outpatient surgery may be performed—ASCs and hospital outpatient departments. The following section describes the data used, the construction of the surgical episodes, and the computation of the average payments. More details about our methodology are provided in *Payments to Ambulatory Surgery Centers, 2nd Edition* (Savych, 2016) and *Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments, 2nd Edition* (Savych, 2016).

THE DATA

This analysis uses information from the detailed medical transaction information in the WCRI Detailed Benchmark/Evaluation (DBE) database. The sample data used in this study cover 41 to 81 percent of the claims across the study states.¹ The data are from 24 large insurers, self-insurers, state funds, and third-party administrators in the study states. In most study states, our data are reasonably representative of the state systems.² The information presented in this analysis comes from the medical bills associated with claims in the DBE database.³ It includes payments to ASCs and hospital outpatient departments as well as other expenditure data within each surgical episode. We used the expenditure data (mainly payments for professional surgery services) to determine the common surgical procedures that were provided and to characterize each episode. After that, we used ASC or hospital outpatient payment data to obtain the actual amount paid for ASC or hospital outpatient facility services provided within each outpatient surgical episode.

The ASC and hospital outpatient payments data in this study cover ASC and hospital outpatient services rendered in calendar years 2011 through 2016 in the 18 study states. The unit of analysis in this study is the surgical episode. We obtained the amount paid for all ASC and hospital outpatient services captured within the surgical episode for each surgery included in this analysis. Note that the amounts paid for professional services for surgeries were not considered as part of the ASC or hospital outpatient payments in this study. Payments that surgeons receive for their services provided as part of the surgical episode are often determined by a professional fee schedule (if one is defined for the state). Typically, fee schedule rates for the professional component of surgeries do not vary based on the location of the services; the same fee schedule rate applies for surgeon services performed in ASCs and hospital outpatient departments.

¹ The data in New York are missing data from a larger data source that is significant in the state. It is possible that a payor with a large market share and single state focus may have more bargaining power on price compared with a multistate payor that designs business processes with multiple states in mind. Whether this creates material differences in estimates depends on how payments for missing data sources compared with other sources in the state and the relative size of the missing payor. To the extent that payments may differ for the missing data source compared with other data sources in the state, this may lead to possible under- or overestimations in the results. If a missing payor has a 25 percent market share and is able to get a 10 percent higher discount on prices than other payors for all of its surgeries, the potential bias in estimates is 2.5 percent.

 $^{^{2}}$ For methods used to assess the representativeness of sample data in the DBE database, please refer to Belton et al. (2018a).

³ The analysis sample includes over 170,000 ASC and hospital outpatient surgical episodes across study states.

The analysis includes states with at least 30 surgical episodes conducted in ASC settings and such that the relative standard error of the estimates is less than 10 percent. The relative standard error for the median study state in 2013 was 3 percent for knee surgeries and 4 percent for shoulder surgeries.

ESTIMATING AVERAGE PAYMENTS TO ASCS AND HOSPITAL OUTPATIENT DEPARTMENTS

Similar to the analysis in <u>Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 7th</u> <u>Edition</u> (Fomenko and Yang, 2018), the surgical episode is the unit of analysis in this study. For each selected surgery, we constructed surgical episodes from three days before the date of surgery to seven days after the date of surgery. This time window allowed us to capture the ASC and hospital outpatient payments related to surgeries more completely, as well as to account for the potential time lag for submitting bills that are related to the surgery.⁴ We enhanced comparability of ASC and hospital outpatient facility payments across states by using the same time window.

In this analysis, we provide information on actual payments to ASCs and hospital outpatient departments for all services that were provided within the time frame of the surgical episode. Those may include ASC or hospital outpatient surgery facility services (for example, treatment/operating/recovery rooms), supplies and equipment, and the technical component of anesthesia that was charged by facilities. Analysis of payments to ASCs and hospital outpatient departments excludes payments for professional services, such as payments to surgeons, payments for the professional component of anesthesiology services, payments for the professional component of radiology services, and any other payments for physicians that may happen during the surgical episode. This distinction is important since payments for professional services across states are reimbursed separately from payments for facility services.

We excluded surgical episodes with a room and board stay within the time frame. This was done to exclude cases where workers experienced complications after a surgery or might have had a more severe underlying condition that required an overnight hospital stay.

SELECTING COMMON SURGERIES

Our analysis focuses on payments for ASC or hospital outpatient services within outpatient surgical episodes for a collection of the most common surgeries provided to injured workers for treating common diagnostic conditions in workers' compensation.

In selecting the surgeries, we focused on two groups of surgical procedures treating common diagnostic conditions in workers' compensation—knee conditions and shoulder conditions. The knee diagnosis group mainly includes conditions such as dislocation and derangement of the knee and sprains and strains of the knee ligament. The shoulder diagnosis group mainly includes conditions such as rotator cuff syndrome and allied disorders, dislocation of the shoulder, and sprains and strains of the shoulder. <u>Table A</u> provides a brief description of these groups of diagnostic conditions. The surgeries that are included in the analysis include invasive orthopedic surgical procedures, such as arthroscopic knee surgeries and arthroscopic shoulder surgeries.

⁴ We found that about 99 percent of all payments for ASC surgical episodes were accumulated on the day of the surgery. Sensitivity tests published in *Hospital Outpatient Cost Index for Workers' Compensation* (Yang and Fomenko, 2012), which used the same definition of surgical episode, showed that results for hospital outpatient payments were robust for different episode time windows (see Table TA.6 in that publication).

We classified episodes into surgery groups using the CPT codes⁵ on the bills from surgeons for major surgeries. In some cases, there were multiple CPT codes billed on the same date of service, indicating multiple surgical procedures within a surgery event. In such cases, we defined the surgery group as the combination of surgical procedures with the two highest paid amounts among all surgical procedures billed as part of the episode.

We compared payments for two common types of surgeries: knee and shoulder arthroscopies. For knee surgeries, we focused on level I knee arthroscopies that fit within primary ambulatory payment classification (APC) code 41 using the 2012 APC definition.⁶ We included surgeries that also might have had a secondary level I arthroscopy surgical procedure within the same episode. The surgeries selected in this analysis captured 78 percent of total payments for knee surgeries conducted in ASC settings and 74 percent of total payments for knee surgeries conducted in ASC settings. The most common surgeries included in the group were cases with CPT code 29881—arthroscopy, knee surgery, with meniscectomy, medial or lateral (Table B).

For shoulder surgeries, we focused on surgeries with a combination of level I and level II arthroscopies that were performed as part of the episode. Those were surgeries that fit into the combination of APC groups 41 and 42 (using the 2012 APC definition) as the two most costly surgical procedures within an episode. These surgeries captured 48 percent of all payments for shoulder surgeries conducted in ASC settings and 42 percent of all payments for shoulder surgeries conducted in hospital outpatient settings. The most common combination of surgical procedures provided as part of this group in 2016 included CPT code 29827 (arthroscopy, shoulder surgery, rotator cuff repair) and CPT code 29826 (arthroscopy, shoulder surgery, decompression of subacromial space) (Table B).

We used the 2012 APC classification to avoid concerns that changes in APC classification may lead to changes in the composition of surgery groups over time. The surgical episodes we identified reflect a stable percentage of the surgeries examined in our analysis. At the same time, changes in the APC definition over time may mean that some of the surgical episodes included in our analysis may be reclassified into a different APC in the years following 2012.⁷ These changes in APC classifications during our sample period may lead to fee schedule changes for affected surgeries and may result in changes in average payments for states that follow Medicare's methodology in determining fee schedule rates for outpatient surgeries. Focusing on APC groups also addresses concerns about changes in definitions of the CPT codes that happen from time to time.⁸

⁵ CPT codes describe medical services provided by physicians, hospitals, and other health care providers. They are published by the American Medical Association.

⁶ APCs are determined by grouping together CPT codes that utilize a similar combination of resources to treat a patient.

⁷ Medicare made substantial changes in APC assignment in 2016. Many procedures that were classified as level I arthroscopy (APC 41) in 2015 were reclassified as level II musculoskeletal procedures (APC 5122) in 2016. Many procedures that were classified as level II arthroscopy (APC 42) in 2015 were reclassified as level III musculoskeletal procedures (APC 5123) in 2016. However, some of the procedures were downgraded. For example, in 2016, shoulder surgeries (CPT codes 29823, 29824, and 29825) were reclassified from being part of APC 42 to being part of APC 5122.

⁸ In 2012, several of the surgical codes for knee surgeries were redefined. For instance, codes 29881 (partial medial or lateral meniscectomy) and 29880 (partial medial and lateral meniscectomy) were redefined to include code 29877 (debridement or shaving of articular cartilage), and code 29877 was eliminated. For shoulder surgeries, effective 2012, arthroscopic limited debridement (CPT code 29822) was bundled into the arthroscopic subacromial decompression (CPT code 29826). In addition, effective 2012, arthroscopic subacromial decompression code 29826 was revised and was no longer considered to be a stand-alone code. Effective 2014, Medicare implemented a change that packaged payments for CPT code 29826 with the primary surgical procedure that is being used, so that there is no separate facility fee reimbursement CPT code 29826. Since we defined surgical episodes based on surgeon bills, we observed this code throughout our sample period and surgical episodes were consistently defined.

COMPUTING AVERAGE ASC AND HOSPITAL OUTPATIENT PAYMENTS

For each surgery in our analysis, we estimated the average and median payment. We computed payments to ASCs or hospital outpatient providers per surgical episode for each surgery by averaging the total amount paid for all ASC or hospital outpatient services captured within the outpatient episodes across all episodes with that surgery.

The analysis provides information on surgeries with at least 30 surgical episodes per year conducted in ASC or hospital outpatient settings and such that the relative standard error of the estimates is less than 10 percent.

DATA CLEANING

Over the years, WCRI has developed algorithms to adjust for known limitations in the data. Some of these limitations include outlier payments for individual services, cases with noncomparable diagnostic conditions, and overlapping surgical episodes. Some of the data cleaning steps follow decisions that were made in a previous WCRI analysis that focused on a hospital outpatient cost index—trimming outliers and excluding cases with incompatible diagnostic conditions, as well as addressing overlapping surgical episodes. Since we wanted to focus on a set of surgeries that are comparable to those used in the previous studies of outpatient surgeries, our approach follows what was done in *Hospital Outpatient Cost Index for Workers' Compensation, 2nd Edition* (Fomenko and Yang, 2013).

TRIMMING OUTLIER VALUES

A small proportion of the lines in the data had unusually large or small values for medical payments. Those unusual values contributed disproportionately to the average due to skewed distributions. To mitigate the influence of the extreme values on the average medical payments and ensure meaningful results, we applied a data cleaning technique to trim the outlier values at both extremes of the distribution of the ASC or hospital outpatient payments across all outpatient surgical episodes with the same surgery. In particular, the surgical episodes were rank ordered according to their ASC or hospital outpatient payments. Then, the episodes with payments below the 5th percentile or above the 95th percentile were removed from consideration. Therefore, this algorithm eliminated 5 percent of the outpatient surgical cases at each of the lower and upper ends of the ASC or hospital outpatient payment distribution. We also show trends in the median value for the measures that we present.

In our analysis, we focused on cases where diagnostic conditions indicated injuries to knees or shoulders. We excluded the cases with diagnosis codes indicating more serious underlying medical conditions, such as tumors, infectious diseases, fractures, and open dislocations. Typically, providers treat cases with those types of red flag conditions differently from how they treat common types of conditions.

Furthermore, a very small group of claims had several surgeries treating different types of diagnostic conditions on the same date. We excluded these cases from this study as well because they were likely to be more serious cases with different treatments and thus not comparable to the common conditions we intended to focus on in this report.

ADDRESSING OVERLAPPING SURGICAL EPISODES

In this study, we created surgical episodes for each surgery in our analysis. The range of a surgical episode was from three days before the date of surgery to seven days after the date of surgery. In our data, a very small

group of cases (less than 1 percent in most years) had two or more surgical episodes overlapping each other. Because ASC and hospital outpatient payments are measured based on surgical episodes in this study, overlapping episodes would lead to double counting of part of the facility payments. We found that among those overlapping surgical episodes, the overwhelming majority of them had two surgeries with the same procedure code or different procedure codes treating the same type of diagnostic condition, and the surgery dates were very close to each other. This indicated that there were likely lagged billing submissions, and these surgical episodes actually could be one single episode. These cases were redefined as a single surgical episode under the surgical procedure with the higher actual amount paid for surgeon services among the two. For the rest of the cases where the overlapping episodes belonged to different diagnosis groups, or the surgery dates were separated from each other by at least a week, we excluded those surgical episodes from the study because they indicated that the underlying injury severity and diagnostic conditions of those cases were likely very different from other surgical episodes.

IDENTIFYING ASC SERVICES

We identified whether the surgery was conducted in an ASC or hospital outpatient setting from information provided on facility fee bills about "place of service" or "bill type." In many states, the fee schedules require the use of specific place of service or bill type codes to identify services provided in ASC settings so that appropriate fee schedule rates can be selected. In most states, place of service code "24" identified services performed in ASC settings on CMS-1500 type bills, and bill type code "831" identified ASC bills on UB-04 bills. In the majority of cases, we had complete information on place of service or bill type.

In this analysis, we focused our attention on free-standing ASCs that identified themselves as ASCs on their medical bills. We can only determine whether a place is an ASC if it uses appropriate codes for "place of service" or "bill type" fields of the bill. This definition reflects billing practices that exist in a state. Hospital-owned ASCs that use hospital fee schedules are treated as hospitals for payment purposes and, therefore, are grouped with hospital outpatient departments.

When we had incomplete data on place of service or bill type for a given bill, we imputed whether the place was an ASC or a hospital outpatient department based on complete bills for the same provider (determined by provider identifier number). For a given unique provider ID, if the bills with complete information identified the place as an ASC, then it was assigned as an ASC for the purposes of our analysis. In some cases, we were not able to uniquely determine whether a provider was an ASC or a hospital outpatient department when we observed conflicting information about place of service on multiple bills. This may happen when the same provider identifiers were used for multiple locations, some of which were ASCs while others were hospitals. Since we could not uniquely assign those cases to one group or another, we dropped those surgical episodes from the analysis. This dropped under 5 percent of surgical episodes from our analysis.

ADDRESSING CONCERNS ABOUT COMPARABILITY OF ASC AND HOSPITAL OUTPATIENT SERVICES

In our analysis, we used a number of methods to enhance the homogeneity of ASC and hospital outpatient payments measured in this study. In particular, we focused on common surgeries and constructed surgical episodes in the same way across surgical settings. Therefore, we controlled the mix of services to the extent that surgical cases constructed around the same surgical procedures share similar patterns of ASC and hospital outpatient care. However, we were not able to directly control for the utilization pattern of different

types of ASC and hospital outpatient services within the surgical episodes because of limited details on ASC or hospital outpatient billing.

Although we focused our analysis on the claims within narrow APC groups defined for two of the most expensive procedures, the states may differ in terms of the likelihood that there were multiple procedures performed on the same day as part of the surgery. The state-specific figures show the percentage of surgical episodes in which there were multiple surgical procedures performed as part of the surgical episode. To examine whether the results are sensitive to cases with multiple surgical procedures, we provide a comparison of the average payments for ASC and hospital outpatient knee surgeries when the only surgical procedure was a knee arthroscopy (CPT code 29881). The results are presented in <u>Figure A</u>. We also provide a comparison of the average payments for ASC and hospital outpatient shoulder surgeries reweighted to keep the distribution of different shoulder procedures constant across states. The results are presented in <u>Figure B</u>. The qualitative results from those estimates are similar to what we found in the main body of the report.

FIGURES AND TABLES (DATA AND METHODS)

- <u>Table A</u> Brief Definitions for Diagnosis Groups
- Table B Examples of the Most Frequent CPT Combinations for Our Surgical Groups, Calendar Year 2016
- <u>Table C</u> Percentage Frequency and Percentage Expenditure for Surgeries Presented in Our Analysis by State, Calendar Year 2016
- Table D Percentage of Surgeries Included in Our Analysis for Diagnostic Conditions, Calendar Year 2016
- Figure A Sensitivity Test Comparing Average Payments to ASCs for Knee Surgeries in our Main Estimates and for Cases with CPT 29881 Only, Calendar Year 2016
- <u>Figure B</u> Sensitivity Test Comparing Average Payments to ASCs for Shoulder Surgeries in our Main Estimates and for Cases with Similar Weights Applied across States, Calendar Year 2016

Table A Brief Definitions for Diagnosis Groups

Diagnosis Group	Definition
Knee conditions	Diagnostic conditions in this group include dislocation and derangement of knee (such as tear or derangement of meniscus of knee) and sprains and strains of ligament or other sites of knee.
Shoulder conditions	Diagnostic conditions in this group mainly include rotator cuff syndrome and allied disorders, other enthesopathies of shoulder region, sprains and strains of shoulder, rupture of tendon in shoulder region, and joint disorders and derangement in shoulder region.

Primary CPT Code	Secondary CPT Code	Primary CPT Code Description	Secondary CPT Code Description	Percentage Frequency	Percentage Expenditure
Knee surge	ries				
29881	None	Arthroscopy, knee surgery, with meniscectomy, medial or lateral	None	46%	42%
29880	None	Arthroscopy, knee surgery, with meniscectomy, medial and lateral	None	17%	16%
29876	29881	Synovectomy, major, two or more compartments (e.g., medial or lateral)	Arthroscopy, knee surgery, with meniscectomy, medial or lateral	5%	6%
29877	None	Arthroscopy, knee surgery, debridement/shaving of articular cartilage (chondroplasty)	None	4%	4%
29879	29881	Abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture	Arthroscopy, knee surgery, with meniscectomy, medial or lateral	2%	3%
29881	29875	Arthroscopy, knee surgery, with meniscectomy, medial or lateral	Synovectomy, limited (e.g., plica or shelf resection) (separate procedure)	2%	2%
29875	None	Synovectomy, limited (e.g., plica or shelf resection) (separate procedure)	None	2%	2%
29881	29876	Arthroscopy, knee surgery, with meniscectomy, medial or lateral	Synovectomy, major, two or more compartments (e.g., medial or lateral)	2%	2%
29880	29876	Arthroscopy, knee surgery, with meniscectomy, medial and lateral	Synovectomy, major, two or more compartments (e.g., medial or lateral)	2%	2%
29876	None	Synovectomy, major, two or more compartments (e.g., medial or lateral)	None	2%	1%
Shoulder s	urgeries				
29827	29826	Arthroscopy, shoulder surgery, rotator cuff repair	Arthroscopy, shoulder surgery, decompression of subacromial space	40%	48%
29827	29824	Arthroscopy, shoulder surgery, rotator cuff repair	Arthroscopy, distal claviculectomy including distal articular surface (Mumford procedure)	13%	11%
29823	29826	Arthroscopy, shoulder, surgical; debridement, extensive	Arthroscopy, shoulder surgery, decompression of subacromial space	11%	7%
29826	29827	Arthroscopy, shoulder surgery, decompression of subacromial space	Arthroscopy, shoulder surgery, rotator cuff repair	5%	5%
29826	29823	Arthroscopy, shoulder surgery, decompression of subacromial space	Arthroscopy, shoulder, surgical; debridement, extensive	5%	5%
29807	29826	Arthroscopy, shoulder surgery, repair of superior labrum anterior to posterior lesion	Arthroscopy, shoulder surgery, decompression of subacromial space	4%	4%
29828	29826	Arthroscopic biceps tenodesis	Arthroscopy, shoulder surgery, decompression of subacromial space	3%	4%
29827	29822	Arthroscopy, shoulder surgery, rotator cuff repair	Arthroscopy, shoulder, surgical; debridement, limited	3%	2%
29828	29824	Arthroscopic biceps tenodesis	Arthroscopy, distal claviculectomy including distal articular surface (Mumford procedure)	2%	2%
29823	29824	Arthroscopy, shoulder, surgical; debridement, extensive	Arthroscopy, distal claviculectomy including distal articular surface (Mumford procedure)	2%	1%

Table B Examples of the Most Frequent CPT Combinations for Our Surgical Groups, Calendar Year 2016

Notes: The numbers shown in the table are computed based on 18-state pooled data covering ambulatory surgery center services and hospital outpatient services in calendar year 2016. Percentage expenditure is the share of the total amount paid for each most commonly used surgical procedure within the surgical group. Percentage frequency is the share of the total number of services for each most commonly used surgical procedure within the surgical group. Percentage frequency is the share of the total number of services for each most commonly used surgical procedure within the surgical group.

Key: CPT: Current Procedural Terminology.

		A	sc			Hospital	Outpatient	
State	Percentage	Frequency	Percentage	Percentage Expenditure		Frequency	Percentage Expenditure	
	Knee Surgeries	Shoulder Surgeries	Knee Surgeries	Shoulder Surgeries	Knee Surgeries	Shoulder Surgeries	Knee Surgeries	Shoulder Surgeries
California	89%	44%	77%	44%	84%	38%	69%	39%
Florida	89%	45%	75%	51%	86%	40%	72%	44%
Georgia	86%	39%	71%	39%	88%	37%	74%	39%
Illinois	9 1%	57%	85%	66%	88%	52%	81%	58%
Indiana	89%	40%	75%	44%	86%	40%	76%	47%
lowa	86%	37%	74%	45%	89%	33%	76%	35%
Louisiana	92 %	56%	84%	61%	83%	50%	69%	55%
Massachusetts	89%	44%	88%	45%	85%	42%	73%	48%
Michigan	9 1%	36%	80%	41%	88%	29%	74%	30%
Minnesota	87%	30%	74%	32%	86%	27%	75%	28%
New Jersey	87%	51%	78%	57%	90%	46%	81%	52%
New York	95%	35%	92%	35%	86%	33%	75%	34%
North Carolina	89%	40%	76%	40%	84%	29%	69%	28%
Pennsylvania	91%	42%	79%	50%	88%	40%	78%	45%
Tennessee	86%	40%	69%	43%	86%	33%	73%	34%
Texas	83%	39%	67%	40%	81%	27%	64%	28%
Virginia	81%	40%	63%	43%	86%	35%	76%	38%
Wisconsin	91%	35%	80%	41%	88%	39%	78%	44%

Table C Percentage Frequency and Percentage Expenditure for Surgeries Presented in Our Analysis by State, Calendar Year 2016

Notes: The numbers shown in this table are computed based on ASC and hospital outpatient services in calendar year 2016. Percentage frequency is the share of the total number of services for each surgical group within the state. Percentage expenditure is the share of the total amount paid for each surgical group within the state.

Key: ASC: ambulatory surgery center.

Table D Percentage of Surgeries Included in Our Analysis for Diagnostic Conditions, Calendar Year 2016

	Percentage Frequency	Percentage Expenditure
Knee conditions		
ASC	89%	78%
Hospital outpatient	86%	74%
Shoulder conditions		
ASC	43%	48%
Hospital outpatient	37%	42%

Notes: The numbers shown in this table are computed based on 18-state pooled data covering ASC and hospital outpatient services in calendar year 2016. Percentage frequency is the share of the total number of services for each surgical group within ASC or hospital outpatient settings. Percentage expenditure is the share of the total amount paid for each surgical group within ASC or hospital outpatient settings.

Key: ASC: ambulatory surgery center.

Note: The difference between the main estimate and the estimate for cases with CPT 29881 only for Florida may reflect a somewhat lower-than-average percentage of surgical episodes with CPT 29881 only and higher fee schedule rates in Florida's Reimbursement Manual for Ambulatory Surgical Centers for other CPT codes that are included in this knee surgery group.

Key: ASC: ambulatory surgery center; CPT: Current Procedural Terminology.

Note: The sensitivity test estimates apply weights to keep the distribution of primary surgical procedures constant across states. The weights reflect the overall distribution of primary surgical procedures across all states.

Key: ASC: ambulatory surgery center.

LIMITATIONS AND CAVEATS

It is important to acknowledge several limitations and caveats of this study.

First, the estimates presented in this study are based on data through 2016. Since most study states did not have substantial changes in their fee schedules after 2016, the comparison of ASC and hospital outpatient payments should provide a reasonable approximation for the states' current comparison. There are two important exceptions. Effective January 1, 2018, Virginia introduced a fee schedule for medical providers including ASCs and hospital outpatient providers. Effective April 1, 2018, Georgia set ASC fee schedule rates at 210 percent of Medicare's OPPS rates (about 7 percent lower than the facility fee schedule rates for hospital outpatient surgeries). Future studies should monitor changes in payments that resulted from these changes in fee schedules.

Second, while we used a number of methods to enhance the comparability of ASC and hospital outpatient payments measured in this study, we cannot account for all different patterns of utilization of

surgical services. In our analysis, we focused on surgical episodes with a common main surgical procedure and constructed surgical episodes in the same way for both ASC and hospital outpatient surgeries. Therefore, we controlled the mix of services to the extent that surgical cases constructed around the same surgical procedures share similar patterns of ASC and hospital outpatient care. However, we were not able to directly control for the utilization pattern of different types of ASC and hospital outpatient services within the surgical episodes because the revenue codes often used in ASC and hospital outpatient billing are too broadly defined to support such analysis. Although we focused on the same surgical procedures, it is possible that we did not capture potential heterogeneity in the nature of the medical care or nature of billing for the medical codes. Our analysis shows that there were some differences in billing for second or third surgical procedures that were part of the main surgery. We also show that our qualitative results are not affected by this issue when we focus on detailed surgeries.

Third, while the analysis focuses on the most common surgical procedures (see <u>Table D</u>), payments for these procedures may not necessarily reflect differences in ASC and hospital outpatient payments for other common surgeries that were performed on workers with shoulder or knee conditions. Payments for surgeries that are not included in this study may differ based on the fee schedule rates that may apply to those surgeries. Other knee and shoulder surgeries may be more or less expensive, thus affecting comparisons of payments. However, since the surgeries that are included in this analysis represent the most frequent surgeries, the qualitative results discussed in this report are likely to hold if we extend the analysis to a wider list of surgical procedures. Furthermore, we show the overall trends for knee and shoulder surgeries.

Fourth, we do not examine all possible factors that may shape the likelihood that a surgery was conducted in an ASC or hospital outpatient setting. There is a growing literature showing that the nature of financial incentives that physicians face may shape the nature and type of care that their patients receive. For example, previous studies showed that surgeon owners of ASCs perform more surgeries than surgeons who are not owners (Mitchell, 2010; Hollingsworth et al., 2010; Gabel et al., 2008; Lynk and Longley, 2002; Yee, 2012). There are also incentives for physicians whose practices are owned by hospitals to refer patients to those hospitals (Baker, Bundorf, and Kessler, 2016). We can expect that the nature of the facility ownership may provide strong incentives for the surgery to be done in ASC or hospital outpatient settings. In addition, other important factors that that may play a role are the number of ASCs in the market, state-specific rules about opening new ASCs (i.e., certificate of need laws), and differences in payments for ASC and hospital outpatient surgeries both for professional as well as facility components. Future studies should examine how these factors shape the likelihood that a workers' compensation surgery is performed in an ASC or hospital outpatient setting.

In addition, we do not examine how hospital consolidation and changes in market power of different medical providers may affect payments for surgical episodes examined in this report. Moves to consolidate hospitals may lead to price increases in a given market. Similarly, payments for surgeries may be affected by strategic pricing decisions by providers designed to expand their market share. Separate analysis would have to examine how changes in market power may have contributed to the changes in prices that we observed in this study.

Furthermore, this study only examines the payments for common surgeries conducted in ASC and hospital outpatient settings. We do not examine the outcomes of these surgeries. We also do not examine differences in the recovery rates between patients treated in ASC and hospital outpatient settings, nor do we examine whether the surgeries were appropriate or indicated for specific knee or shoulder conditions.

Finally, this study provides a descriptive analysis of the fee schedules. We do not make causal arguments,

and we do not establish causal links between specific policies and observed payments.

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