



# Medical Data Report

For the state of:

# SOUTH DAKOTA

October 2017



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## Introduction

Medical costs have consistently been on the rise over the last 30 years. Today, in many states, close to 60% of workers compensation benefits are attributed to medical costs. The rising cost of medical care is one of the major issues facing workers compensation stakeholders now and in the foreseeable future. The availability of medical data on workers compensation claims is essential for pricing of proposed state legislation, impacts of changes to medical fee schedules, and research.

This publication is a data source for regulators and others who are interested in the driving forces behind the increasing medical costs in workers compensation claims. The information in this report provides important benchmarks against which cost containment strategies may be measured and gives valuable insight into the medical cost drivers that threaten the financial soundness of the workers compensation system.

Knowing how payments for different services contribute to workers compensation medical benefit costs provides insight into the growth of medical benefits. This report illustrates the breakdown of services by category, namely:

- Physician
- Hospital Outpatient
- Hospital Inpatient
- Ambulatory Surgical Centers
- Drugs
- Durable Medical Equipment (DME), Supplies, and Implants
- Other

Next, the report drills down into these categories to show which particular procedures represent the greatest share of payments and which are performed the most.

Additionally, this report provides detail on payments for prescription drugs, including which drugs are being prescribed the most and which ones represent the greatest share of drug payments, as well as information on repackaged drugs and controlled substances.

There is one important caveat: Information in this report may not coincide with an analysis of a medical fee schedule change performed in the future. An analysis of a medical fee schedule change requires evaluation of the specific procedures covered by the fee schedule, which may be different from how payments are categorized in this report.

Additional information regarding the data underlying this report is available in the Appendix.



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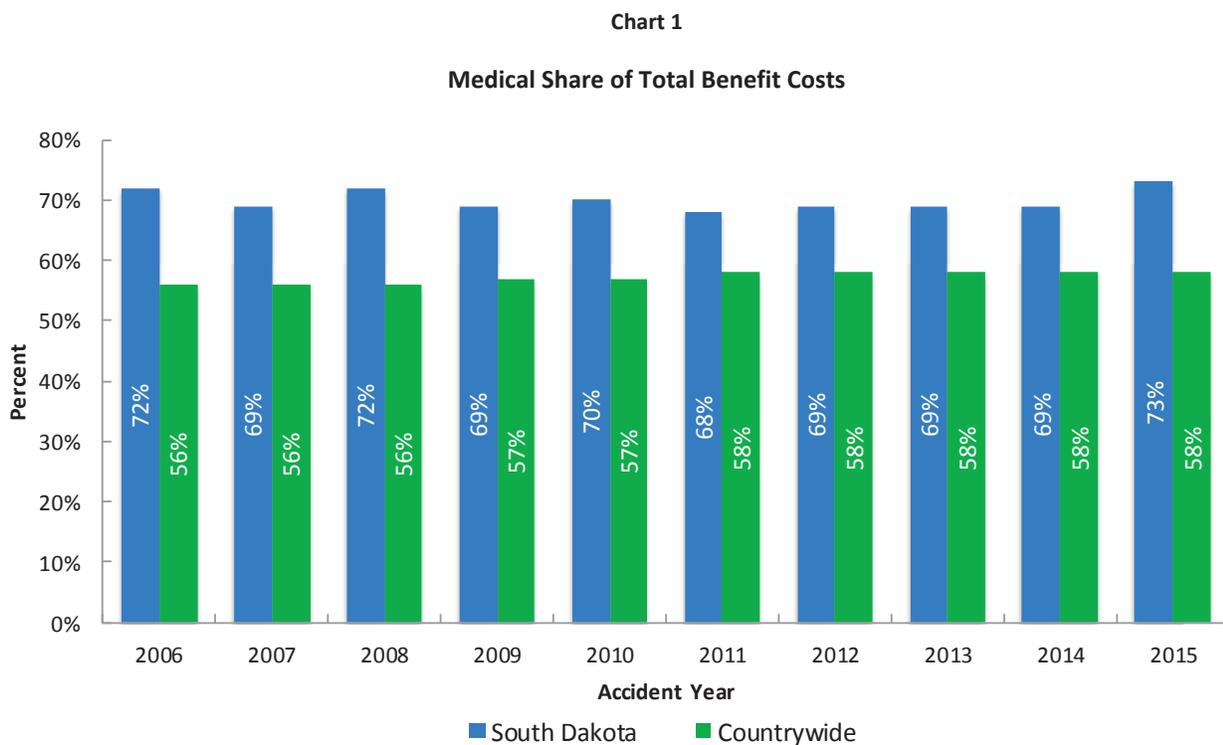
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Traditional workers compensation policies cover two types of benefit payments: medical benefits and indemnity (lost wages) benefits.

Of the two, medical benefits resulting from a work-related injury or disease are the leading cost drivers for workers compensation claims on a countrywide basis. Because this is a relative measure, and benefits for both indemnity and medical may vary from state to state, the local share of medical benefit costs may vary. In particular, the medical share in a state may be large because the indemnity benefits are relatively less prominent.

Chart 1 displays the medical percentage of total benefit costs for South Dakota and the countrywide average for the past 10 accident years.

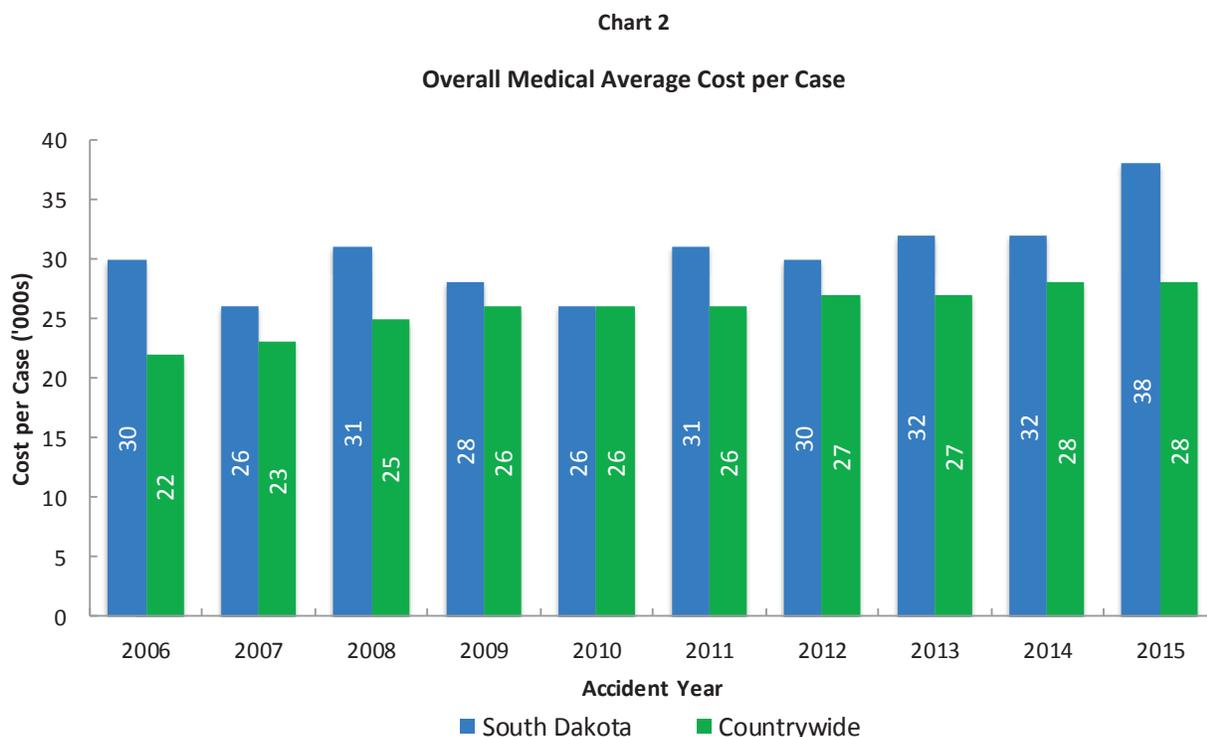


Source: NCCI Calendar-Accident Year Call for Compensation Experience. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, TX, UT, VA, VT, and WV.

After a decade of medical cost inflation at an annual rate of 6%, the countrywide overall medical average cost per claim has seen more moderate increases, averaging 1% from 2009 to 2015; this is markedly less than the observed 3% annual growth for the United States Personal Healthcare Spending per Capita.<sup>1</sup> Chart 2 displays the historical overall medical average cost per case (per lost-time claim) for the most recent 10 accident years. Results are displayed for both South Dakota and the countrywide average.

Medical losses are at historical benefit levels and historical dollar values—meaning that no adjustment for inflation or changes in benefits has been made. Since the data is aggregated for all medical losses by accident year, the results shown in this chart provide a high-level perspective of the average medical cost per case.

This chart illustrates how South Dakota compares to the countrywide average for each individual accident year and allows for the comparison of the growth in average medical costs.



Source: NCCI Calendar-Accident Year Call for Compensation Experience. Losses and claim counts are developed to ultimate. Medical-only claim counts and losses are excluded. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, TX, UT, VA, and VT.

<sup>1</sup> Medical Cost Trends Then and Now, [www.ncci.com/Articles/Documents/II\\_AIS2017-Lipton.pdf](http://www.ncci.com/Articles/Documents/II_AIS2017-Lipton.pdf).

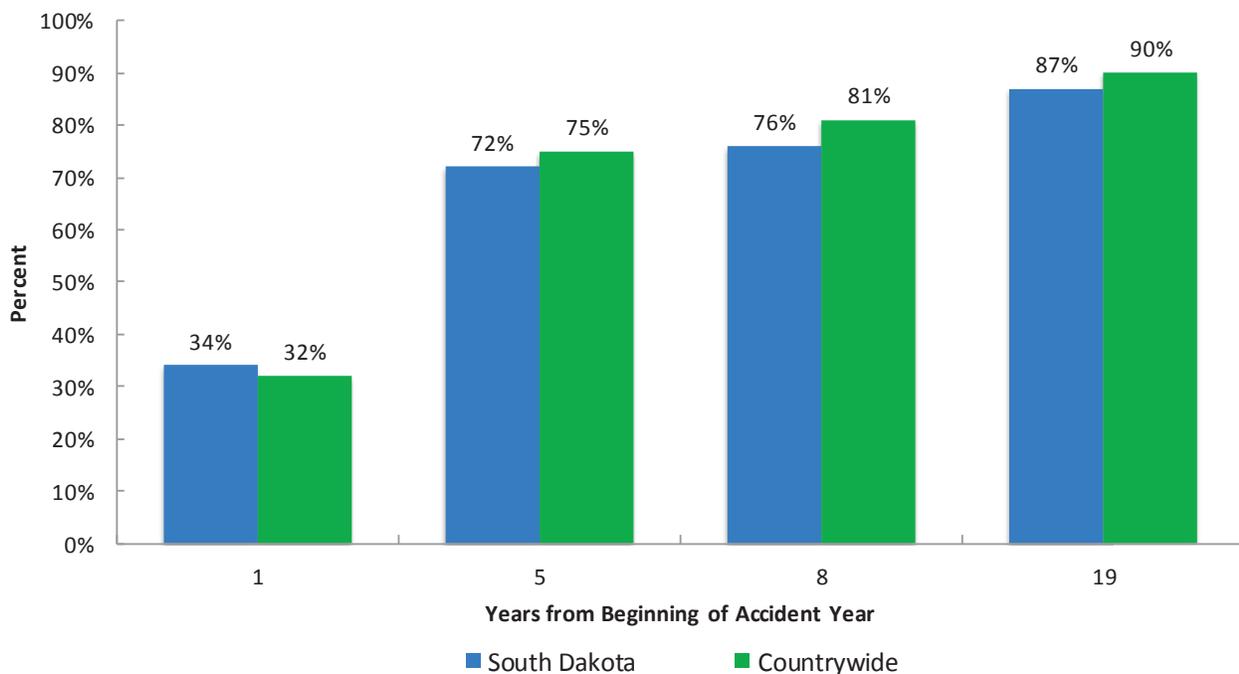
One factor that impacts medical costs is the time over which medical services are used. Payments on a workers compensation claim often continue for many years. Recent NCCI research has found that it is likely that more than 10% of the cost of medical benefits for workplace injuries that occur this year will be for services provided more than two decades into the future.

A key determinant driving payment patterns for medical services is the effectiveness of dispute resolution processes, settlement practices, and statutory provisions for medical benefits. An aging workforce and continued changes in rules for Medicare set-asides have created a shifting environment for the settlement of claims and, particularly, medical benefits.

Chart 3 shows the percentage of medical benefits paid (including medical settlements) at different claim maturities for South Dakota and the countrywide average.

**Chart 3**

**Percentage of Medical Paid by Claim Maturity**



Source: NCCI Calendar-Accident Year Call for Compensation Experience. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, and VT.

Knowing how payments for different medical services contribute to workers compensation medical benefit costs provides insight into the growth in medical benefits.

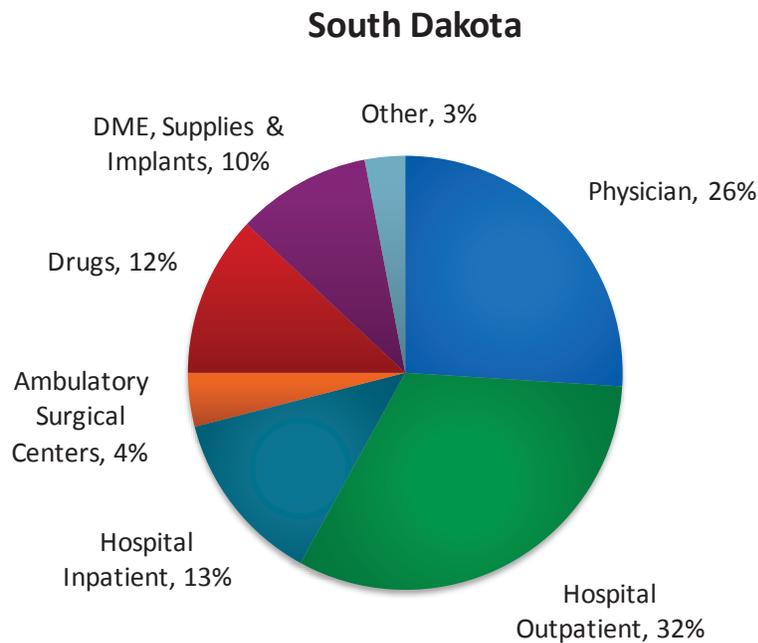
Chart 4 displays the distribution of medical payments by type of service.

Payments are categorized as Drugs; Durable Medical Equipment (DME), Supplies, and Implants; and Other (includes home health, transportation, vision, and dental services), based on the procedure code reported. Payments are mapped to these categories regardless of who provides the service or where the service is performed. For the remaining categories—Physicians, Hospital Outpatient, Hospital Inpatient, and Ambulatory Surgical Centers (ASC)—NCCI relies on a combination of:

- Provider taxonomy code—identifies the type of provider that billed for and is being paid for a medical service; see Glossary
- Procedure code—alphanumeric code used to identify procedures performed by medical professionals
- Place of services—alphanumeric code used to identify places where procedures were performed (e.g., physician’s office, ambulatory surgical center)

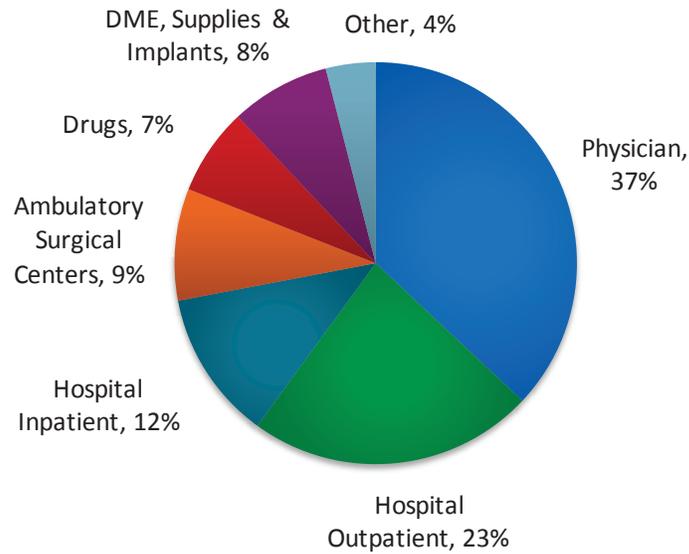
Chart 4

Distribution of Medical Payments

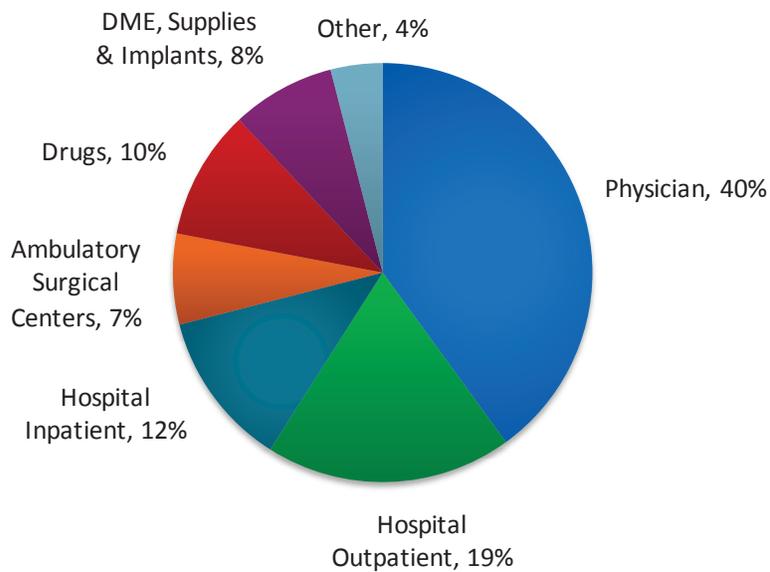


## Distribution of Medical Payments (cont'd)

### Region



### Countrywide



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Results from NCCI’s study, [“The Price Impact of Physician Fee Schedules”](#) (April 2014), show that the median workers compensation price for a physician service is always at, or very near, the maximum allowable reimbursement (MAR) amount set by the fee schedule. In the 1970s, fewer than a dozen states had physician fee schedules in place. In the 1990s, several states established such schedules. Today, few states remain *without* a physician fee schedule. Recent changes in the schedules indicate greater attention to provisions that often seek to balance cost containment with service provider availability.

One measure of workers compensation medical costs is a comparison of current payments to the Medicare rates.

The table below shows the average percentage of Medicare schedule reimbursement amounts for physician payments, by category, for South Dakota, the region, and countrywide.

<b>Payments Percentage of Medicare</b>	<b>SD</b>	<b>Region</b>	<b>Countrywide</b>
Surgery	156%	255%	228%
Radiology	228%	283%	243%
Medicine	107%	142%	129%
Evaluation and Management	103%	169%	139%
<b>All Physician Services</b>	<b>128%</b>	<b>185%</b>	<b>160%</b>

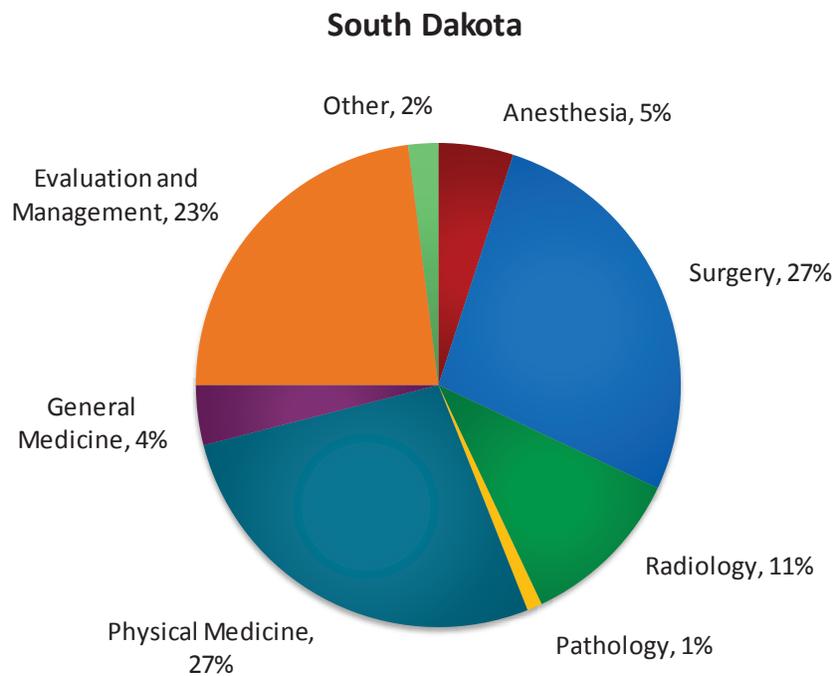
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Chart 5 shows the distribution of physician payments by service category. Service categories are defined by the American Medical Association (AMA). Services involving office visits and consultations are included in the Evaluation and Management category. The Other category includes any codes not included in the AMA service categories, such as state-defined codes.

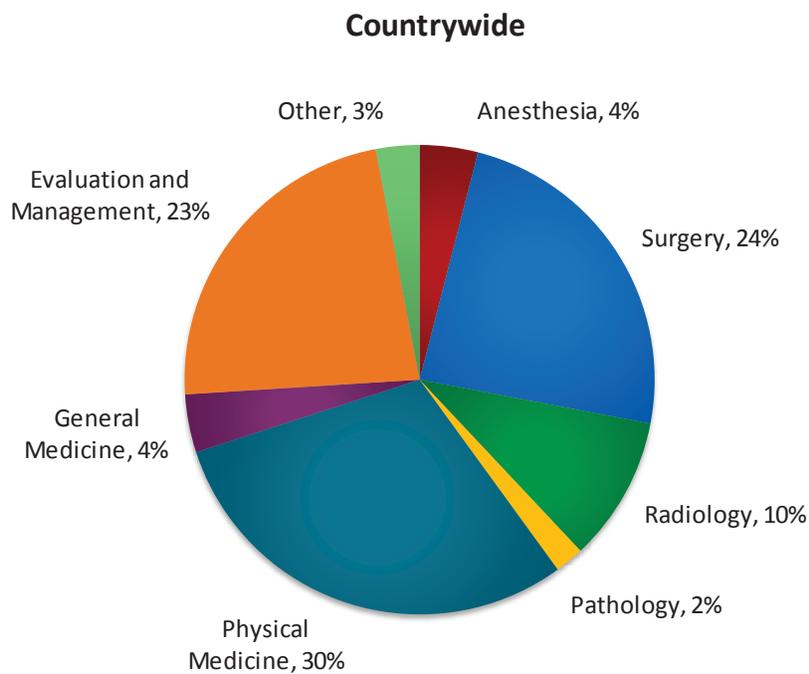
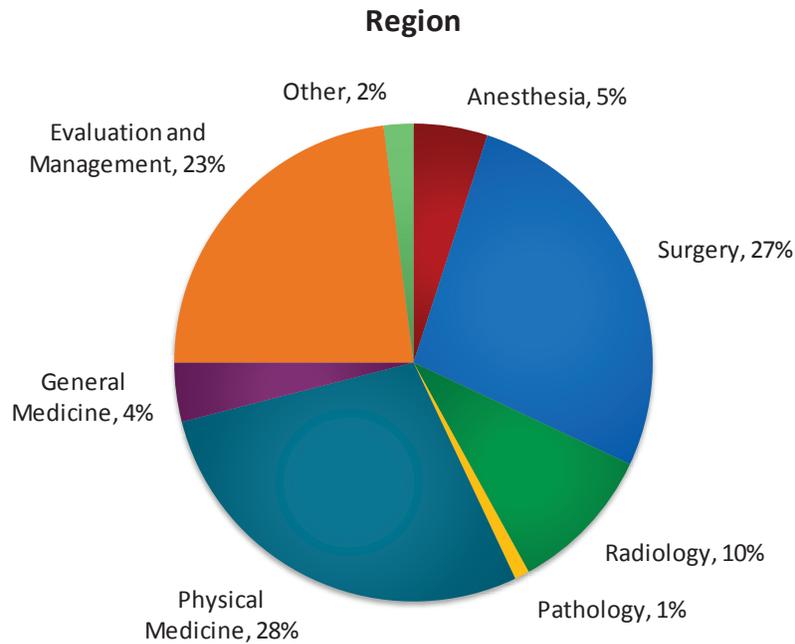
Since many states' medical fee schedule payment levels vary by service categories, an analysis of physician payments provides insights into the effectiveness of the fee schedule. For example, if the share of payments is high for a particular category compared to other states, a driver of the higher share could be higher maximum payment levels for that service category provided in the fee schedule.

Chart 5

Distribution of Physician Payments by AMA Service Category



## Distribution of Physician Payments by AMA Service Category (cont'd)



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Physicians typically use current procedure terminology (CPT) codes to identify the services that they provide to claimants. These codes are specific and provide detailed information on what service was performed. Charts 6 through 14 display the top 10 procedure codes reported by physicians for the following service categories: surgery, radiology, physical and general medicine, and evaluation and management. A brief description of each procedure code, including the percentage of payments that the procedure code represents in South Dakota, is displayed in the corresponding table below each chart.

The charts also include the average amount paid per transaction for these codes in South Dakota, in the region, and across the country. The average amount paid per transaction is calculated by taking the total payments for the procedure code and dividing by the number of transactions for the procedure code. Other fields, such as the secondary paid procedure code, modifier, diagnosis code, place of service, quantity/units, and others may need to be considered when evaluating average payments per service.

The Top 10 charts rank the procedure codes for each service category using two different methods. The first method ranks procedure codes by total payments. Procedure codes are sorted from highest total payments to lowest total payments. The procedure code with the highest amount paid is ranked first, the procedure code with the second highest amount paid is ranked second, and so on. This method of ranking shows those procedures that represent the highest percentage share of payments.

The second method ranks procedure codes by total count of transactions. The procedure code with the highest total transaction count is ranked first, the procedure code with the second highest total transaction count is ranked second, and so on. This method reveals the most frequently used procedures.

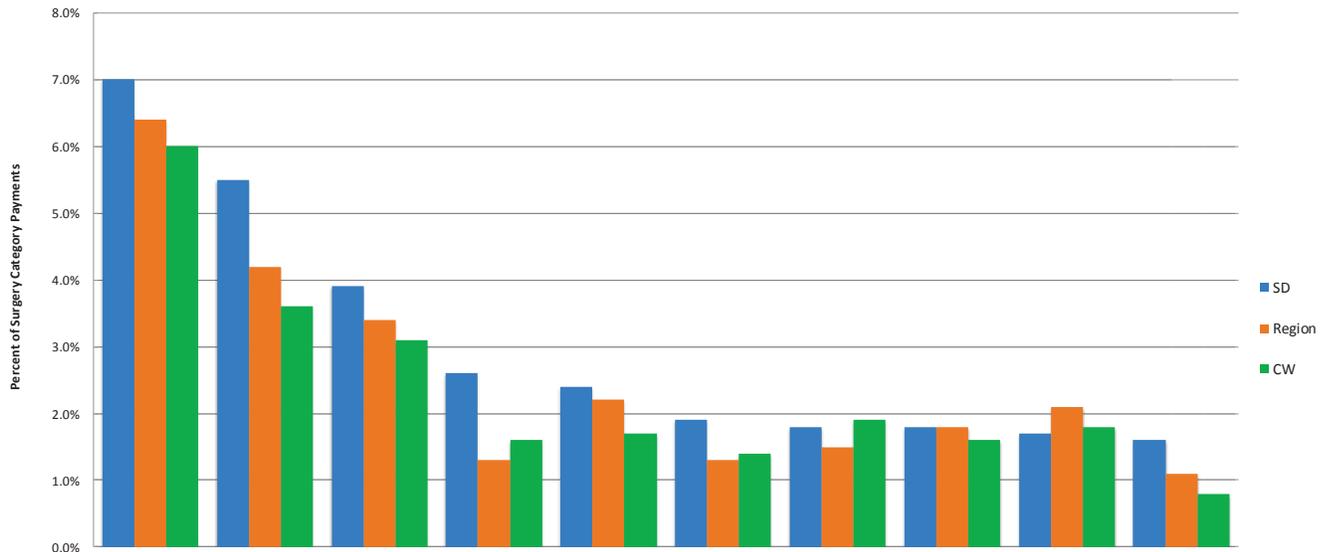
Results from NCCI's study, [“The Price Impact of Physician Fee Schedules”](#) (April 2014), show that the influence of fee schedules is quite different between the high-volume Evaluation and Management (E&M) service category and the small-volume Surgery category. For Surgery, many workers compensation payments are well below the MAR but are considerably above group health payments. In contrast, for E&M, workers compensation payments are closer to the MAR than those for Surgery and are more in line with those for group health.



In South Dakota, physician payments for surgery services provided in 2016 are, on average, 156% of Medicare scheduled reimbursement amounts.

Chart 6

Top 10 Surgery Procedure Codes by Amount Paid for South Dakota



Procedure Code	SD	Reg	CW
29827	\$1,234	\$1,936	\$1,993
29826	\$632	\$938	\$895
29881	\$1,070	\$1,526	\$1,432
63030	\$1,867	\$1,816	\$2,098
29824	\$429	\$922	\$861
29888	\$1,747	\$2,339	\$2,165
22551	\$2,683	\$3,328	\$3,295
12001	\$123	\$183	\$179
29823	\$905	\$1,173	\$1,047
29822	\$701	\$918	\$942

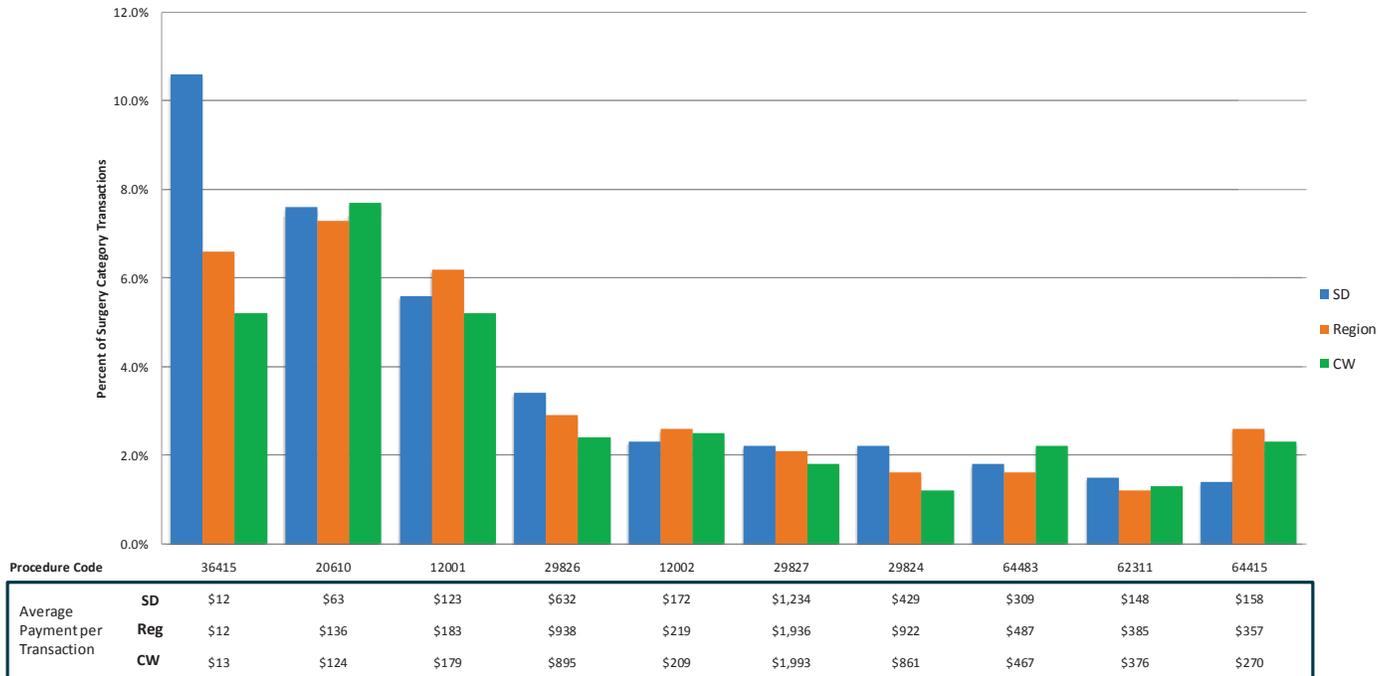
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
29827	7.0%	Arthroscopy shoulder surgical; with rotator cuff repair
29826	5.5%	Arthroscopy shoulder surgical; decompression of subacromial space with partial acromioplasty with coracoacromial ligament (i.e., arch) release when performed
29881	3.9%	Arthroscopy knee surgical; with meniscectomy (medial or lateral including any meniscal shaving) including debridement/shaving of articular cartilage
63030	2.6%	Laminotomy (hemilaminectomy) with decompression of nerve root(s) including partial facetectomy, foraminotomy, and/or excision of herniated intervertebral disc; 1 interspace lumbar
29824	2.4%	Arthroscopy shoulder surgical; distal claviclectomy including distal articular surface (Mumford procedure)
29888	1.9%	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
22551	1.8%	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophyctomy and decompression of spinal cord and/or nerve roots; cervical below C2
12001	1.8%	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk, and/or extremities (including hands and feet); 2.5 cm or less
29823	1.7%	Arthroscopy shoulder surgical; debridement extensive
29822	1.6%	Arthroscopy shoulder surgical; debridement limited



Chart 7

Top 10 Surgery Procedure Codes by Transaction Counts for South Dakota



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

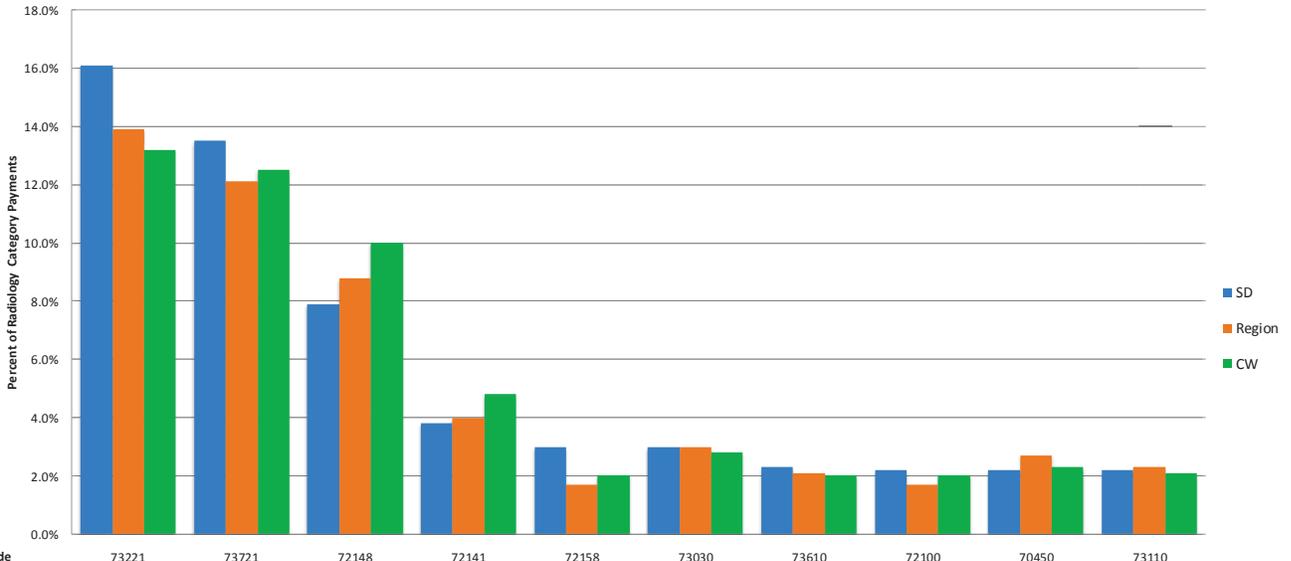
Code	% in SD	Description
36415	10.6%	Collection of venous blood by venipuncture
20610	7.6%	Arthrocentesis, aspiration, and/or injection; major joint or bursa (e.g., shoulder, hip, knee, joint, subacromial bursa)
12001	5.6%	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk, and/or extremities (including hands and feet); 2.5 cm or less
29826	3.4%	Arthroscopy shoulder surgical; decompression of subacromial space with partial acromioplasty with coracoacromial ligament (i.e., arch) release when performed
12002	2.3%	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk, and/or extremities (including hands and feet); 2.6 cm to 7.5 cm
29827	2.2%	Arthroscopy shoulder surgical; with rotator cuff repair
29824	2.2%	Arthroscopy shoulder surgical; distal claviclectomy including distal articular surface (Mumford procedure)
64483	1.8%	Injection(s), anesthetic agent, and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or computed tomography (CT)); lumbar or sacral, single level
62311	1.5%	Injection(s) of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral
64415	1.4%	Injection, anesthetic agent; brachial plexus, single



In South Dakota, physician payments for radiology services provided in 2016 are, on average, 228% of Medicare scheduled reimbursement amounts.

Chart 8

Top 10 Radiology Procedure Codes by Amount Paid for South Dakota



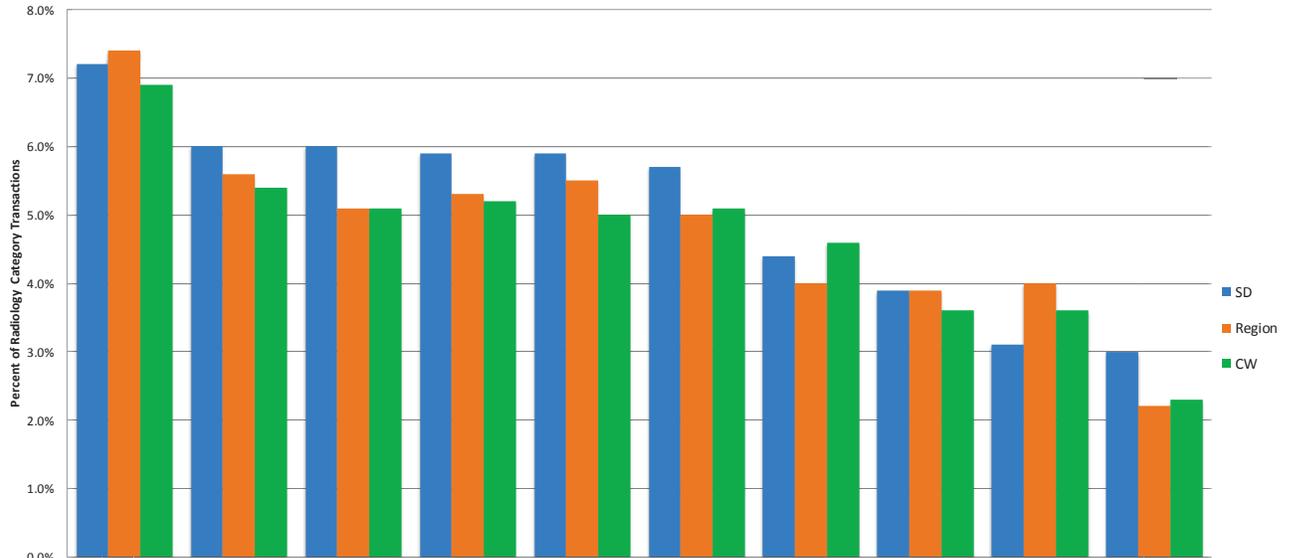
Procedure Code	SD	Reg	CW
73221	\$462	\$512	\$514
73721	\$433	\$515	\$514
72148	\$435	\$549	\$495
72141	\$445	\$524	\$500
72158	\$578	\$724	\$736
73030	\$37	\$60	\$56
73610	\$35	\$57	\$53
72100	\$45	\$62	\$62
70450	\$117	\$186	\$164
73110	\$34	\$62	\$59

Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
73221	16.1%	Magnetic resonance (e.g., proton) imaging any joint of upper extremity; without contrast material
73721	13.5%	Magnetic resonance (e.g., proton) imaging any joint of lower extremity; without contrast material
72148	7.9%	Magnetic resonance (e.g., proton) imaging spinal canal and contents lumbar; without contrast material
72141	3.8%	Magnetic resonance (e.g., proton) imaging spinal canal and contents cervical; without contrast material
72158	3.0%	Magnetic resonance (e.g., proton) imaging spinal canal and contents without contrast material followed by contrast material and further sequences; lumbar
73030	3.0%	Radiologic examination shoulder; complete minimum of 2 views
73610	2.3%	Radiologic examination ankle; complete minimum of 3 views
72100	2.2%	Radiologic examination spine lumbosacral; 2 or 3 views
70450	2.2%	Computed tomography (CT) head or brain; without contrast material
73110	2.2%	Radiologic examination wrist; complete minimum of 3 views

Chart 9

## Top 10 Radiology Procedure Codes by Transaction Counts for South Dakota



Procedure Code	SD	Reg	CW
73030	\$37	\$60	\$56
73140	\$27	\$51	\$50
73630	\$33	\$55	\$51
73610	\$35	\$57	\$53
73110	\$34	\$62	\$59
73130	\$33	\$54	\$51
72100	\$45	\$62	\$62
73562	\$37	\$62	\$60
73221	\$462	\$512	\$514
73560	\$31	\$53	\$48

Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

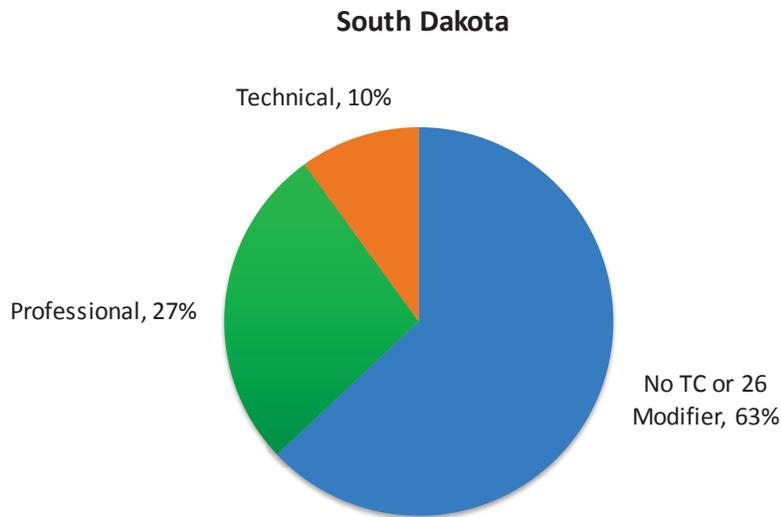
Code	% in SD	Description
73030	7.2%	Radiologic examination shoulder; complete minimum of 2 views
73140	6.0%	Radiologic examination finger(s) minimum of 2 views
73630	6.0%	Radiologic examination foot; complete minimum of 3 views
73610	5.9%	Radiologic examination ankle; complete minimum of 3 views
73110	5.9%	Radiologic examination wrist; complete minimum of 3 views
73130	5.7%	Radiologic examination hand; minimum of 3 views
72100	4.4%	Radiologic examination spine lumbosacral; 2 or 3 views
73562	3.9%	Radiologic examination knee; 3 views
73221	3.1%	Magnetic resonance (e.g., proton) imaging any joint of upper extremity; without contrast material
73560	3.0%	Radiologic examination knee; 1 or 2 views

Radiology procedures consist of two components. There is a technical component, which is the performance of the examination, and a professional component for the interpretation of the results. Radiology services may be billed for the entire procedure, or they may be billed separately for each component. If billed by component, a modifier should be reported along with the CPT code. These modifiers may be “26” for the professional component or “TC” for the technical component.

Chart 10 shows the distribution of radiology payments by component for the latest service year and the breakdown for the identified top 10 radiology procedures, by paid amount, in the state.

**Chart 10**

**Distribution of Radiology Payments by Modifier Code for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016.

**Average Paid Amount per Transaction by Modifier Code for South Dakota**

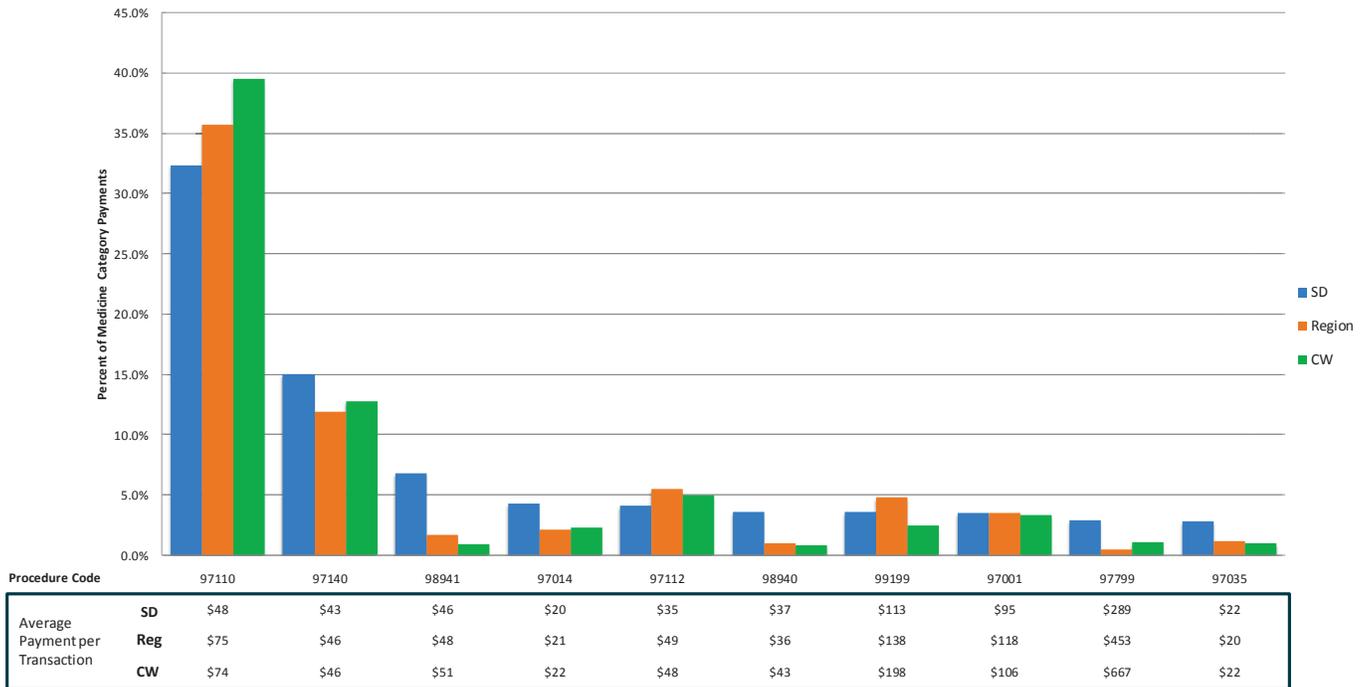
Code	No TC or 26 Modifier	Professional	Technical
73221	\$861	\$165	\$776
73721	\$839	\$158	\$813
72148	\$1,005	\$167	\$936
72141	\$885	\$172	\$794
72158	\$1,158	\$251	\$949
73030	\$47	\$19	\$28
73610	\$47	\$17	\$32
72100	\$55	\$23	\$37
70450	\$392	\$93	\$293
73110	\$46	\$19	\$29



In South Dakota, physician payments for physical and general medicine services provided in 2016 are, on average, 107% of Medicare scheduled reimbursement amounts.

**Chart 11**

**Top 10 Physical and General Medicine Procedure Codes by Amount Paid for South Dakota**

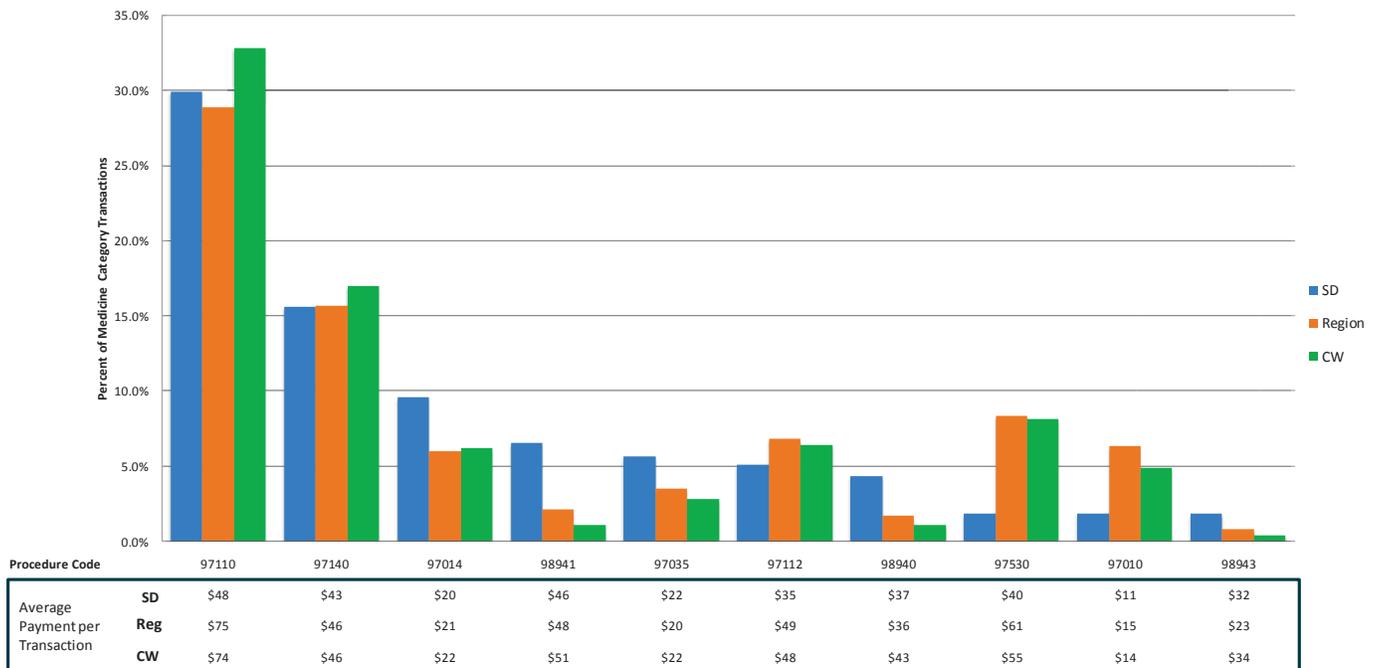


Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
97110	32.3%	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
97140	15.0%	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction) 1 or more regions, each 15 minutes
98941	6.8%	Chiropractic manipulative treatment (CMT); spinal 3-4 regions
97014	4.3%	Application of a modality to 1 or more areas; electrical stimulation (unattended)
97112	4.1%	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
98940	3.6%	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
99199	3.6%	Unlisted special service procedure or report
97001	3.5%	Physical therapy evaluation
97799	2.9%	Unlisted physical medicine/rehabilitation service or procedure
97035	2.8%	Application of a modality to 1 or more areas; ultrasound each 15 minutes

Chart 12

## Top 10 Physical and General Medicine Procedure Codes by Transaction Counts for South Dakota



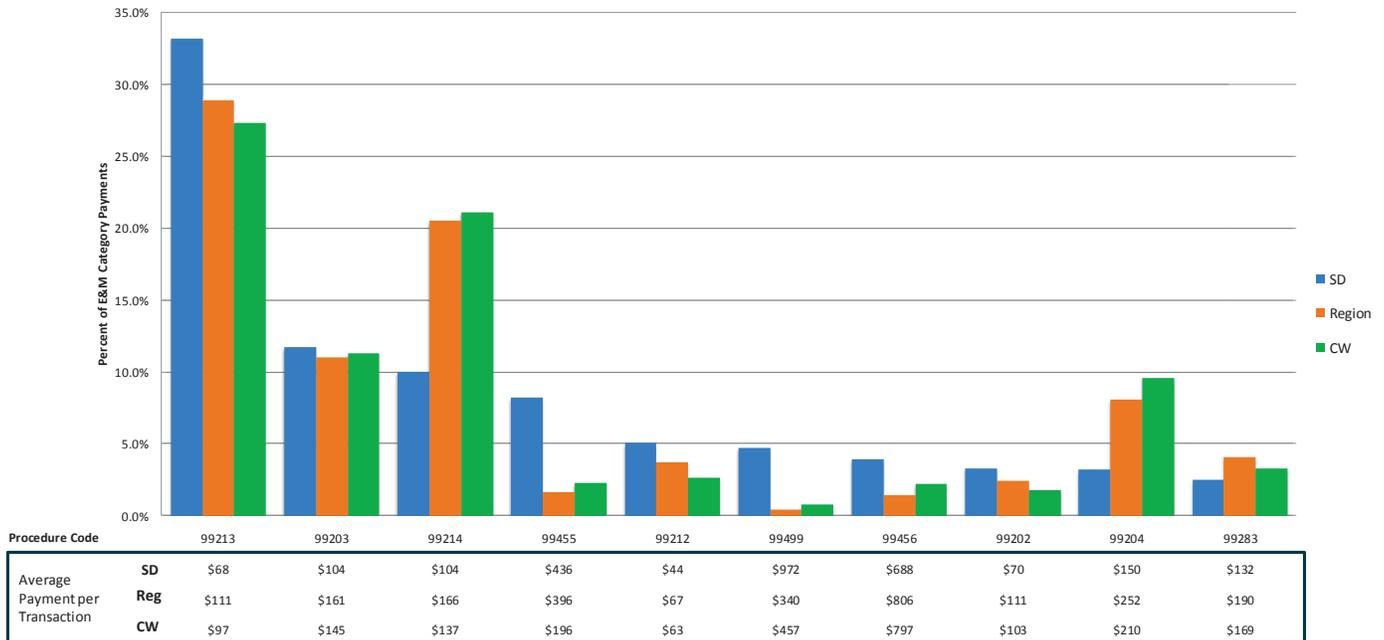
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
97110	29.9%	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
97140	15.6%	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction) 1 or more regions, each 15 minutes
97014	9.6%	Application of a modality to 1 or more areas; electrical stimulation (unattended)
98941	6.5%	Chiropractic manipulative treatment (CMT); spinal 3-4 regions
97035	5.6%	Application of a modality to 1 or more areas; ultrasound each 15 minutes
97112	5.1%	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
98940	4.3%	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
97530	1.8%	Therapeutic activities, direct (one-on-one) patient contact by the provider (use of dynamic activities to improve functional performance), each 15 minutes
97010	1.8%	Application of a modality to 1 or more areas; hot or cold packs
98943	1.8%	Chiropractic manipulative treatment (CMT); extraspinal, 1 or more regions

In South Dakota, physician payments for evaluation and management services provided in 2016 are, on average, 103% of Medicare scheduled reimbursement amounts.

Chart 13

### Top 10 Evaluation and Management Procedure Codes by Amount Paid for South Dakota

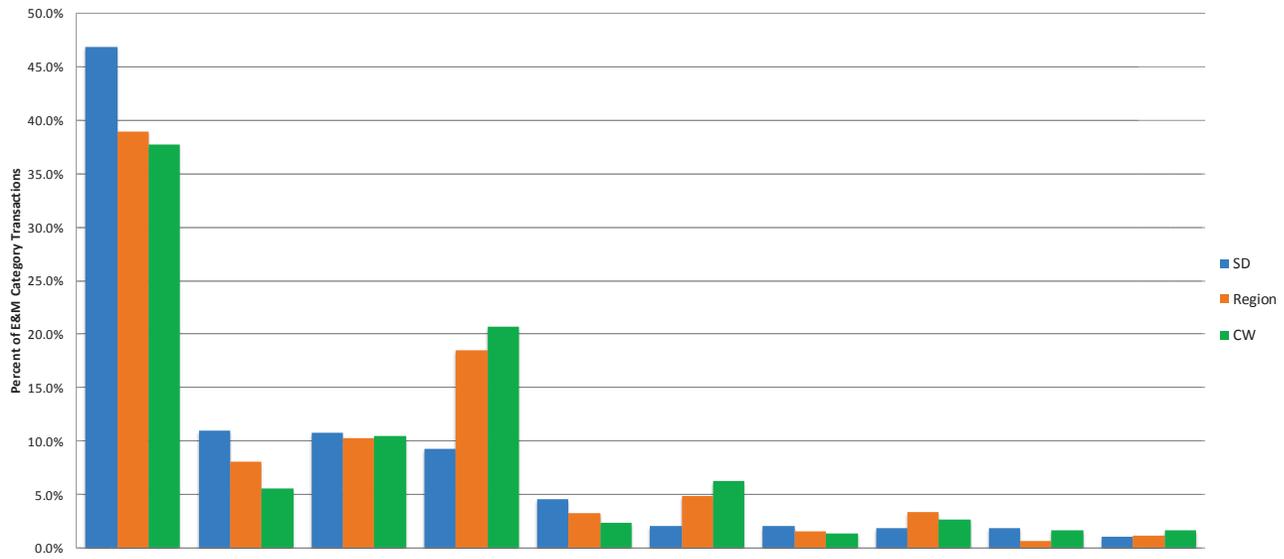


Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
99213	33.2%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.
99203	11.7%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.
99214	10.0%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.
99455	8.2%	Work related or medical disability examination by the treating physician.
99212	5.1%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.
99499	4.7%	Unlisted evaluation and management service
99456	3.9%	Work related or medical disability examination by other than the treating physician.
99202	3.3%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of low to moderate severity. Physicians typically spend 20 minutes face-to-face with the patient and/or family.
99204	3.2%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.
99283	2.5%	Emergency department visit. Usually the presenting problem(s) are of moderate severity.

Chart 14

### Top 10 Evaluation and Management Procedure Codes by Transaction Counts for South Dakota



Procedure Code	SD	Reg	CW
99213	\$68	\$111	\$97
99212	\$44	\$67	\$63
99203	\$104	\$161	\$145
99214	\$104	\$166	\$137
99202	\$70	\$111	\$103
99204	\$150	\$252	\$210
99232	\$99	\$110	\$97
99283	\$132	\$190	\$169
99455	\$436	\$396	\$196
99215	\$151	\$220	\$172

Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
99213	46.9%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.
99212	11.0%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.
99203	10.8%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.
99214	9.3%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.
99202	4.5%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of low to moderate severity. Physicians typically spend 20 minutes face-to-face with the patient and/or family.
99204	2.0%	Office or other outpatient visit for the evaluation and management of a new patient. Usually the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.
99232	2.0%	Subsequent hospital care per day for the evaluation and management of a patient. Usually the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.
99283	1.8%	Emergency department visit. Usually the presenting problem(s) are of moderate severity.
99455	1.8%	Work related or medical disability examination by the treating physician.
99215	1.0%	Office or other outpatient visit for the evaluation and management of an established patient. Usually the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.

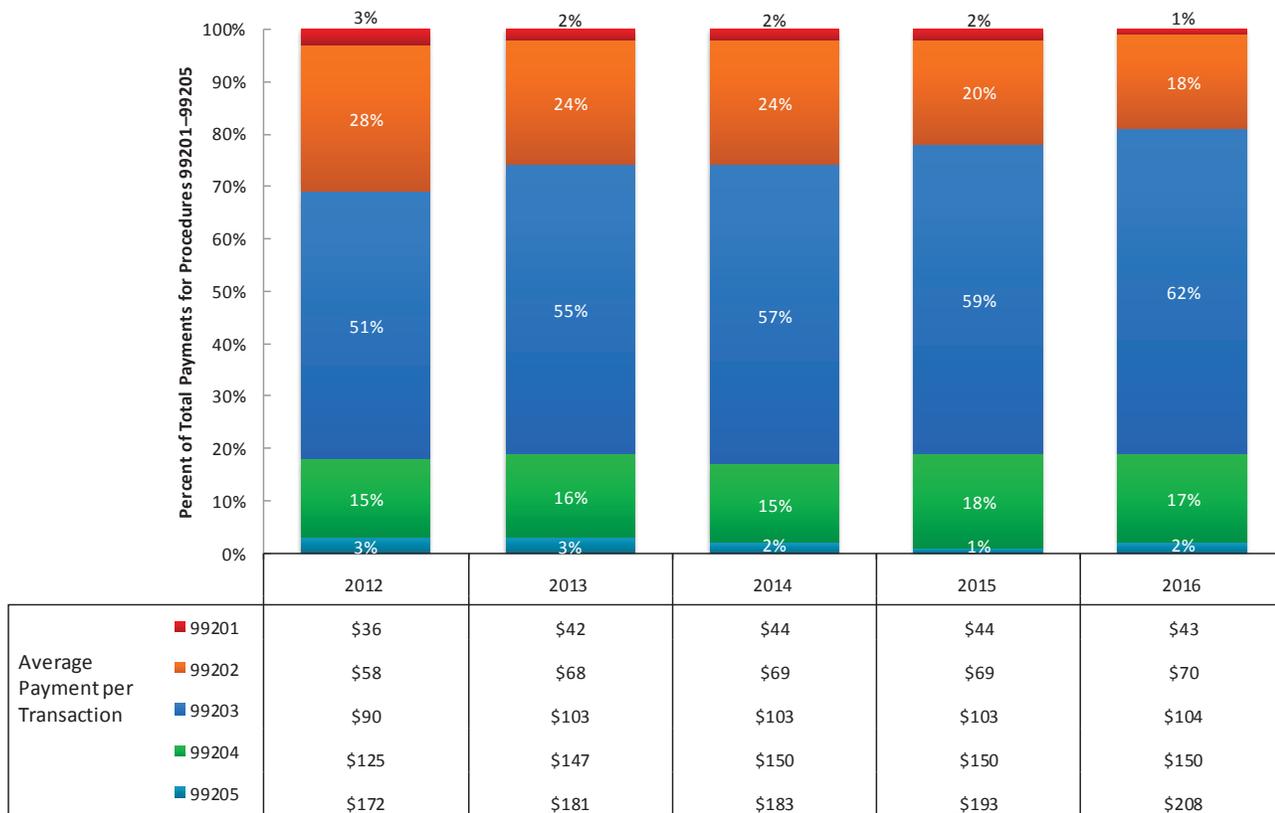


Evaluation and Management services consist largely of office or outpatient visits for new patients or an established patient.

There are five periods of time spent with a *new* patient, ranging from 10 minutes for Procedure Code 99201 to 60 minutes for Procedure Code 99205. Chart 15 shows a five-year snapshot of experience for each procedure type and the average payment per transaction.

**Chart 15**

**Office or Other Outpatient Visit for the Evaluation and Management of a New Patient for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016.

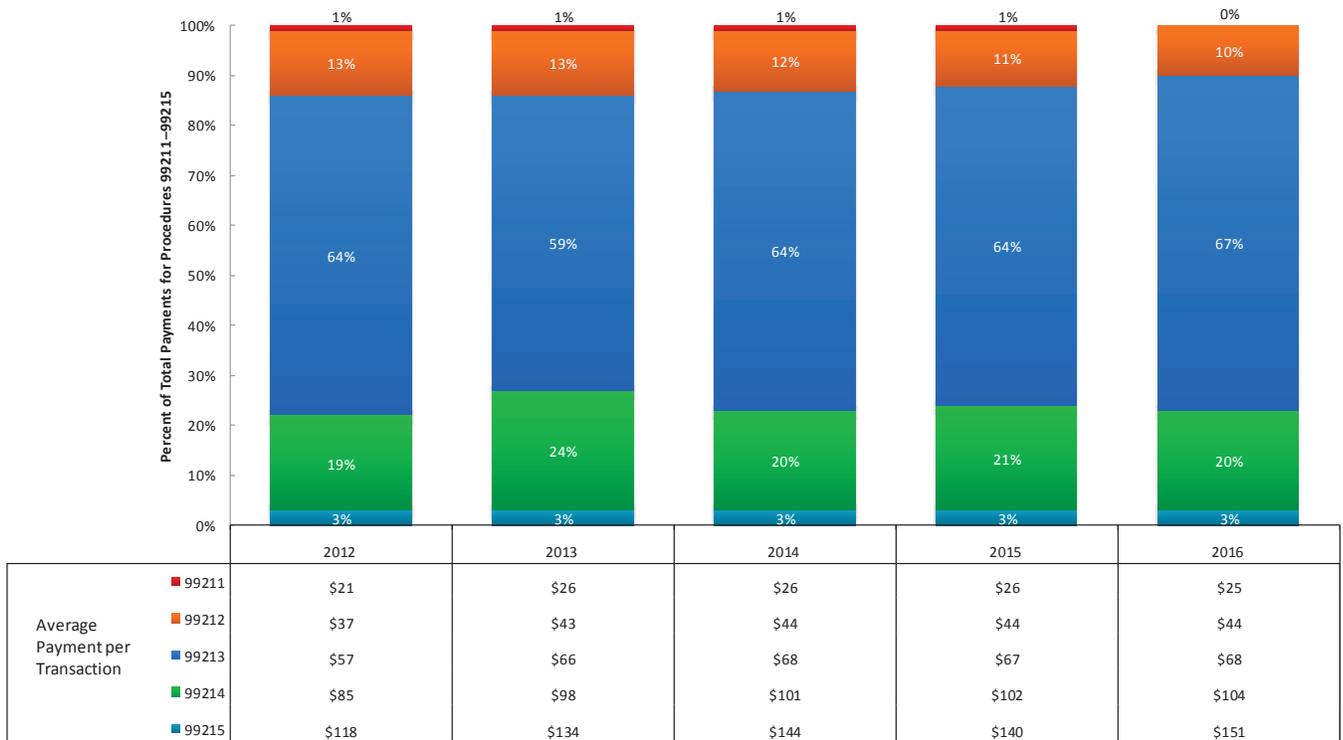
Code	Description
99201	Office or other outpatient visit for the evaluation and management of a new patient, for problems of low to moderate severity. Physicians typically spend 10 minutes face-to-face with the patient and/or family.
99202	Office or other outpatient visit for the evaluation and management of a new patient, for problems of low to moderate severity. Physicians typically spend 20 minutes face-to-face with the patient and/or family.
99203	Office or other outpatient visit for the evaluation and management of a new patient, for problems of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.
99204	Office or other outpatient visit for the evaluation and management of a new patient, for problems of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.
99205	Office or other outpatient visit for the evaluation and management of a new patient, for problems of moderate to high severity. Physicians typically spend 60 minutes face-to-face with the patient and/or family.



Similarly, for *established* patients, there are five periods of time spent with the patient, ranging from five minutes for Procedure Code 99211 to 40 minutes for Procedure Code 99215. Chart 16 shows a five-year snapshot of experience for each procedure type and the average payment per transaction.

Chart 16

Office or Other Outpatient Visit for the Evaluation and Management of an Established Patient for South Dakota



Source: NCCI Medical Data Call, Service Year 2016.

Code	Description
99211	Office or other outpatient visit for the evaluation and management of an established patient for problem(s) that are minimal. Typically 5 minutes are spent performing or supervising these services.
99212	Office or other outpatient visit for the evaluation and management of an established patient for problem(s) that are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.
99213	Office or other outpatient visit for the evaluation and management of an established patient for problem(s) that are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.
99214	Office or other outpatient visit for the evaluation and management of an established patient for problem(s) that are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.
99215	Office or other outpatient visit for the evaluation and management of an established patient for problem(s) that are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.



Payments attributed to facilities represent inpatient hospital services, outpatient hospital services, and ambulatory surgical center services. Payments are mapped to these categories based on a combination of data elements reported for each transaction, including:

- Taxonomy code
- Procedure code
- Place of service

General healthcare trends may be the primary driver of the cost distribution; however, the fee schedule may also play a role. In many states, the fee schedule varies by type of facility, which may help explain differences observed between states.

Hospital inpatient fee schedules in workers compensation were mostly established in the last decade. Several states remain without such regulation today. Unlike physician fee schedules, hospital inpatient fee schedules vary a great deal. Some are based on Medicare, others reflect a discount off the charge master established by the hospitals, and yet others are based on per diem rates.

A hospital inpatient stay is typically reported with one of two types of codes: a diagnosis related group (DRG) code or revenue code. Data reporters are instructed to report the code that is consistent with how the reimbursement was determined.

If the hospital inpatient fee schedule is a Medicare-based fee schedule, then a greater share of payments reported by DRG codes would be expected. DRG codes are a system of hospital payment classifications that group patients with similar clinical problems who are expected to require similar amounts of hospital resources. DRG codes provide detailed information about the type of services performed during the inpatient stay. In South Dakota, 42% of hospital inpatient payments are reported with a DRG code.

Due to differences in fee schedules, which may result in varied reporting of codes across jurisdictions, regional and countrywide, comparisons by procedure code for inpatient costs should be interpreted with caution. Some measures for hospital inpatient services include the average cost of an inpatient stay, the average length of stay, or the average cost per day.

A measure of workers compensation hospital inpatient costs is a comparison of current payments to the Medicare rates. The table below shows the average percentage of Medicare schedule reimbursement amounts for hospital inpatient payments for South Dakota, the region, and countrywide.

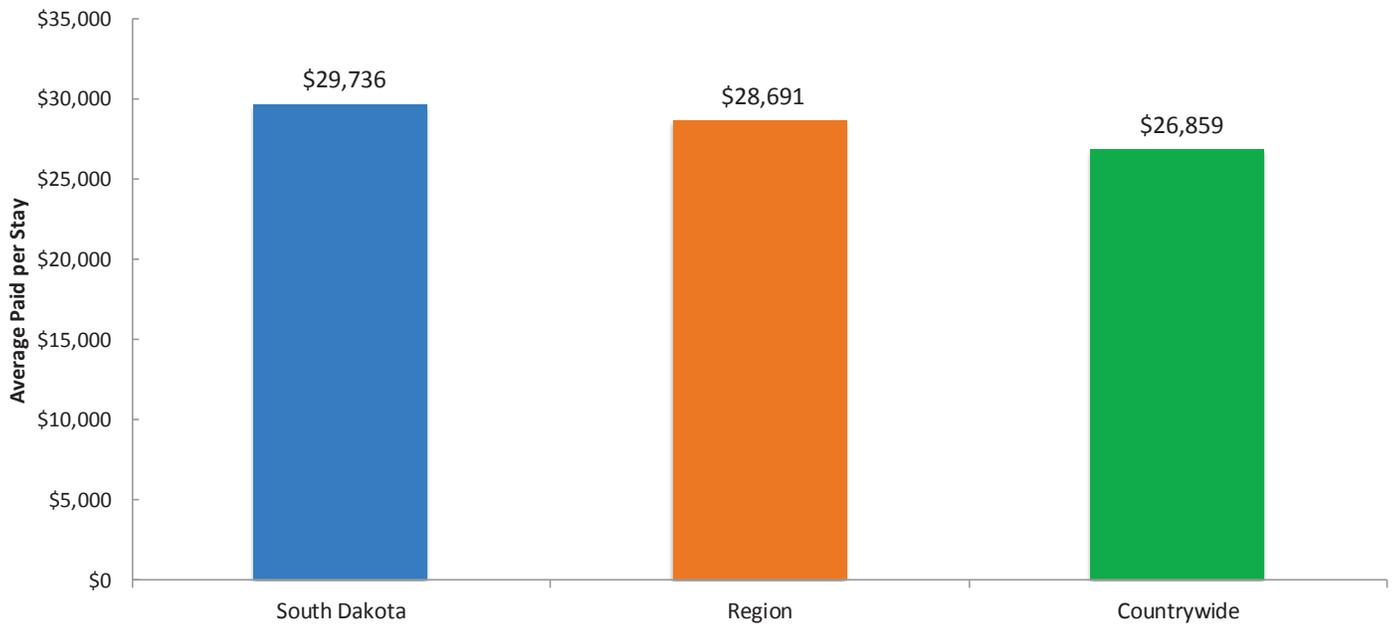
Medical Cost Category	SD	Region	Countrywide
Hospital Inpatient	281%	216%	201%

One comparative measure of inpatient service costs is the average payment per inpatient stay. An inpatient stay is defined as any hospital service or set of services provided to a claimant during the period of time when the claimant is in an inpatient setting, for a specific diagnosis. Any stay may have more than one procedure performed, and any claimant may have more than one stay.

Chart 17 displays the average paid amount per stay for hospital inpatient services for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

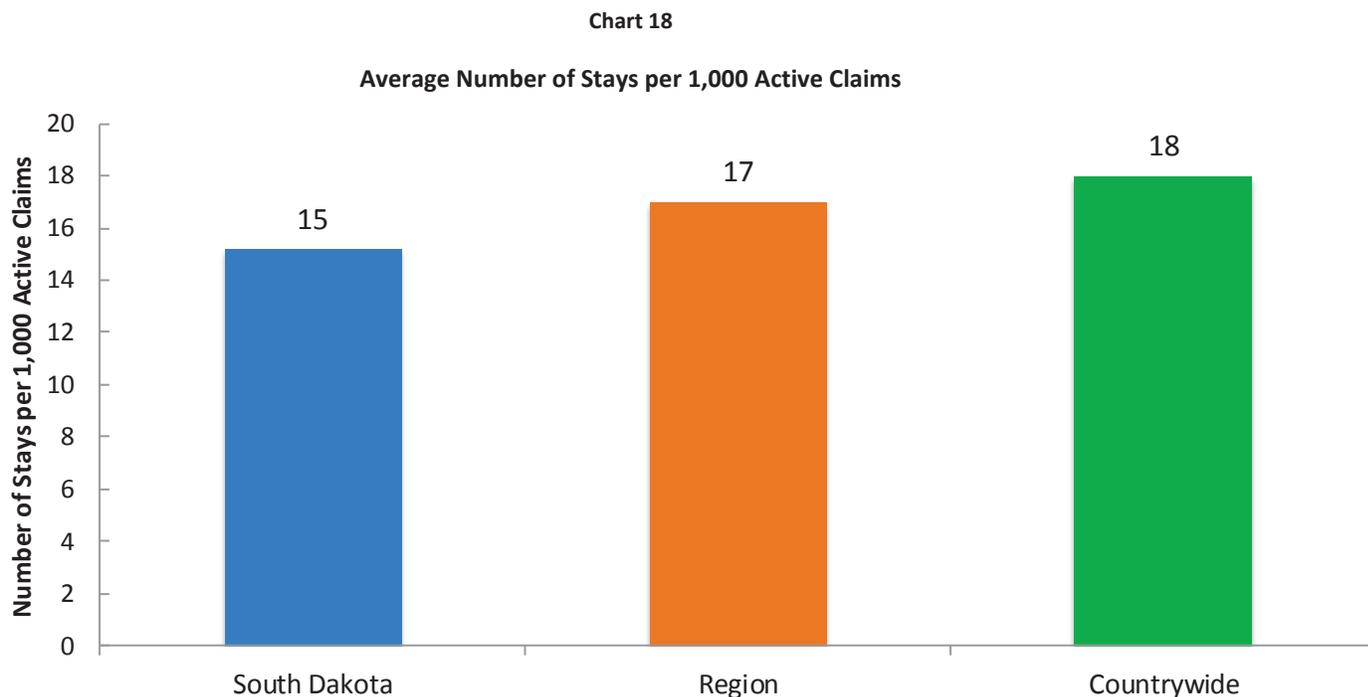
**Chart 17**

**Average Paid Amount per Stay for Hospital Inpatient Services**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

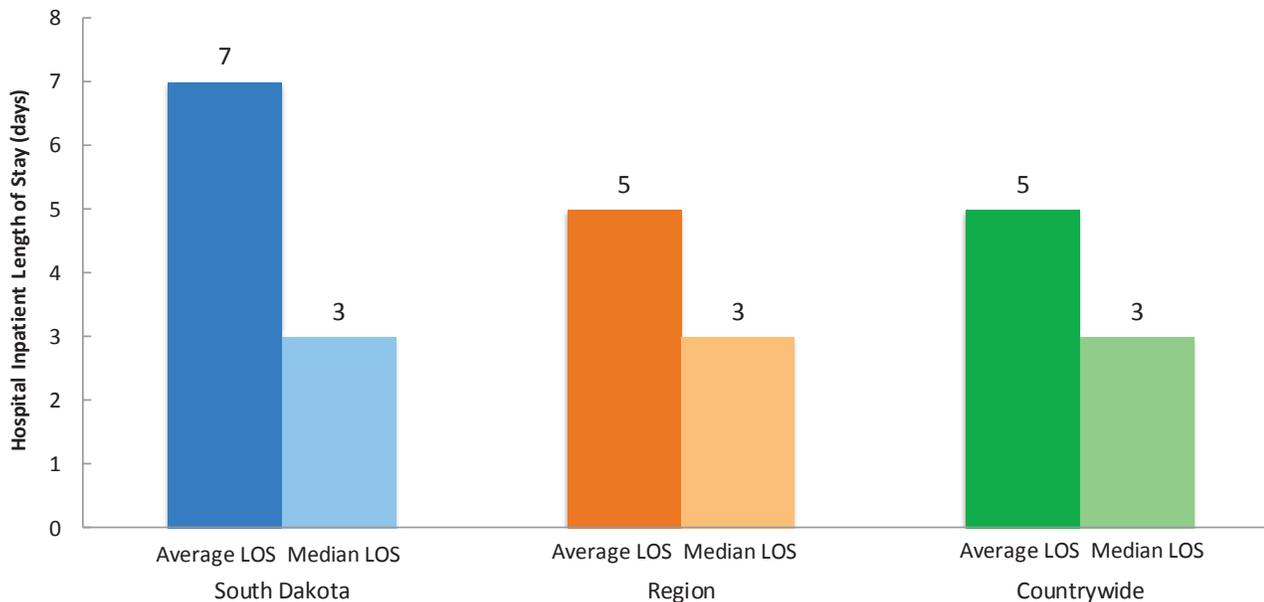
Chart 18 displays the average number of stays for hospital inpatient services per 1,000 active claims in 2016 for South Dakota, the region, and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Chart 19 displays the average and median<sup>2</sup> length of stay (LOS) for hospital inpatient services for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 19**  
**Inpatient Length of Stay for Hospital Inpatient Services**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

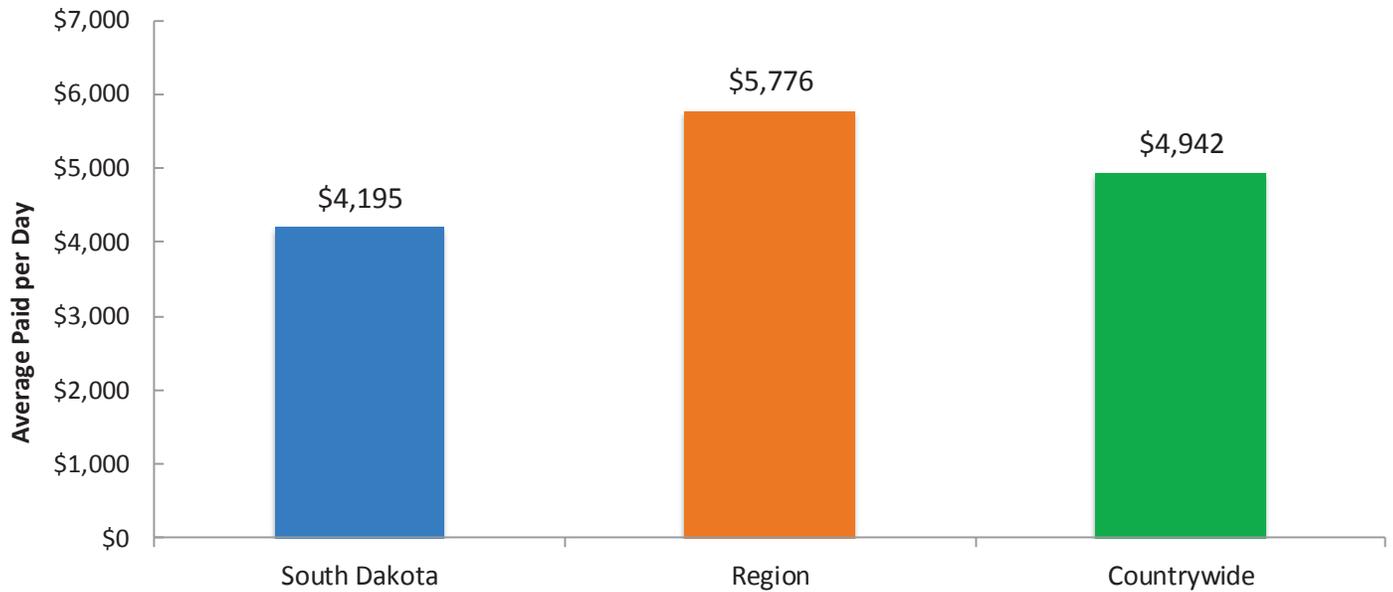
<sup>2</sup> The median LOS is the LOS where one-half of all LOS values is higher and one-half is lower. This statistic is less affected by extremely low or extremely high values.



Chart 20 displays the average paid amount per day for hospital inpatient services for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

Chart 20

### Average Paid Amount per Day for Hospital Inpatient Services



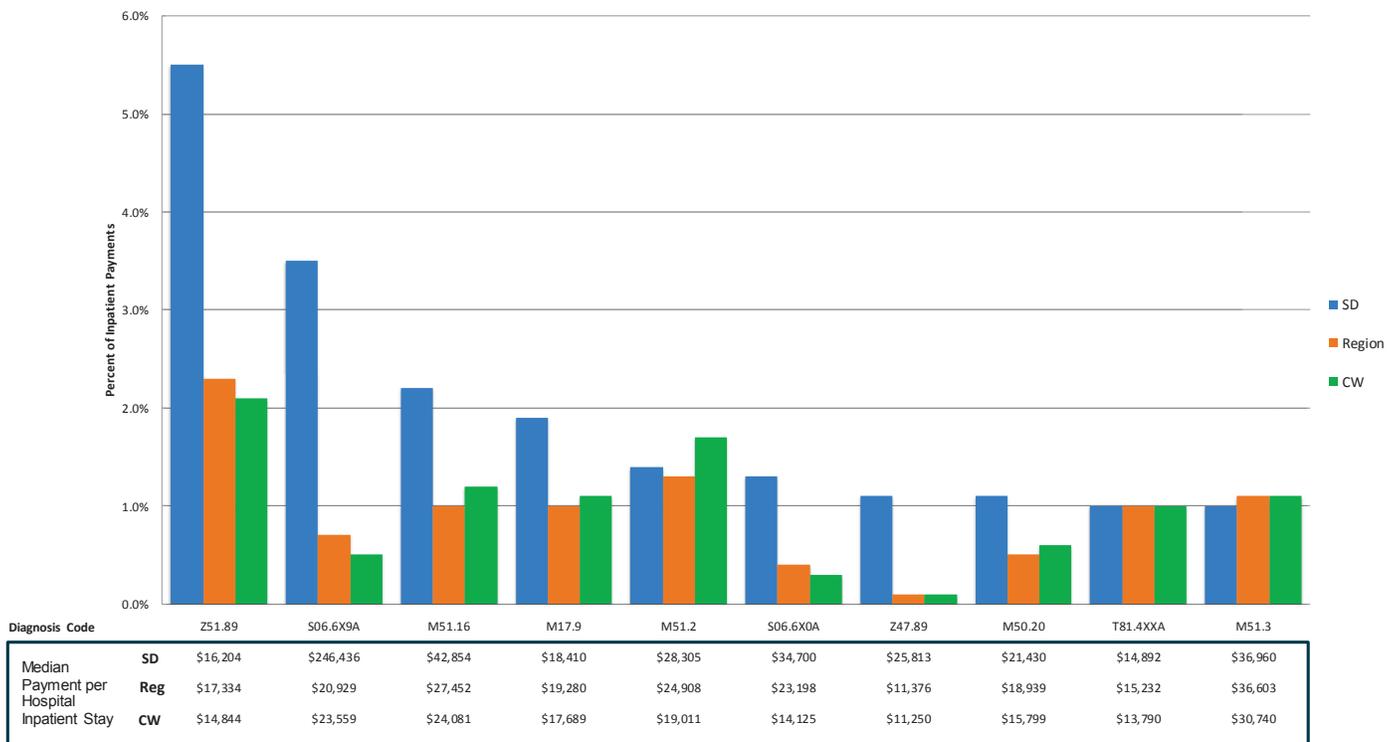
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Charts 21 and 22 display the top 10 diagnoses and top 10 DRG codes for hospital inpatient services, revealing the most prevalent types of hospital inpatient stays. The codes are ranked based on total payments in South Dakota. A brief description of each code is displayed in the tables below the charts.

**Chart 21**

**Top 10 Diagnoses by Amount Paid for Hospital Inpatient Services for South Dakota**

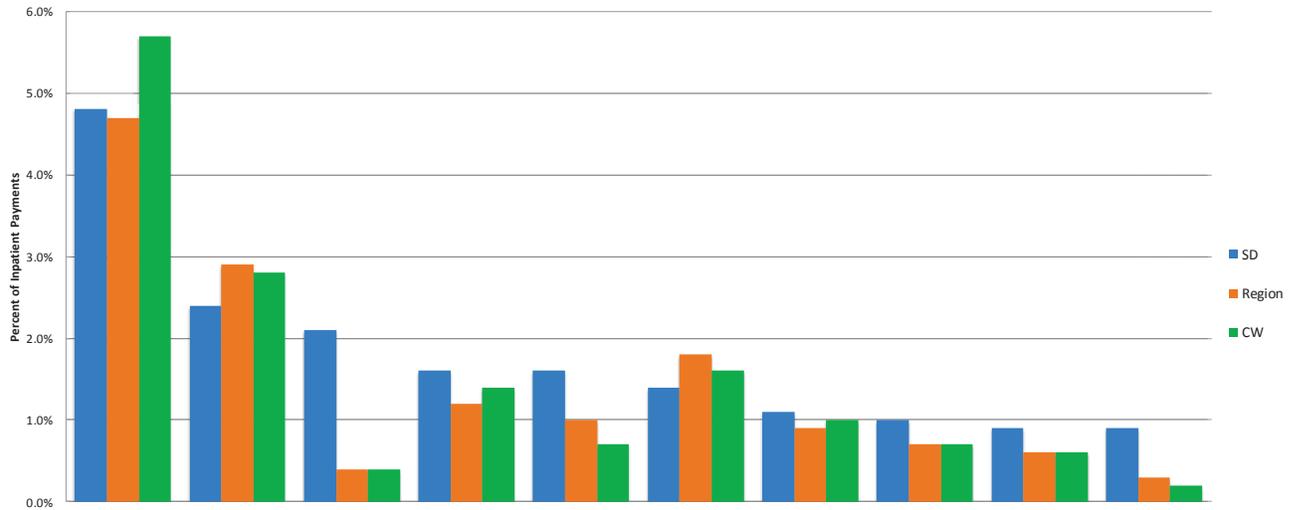


Source: NCCI Medical Data Call, Service Years 2015 and 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
Z51.89	5.5%	Encounter for other specified aftercare
S06.6X9A	3.5%	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial
M51.16	2.2%	Intervertebral disc disorders with radiculopathy, lumbar region
M17.9	1.9%	Osteoarthritis of knee, unspecified
M51.2	1.4%	Other thoracic, thoracolumbar, and lumbosacral intervertebral disc displacement
S06.6X0A	1.3%	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter
Z47.89	1.1%	Encounter for other orthopedic aftercare
M50.20	1.1%	Other cervical disc displacement, unspecified cervical region
T81.4XXA	1.0%	Infection following a procedure, initial encounter
M51.3	1.0%	Other thoracic, thoracolumbar, and lumbosacral intervertebral disc degeneration

Chart 22

### Top 10 DRG Codes by Amount Paid for Hospital Inpatient Services for South Dakota



Procedure Code		460	999	560	473	552	494	493	481	482	501
Median Payment per Hospital Inpatient Stay	<b>SD</b>	\$66,680	\$80,282	\$128,780	\$52,715	\$19,770	\$22,210	\$44,319	\$28,944	\$26,771	\$27,301
	<b>Reg</b>	\$38,316	\$23,706	\$14,529	\$19,695	\$11,677	\$21,684	\$22,143	\$28,553	\$20,661	\$21,925
	<b>CW</b>	\$38,890	\$21,289	\$16,298	\$19,931	\$9,711	\$17,641	\$24,193	\$22,419	\$18,489	\$19,052

Source: NCCI Medical Data Call, Service Years 2015 and 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
460	4.8%	Spinal fusion except cervical without major complications or comorbidities
999	2.4%	Ungroupable
560	2.1%	Aftercare, musculoskeletal system and connective tissue with complications or comorbidities
473	1.6%	Cervical spinal fusion without complications or comorbidities/major complications or comorbidities
552	1.6%	Medical back problems without major complications or comorbidities
494	1.4%	Lower extremity and humerus procedures except hip, foot, femur without complications or comorbidities/major complications or comorbidities
493	1.1%	Lower extremity and humerus procedures except hip, foot, femur with complications or comorbidities
481	1.0%	Hip and femur procedures except major joint with complications or comorbidities
482	0.9%	Hip and femur procedures except major joint without complications or comorbidities/major complications or comorbidities
501	0.9%	Soft tissue procedures with complications or comorbidities



Hospital outpatient services are reported with several types of procedure codes. Data reporters are instructed to report the code that is consistent with the way the reimbursement was determined.

If the hospital outpatient fee schedule is a Medicare-based fee schedule, then a greater share of payments reported by CPT or other healthcare common procedure coding system (HCPCS) codes would be expected. These codes are very specific and provide detailed information about the actual services performed. Some payments are also reported by a specific ambulatory payment classification (APC) code. An APC code represents a group of services provided by the facility on an outpatient basis.

If the hospital outpatient fee schedule is based on a discount from charged amounts, then revenue codes may be the more prevalent code type. Revenue codes are very generic and do not provide much information about the specific services that were performed.

Due to these differences in fee schedules, which may result in varied reporting of codes across jurisdictions, the region, and countrywide, comparisons by procedure code for outpatient benefits should be interpreted with caution. One comparative measure of outpatient service costs is the average cost per outpatient visit. A visit is defined as any service or set of services provided to a claimant on a specific date. Any visit may have more than one procedure performed, and any claim may have more than one visit.

Hospital outpatient visits can vary in nature. A surgical visit includes at least one surgical service, while a nonsurgical visit does not. A surgical service is defined as “major surgery” or “minor surgery” within the surgical category defined by the AMA. In this section, we provide measures of hospital outpatient payments that take into account the type of visit, since the level of reimbursement varies considerably by type of visit.

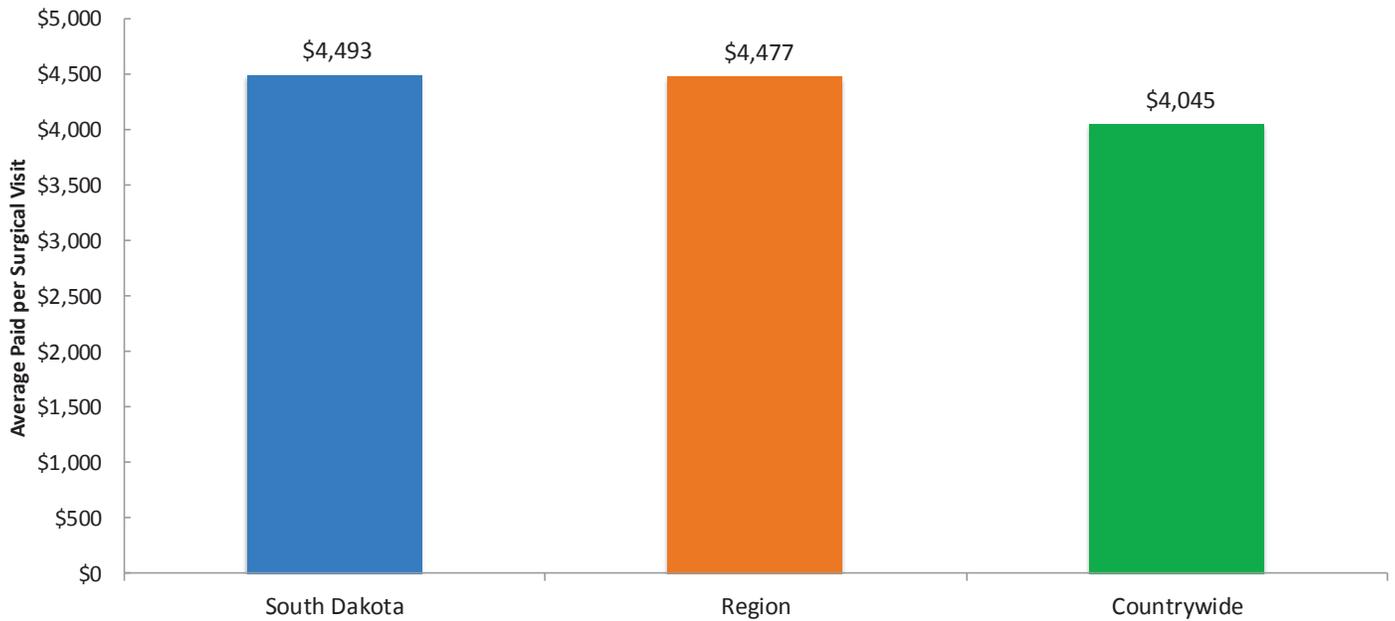
One measure of workers compensation hospital outpatient costs is a comparison of current payments to the Medicare rates. The table below shows the average percentage of Medicare schedule reimbursement amounts for hospital outpatient payments for South Dakota, the region, and countrywide.

<b>Medical Cost Category</b>	<b>SD</b>	<b>Region</b>	<b>Countrywide</b>
Hospital Outpatient	161%	214%	192%

Chart 23 displays the average paid amount per visit for hospital outpatient surgical services for South Dakota, the region, and countrywide. Surgical services represent 58% of hospital outpatient payments in South Dakota. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 23**

**Average Paid Amount per Surgical Visit for Hospital Outpatient Services**



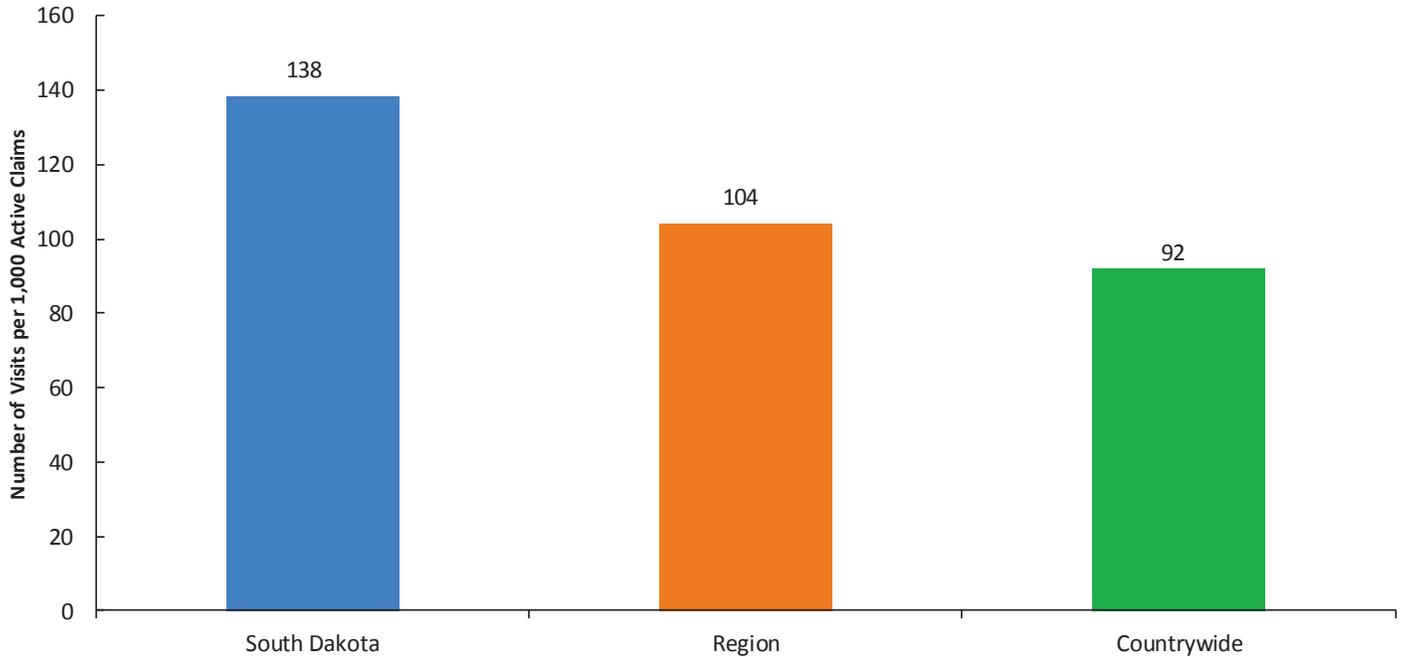
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 24 displays the number of visits per year per 1,000 active claims for hospital outpatient surgical services for South Dakota, as well as the average visits per year per 1,000 active claims for the region and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year.

**Chart 24**

**Average Number of Surgical Hospital Outpatient Visits per 1,000 Active Claims**

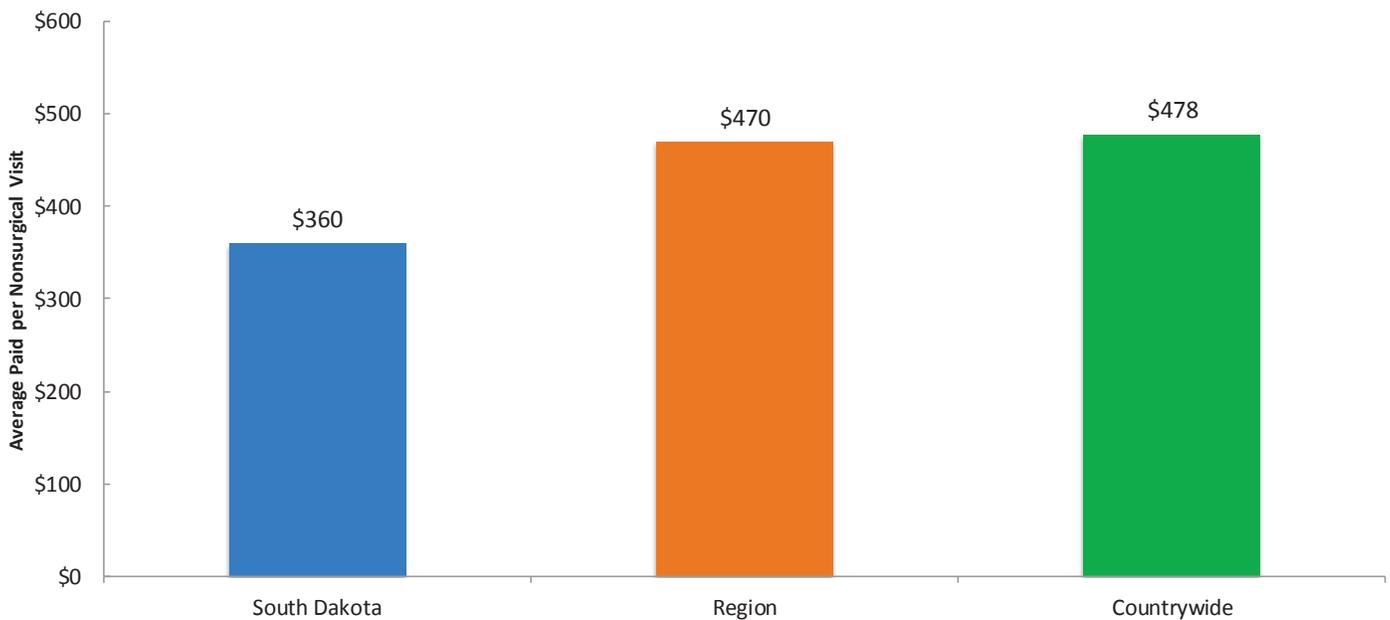


Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Chart 25 displays the average paid amount per visit for hospital outpatient nonsurgical services (such as physical therapy) for South Dakota, the region, and countrywide. Nonsurgical services represent 42% of hospital outpatient payments in South Dakota. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 25**

**Average Paid Amount per Nonsurgical Visit for Hospital Outpatient Services**



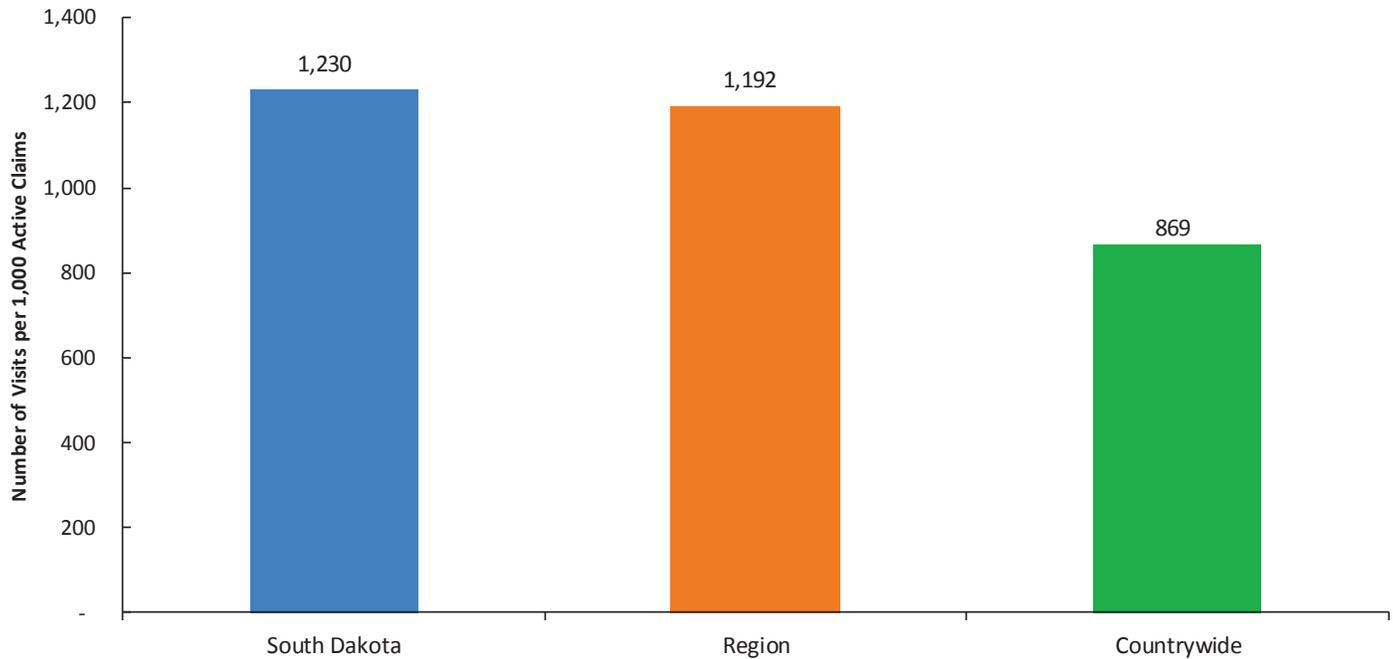
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 26 displays the number of visits per year per 1,000 active claims for hospital outpatient nonsurgical services for South Dakota, as well as the average visits per year per 1,000 active claims for the region and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year.

**Chart 26**

**Average Number of Nonsurgical Hospital Outpatient Visits per 1,000 Active Claims**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Chart 27 displays the average paid amount per visit for outpatient services in South Dakota, the region, and countrywide for the top 10 diagnoses in South Dakota. The codes are ranked based on total payments in South Dakota. A brief description of each code is displayed in the table below.

**Chart 27**  
**Top 10 Diagnoses by Amount Paid for Hospital Outpatient Services for South Dakota**



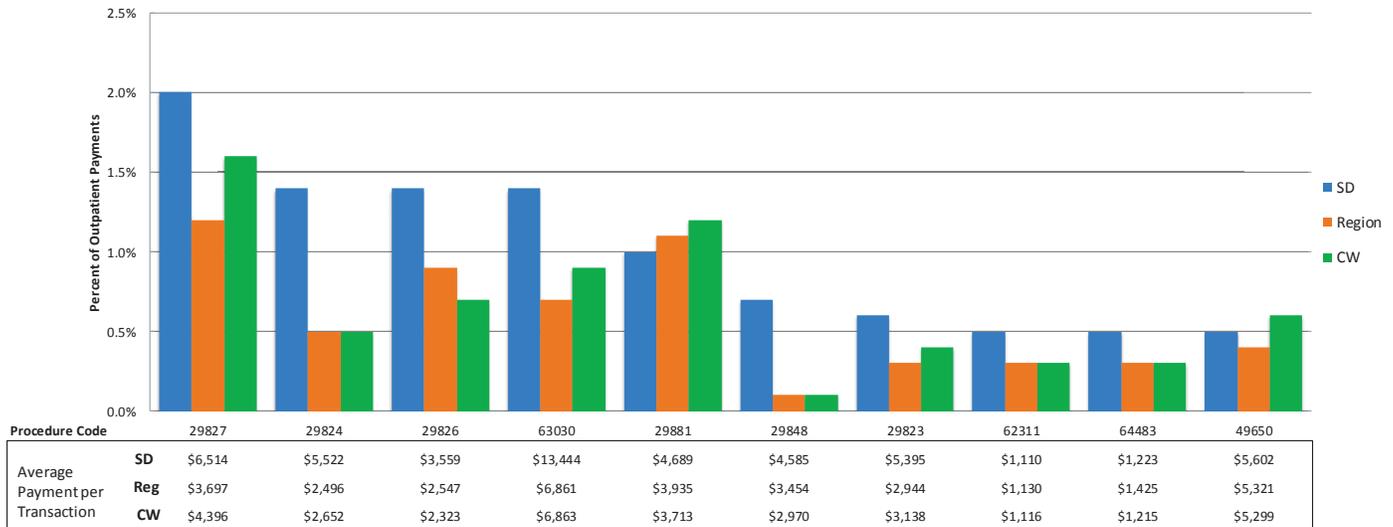
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
M54.5	2.2%	Low back pain
S46.011A	2.2%	Strain of muscle(s) and tendon(s) of the rotator cuff of right shoulder, initial encounter
M51.16	2.0%	Intervertebral disc disorders with radiculopathy, lumbar region
R68.89	1.8%	Other general symptoms and signs
M25.511	1.7%	Pain in right shoulder
Z47.89	1.4%	Encounter for other orthopedic aftercare
S46.012A	1.4%	Strain of muscle(s) and tendon(s) of the rotator cuff of left shoulder, initial encounter
M75.121	1.3%	Complete rotator cuff tear or rupture of right shoulder, not specified as traumatic
K40.90	1.3%	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent
M54.16	1.3%	Radiculopathy, lumbar region

Charts 28 and 29 display the average paid amount per visit for outpatient services in South Dakota, the region, and countrywide for the top 10 surgery CPT and nonsurgery CPT codes in South Dakota. The codes are ranked based on total payments in South Dakota. A brief description of each code is displayed in the table below.

**Chart 28**

**Top 10 Surgery Procedure Codes by Amount Paid for Hospital Outpatient Services for South Dakota**

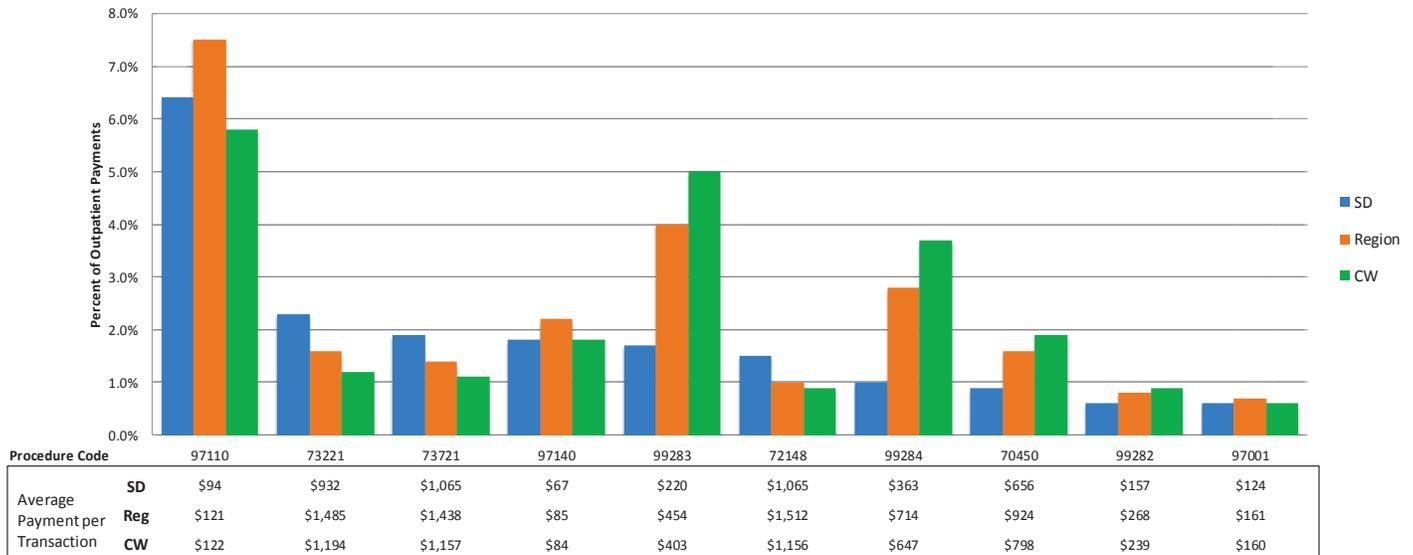


Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
29827	2.0%	Arthroscopy shoulder surgical; with rotator cuff repair
29824	1.4%	Arthroscopy shoulder surgical; distal claviclectomy including distal articular surface (Mumford procedure)
29826	1.4%	Arthroscopy shoulder surgical; decompression of subacromial space with partial acromioplasty with coracoacromial ligament (i.e., arch) release when performed
63030	1.4%	Laminotomy (hemilaminectomy) with decompression of nerve root(s) including partial facetectomy, foraminotomy, and/or excision of herniated intervertebral disc; 1 interspace lumbar
29881	1.0%	Arthroscopy knee surgical; with meniscectomy (medial or lateral including any meniscal shaving) including debridement/shaving of articular cartilage
29848	0.7%	Endoscopy, wrist, surgical, with release of transverse carpal ligament
29823	0.6%	Arthroscopy shoulder surgical; debridement extensive
62311	0.5%	Injection(s) of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral
64483	0.5%	Injection(s), anesthetic agent, and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or computed tomography (CT)); lumbar or sacral, single level
49650	0.5%	Laparoscopy, surgical; repair initial inguinal hernia

Chart 29

### Top 10 Nonsurgery Procedure Codes by Amount Paid for Hospital Outpatient Services for South Dakota



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
97110	6.4%	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
73221	2.3%	Magnetic resonance (e.g., proton) imaging any joint of upper extremity; without contrast material
73721	1.9%	Magnetic resonance (e.g., proton) imaging any joint of lower extremity; without contrast material
97140	1.8%	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction) 1 or more regions, each 15 minutes
99283	1.7%	Emergency department visit. Usually the presenting problem(s) are of moderate severity.
72148	1.5%	Magnetic resonance (e.g., proton) imaging spinal canal and contents lumbar; without contrast material
99284	1.0%	Emergency department visit. Usually the presenting problem(s) are of high severity and require urgent evaluation by the physician but do not pose an immediate significant threat to life or physiologic function.
70450	0.9%	Computed tomography (CT) head or brain; without contrast material
99282	0.6%	Emergency department visit. Usually the presenting problem(s) are of low to moderate severity.
97001	0.6%	Physical therapy evaluation

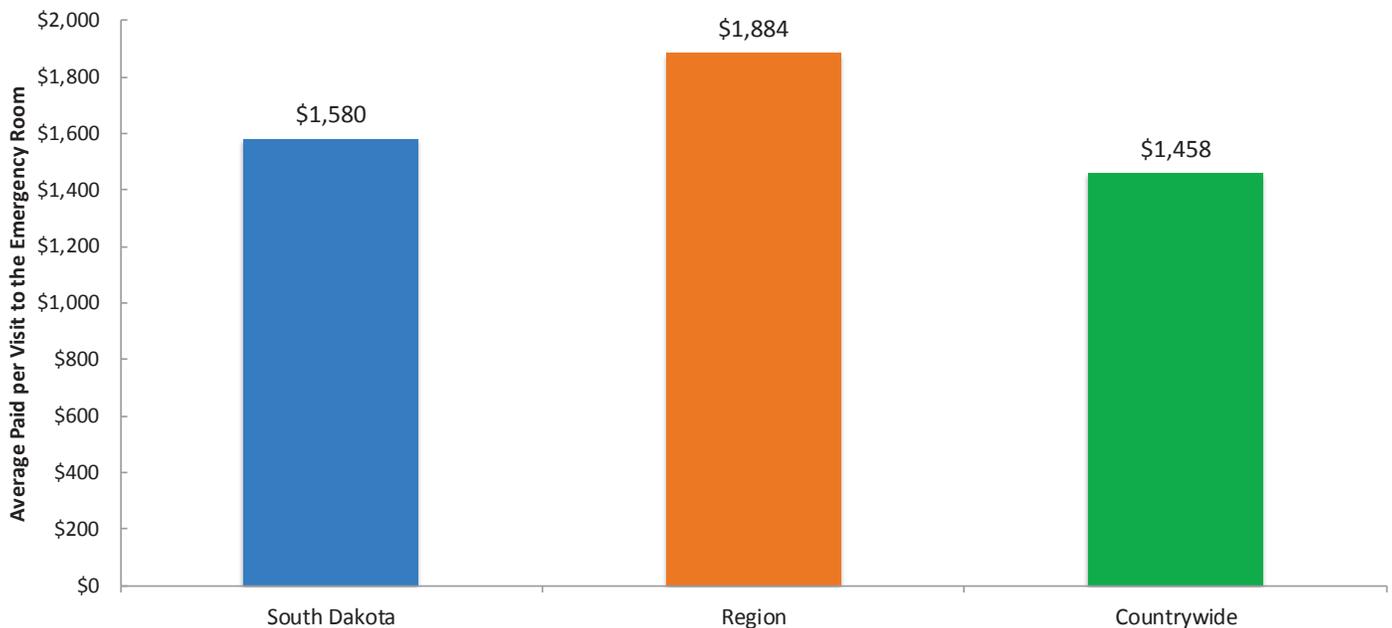


In South Dakota, 13% of the payments associated with facilities (ASC, hospital outpatient, and hospital inpatient) are for emergency room payments, compared to 17% countrywide.

Chart 30 displays the average paid amount per visit for emergency room services for South Dakota, the region, and countrywide. The average paid amount includes all payments for an emergency room visit such as payments for facility services, physician services, and drugs. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 30**

**Average Amount Paid per Emergency Room Visit**



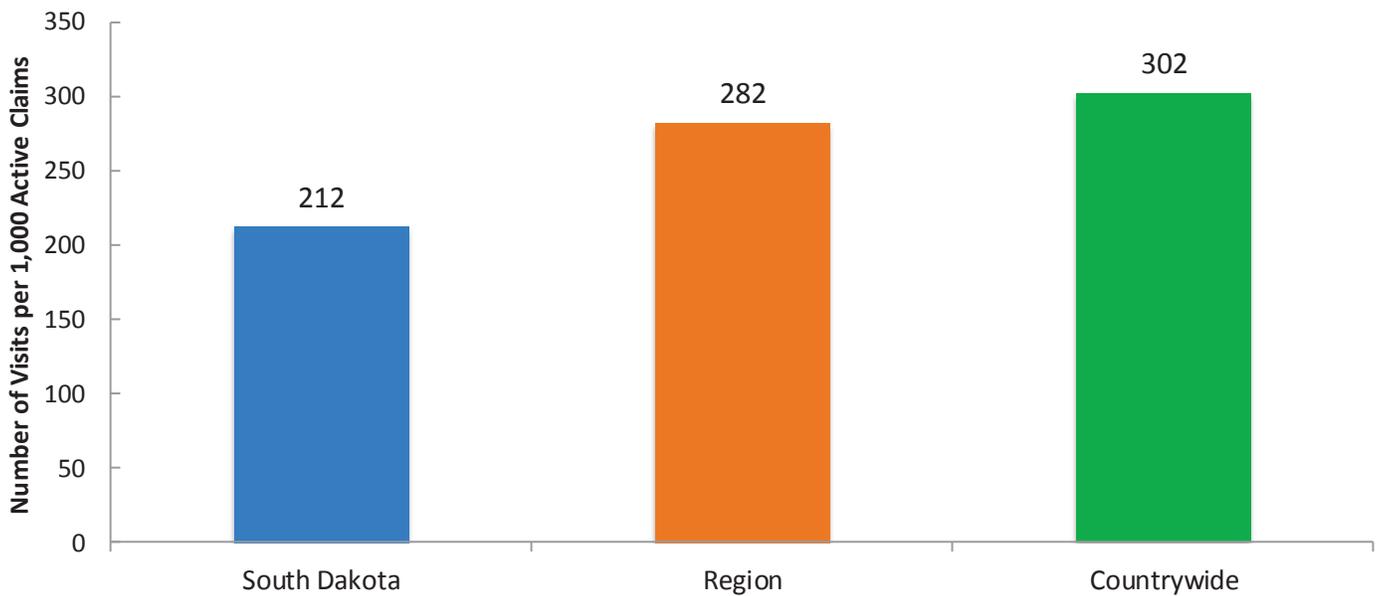
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 31 displays the number of visits per year per 1,000 active claims for emergency room services for South Dakota, as well as the average visits per 1,000 active claims for the region and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year.

**Chart 31**

**Average Number of Emergency Room Visits per 1,000 Active Claims**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

For emergency room visits, there are five levels of severity, ranging from limited or minor problems reported with Procedure Code 99281 to life-threatening situations reported with Procedure Code 99285. Chart 32 shows a five-year snapshot of experience for each procedure type and the average payment per transaction.

**Chart 32**

**Emergency Room Payments by Procedure Code for South Dakota**



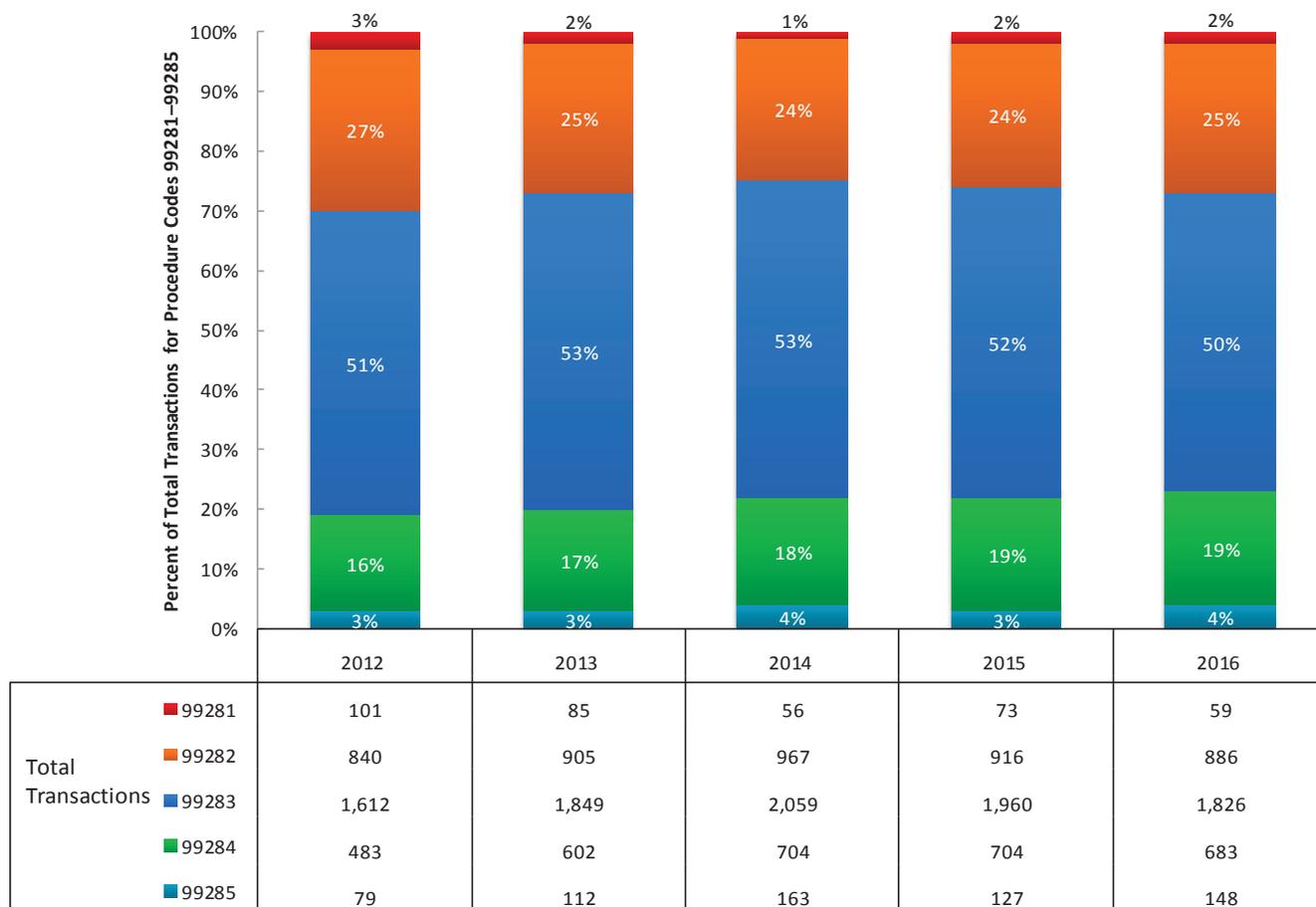
Source: NCCI Medical Data Call, Service Year 2016.

Code	Description
99281	Emergency department visit for the evaluation and management of a patient. Usually the presenting problem(s) are self limited or minor.
99282	Emergency department visit. Usually the presenting problem(s) are of low to moderate severity.
99283	Emergency department visit. Usually the presenting problem(s) are of moderate severity.
99284	Emergency department visit. Usually the presenting problem(s) are of high severity and require urgent evaluation by the physician but do not pose an immediate significant threat to life or physiologic function.
99285	Emergency department visit. Usually the presenting problem(s) are of high severity and pose an immediate significant threat to life or physiologic function.

Chart 33 shows a five-year snapshot of experience for each procedure type and the number of transactions per service year.

**Chart 33**

**Emergency Room Transactions by Procedure Code for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016.

Code	Description
99281	Emergency department visit for the evaluation and management of a patient. Usually the presenting problem(s) are self limited or minor.
99282	Emergency department visit. Usually the presenting problem(s) are of low to moderate severity.
99283	Emergency department visit. Usually the presenting problem(s) are of moderate severity.
99284	Emergency department visit. Usually the presenting problem(s) are of high severity and require urgent evaluation by the physician but do not pose an immediate significant threat to life or physiologic function.
99285	Emergency department visit. Usually the presenting problem(s) are of high severity and pose an immediate significant threat to life or physiologic function.



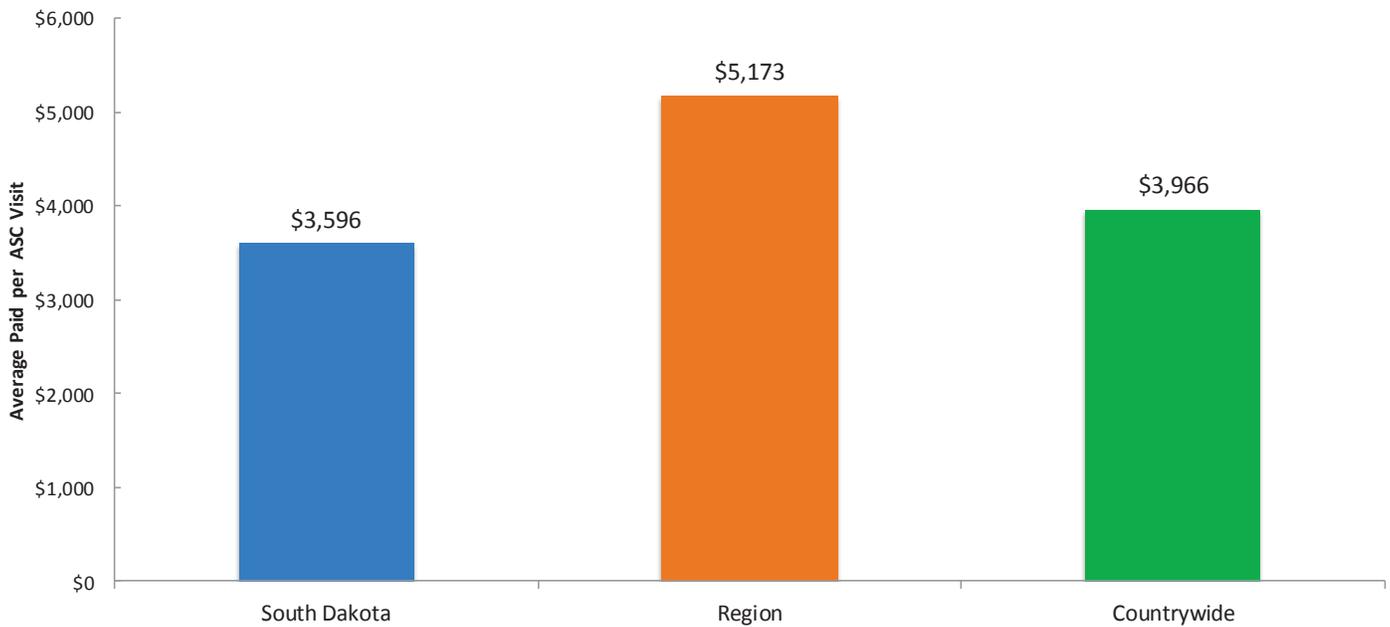
Ambulatory surgical centers (ASC) are often used as an alternative facility to hospitals for conducting outpatient surgeries. One measure of workers compensation ASC costs is a comparison of current payments to the Medicare rates. The table below shows the average percentage of Medicare schedule reimbursement amounts for ASC payments for South Dakota, the region, and countrywide.

<b>Medical Cost Category</b>	<b>SD</b>	<b>Region</b>	<b>Countrywide</b>
Ambulatory Surgical Center	238%	349%	292%

Chart 34 displays the average paid amount per visit for ASC services for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 34**

**Average Amount Paid per Visit for ASC Services**



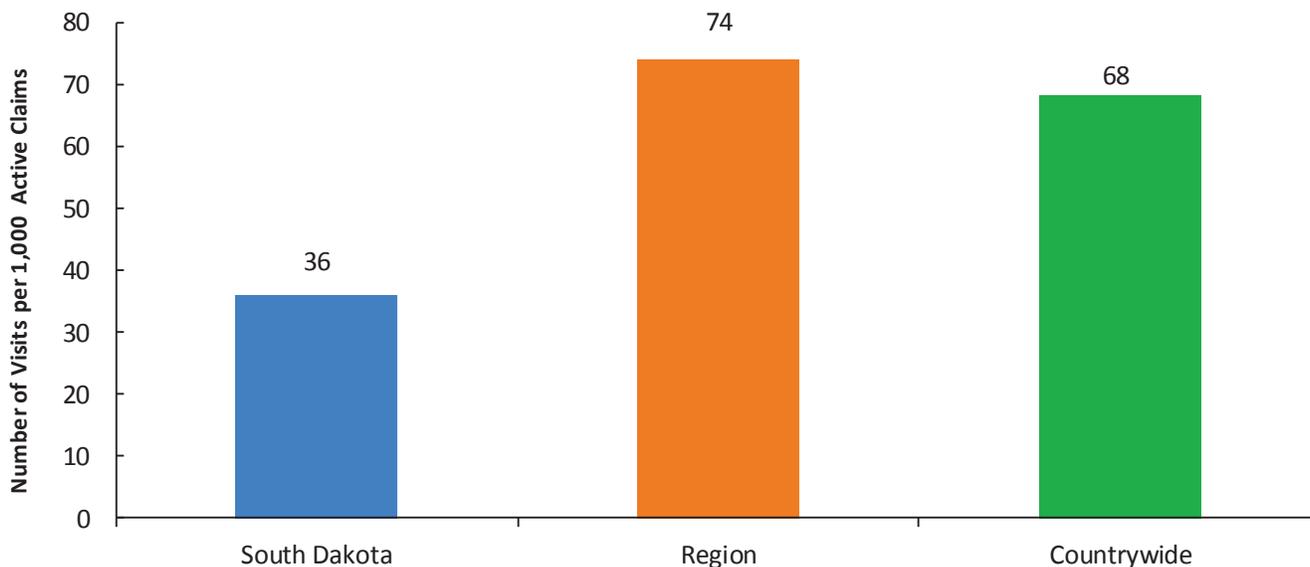
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 35 displays the number of ASC visits per year per 1,000 active claims for South Dakota, as well as the average visits per 1,000 active claims for the region and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year.

Chart 35

Average Number of ASC Visits per 1,000 Active Claims



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Chart 36 displays the top 10 diagnoses for ASC visits. The codes are ranked based on total payments in South Dakota. A brief description of each code is displayed in the table below.

**Chart 36**  
**Top 10 Diagnoses by Amount Paid for ASC Services for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

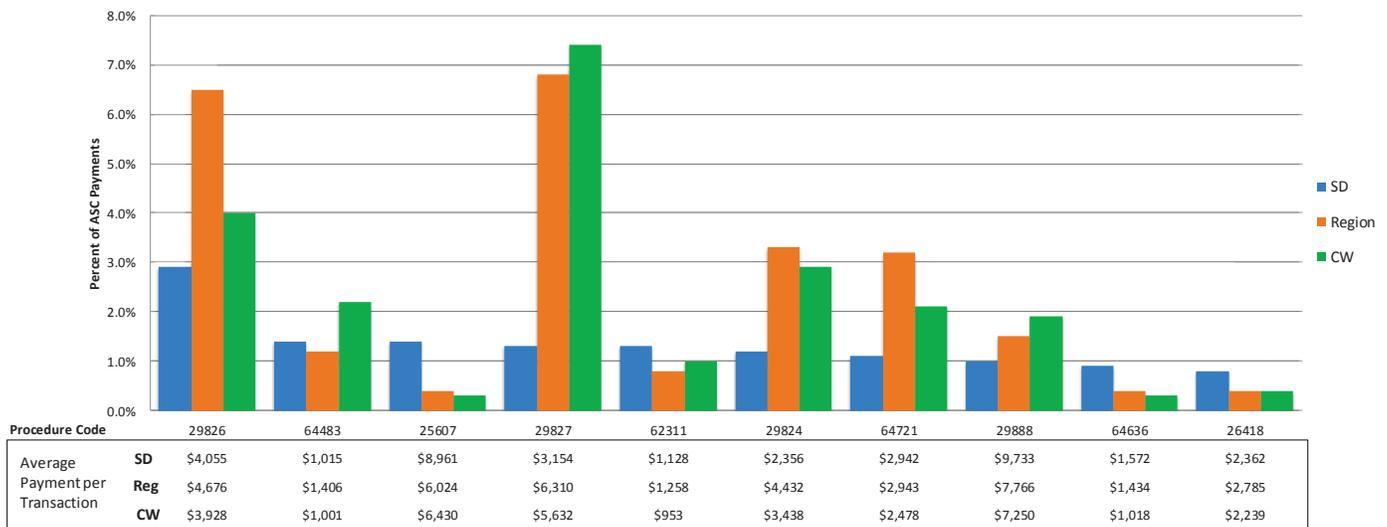
Code	% in SD	Description
M54.5	3.8%	Low back pain
S43.422A	3.4%	Sprain of left rotator cuff capsule, initial encounter
S43.492A	3.1%	Other sprain of left shoulder joint, initial encounter
M75.121	2.7%	Complete rotator cuff tear or rupture of right shoulder, not specified as traumatic
S43.421A	2.6%	Sprain of right rotator cuff capsule, initial encounter
S83.512A	2.4%	Sprain of anterior cruciate ligament of left knee, initial encounter
K40.90	2.3%	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent
S46.011A	1.9%	Strain of muscle(s) and tendon(s) of the rotator cuff of right shoulder, initial encounter
M51.16	1.8%	Intervertebral disc disorders with radiculopathy, lumbar region
S52.571A	1.7%	Other intraarticular fracture of lower end of right radius, initial encounter for closed fracture

Typically, only surgery-related services are performed in ASCs. The most prevalent procedure code types reported are CPT codes and revenue codes. The predominant revenue code reported for ASC services is code 0490—Ambulatory Surgical Care. In South Dakota, code 0490 represents 84% of ASC payments reported by revenue codes.

Chart 37 displays the top 10 surgery CPT codes for ASC services. The procedure codes are ranked based on total payments in South Dakota. A brief description of each procedure code is displayed in the table below.

**Chart 37**

**Top 10 Surgery Procedure Codes by Amount Paid for ASC Services for South Dakota**



Procedure Code	SD	29826	64483	25607	29827	62311	29824	64721	29888	64636	26418
Average	\$4,055	\$4,055	\$1,015	\$8,961	\$3,154	\$1,128	\$2,356	\$2,942	\$9,733	\$1,572	\$2,362
Payment per	\$4,676	\$4,676	\$1,406	\$6,024	\$6,310	\$1,258	\$4,432	\$2,943	\$7,766	\$1,434	\$2,785
Transaction	\$3,928	\$3,928	\$1,001	\$6,430	\$5,632	\$953	\$3,438	\$2,478	\$7,250	\$1,018	\$2,239

Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
29826	2.9%	Arthroscopy shoulder surgical; decompression of subacromial space with partial acromioplasty with coracoacromial ligament (i.e., arch) release when performed
64483	1.4%	Injection(s), anesthetic agent, and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or computed tomography (CT)); lumbar or sacral, single level
25607	1.4%	Open treatment of distal radial extra-articular fracture or epiphyseal separation, with internal fixation
29827	1.3%	Arthroscopy shoulder surgical; with rotator cuff repair
62311	1.3%	Injection(s) of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral
29824	1.2%	Arthroscopy shoulder surgical; distal claviclectomy including distal articular surface (Mumford procedure)
64721	1.1%	Neuroplasty and/or transposition; median nerve at carpal tunnel
29888	1.0%	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
64636	0.9%	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)
26418	0.8%	Repair, extensor tendon, finger, primary or secondary; without free graft, each tendon



According to NCCI's study, "Workers Compensation and Prescription Drugs: 2016 Update" (*Annual Issues Symposium*, May 2016), in 2014, the narcotics Oxycontin® and Oxycodone-Acetaminophen (commonly known as Percocet®) were among the most widely prescribed drugs in workers compensation.

Drugs are uniquely identified by a national drug code (NDC). Charts 38 through 43 provide greater detail on payments for prescription drugs reported with an NDC, whether the drugs were provided in a pharmacy, physician's office, hospital, or other place of service. Payments are categorized as drugs if the code reported on the transaction is an NDC. Payments for drugs can also be reported using codes other than NDCs, such as revenue codes, HCPCS codes, and other state-specific procedure codes. The results in these charts are based only on payments reported with an NDC.

Chart 38 displays the shares of the payments of prescription medication for the top 10 workers compensation drugs and whether the drugs are generic (G) or brand name (B). This method of ranking shows which drugs have the highest percentage share of payments. Also included is the amount paid per unit (PPU). (See Glossary for the definition of *unit*.)

Chart 38

**Top 10 Workers Compensation Drugs by Amount Paid for South Dakota**

Name of Drug	Type B/G	Category	% of Drug Payments	PPU South Dakota	PPU Region	PPU Countrywide
Lyrica®	B	Miscellaneous Central Nervous System Agents	13.6%	\$6.19	\$6.15	\$6.24
Oxycontin®	B	Analgesics/Antipyretics	9.3%	\$8.45	\$7.58	\$8.43
Gabapentin	G	Anticonvulsants	4.8%	\$1.05	\$1.03	\$1.20
Duloxetine HCl	G	Psychotherapeutic Agents	4.7%	\$4.88	\$4.85	\$5.28
Fentora®	B	Analgesics/Antipyretics	3.4%	\$108.98	N/A	\$107.53
Tramadol HCl	G	Analgesics/Antipyretics	3.1%	\$0.77	\$0.73	\$1.16
Nucynta®	B	Analgesics/Antipyretics	2.9%	\$5.64	\$5.62	\$6.07
Lidocaine	G	Antipruritics/Local Anesthesia, Skin/Mucous Membrane	2.7%	\$6.25	\$6.56	\$7.01
Oxycodone HCl	G	Analgesics/Antipyretics	2.6%	\$1.18	\$1.11	\$1.27
Hydrocodone Bitartrate-Acetaminophen	G	Analgesics/Antipyretics	2.2%	\$0.58	\$0.54	\$0.58

**Top 10 Workers Compensation Drugs by Amount Paid for Countrywide**

Name of Drug	Type B/G	Category	% of Drug Payments	PPU South Dakota	PPU Region	PPU Countrywide
Lyrica®	B	Miscellaneous Central Nervous System Agents	7.0%	\$6.19	\$6.15	\$6.24
Oxycontin®	B	Analgesics/Antipyretics	4.4%	\$8.45	\$7.58	\$8.43
Gabapentin	G	Anticonvulsants	4.2%	\$1.05	\$1.03	\$1.20
Oxycodone HCl-Acetaminophen	G	Analgesics/Antipyretics	3.7%	\$1.32	\$1.38	\$1.76
Meloxicam	G	Analgesics/Antipyretics	3.4%	\$2.83	\$3.00	\$3.29
Duloxetine HCl	G	Psychotherapeutic Agents	2.8%	\$4.88	\$4.85	\$5.28
Tramadol HCl	G	Analgesics/Antipyretics	2.7%	\$0.77	\$0.73	\$1.16
Hydrocodone Bitartrate-Acetaminophen	G	Analgesics/Antipyretics	2.5%	\$0.58	\$0.54	\$0.58
Lidocaine	G	Antipruritics/Local Anesthesia, Skin/Mucous Membrane	2.3%	\$6.25	\$6.56	\$7.01
Celecoxib	G	Analgesics/Antipyretics	2.3%	\$4.35	\$4.45	\$5.14

Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 39 displays the top 10 workers compensation drugs according to the number of prescriptions. This chart reveals the most frequently prescribed drugs and the amount PPU.

The results in this chart are based only on payments reported with an NDC.

Chart 39

**Top 10 Workers Compensation Drugs by Prescription Counts for South Dakota**

Name of Drug	Type B/G	Category	% of Drug Prescriptions	PPU South Dakota	PPU Region	PPU Countrywide
Hydrocodone Bitartrate-Acetaminophen	G	Analgesics/Antipyretics	9.5%	\$0.58	\$0.54	\$0.58
Tramadol HCl	G	Analgesics/Antipyretics	7.9%	\$0.77	\$0.73	\$1.16
Gabapentin	G	Anticonvulsants	5.6%	\$1.05	\$1.03	\$1.20
Cyclobenzaprine HCl	G	Muscle Relaxants, Skeletal	4.5%	\$0.83	\$1.08	\$1.30
Lyrica®	B	Miscellaneous Central Nervous System Agents	4.2%	\$6.19	\$6.15	\$6.24
Oxycodone HCl	G	Analgesics/Antipyretics	4.0%	\$1.18	\$1.11	\$1.27
Duloxetine HCl	G	Psychotherapeutic Agents	3.7%	\$4.88	\$4.85	\$5.28
Meloxicam	G	Analgesics/Antipyretics	3.3%	\$2.83	\$3.00	\$3.29
Oxycodone HCl-Acetaminophen	G	Analgesics/Antipyretics	2.9%	\$1.32	\$1.38	\$1.76
Oxycontin®	B	Analgesics/Antipyretics	2.6%	\$8.45	\$7.58	\$8.43

**Top 10 Workers Compensation Drugs by Prescription Counts for Countrywide**

Name of Drug	Type B/G	Category	% of Drug Prescriptions	PPU South Dakota	PPU Region	PPU Countrywide
Hydrocodone Bitartrate-Acetaminophen	G	Analgesics/Antipyretics	9.7%	\$0.58	\$0.54	\$0.58
Tramadol HCl	G	Analgesics/Antipyretics	5.1%	\$0.77	\$0.73	\$1.16
Cyclobenzaprine HCl	G	Muscle Relaxants, Skeletal	5.0%	\$0.83	\$1.08	\$1.30
Gabapentin	G	Anticonvulsants	4.9%	\$1.05	\$1.03	\$1.20
Oxycodone HCl-Acetaminophen	G	Analgesics/Antipyretics	4.7%	\$1.32	\$1.38	\$1.76
Meloxicam	G	Analgesics/Antipyretics	3.9%	\$2.83	\$3.00	\$3.29
Ibuprofen	G	Analgesics/Antipyretics	3.5%	\$0.46	\$0.44	\$0.45
Oxycodone HCl	G	Analgesics/Antipyretics	2.8%	\$1.18	\$1.11	\$1.27
Naproxen	G	Analgesics/Antipyretics	2.7%	\$1.07	\$0.91	\$0.96
Lyrica®	B	Miscellaneous Central Nervous System Agents	2.2%	\$6.19	\$6.15	\$6.24

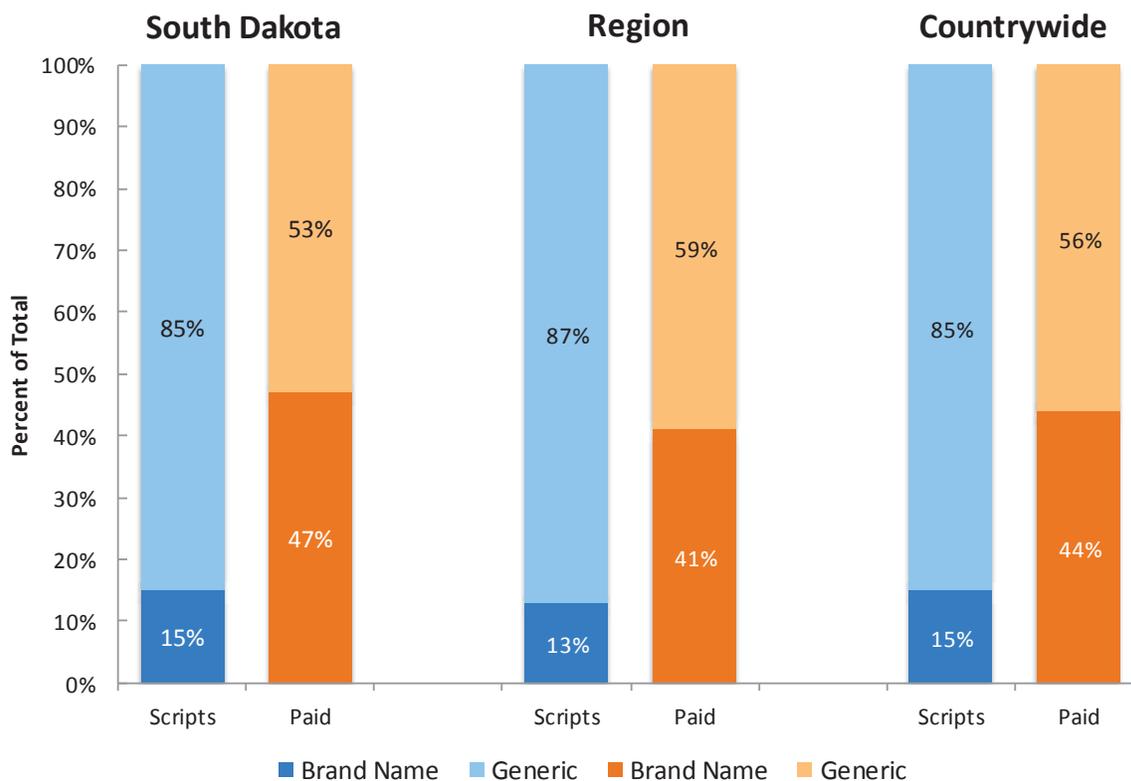
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

According to NCCI’s study, “Workers Compensation and Prescription Drugs: 2016 Update” (*Annual Issues Symposium*, May 2016), brand-name drug prices increased by 14% in 2014 while utilization was down 18%, resulting in a 7% decrease in brand-name drug payments.

Chart 40 shows the distribution of prescription drugs by brand name and generics for South Dakota, the region, and the countrywide average. The share between brand name and generics is displayed based on the prescription counts and the payments. Typically, a higher percentage of drugs is given in the generic form; however, higher costs occur when brand-name drugs are prescribed. In several states, a prescription drug fee schedule includes rules regarding the dispensing and reimbursement rates for brand-name and generic drugs. The results in this chart are based only on transactions reported with an NDC.

Chart 40

### Distribution of Drugs by Brand Name and Generic



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

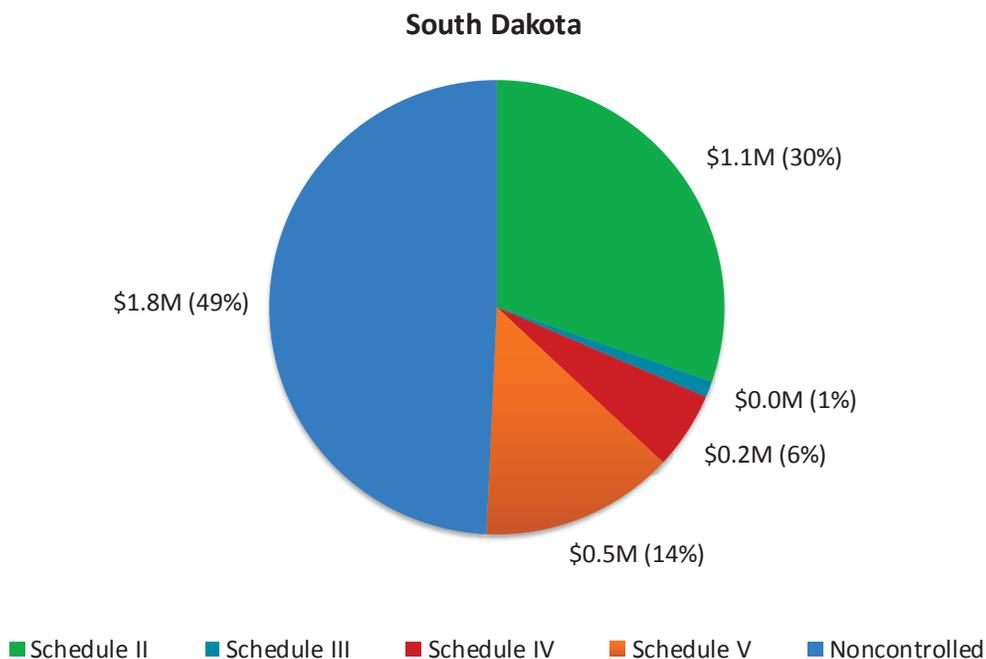
The Controlled Substance Act (CSA) was passed in 1970 to regulate the manufacture, distribution, possession, and use of certain drugs. There are five schedules, or groups, determined by varying qualifications, such as the drug’s medical uses, if any, and its potential for abuse. For example, Schedule V drugs have the lowest potential for abuse, while Schedule I drugs are illegal, mainly because they have no known medical uses.

The share of claims observed in Service Year 2016 with at least one controlled substance in South Dakota is 11%. This compares to the region and countrywide shares of 14% and 16% respectively.

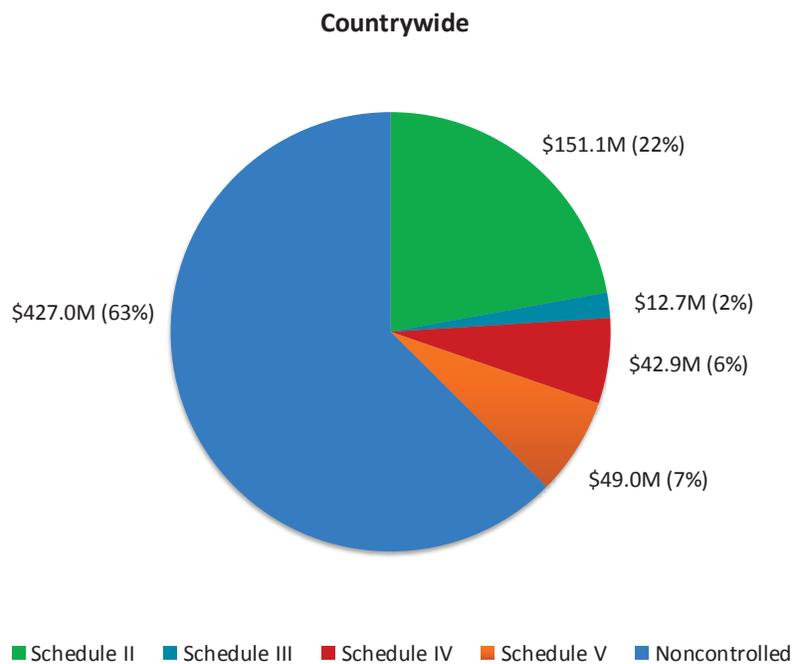
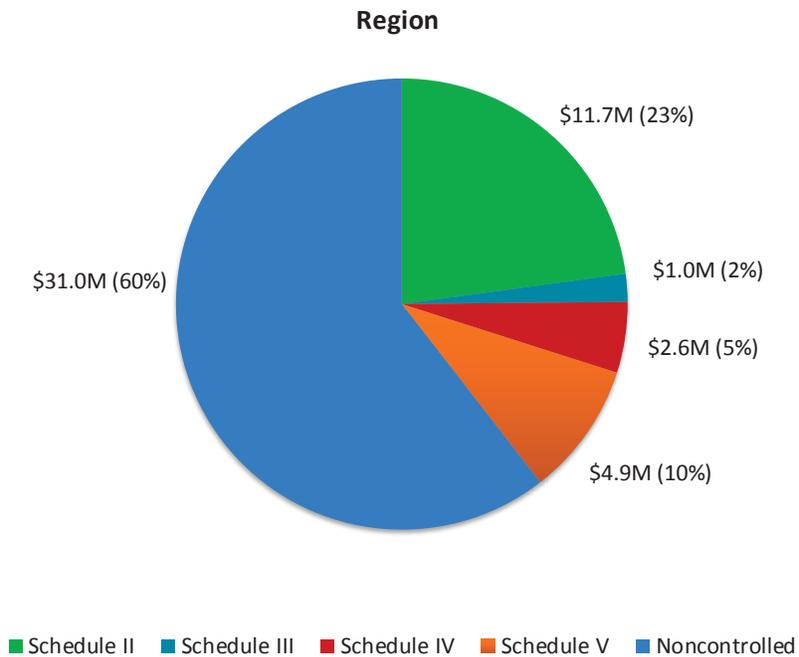
According to NCCI’s study, “Workers Compensation and Prescription Drugs: 2016 Update” (*Annual Issues Symposium*, May 2016), controlled substance prices increased 16% in 2014 while utilization was down 7%, resulting in an 8% increase in controlled substance payments countrywide. In 2016, South Dakota spent \$1.1M on Schedule II and Schedule III drugs for workers compensation claims.

Chart 41 shows the distribution of prescription drug payments in South Dakota by CSA schedule (paid amounts shown in millions of dollars). The distributions for the region and countrywide are also shown.

**Chart 41**  
**Distribution of Prescription Drug Payments by CSA Schedule**



## Distribution of Prescription Drug Payments by CSA Schedule (cont'd)



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

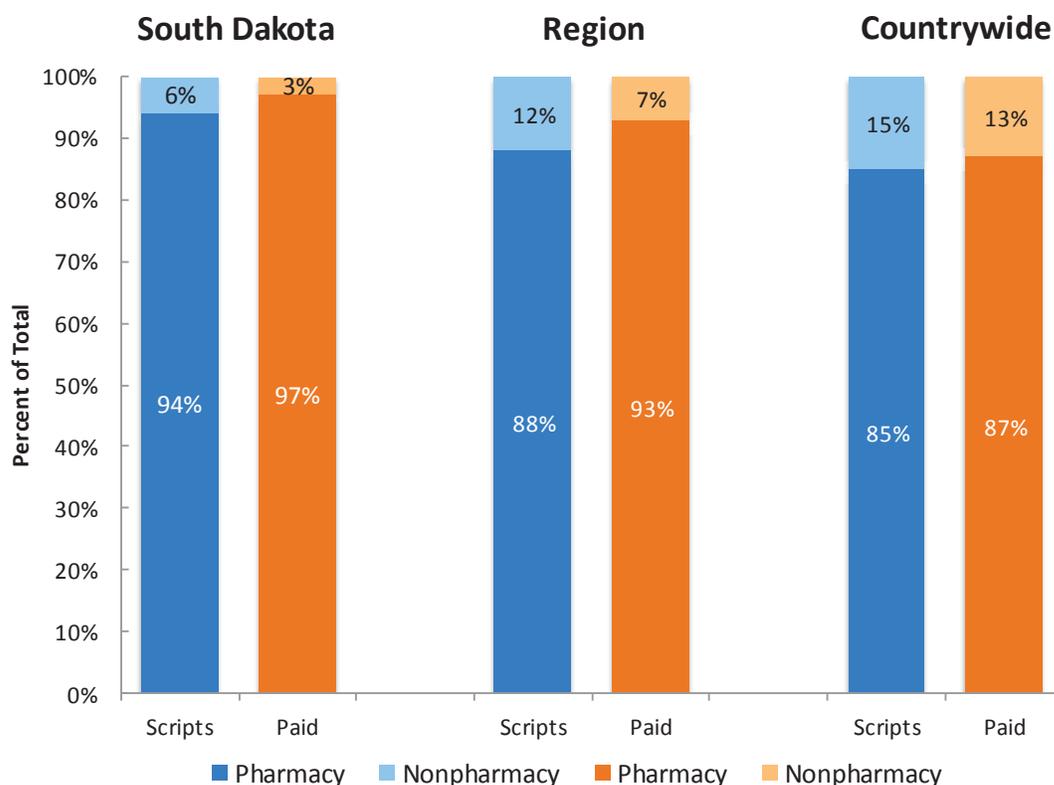
The rules on drug dispensing vary from state to state. Some states allow physician dispensing of drugs, while other states place limits or prohibit physician dispensing. Analysis of the share of drugs dispensed from a pharmacy and from a nonpharmacy (e.g., physicians and hospitals) may provide insight into the drivers of drug costs.

According to NCCI’s study, “Workers Compensation and Prescription Drugs: 2016 Update” (*Annual Issues Symposium*, May 2016), physician-dispensed prescription drug prices and utilization increased 4% each in 2014, resulting in an 8% increase in physician-dispensed prescription drug payments countrywide.

Chart 42 shows the distribution of prescription drugs dispensed by pharmacies and nonpharmacies. The share between pharmacy-dispensed and nonpharmacy-dispensed is displayed, based on both prescription counts and payments, for South Dakota, the region, and the countrywide average. The results in this chart are based only on transactions reported with an NDC.

Chart 42

Distribution of Drugs by Pharmacy and Nonpharmacy by Scripts and Amount Paid



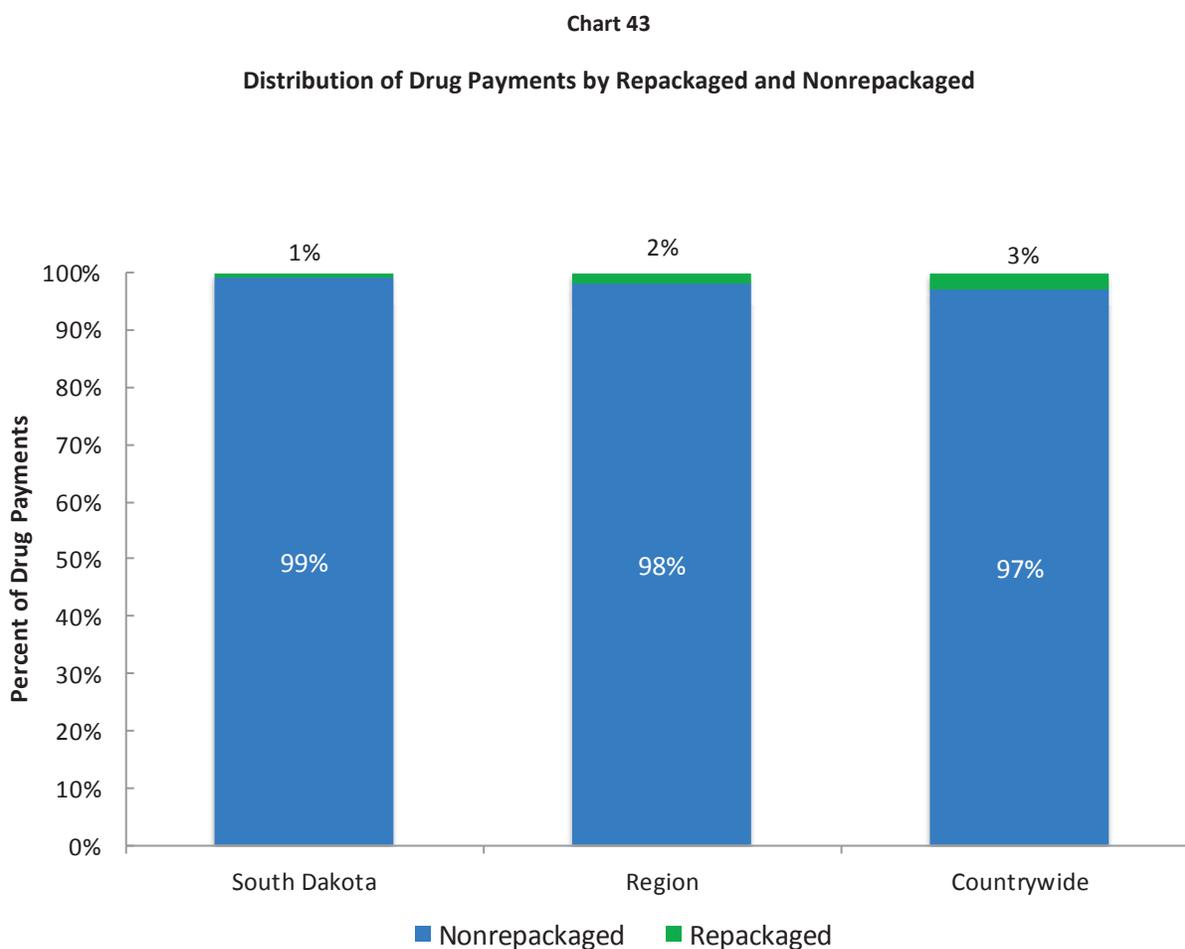
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



NDCs are specific not only to the product (including strength and formulation) and the package size but also to the labeler. Labelers are manufacturers, repackagers, and distributors.

Workers compensation drug fee schedules are typically based on Average Wholesale Price (AWP). Because each NDC comes with a unique AWP, any firm that repackages a drug can set both a new NDC and a new, possibly higher, AWP. As a result, workers compensation costs for repackaged drugs had grown out of proportion to the number of prescriptions written for repackaged drugs. Repackaged drugs now represent a small portion of overall drug payments because several states have implemented regulation on their reimbursement.

Chart 43 shows the distribution of payments for repackaged and nonrepackaged drugs. The results in this chart are based only on payments reported with an NDC.



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

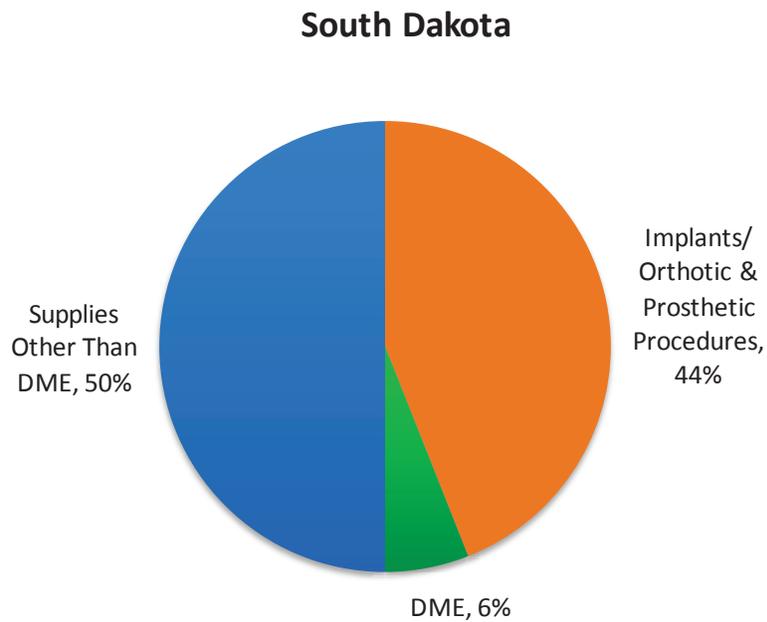
Chart 44 displays the distribution of payments among three separate categories:

- Implants/Orthotic and Prosthetic Procedures
- Durable Medical Equipment (DME)
- Supplies Other Than DME

Payments are mapped to each of these categories based on the procedure code reported, regardless of who provides the service or where the service is performed.

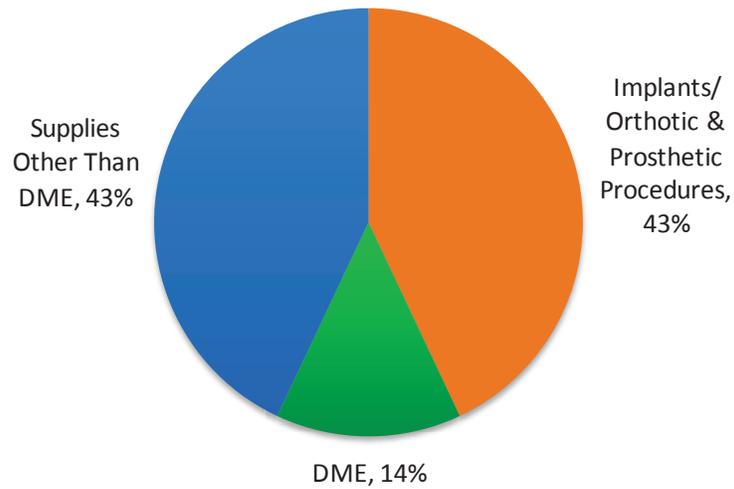
Chart 44

### Distribution of Payments by DME, Supplies, and Implants

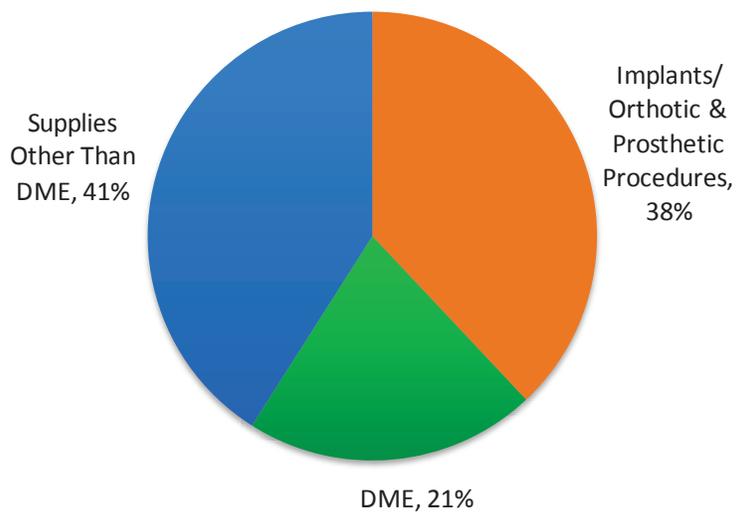


## Distribution of Payments by DME, Supplies, and Implants (cont'd)

### Region



### Countrywide



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

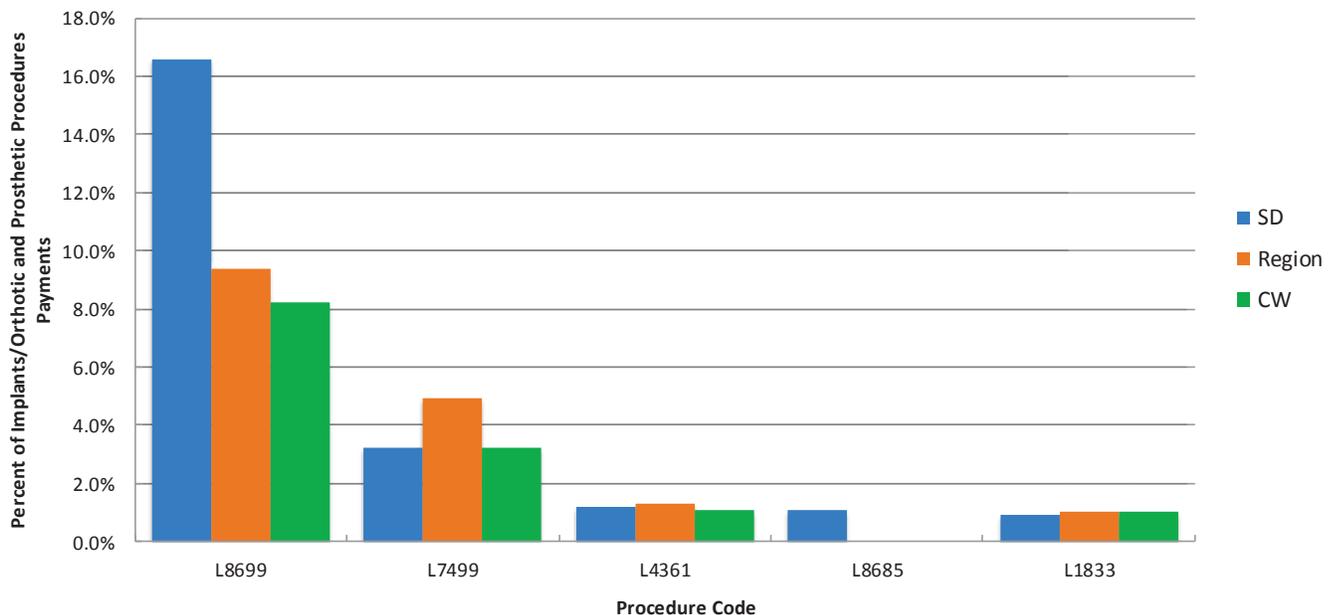
The most prevalent procedure code types reported for Implants/Orthotic and Prosthetic Procedures are HCPCS codes and revenue codes. Revenue codes represent 56% of Implants/Orthotic and Prosthetic Procedures payments, while HCPCS codes represent 44%.

The predominant revenue code reported for Implants/Orthotic and Prosthetic Procedures is code 0278— Medical/Surgical Supplies: Other implants. In South Dakota, payments for code 0278 represent 54% of Implants/Orthotic and Prosthetic Procedures payments.

Chart 45 displays the top five HCPCS codes for Implants/Orthotic and Prosthetic Procedures. The procedure codes are ranked based on total payments in South Dakota. A brief description of each HCPCS code is displayed in the table below.

**Chart 45**

**Top Five Implants/Orthotic and Prosthetic Procedures Codes by Amount Paid for South Dakota**



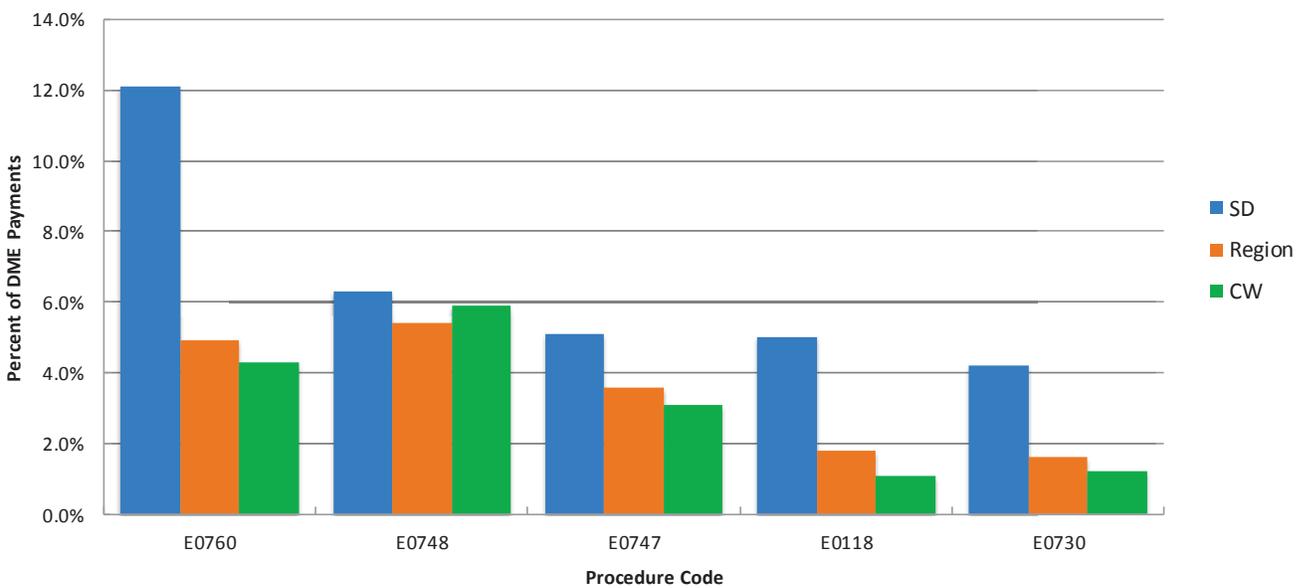
Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
L8699	16.6%	Prosthetic implant, not otherwise specified
L7499	3.2%	Upper extremity prosthesis, not otherwise specified
L4361	1.2%	Walking boot, pneumatic and/or vacuum, with or without joints, with or without interface material, prefabricated, off-the-shelf
L8685	1.1%	Implantable neurostimulator pulse generator, single array, rechargeable, includes extension
L1833	0.9%	Knee orthosis, adjustable knee joints (unicentric or polycentric), positional orthosis, rigid support, prefabricated, off-the shelf

The most prevalent procedure code types reported for DMEs are HCPCS codes. The predominant HCPCS code reported for DMEs is E1399—Durable Medical Equipment, Miscellaneous. In South Dakota, code E1399 represents 23% of DME payments.

Chart 46 displays the top five procedure codes for DME other than code E1399. The procedure codes are ranked based on total payments in South Dakota. A brief description of each procedure code is displayed in the table below.

**Chart 46**  
**Top Five DME Codes by Amount Paid for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

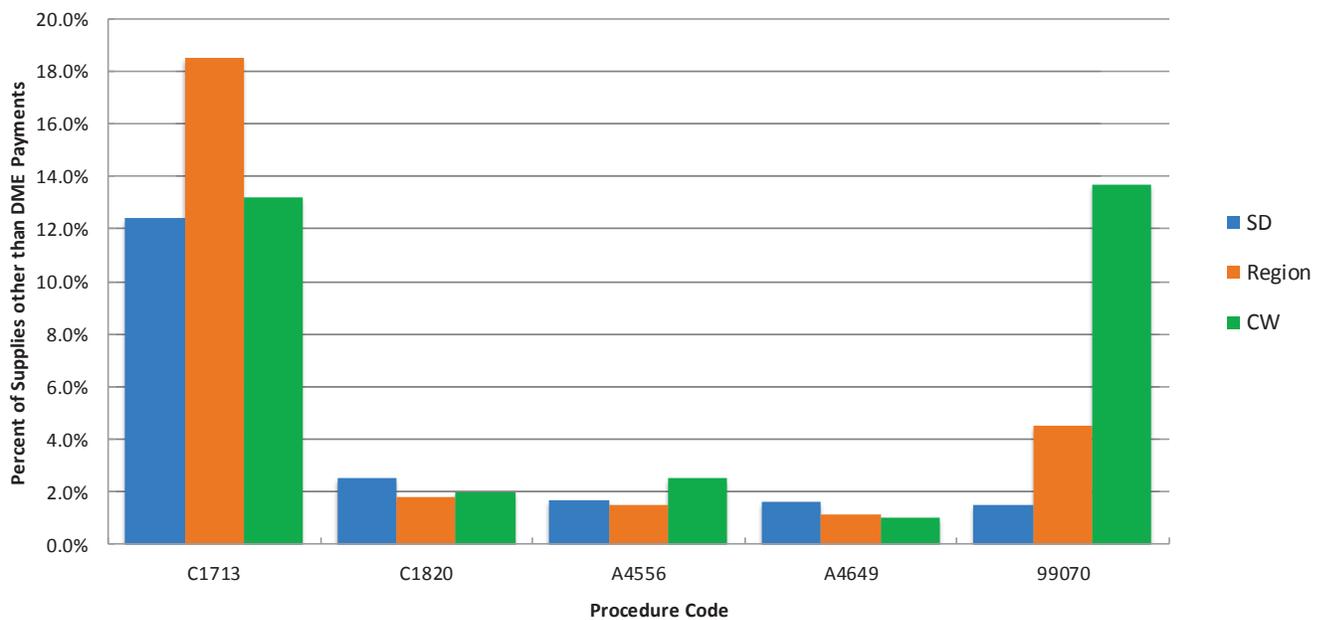
Code	% in SD	Description
E0760	12.1%	Osteogenesis stimulator, low intensity ultrasound, noninvasive
E0748	6.3%	Osteogenesis stimulator, electrical, noninvasive, spinal applications
E0747	5.1%	Osteogenesis stimulator, electrical, noninvasive, other than spinal applications
E0118	5.0%	Crutch substitute, lower leg platform, with or without wheels, each
E0730	4.2%	Transcutaneous electrical nerve stimulation (TENS) device, 4 or more leads, for multiple nerve stimulation

The most prevalent procedure code types reported for Supplies other than DME are HCPCS codes and revenue codes. HCPCS codes represent 29% of Supplies other than DME payments, while revenue and other codes represent the other 71%.

Chart 47 displays the top five procedure codes for Supplies other than DME. The procedure codes are ranked based on total payments in South Dakota. A brief description of each procedure code is displayed in the table below.

**Chart 47**

**Top Five Supplies other than DME Codes by Amount Paid for South Dakota**



Source: NCCI Medical Data Call, Service Year 2016. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
C1713	12.4%	Anchor/screw for opposing bone-to-bone or soft tissue-to-bone (implantable)
C1820	2.5%	Generator, neurostimulator (implantable), with rechargeable battery and charging system
A4556	1.7%	Electrodes (e.g., apnea monitor), per pair
A4649	1.6%	Surgical supply; miscellaneous
99070	1.5%	Supplies and materials (except spectacles), provided by the physician or other qualified health care professional over and above those usually included with the office visit or other services rendered



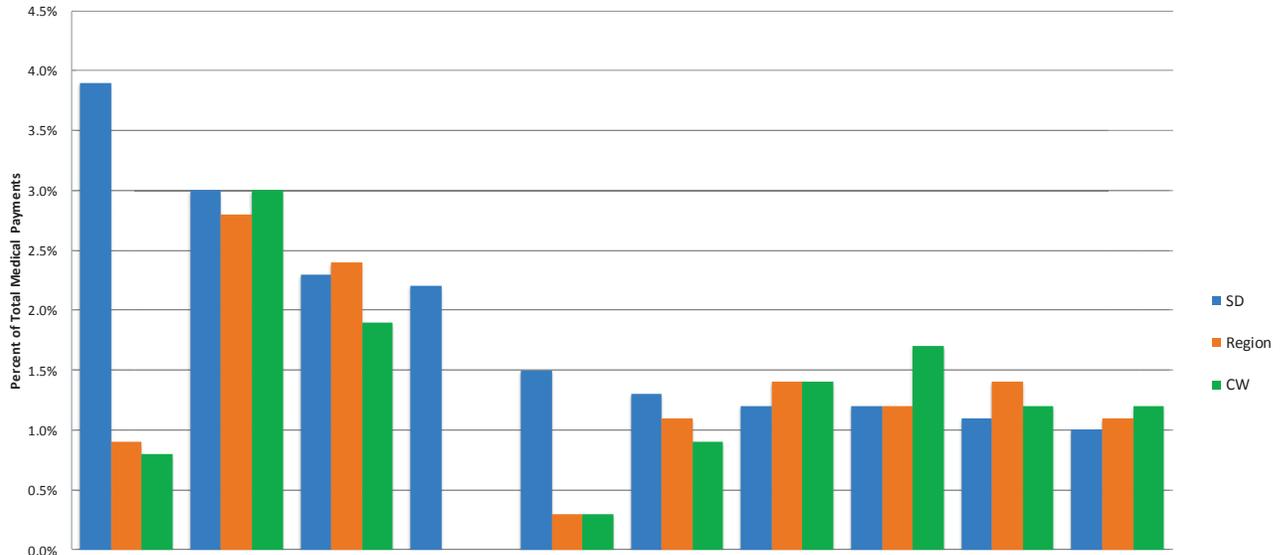
Chart 48 displays the top 10 diagnoses, identified by the ICD-10 (International Classification of Diseases) codes. The ICD-10 code indicates the condition for which the care is provided. NCCI assigns an ICD-10 code to each workers compensation claim based on the severity of the ICD-10 codes reported on bills by medical providers for services provided to the injured worker.

The top 10 diagnosis codes are ranked by total claim payments for South Dakota. This method of ranking shows which diagnostic codes have the highest percentage share of payments. Payments are based on claims with dates of injury between January 1, 2015, and December 31, 2015, and they include all reported services provided for those claims through December 31, 2016. As these claims mature, the mix of ICD-10 codes may change, thus impacting the percentage share of payments for a specific code over time. This mix may also affect how costs per code in South Dakota compare to countrywide costs. The state, region, and countrywide average payments per claim are also displayed for each diagnostic code. A brief description of each diagnostic code is displayed in the table below the chart.



Chart 48

Top 10 ICD-10 Codes by Amount Paid for Dates of Injury in 2015 for South Dakota



Diagnosis Code	SD	Reg	CW
Z51.89	\$14,889	\$4,174	\$5,419
M54.5	\$2,262	\$2,791	\$2,960
S43.429A	\$18,210	\$22,893	\$18,185
G82.51	\$786,003	N/A	\$966,459
S22.009A	\$90,556	\$31,750	\$30,290
K40.90	\$10,498	\$9,694	\$8,231
S61.209A	\$652	\$856	\$812
T14.90	\$1,711	\$1,976	\$2,562
M25.519	\$2,001	\$2,812	\$2,753
M54.2	\$2,576	\$3,538	\$3,550

Source: NCCI Medical Data Call, Dates of Injury in 2015. Region includes IA, KS, MN, MO, and NE. Countrywide includes data for the following states: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

Code	% in SD	Description
Z51.89	3.9%	Encounter for other specified aftercare
M54.5	3.0%	Low back pain
S43.429A	2.3%	Sprain of unspecified rotator cuff capsule, initial encounter
G82.51	2.2%	Quadriplegia, C1-C4 complete
S22.009A	1.5%	Unspecified fracture of unspecified thoracic vertebra, initial encounter for closed fracture
K40.90	1.3%	Unilateral inguinal hernia, without obstruction or gangrene, not specified as recurrent
S61.209A	1.2%	Unspecified open wound of unspecified finger without damage to nail, initial encounter
T14.90	1.2%	Injury, unspecified
M25.519	1.1%	Pain in unspecified shoulder
M54.2	1.0%	Cervicalgia



## Comparison of Selected Results by Service Year

The tables in this section provide a comparison of results for South Dakota for the latest five service years. Analysis in the growth of shares may provide additional insight into medical cost drivers above and beyond an analysis at a specific point in time. The oldest data available from the Medical Data Call is for Service Year 2011 because this is the first full service year of data since the inception of the Call.

Results in the charts below may vary compared to medical reports from previous years. This is due to a lag in reporting, as well as improved derivations affecting categories for certain charts.

**Distribution of Medical Payments for South Dakota (Chart 4)**

Medical Category	2012	2013	2014	2015	2016
Physician	28%	27%	26%	26%	26%
Hospital Outpatient	29%	31%	31%	31%	32%
Hospital Inpatient	15%	13%	14%	17%	13%
ASC	3%	4%	4%	3%	4%
Drugs	12%	13%	12%	12%	12%
DME, Supplies, and Implants	10%	10%	10%	9%	10%
Other	3%	2%	3%	2%	3%

**Distribution of Physician Payments by AMA Service Category for South Dakota (Chart 5)**

AMA Service Category	2012	2013	2014	2015	2016
Anesthesia	5%	4%	5%	5%	5%
Surgery	28%	27%	26%	26%	27%
Radiology	11%	11%	12%	10%	11%
Pathology	1%	1%	1%	1%	1%
Physical Medicine	27%	29%	27%	27%	27%
General Medicine	5%	4%	4%	6%	4%
Evaluation and Management	18%	21%	23%	23%	23%
Other	5%	3%	2%	2%	2%



### Hospital Inpatient Statistics for South Dakota (Charts 17 and 18)

Hospital Inpatient Statistics	2012	2013	2014	2015	2016
Average Payment Per Stay	\$23,412	\$24,475	\$26,017	\$32,671	\$29,736
Number of Stays per 1,000 Active Claims	15	16	18	18	15

### Distribution of Hospital Outpatient Payments by Surgery and Nonsurgery for South Dakota

Visit Type	2012	2013	2014	2015	2016
Surgery	54%	56%	55%	57%	58%
Nonsurgery	46%	44%	45%	43%	42%

### Hospital Outpatient Surgery Statistics for South Dakota (Charts 23 and 24)

Hospital Outpatient Surgery Statistics	2012	2013	2014	2015	2016
Average Payment Per Visit	\$3,778	\$4,196	\$4,138	\$4,231	\$4,493
Number of Visits per 1,000 Active Claims	118	136	135	141	138

### Hospital Outpatient Nonsurgery Statistics for South Dakota (Charts 25 and 26)

Hospital Outpatient Nonsurgery Statistics	2012	2013	2014	2015	2016
Average Payment Per Visit	\$290	\$299	\$324	\$330	\$360
Number of Visits per 1,000 Active Claims	1,287	1,477	1,392	1,390	1,230

### Emergency Room Statistics for South Dakota (Charts 30 and 31)

Emergency Room Statistics	2012	2013	2014	2015	2016
Average Payment Per Visit	\$1,198	\$1,424	\$1,659	\$1,463	\$1,580
Number of Visits per 1,000 Active Claims	209	214	218	218	212



## ASC Statistics for South Dakota (Charts 34 and 35)

ASC Statistics	2012	2013	2014	2015	2016
Average Payment Per Visit	\$1,928	\$2,168	\$2,400	\$2,716	\$3,596
Number of Visits per 1,000 Active Claims	46	52	52	40	36

## Distribution of Drug Payments by Brand Name and Generic for South Dakota (Chart 40)

Type of Drug	2012	2013	2014	2015	2016
Brand Name	58%	58%	49%	44%	47%
Generic	42%	42%	51%	56%	53%

## Distribution of Drug Payments by Pharmacy and Nonpharmacy for South Dakota (Chart 42)

Type of Provider	2012	2013	2014	2015	2016
Pharmacy	95%	93%	92%	96%	97%
Nonpharmacy	5%	7%	8%	4%	3%

## Distribution of Drug Payments by Repackaged and Nonrepackaged for South Dakota (Chart 43)

Type of Drug	2012	2013	2014	2015	2016
Repackaged	1%	1%	1%	1%	1%
Nonrepackaged	99%	99%	99%	99%	99%

## Distribution of Payments by DME, Supplies, and Implants for South Dakota (Chart 44)

Category	2012	2013	2014	2015	2016
Implants/Orthotic and Prosthetic Procedures	44%	48%	42%	44%	44%
DME	7%	5%	6%	8%	6%
Supplies Other Than DME	49%	47%	52%	48%	50%



## Glossary

**Accident Year:** A loss accounting definition in which experience is summarized by the calendar year in which an accident occurred.

**Ambulatory Payment Classification (APC):** Unit of payment under Medicare's Outpatient Prospective Payment System (OPPS) for hospital outpatient services where individual services are grouped based on similar characteristics and similar costs.

**Ambulatory Surgical Center (ASC):** A state-licensed facility that is used mainly to perform outpatient surgery, has a staff of physicians, has continuous physician and nursing care, and does not provide for overnight stays. An ASC can bill for facility fees much like a hospital, but generally has a separate fee schedule.

**Controlled Substance:** Drugs that are regulated by the Controlled Substance Act (CSA) of 1970. Each controlled substance is contained in one of five schedules based on its medical use(s) and its potential for abuse and addiction.

**CPT Code Modifiers:** Modifiers are codes added to a CPT code that further describe the procedure performed without changing the meaning of the original code.

**Current Procedure Terminology (CPT):** A numeric coding system maintained by the American Medical Association (AMA). The CPT coding system consists of five-digit codes that are primarily used to identify medical services and procedures performed by physicians and other healthcare professionals.

**Diagnosis Related Groups (DRG):** A system of hospital payment classification that groups patients with similar clinical problems who are expected to require similar amounts of hospital resources.

**Drugs:** Includes any data reported by a National Drug Code (NDC). Also included are data for revenue codes, the Healthcare Common Procedure Code System (HCPCS), and other state-specific codes that represent drugs.

**Durable Medical Equipment (DME):** Equipment that is primarily and customarily used to serve a medical purpose, can withstand repeated use, could normally be rented and used by successive patients, is appropriate for use in the home, and is not generally useful to a person in the absence of an illness or injury.

**Emergency Room Services:** Services performed in a hospital for patients requiring immediate attention.

**Healthcare Common Procedure Coding System (HCPCS):** Alphanumeric codes that include mostly nonphysician items or services such as medical supplies, ambulatory services, prostheses, etc. These are items and services not covered by Current Procedure Terminology (CPT) procedures.

**Inpatient Hospital Service:** Services for a patient who is admitted to a hospital for treatment that requires at least one overnight stay (more than 24 hours in a hospital).

**Inpatient Hospital Stay:** A hospital admission of a patient requiring hospitalization of at least one 24-hour period.

**Length of Stay:** The amount of time, in days, between admission to a hospital and discharge.

**Medical Data Call:** Captures transaction-level detail for medical billings that were processed on or after July 1, 2010. All medical transactions with the jurisdiction state in any applicable Medical Data Call state are reportable. This includes all workers compensation claims, including medical-only claims.

**Outpatient Hospital Service:** Any type of medical or surgical care performed at a hospital that is not expected to result in an overnight hospital stay (less than 24 hours in a hospital).



**(Paid) Procedure Code:** A code from the jurisdiction-approved code table that identifies the procedure associated with the reimbursement. Examples include CPT code or revenue code.

**Revenue Code:** A numeric coding system used in hospital billings that provides broad classifications of the types of services provided. Some examples are emergency room, operating room, recovery room, room and board, and supplies.

**Service Year:** A loss accounting definition where experience is summarized by the calendar year in which a medical service was provided.

**Surgery Visit:** A visit in which at least one surgery procedure is performed based on the reported procedure code.

**Taxonomy Code:** A code that identifies the type of provider that billed for, and is being paid for, a medical service. Data reporters are instructed to use the provider taxonomy list of standard codes maintained by the National Uniform Claim Committee.

**Transaction:** A line item of a medical bill.

**Units:** The number of units of service performed or the quantity of drugs dispensed. For Paid Procedure Codes related to medications, the quantity/units depend on the type of drug:

- For tablets, capsules, suppositories, nonfilled syringes, etc., *units* represents the actual number of the drug provided. For example, a bottle of 30 pills would have 30 units.
- For liquids, suspensions, solutions, creams, ointments, bulk powders, etc. dispensed in standard packages, the units are specified by the procedure code. For example, a cream is dispensed in a standard tube, which is defined as a single unit.
- For liquids, suspensions, solutions, creams, ointments, bulk powders, etc. that are not dispensed in standard packages, the number of units is the amount provided in its standard unit of measurement (e.g., milliliters, grams, ounces). For example, codeine cough syrup dispensed by a pharmacist into a four-ounce bottle would be reported as four units.

**Visit:** Any hospital outpatient or ASC service or set of services provided to a claimant on a specific date. Any visit may have more than one procedure performed, and any claimant may have more than one visit.



## Appendix

The data contained in this report represents medical transactions for Service Year 2016 (medical services delivered from January 1, 2016, to December 31, 2016), except where otherwise noted. Insurance carriers must report paid medical transactions if they write at least 1% of the market share in any one state for which NCCI is the advisory organization. Once a carrier meets the eligibility criteria, the carrier will be required to report for all applicable states in which it writes, even if an individual state's market share is below the threshold. All carriers within a group are required to report, regardless of whether they write less than 1% of the market share in the state.

The data is reported under the jurisdiction state—the state under whose Workers Compensation Act the claimant's benefits are being paid. Medical transactions must continue to be reported until the transactions no longer occur (i.e., the claim is closed) or 30 years from the accident date. There are nearly 30 data elements reported.

For the state of South Dakota in Service Year 2016, the reported number of transactions was more than 276,900, with more than \$51,584,500 paid, for more than 15,000 claims, representing data from 89% of the workers compensation premium written, which includes experience for large-deductible policies. Lump-sum settlements are not required to be reported. Also, self-insured data is not included.

Wherever possible, standard industry codes are used because they provide a clear definition of the data, increase efficiency of computer systems, and improve the accuracy and quality of the data.

Carriers differ in their handling of medical data reporting. Some carriers retain all medical claims handling internally and submit the data themselves. Others use business partners for various aspects of medical claim handling, such as third party administrators, medical bill review vendors, etc. It is possible for a carrier to authorize its vendor to report the data on its behalf. Some carriers may use a combination of direct reporting and using vendors. Although data may have been provided by an authorized vendor on behalf of a carrier, the quality, timeliness, and completeness of the data is the responsibility of the carrier.

Before a medical data provider can send files, each submitter's electronic data file must pass certification testing. This ensures that all connections, data files, and systems are functioning and processing correctly. Each medical data provider within a reporting group is required to pass certification testing. If a medical data provider reports data for more than one reporting group, that data must be certified for each group.

For more information about the Medical Data Call, please refer to the *Medical Data Call Reporting Guidebook* on [ncci.com](http://ncci.com).