



# Medical Data Report

For the state of

# SOUTH DAKOTA

October 2021



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## Introduction

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

This publication is a data source for regulators and others who are interested in the driving forces behind changing medical costs in WC 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 underlie the financial soundness of the WC system. When making comparisons to the region and countrywide (CW), it is important to note that some states in this report do not have a fee schedule.

Knowing how payments for different services contribute to WC 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, Prosthetics, Orthotics and Supplies (DMEPOS)
- Other

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

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.

The data contained in this report represents medical transactions for Service Year 2020 (medical services delivered from January 1, 2020, to December 31, 2020), except where otherwise noted. WC insurance carriers must report paid medical transactions if, over the most recent three years, they write at least 1% of the market share in any one state for which NCCI is the rating or advisory organization. Once a carrier meets the eligibility criteria, it is required to report for all applicable states in which it writes WC insurance. All carriers within an insurance group are required to report.

No data adjustments have been made for the reporting of COVID-19-related claims. For more information on impacts of COVID-19 on medical losses, please see the Medical Indicators & Trends dashboard<sup>1</sup> on [ncci.com](https://www.ncci.com).

For South Dakota in Service Year 2020, the reported number of transactions was more than 233,400, with more than \$49,078,400 paid, for more than 12,800 claims. This represents data from 96% of the workers compensation premium written, which includes experience for large-deductible policies. Bulk payments and lump-sum settlements are not required to be reported. Also, self-insured data is not included.

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<sup>1</sup> [www.ncci.com/Articles/Pages/Insights-Medical-Indicators-Trends-Dashboard.aspx](https://www.ncci.com/Articles/Pages/Insights-Medical-Indicators-Trends-Dashboard.aspx)



Unless otherwise noted, the source for all data in this report is:

- NCCI's Medical Data Call, Service Year 2020
- Region includes data from the following states: IA, IL, IN, KS, MI, MN, MO, NE, OK, and WI.
- Countrywide includes data from 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, NJ, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV

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



Table of Contents

**Medical Cost Statistics ..... 6**

- Medical Share of Total Benefit Costs by Accident Year ..... 6
- Overall Medical Average Cost per Lost-Time Claim (in 000s)..... 7
- Percentage of Medical Paid by Claim Maturity ..... 8
- Distribution of Medical Payments ..... 9

**Physicians ..... 10**

- Physician Payments as a Percentage of Medicare..... 10
- Distribution of Physician Payments by AMA Service Category ..... 11
- Top 10 Anesthesia Procedure Codes by Amount Paid ..... 13
- Top 10 Anesthesia Procedure Codes by Transaction Counts ..... 14
- Top 10 Surgery Procedure Codes by Amount Paid..... 15
- Top 10 Surgery Procedure Codes by Transaction Counts..... 16
- Time Until First Treatment for Major Surgery (in Days) ..... 17
- Top 10 Radiology Procedure Codes by Amount Paid ..... 18
- Top 10 Radiology Procedure Codes by Transaction Counts ..... 19
- Time Until First Treatment for Radiology (in Days) ..... 20
- Top 10 Physical and General Medicine Procedure Codes by Amount Paid ..... 21
- Top 10 Physical and General Medicine Procedure Codes by Transaction Counts ..... 22
- Time Until First Treatment for Physical and General Medicine (in Days) ..... 23
- Top 10 Evaluation and Management Procedure Codes by Amount Paid ..... 24
- Top 10 Evaluation and Management Procedure Codes by Transaction Counts ..... 25
- Time Until First Treatment for Evaluation and Management (in Days) ..... 26
- Office or Other Outpatient Visit for the Evaluation and Management of a New Patient..... 27
- Office or Other Outpatient Visit for the Evaluation and Management of an Established Patient..... 28
- Distribution of Telemedicine Payments by Physician Service Category..... 29
- Top 10 Procedure Codes by Amount Paid for Telemedicine Services..... 30
- Top 10 Procedure Codes by Transaction Counts for Telemedicine Services..... 31

**Hospital Inpatient ..... 32**

- Hospital Inpatient Payments as a Percentage of Medicare..... 32
- Average Amount Paid per Stay for Hospital Inpatient Services ..... 33
- Average Amount Paid per Day for Hospital Inpatient Services ..... 33
- Average Number of Inpatient Stays per 1,000 Active Claims..... 34
- Length of Stay for Hospital Inpatient Services (in Days)..... 34



Time Until First Treatment for Hospital Inpatient Stays (in Days)..... 35

Top 10 Diagnosis Groups by Amount Paid for Hospital Inpatient Services ..... 36

Top 10 DRG Codes by Amount Paid for Hospital Inpatient Services ..... 37

**Hospital Outpatient ..... 38**

    Hospital Outpatient Payments as a Percentage of Medicare..... 38

    Distribution of Payments for Outpatient Services by Hospital Outpatient Visit Type ..... 39

    Average Amount Paid for Hospital Outpatient Services per Emergency Visit ..... 40

    Average Number of Emergency Hospital Outpatient Visits per 1,000 Active Claims..... 40

    Top 10 Diagnosis Groups by Amount Paid for Emergency Hospital Outpatient Visits..... 41

    Distribution of Emergency Room Outpatient Services by Procedure Code ..... 42

    Emergency Room Outpatient Paid per Transaction by Procedure Code ..... 42

    Average Amount Paid for Hospital Outpatient Services per Nonemergency Major Surgery Visit..... 43

    Average Number of Nonemergency Major Surgery Hospital Outpatient Visits per 1,000 Active Claims ..... 43

    Time Until First Treatment for Nonemergency Major Surgery Outpatient Visits (in Days) ..... 44

    Top 10 Diagnosis Groups by Amount Paid for Nonemergency Major Surgery Hospital Outpatient Visits ..... 45

    Top 10 Procedure Codes by Amount Paid for Hospital Outpatient Services in Nonemergency Major Surgery Visits..... 46

    Average Amount Paid for Hospital Outpatient Services per Other Outpatient Visit ..... 47

    Average Number of Other Hospital Outpatient Visits per 1,000 Active Claims ..... 47

    Time Until First Treatment for Other Outpatient Visits (in Days)..... 48

    Top 10 Diagnosis Groups by Amount Paid for Other Hospital Outpatient Visits ..... 49

    Top 10 Procedure Codes by Amount Paid for Hospital Outpatient Services in Other Visits..... 50

**Ambulatory Surgical Centers ..... 51**

    ASC Payments as a Percentage of Medicare ..... 51

    Average Amount Paid per Major Surgery Visit for ASC Services ..... 52

    Average Number of ASC Major Surgery Visits per 1,000 Active Claims ..... 52

    Time Until First Treatment for ASC Major Surgery Visits (in Days) ..... 53

    Top 10 Diagnosis Groups by Amount Paid for ASC Major Surgery Visits ..... 54

    Top 10 Procedure Codes by Amount Paid for ASC Services in Major Surgery Visits..... 55

    Major Surgery Outpatient Visit Comparisons for Procedure Codes in Chart 55 ..... 56

**Prescription Drugs..... 57**

    Distribution of Prescription Drug Payments by CSA Schedule ..... 57

    Top 10 Workers Compensation Drugs by Amount Paid ..... 58

    Top 10 Workers Compensation Drugs by Prescription Counts ..... 59

    Distribution of Drugs by Brand Name and Generic ..... 60

    Distribution of Drugs by Pharmacy and Nonpharmacy ..... 61



Top 5 Nonpharmacy-Dispensed Drugs by Amount Paid with Pharmacy-Dispensed Comparison ..... 62

**Durable Medical Equipment, Prosthetics, Orthotics, and Supplies ..... 63**

    Distribution of Payments by DMEPOS ..... 63

    Top Diagnosis Groups by Amount Paid for Dates of Injury in 2019 for Claims *With* an Implant or Prosthetic ..... 64

    Average Amount Paid per Claim *Without* an Implant or Prosthetic for Diagnosis Groups in Chart 64 ..... 64

**Other Medical Services..... 65**

    Distribution of Other Medical Services Payments..... 65

**Diagnosis Group and Body System ..... 66**

    Top Body Systems by Amount Paid for Dates of Injury in 2019 ..... 66

    Top Diagnosis Groups by Amount Paid for Dates of Injury in 2019 ..... 66

**Comparison of Selected Results by Year ..... 67**

**Glossary ..... 71**

**Appendix ..... 74**



## Medical Cost Statistics

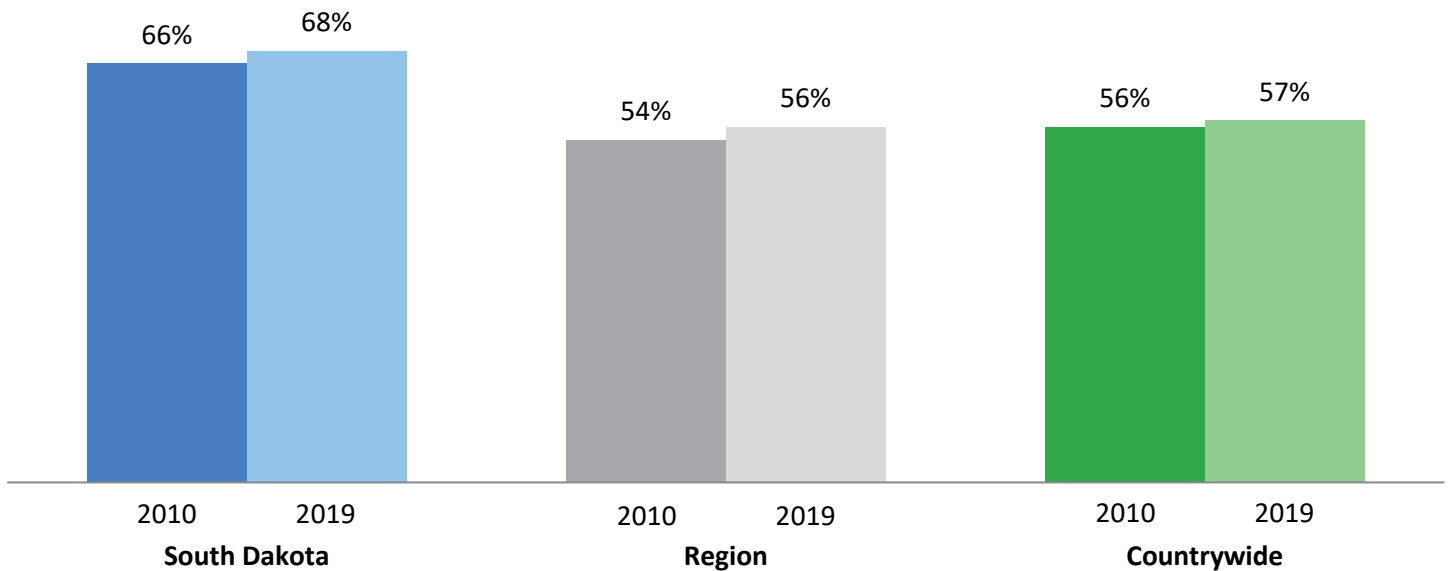
Traditional workers compensation policies cover two types of benefit payments: medical benefits and indemnity (lost wages) benefits.

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 share of medical benefit costs may vary across states. 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, the region, and countrywide for Accident Years 2010 and 2019.

Chart 1

Medical Share of Total Benefit Costs by Accident Year



Source: NCCI's Calendar-Accident Year Call for Compensation Experience. Region includes IA, IL, IN, KS, MO, NE, and OK. Countrywide data includes 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.



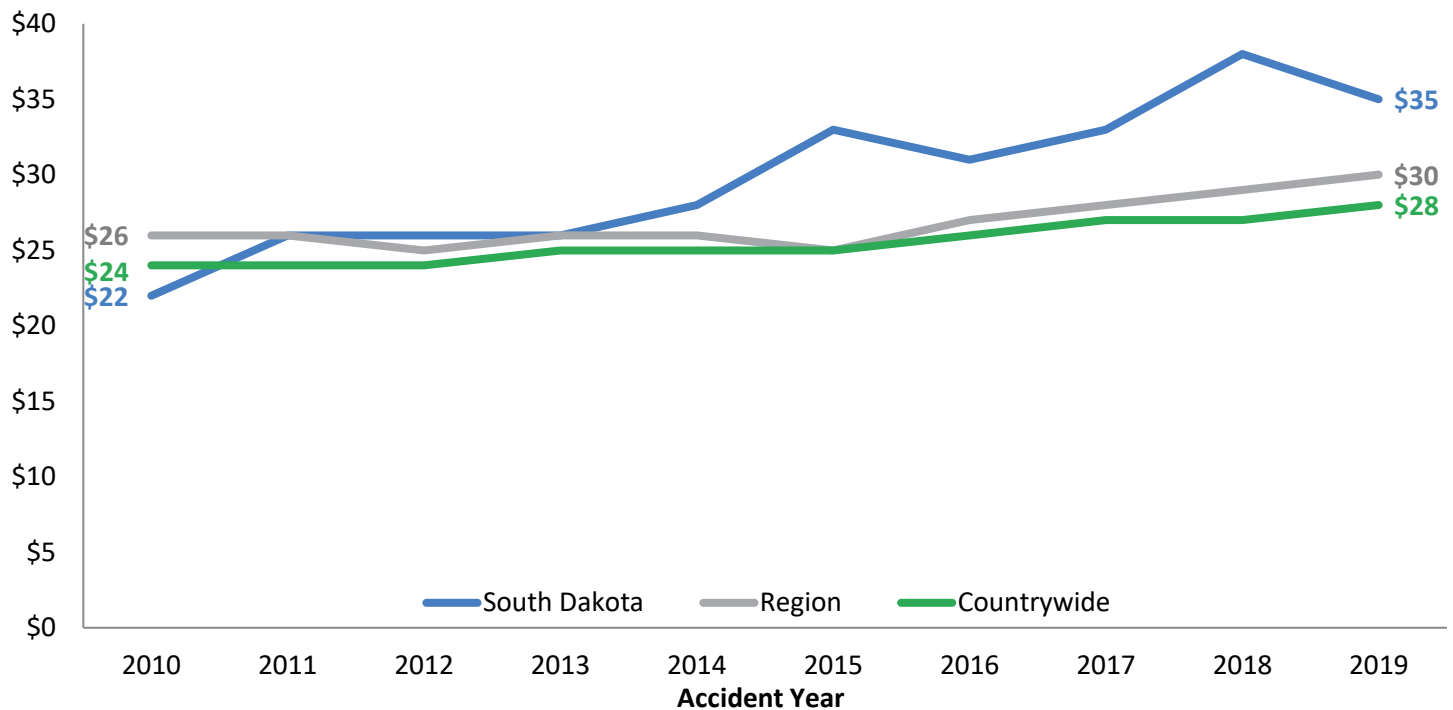


The countrywide overall medical average cost per claim has seen moderate increases in recent years, averaging about 2% from Accident Years 2010 to 2019; this has increased at a slightly higher rate than the United States Personal Healthcare Spending per capita.<sup>2</sup> Chart 2 displays the historical overall medical average cost per case (per lost-time claim) for the most recent 10 accident years. Results are displayed for South Dakota, the region, and countrywide.

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 regional and countrywide average for each individual accident year and allows for the comparison of the growth in average medical costs.

**Chart 2**  
**Overall Medical Average Cost per Lost-Time Claim (in 000s)**



Source: NCCI’s Calendar-Accident Year Call for Compensation Experience. Region includes IA, IL, IN, KS, MO, NE, and OK. Countrywide data 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.

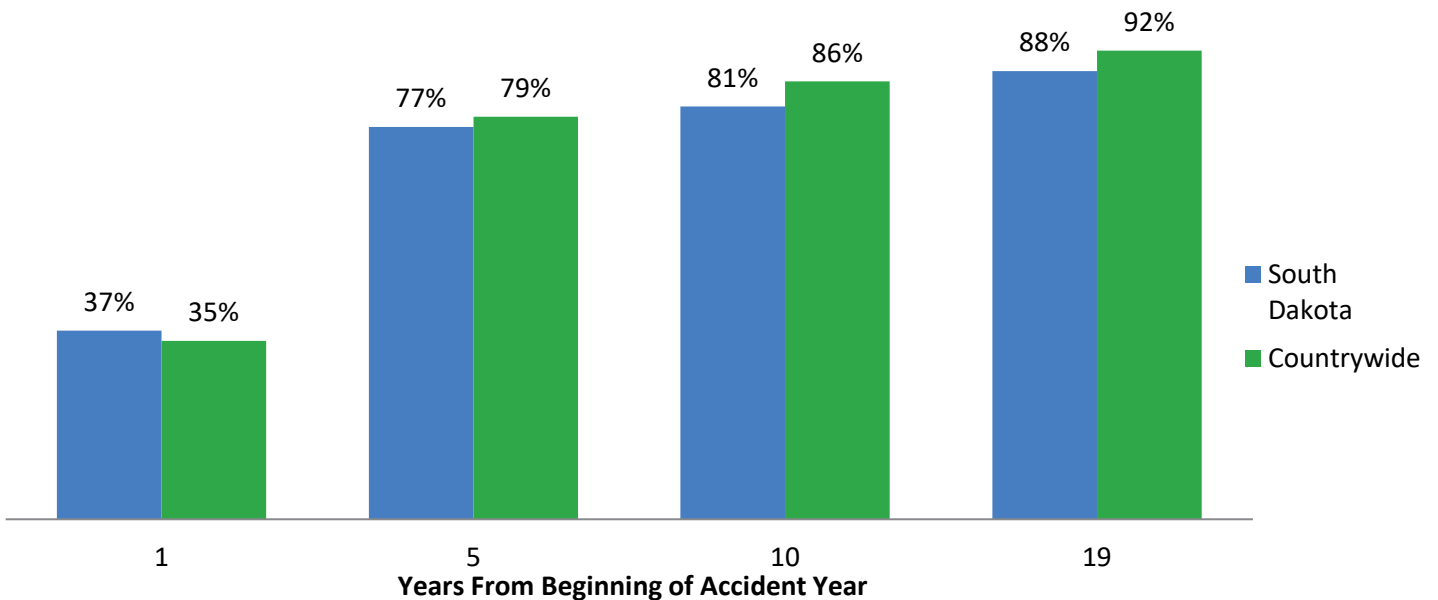
<sup>2</sup> State of the Line Report, *Annual Issues Symposium*, May 2021, [www.ncci.com/Articles/Documents/AIS2021-SOTL-Presentation.pdf](http://www.ncci.com/Articles/Documents/AIS2021-SOTL-Presentation.pdf)

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. NCCI research has found that it is likely that about 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 countrywide.

**Chart 3**  
**Percentage of Medical Paid by Claim Maturity**



Source: NCCI's Calendar-Accident Year Call for Compensation Experience. Countrywide data includes 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, OK, OR, RI, SC, SD, TN, UT, VA, and VT.

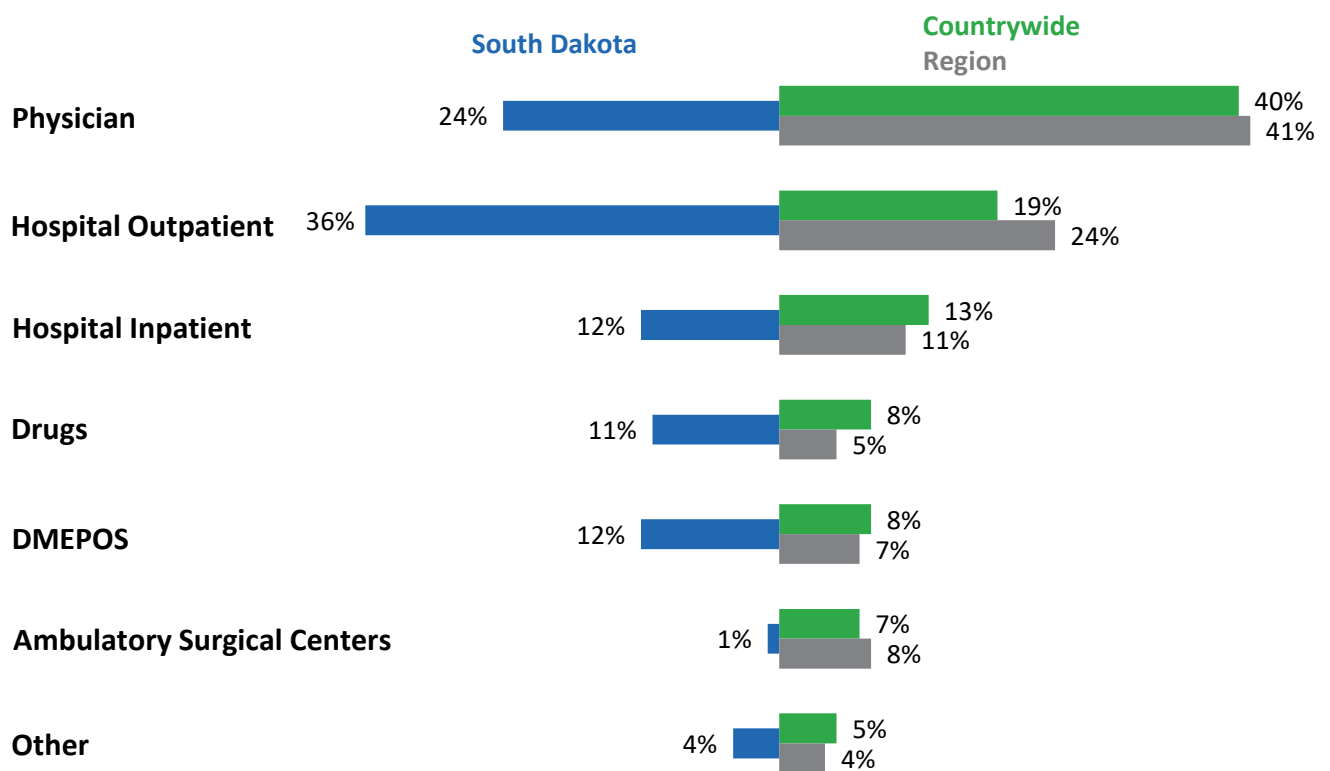
Knowing how payments for different medical services contribute to workers compensation medical benefit costs provides insight into the growth in medical benefits.

Payments are categorized as Drugs; 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
- 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 or ambulatory surgical center)

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

**Chart 4**  
**Distribution of Medical Payments**



## Physicians

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. NCCI’s most recent study, “The Impact of Fee Schedule Updates on Physician Payments” (December 2018), shows that:

- Approximately 80% of any change in the maximum allowable reimbursement (MAR) for a physician service will be realized as a change in prices paid
- Most of the impact of a MAR change on prices paid is realized within one year from the date of a fee schedule change

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

The chart below shows the average percentage of Medicare schedule reimbursement<sup>3</sup> amounts for physician payments by category for South Dakota, the region, and countrywide. Note that “all physician services” in Chart 5 below refers only to the categories listed in the chart, and the state comparison reflects Medicare’s geographic adjustments. In South Dakota, 90% of “all physician services” payments are included in the chart below.

**Chart 5**

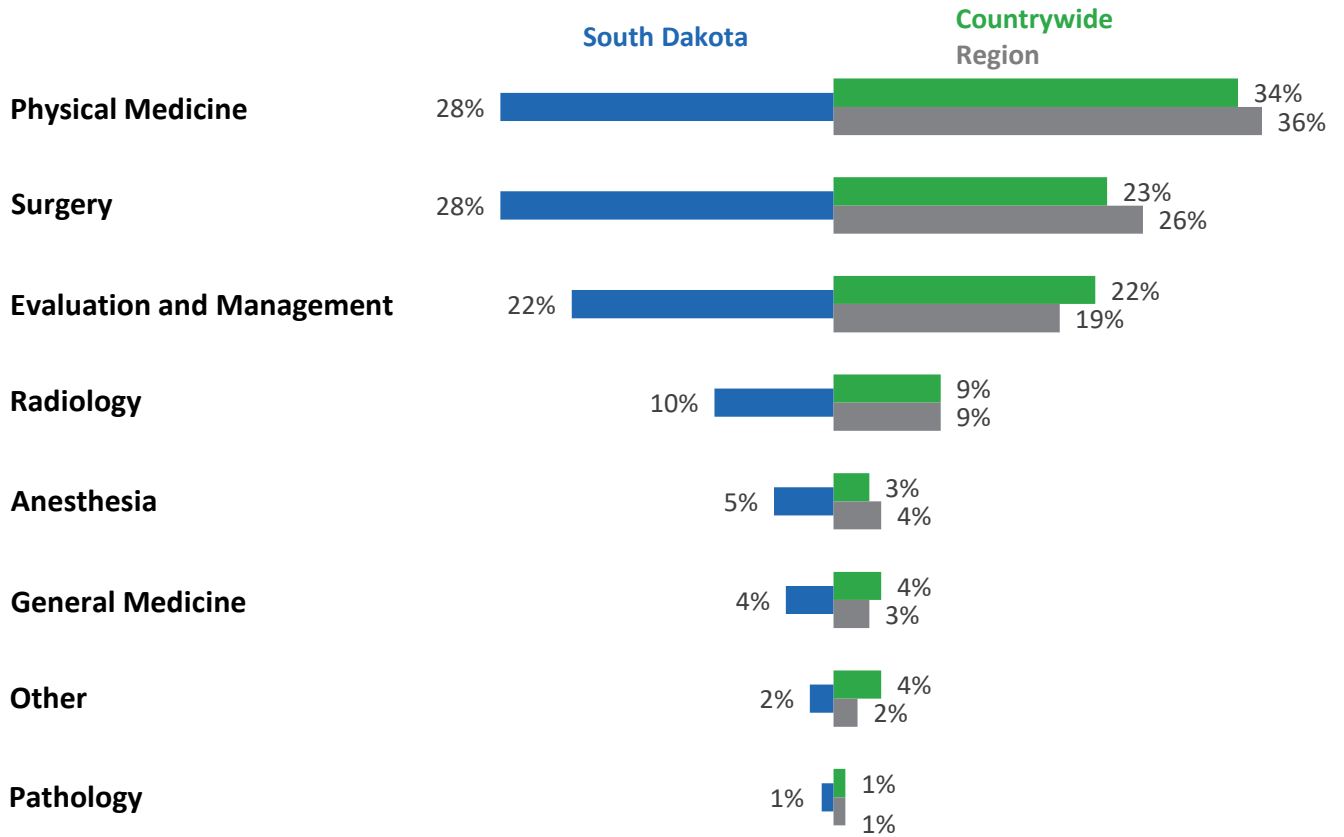
**Physician Payments as a Percentage of Medicare**

Physician Service Category	South Dakota	Region	Countrywide
General and Physical Medicine	108%	153%	132%
Surgery	177%	339%	270%
Evaluation and Management	105%	169%	144%
Radiology	226%	311%	227%
Anesthesia	269%	411%	309%
<b>All Physician Services</b>	<b>135%</b>	<b>204%</b>	<b>167%</b>

<sup>3</sup> The calculation for Surgery takes into account Medicare’s endoscopic procedures reimbursement rules.

Chart 6 displays the distribution of physician payments by service category for South Dakota, the region, and countrywide.

**Chart 6**  
**Distribution of Physician Payments by AMA Service Category**



In 2019, NCCI conducted a review of physician costs in workers compensation as compared to group health (GH). Results<sup>4</sup> show that WC physician costs are 77% higher than GH in general, with variation across states ranging from 0% to 200%. The difference in costs for physician services is due to both prices and utilization of services. Most notably, physical medicine services in WC are almost three times the costs of physical medicine services in GH, largely due to the number of services provided.

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. The charts below display the top 10 procedure codes reported by physicians for the following service categories: anesthesia, surgery, radiology, physical and general medicine, and evaluation and management. A brief description of each procedure code is displayed in the corresponding table below each chart.

Except for anesthesia codes and physical & general medicine codes, the charts also include the average amount paid per transaction (PPT) for these codes in South Dakota, in the region, and countrywide. The average PPT 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, and quantity/units, may need to be considered when evaluating average payments per service. The charts for the top 10 anesthesia codes and physical & general medicine codes include the average amount paid per unit (PPU) for the codes in South Dakota, in the region, and countrywide. The PPU is calculated by taking the total payments for the procedure code and dividing by the number of units for the procedure code. For these codes, a unit is typically a measurement of time (15-minute increment, 30-minute increment, 1-hour increment, etc.) but can also be one transaction. The procedure code description will indicate the unit measurement.

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.

Additional charts show time until first treatment and results for telemedicine services. Time to initial treatment (TTT) is a measure of the availability of medical services and is measured by the number of days between the date of injury and the date on which the worker first received medical services. Telemedicine services charts are based on transactions reported with a telemedicine-specific procedure code, modifier, or place of service and show the distribution, as well as the top 10 procedure codes, for telemedicine service.

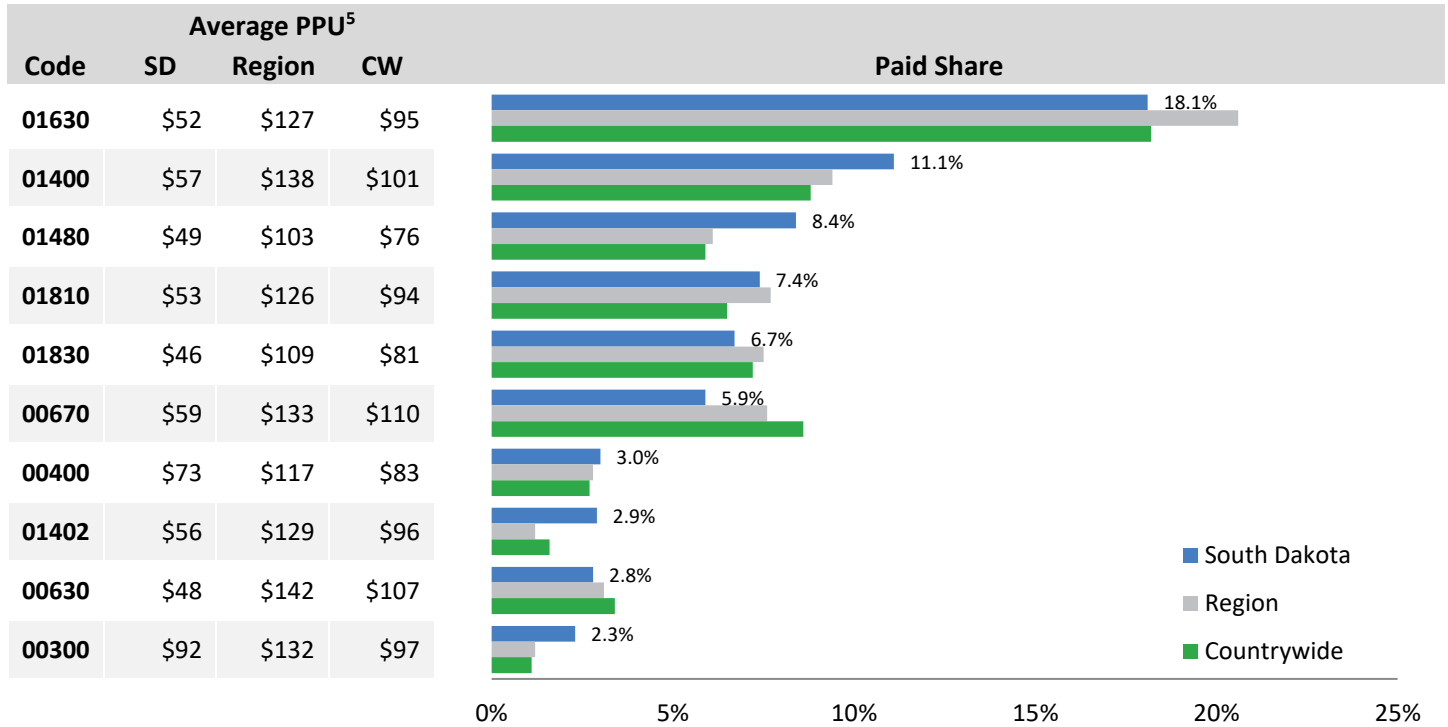
<sup>4</sup> Lipton, Barry, *Work Comp vs. Group Health—The Price We Pay* (Channel NCCI, video file), May 23, 2019, [www.youtube.com/watch?v=fb3tnbQoMSY](https://www.youtube.com/watch?v=fb3tnbQoMSY)



In South Dakota, physician payments for anesthesia services provided in 2020 are, on average, 269% of Medicare-scheduled reimbursement amounts, compared to 411% in the region and 309% countrywide. Payments for these services comprise 5% of physician payments, compared to 4% in the region and 3% countrywide.

### Chart 7

#### Top 10 Anesthesia Procedure Codes by Amount Paid



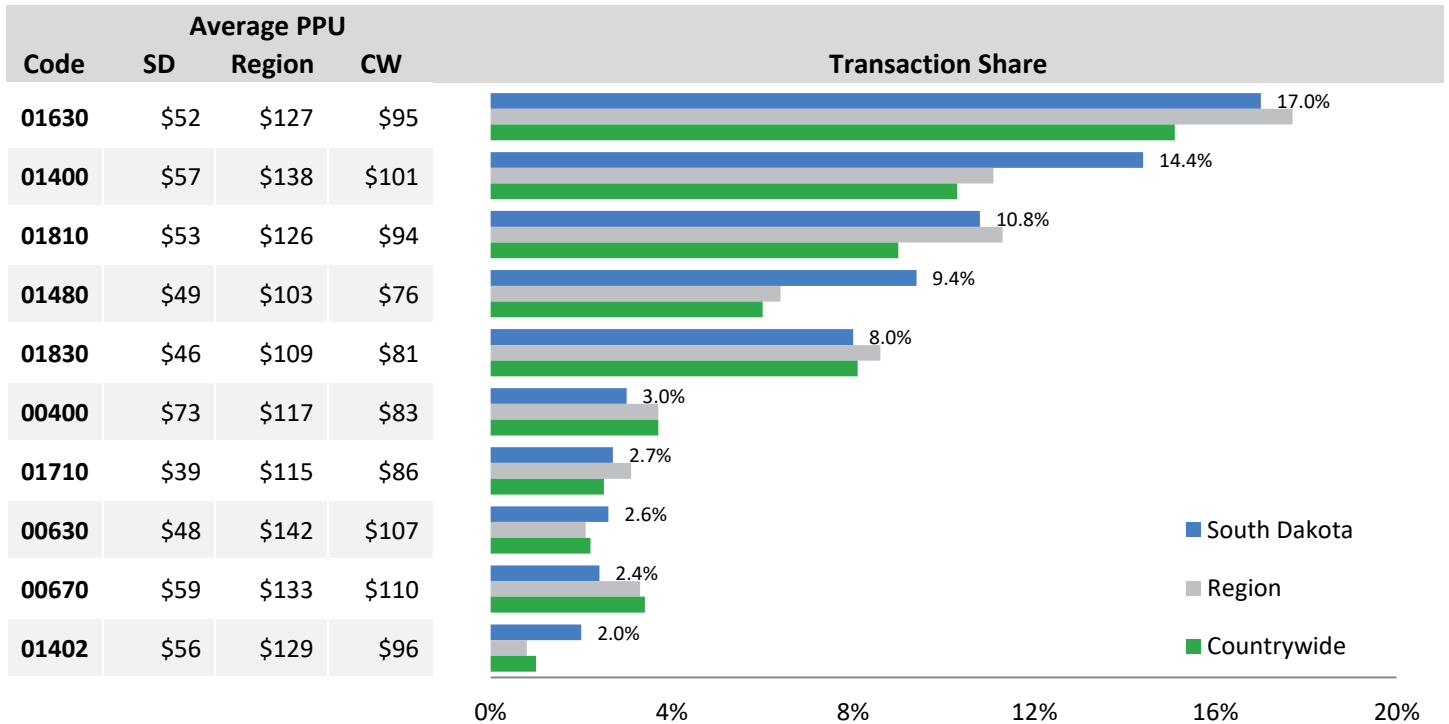
Code	Description
01630	Anesthesia for open or surgical arthroscopic procedures on humeral head and neck, sternoclavicular joint, acromioclavicular joint, and shoulder joint; not otherwise specified
01400	Anesthesia for open or surgical arthroscopic procedures on knee joint; not otherwise specified
01480	Anesthesia for open procedures on bones of lower leg, ankle, and foot; not otherwise specified
01810	Anesthesia for all procedures on nerves, muscles, tendons, fascia, and bursae of forearm, wrist, and hand
01830	Anesthesia for open or surgical arthroscopic/endoscopic procedures on distal radius, distal ulna, wrist, or hand joints; not otherwise specified
00670	Anesthesia for extensive spine and spinal cord procedures (e.g., spinal instrumentation or vascular procedures)
00400	Anesthesia for procedures on the integumentary system on the extremities, anterior trunk, and perineum; not otherwise specified
01402	Anesthesia for open or surgical arthroscopic procedures on knee joint; total knee arthroplasty
00630	Anesthesia for procedures in lumbar region; not otherwise specified
00300	Anesthesia for all procedures on the integumentary system, muscles and nerves of head, neck, and posterior trunk; not otherwise specified

<sup>5</sup> A unit is an increment of 15 minutes unless otherwise defined in the description.



Chart 8

Top 10 Anesthesia Procedure Codes by Transaction Counts



Code	Description
01630	Anesthesia for open or surgical arthroscopic procedures on humeral head and neck, sternoclavicular joint, acromioclavicular joint, and shoulder joint; not otherwise specified
01400	Anesthesia for open or surgical arthroscopic procedures on knee joint; not otherwise specified
01810	Anesthesia for all procedures on nerves, muscles, tendons, fascia, and bursae of forearm, wrist, and hand
01480	Anesthesia for open procedures on bones of lower leg, ankle, and foot; not otherwise specified
01830	Anesthesia for open or surgical arthroscopic/endoscopic procedures on distal radius, distal ulna, wrist, or hand joints; not otherwise specified
00400	Anesthesia for procedures on the integumentary system on the extremities, anterior trunk, and perineum; not otherwise specified
01710	Anesthesia for procedures on nerves, muscles, tendons, fascia, and bursae of upper arm and elbow; not otherwise specified
00630	Anesthesia for procedures in lumbar region; not otherwise specified
00670	Anesthesia for extensive spine and spinal cord procedures (e.g., spinal instrumentation or vascular procedures)
01402	Anesthesia for open or surgical arthroscopic procedures on knee joint; total knee arthroplasty

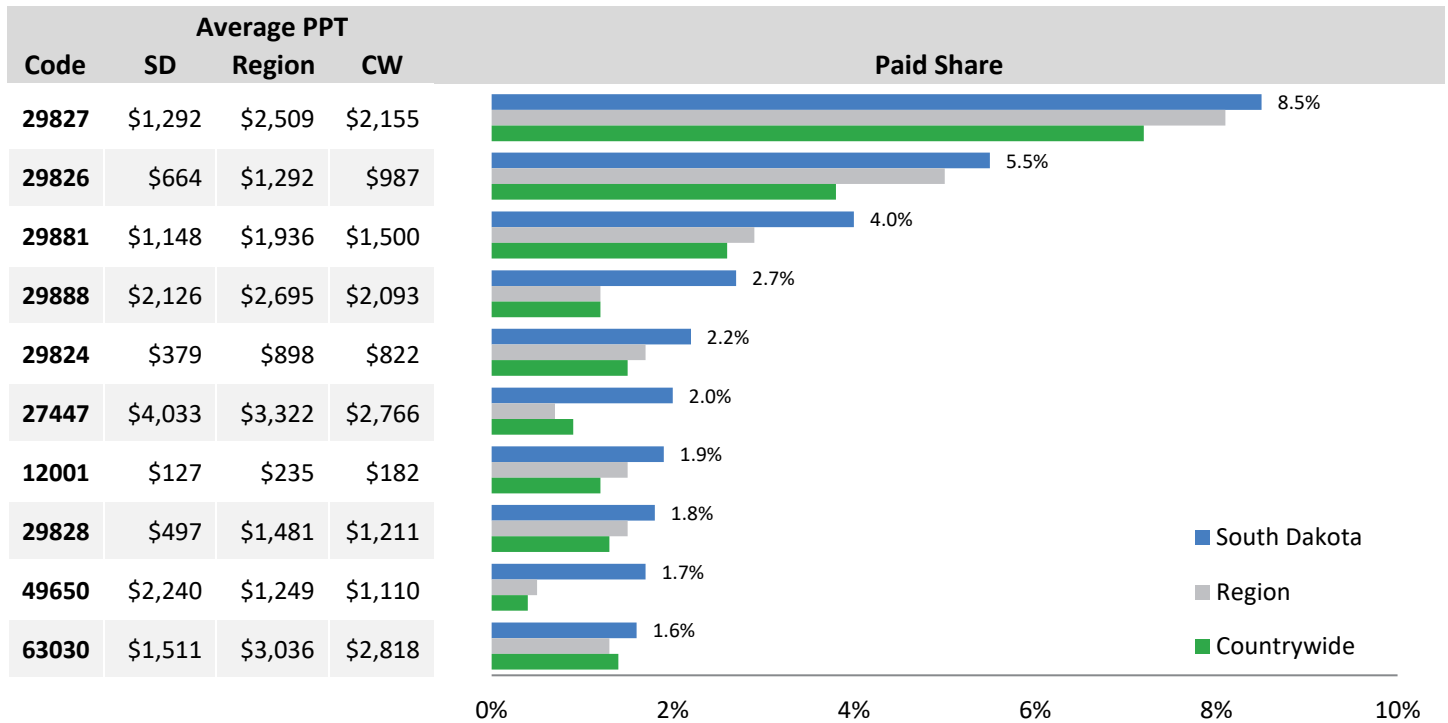




In South Dakota, physician payments for surgery services provided in 2020 are, on average, 177% of Medicare-scheduled reimbursement amounts, compared to 339% in the region and 270% countrywide. Payments for these services comprise 28% of physician payments, compared to 26% in the region and 23% countrywide.

### Chart 9

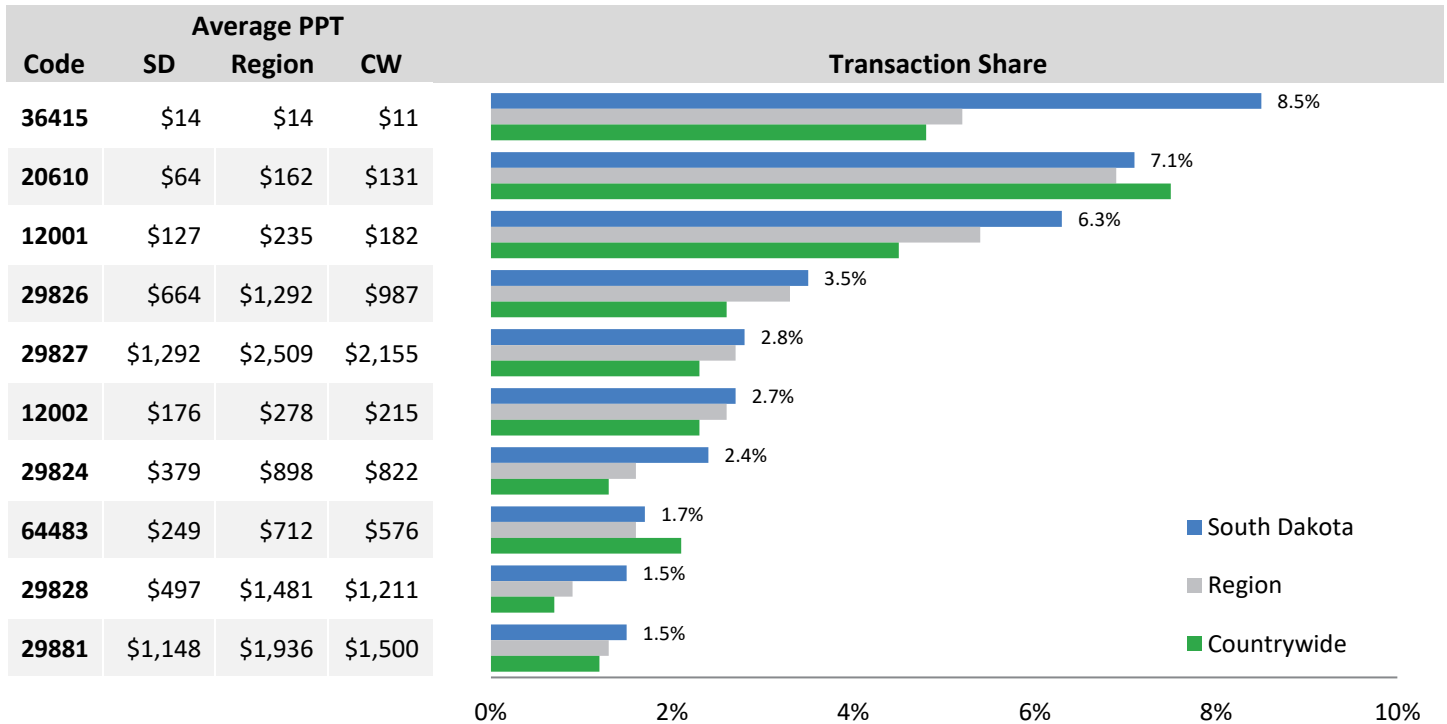
#### Top 10 Surgery Procedure Codes by Amount Paid



Code	Description
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29826	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (i.e., arch) release, when performed
29881	Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving), including debridement/shaving of articular cartilage
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
29824	Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)
27447	Arthroplasty, knee condyle and plateau; medial and lateral compartments, with or without patella resurfacing (total knee arthroplasty)
12001	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk, and/or extremities (including hands and feet); 2.5 cm or less
29828	Arthroscopy, shoulder, surgical; biceps tenodesis
49650	Laparoscopy, surgical; repair initial inguinal hernia
63030	Laminotomy (hemilaminectomy) with decompression of nerve root(s) including partial facetectomy, foraminotomy, and/or excision of herniated intervertebral disc; 1 interspace lumbar

### Chart 10

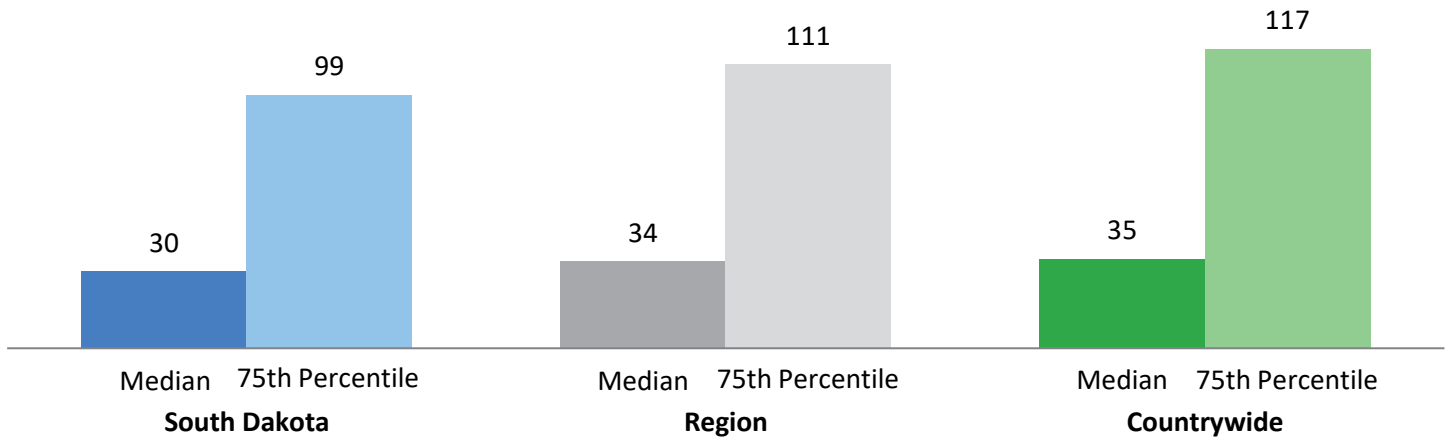
#### Top 10 Surgery Procedure Codes by Transaction Counts



Code	Description
36415	Collection of venous blood by venipuncture
20610	Arthrocentesis, aspiration, and/or injection; major joint or bursa (e.g., shoulder, hip, knee, joint, subacromial bursa)
12001	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	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (i.e., arch) release, when performed
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
12002	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
29824	Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)
64483	Injection(s), anesthetic agent, and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or computed tomography (CT)); lumbar or sacral, single level
29828	Arthroscopy, shoulder, surgical; biceps tenodesis
29881	Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving), including debridement/shaving of articular cartilage

Chart 11 shows the median and 75th percentile<sup>6</sup> time until first treatment for major surgery for South Dakota, the region, and countrywide. No adjustment has been made to account for injuries that may take time to develop such as an occupational disease, which may extend the time between the date a work-related injury or disease is reported and the first medical treatment takes place.

**Chart 11**  
**Time Until First Treatment for Major Surgery<sup>7</sup> (in Days)**



Source: NCCI’s Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.

<sup>6</sup> The median is the TTT where one-half of all TTT values are higher and one-half are lower. This statistic is less affected by extremely low or extremely high values. The 75th percentile is the TTT where 75% of all TTT values are lower and 25% are higher. For example, Chart 11 indicates that out of 100 claimants, 75 will receive a major surgery within 99 days of their accident date. Comparing the median to the 75th percentile illustrates the variation in TTT between claims.

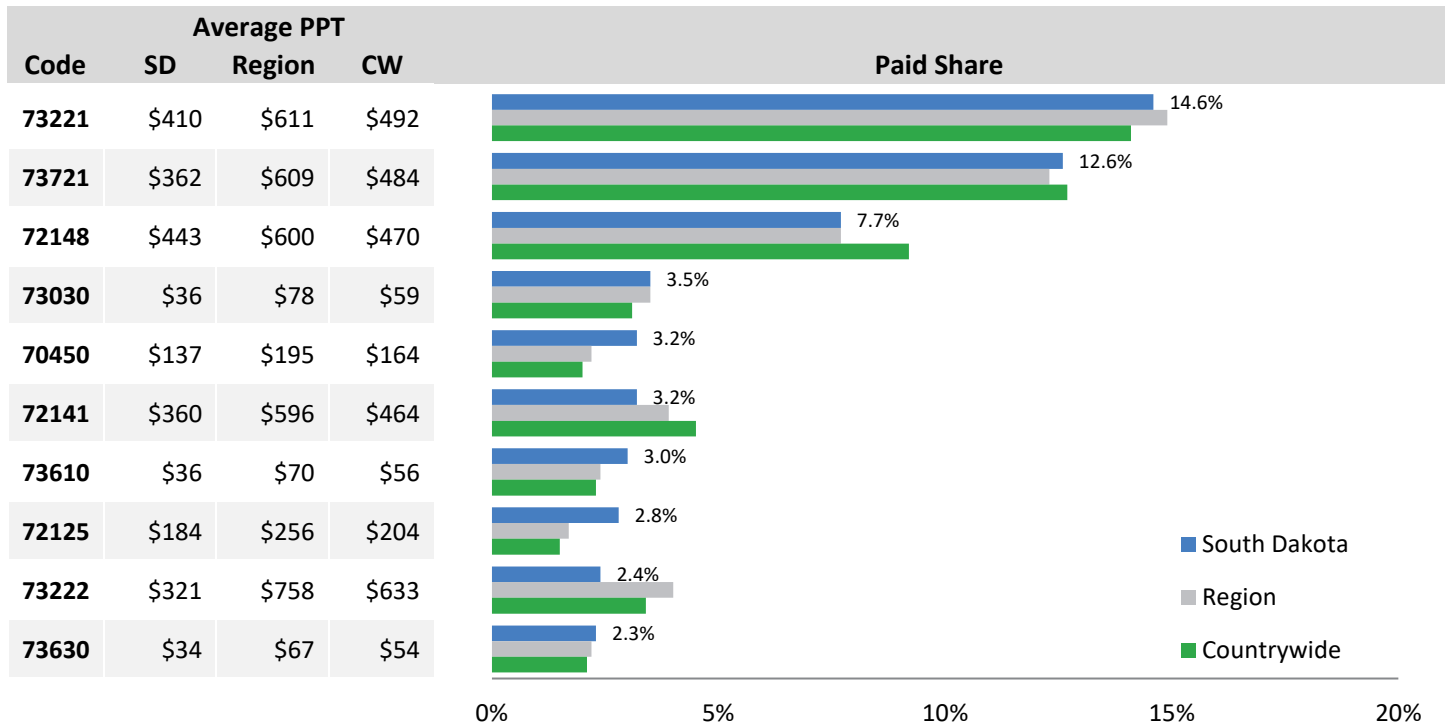
<sup>7</sup> A service is classified as “surgical” if it falls within the surgical category as defined by the AMA. A service is further classified as “major surgery” if it has a global follow-up period of 90 days as defined by the Centers for Medicare & Medicaid Services and is not an injection.



In South Dakota, physician payments for radiology services provided in 2020 are, on average, 226% of Medicare-scheduled reimbursement amounts, compared to 311% in the region and 227% countrywide. Payments for these services comprise 10% of physician payments, compared to 9% in the region and 9% countrywide.

### Chart 12

#### Top 10 Radiology Procedure Codes by Amount Paid

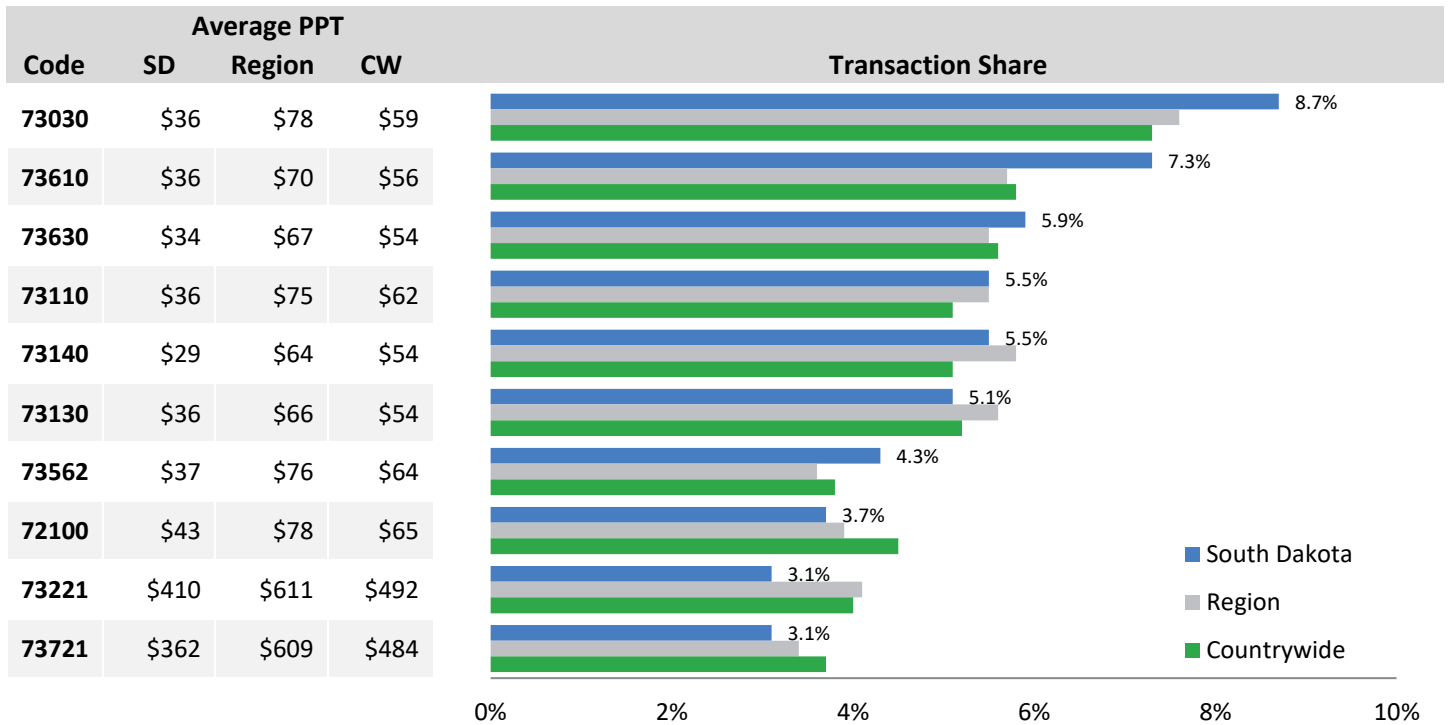


Code	Description
73221	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; without contrast material
73721	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; without contrast material
72148	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; without contrast material
73030	Radiologic examination, shoulder; complete minimum of 2 views
70450	Computed tomography (CT), head or brain; without contrast material
72141	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; without contrast material
73610	Radiologic examination, ankle; complete minimum of 3 views
72125	Computed tomography (CT), cervical spine; without contrast material
73222	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; with contrast material
73630	Radiologic examination, foot; complete minimum of 3 views



Chart 13

Top 10 Radiology Procedure Codes by Transaction Counts



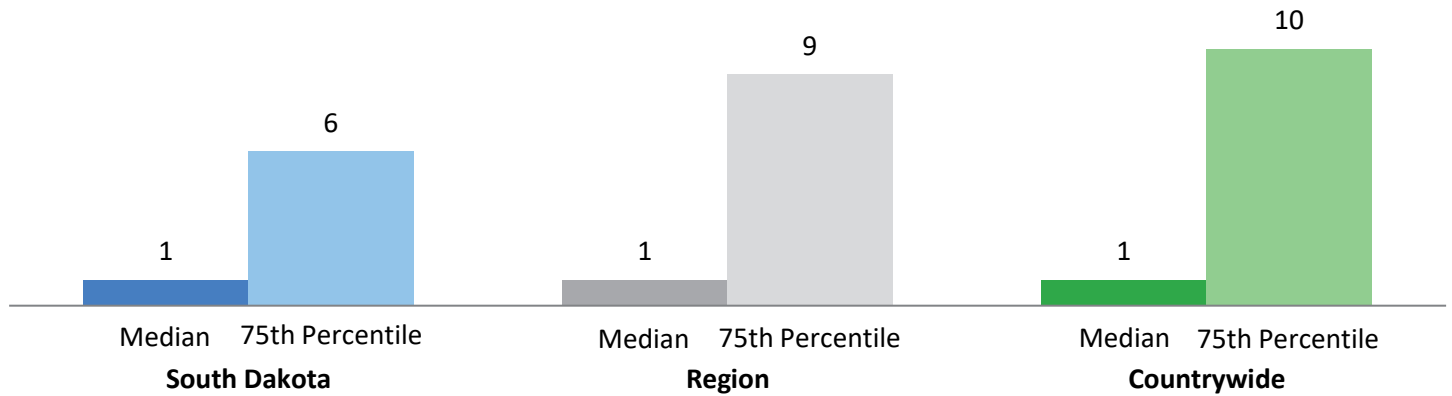
Code	Description
73030	Radiologic examination, shoulder; complete minimum of 2 views
73610	Radiologic examination, ankle; complete minimum of 3 views
73630	Radiologic examination, foot; complete minimum of 3 views
73110	Radiologic examination, wrist; complete minimum of 3 views
73140	Radiologic examination, finger(s); minimum of 2 views
73130	Radiologic examination, hand; minimum of 3 views
73562	Radiologic examination, knee; 3 views
72100	Radiologic examination, spine, lumbosacral; 2 or 3 views
73221	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; without contrast material
73721	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; without contrast material



Chart 14 shows the median and 75th percentile time until first treatment for radiology procedures for South Dakota, the region, and countrywide.

### Chart 14

#### Time Until First Treatment for Radiology (in Days)



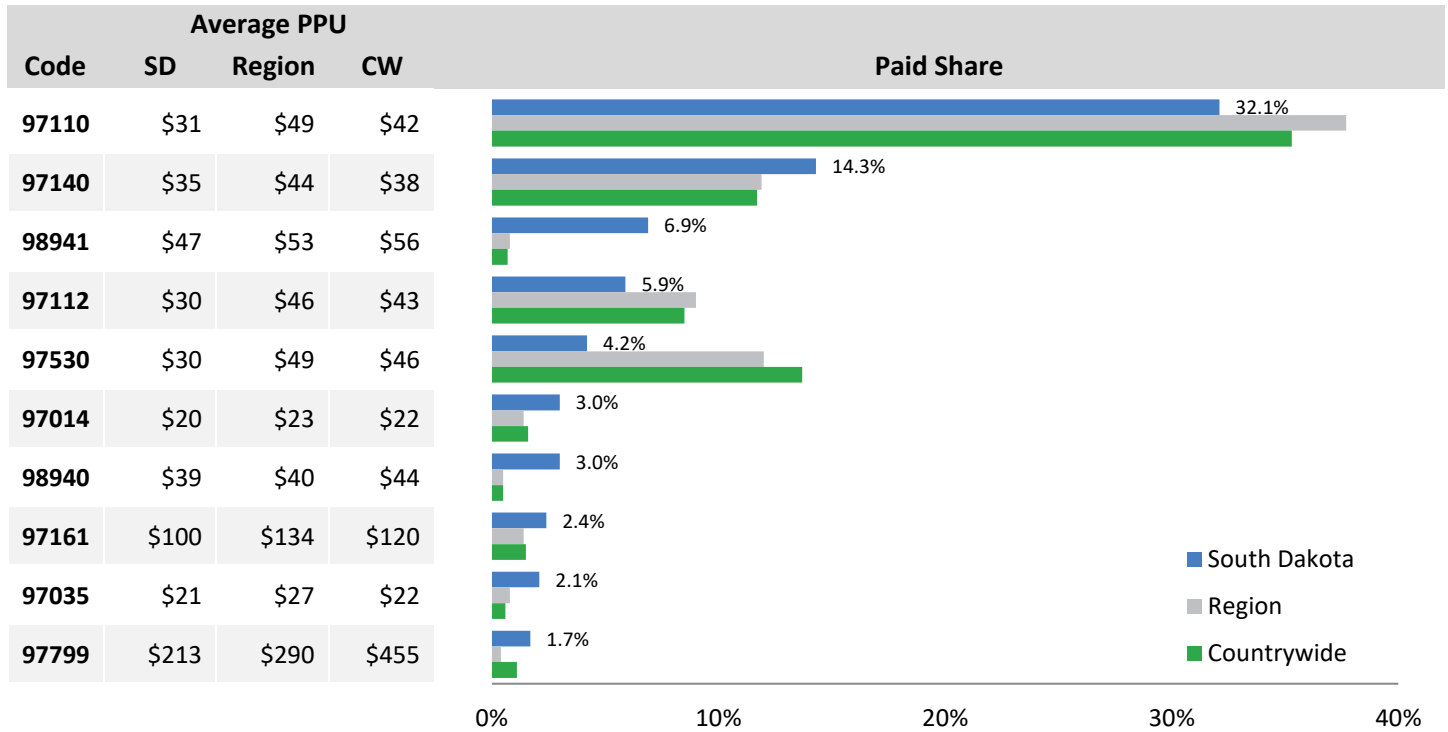
Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



In South Dakota, physician payments for physical and general medicine services provided in 2020 are, on average, 108% of Medicare-scheduled reimbursement amounts, compared to 153% in the region and 132% countrywide. Payments for these services comprise 32% of physician payments, compared to 39% in the region and 38% countrywide.

Chart 15

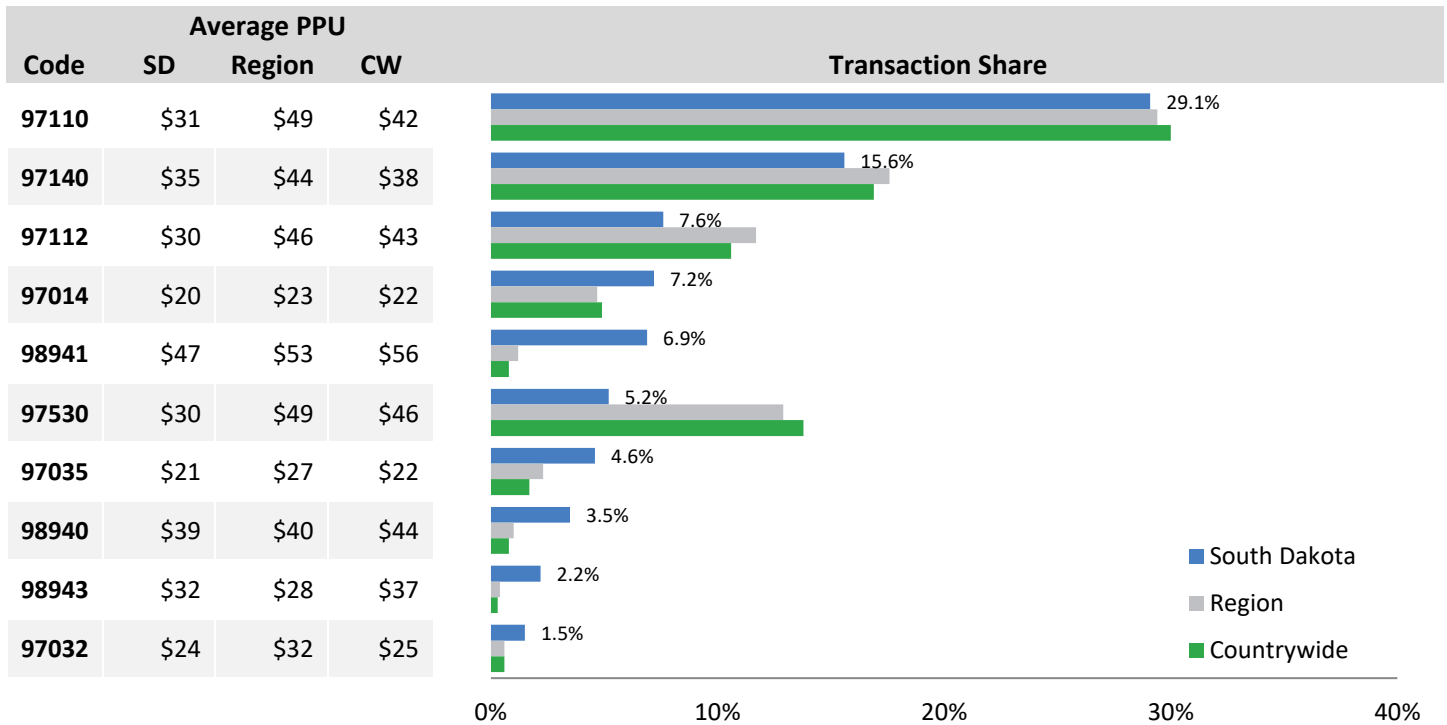
Top 10 Physical and General Medicine Procedure Codes by Amount Paid



Code	Description
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
97140	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes
98941	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions
97112	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
97530	Therapeutic activities, direct (one-on-one) patient contact by the provider (use of dynamic activities to improve functional performance), each 15 minutes
97014	Application of a modality to 1 or more areas; electrical stimulation (unattended)
98940	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
97161	Physical therapy evaluation of low complexity; typically, 20 minutes are spent with the patient and/or family
97035	Application of a modality to 1 or more areas; ultrasound, each 15 minutes
97799	Unlisted physical medicine/rehabilitation service or procedure

### Chart 16

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



Code	Description
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
97140	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes
97112	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
97014	Application of a modality to 1 or more areas; electrical stimulation (unattended)
98941	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions
97530	Therapeutic activities, direct (one-on-one) patient contact by the provider (use of dynamic activities to improve functional performance), each 15 minutes
97035	Application of a modality to 1 or more areas; ultrasound, each 15 minutes
98940	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
98943	Chiropractic manipulative treatment (CMT); extraspinal, 1 or more regions
97032	Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes

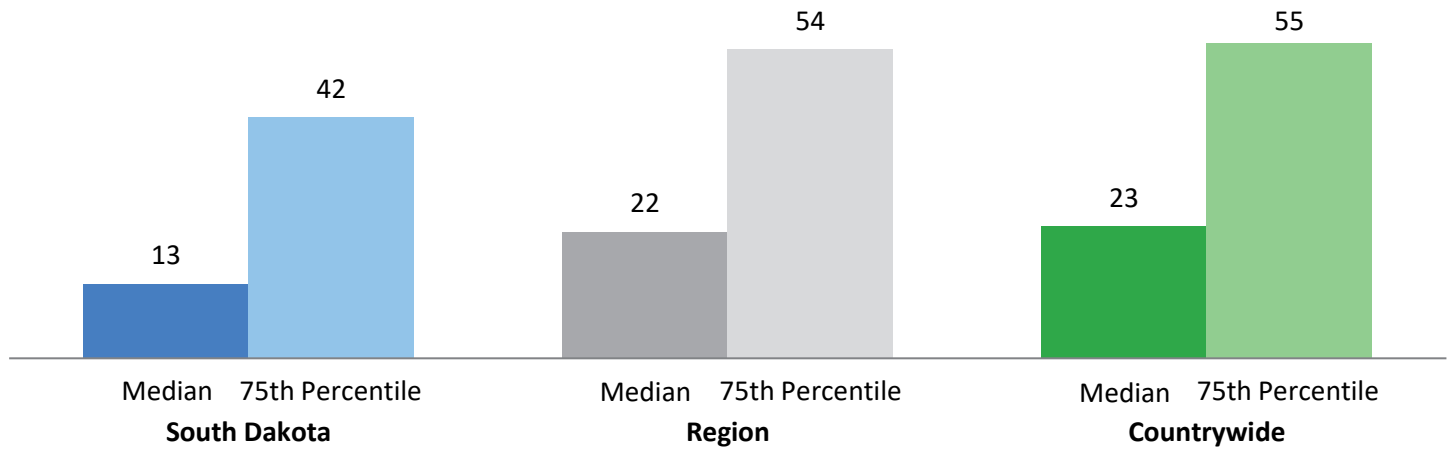




Chart 17 shows the median and 75th percentile time until first treatment for physical and general medicine procedures for South Dakota, the region, and countrywide.

Chart 17

Time Until First Treatment for Physical and General Medicine (in Days)



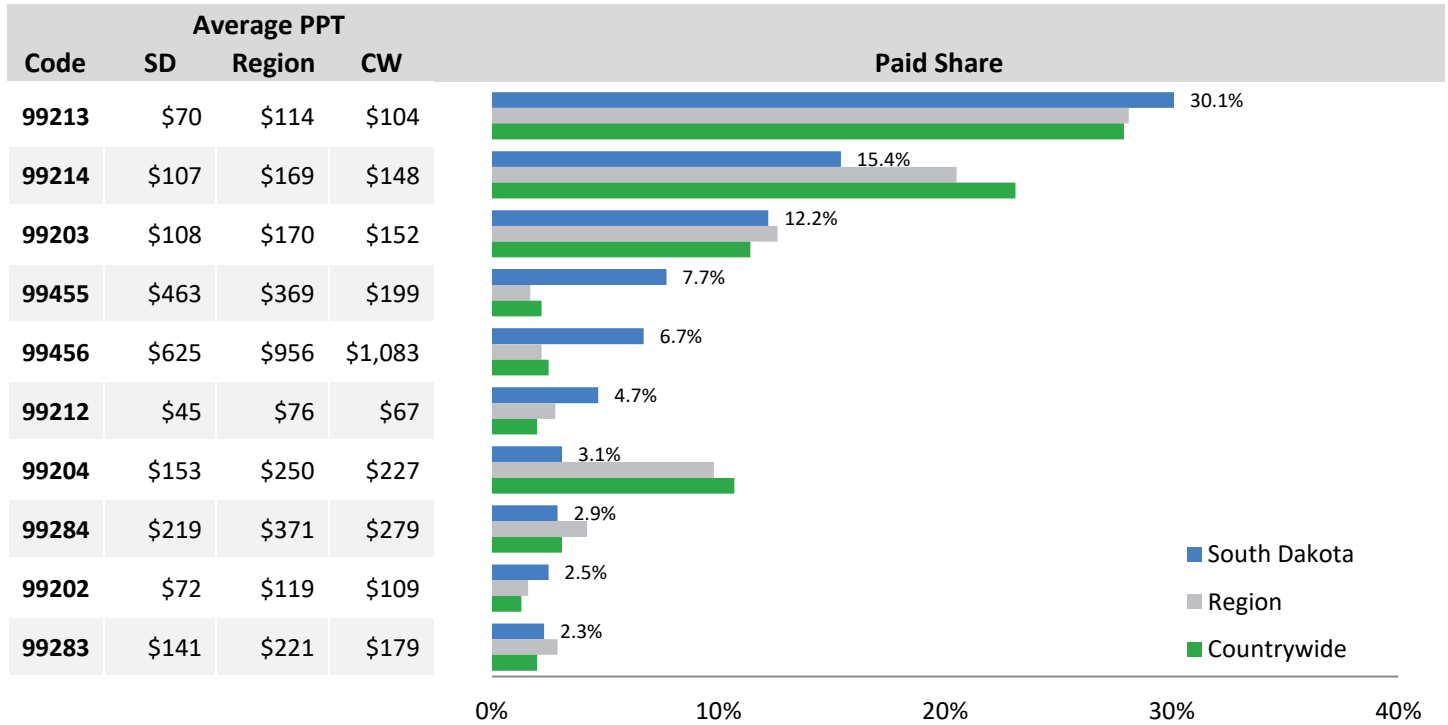
Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



In South Dakota, physician payments for evaluation and management services provided in 2020 are, on average, 105% of Medicare-scheduled reimbursement amounts, compared to 169% in the region and 144% countrywide. Payments for these services comprise 22% of physician payments, compared to 19% in the region and 22% countrywide.

### Chart 18

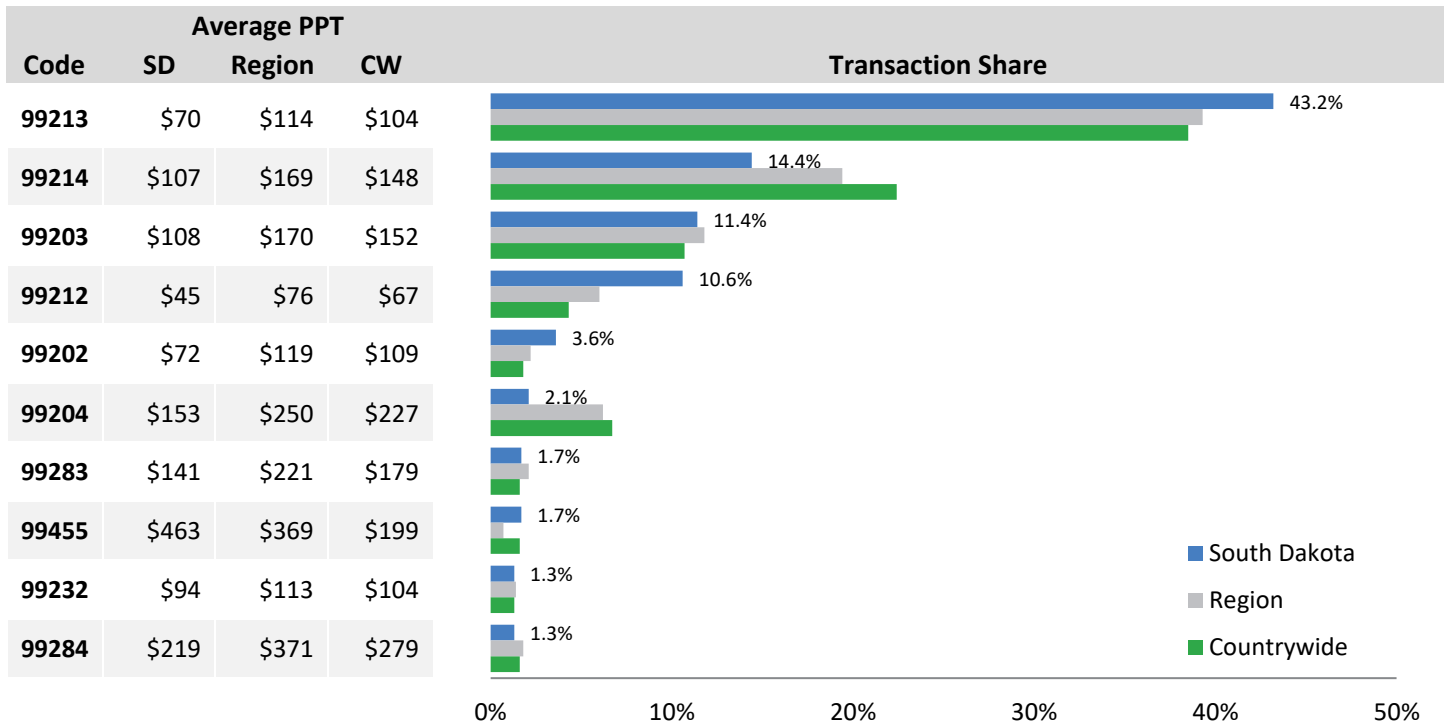
#### Top 10 Evaluation and Management Procedure Codes by Amount Paid



Code	Description
99213	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.
99214	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.
99203	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.
99455	Work related or medical disability examination by the treating physician.
99456	Work related or medical disability examination by other than the treating physician.
99212	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.
99204	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.
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.
99202	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.
99283	Emergency department visit. Usually the presenting problem(s) are of moderate severity.

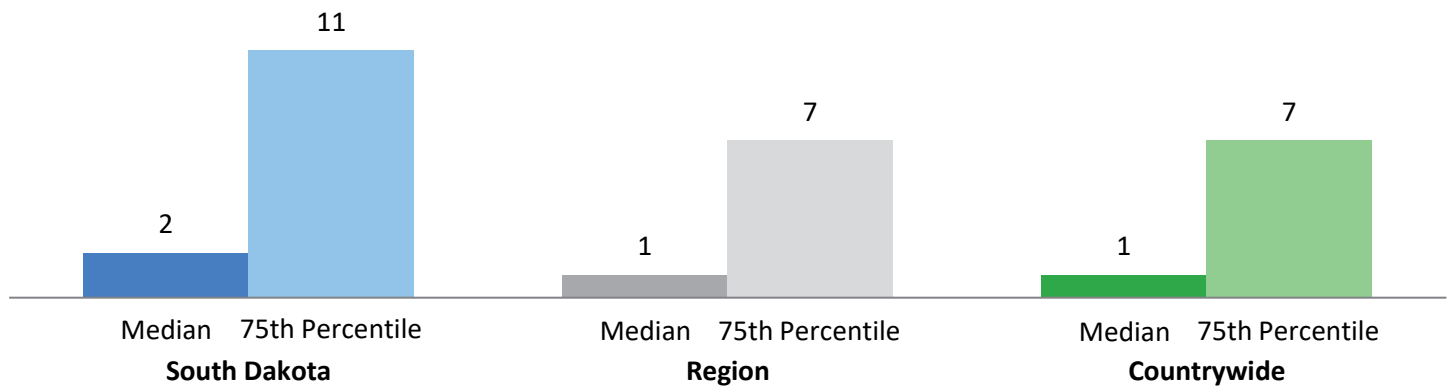
### Chart 19

#### Top 10 Evaluation and Management Procedure Codes by Transaction Counts



Code	Description
99213	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.
99214	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.
99203	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.
99212	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.
99202	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	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	Emergency department visit. Usually the presenting problem(s) are of moderate severity.
99455	Work related or medical disability examination by the treating physician.
99232	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.
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.

Chart 20 shows the median and 75th percentile time until first treatment for evaluation and management procedures for South Dakota, the region, and countrywide.

**Chart 20****Time Until First Treatment for Evaluation and Management (in Days)**

Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.

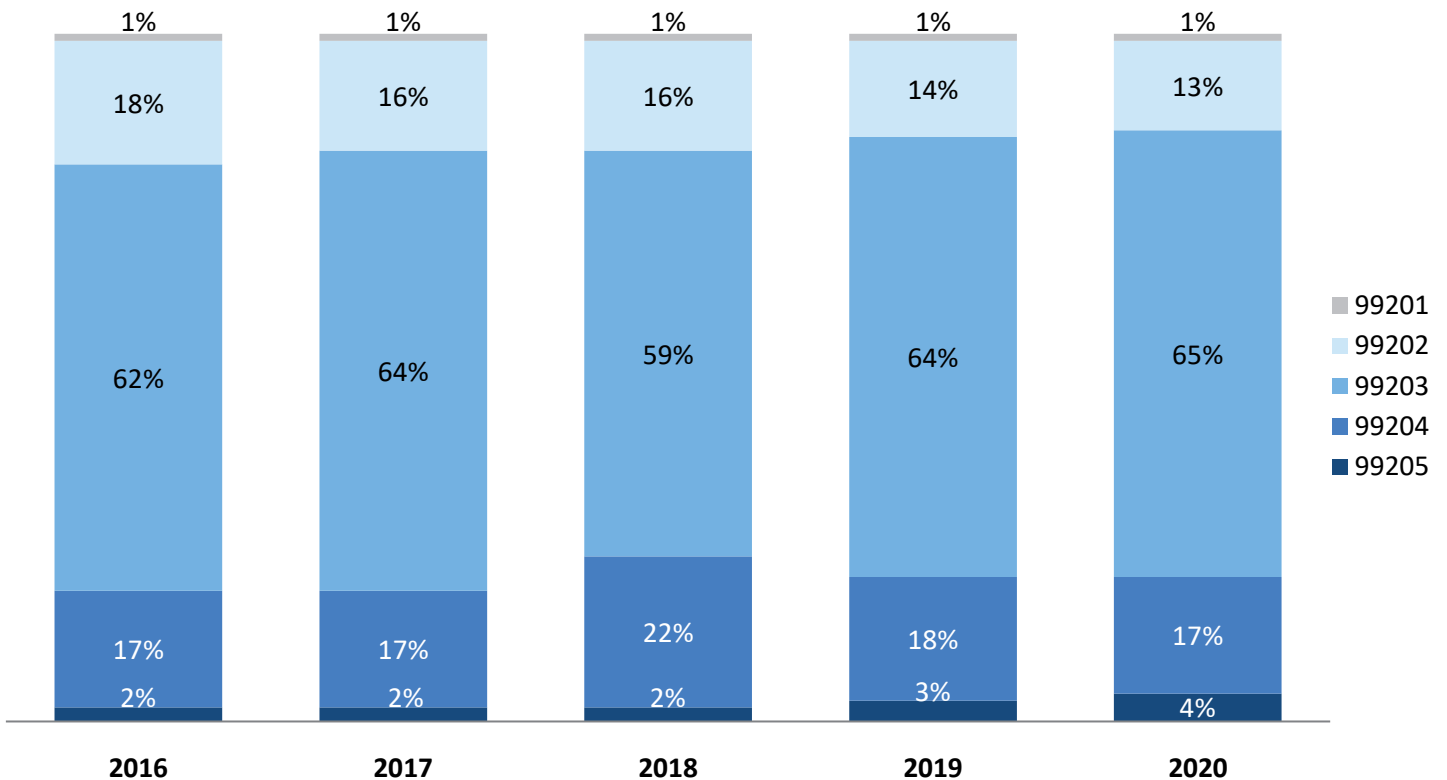
Evaluation and Management services consist largely of office or outpatient visits for a new patient or an established patient.

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 21 shows a five-year snapshot of experience for each procedure type and the average amount paid per transaction for new patients.

**Chart 21**

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

**Distribution of Payments by Procedure Code**



Source: NCCI's Medical Data Call, Service Years 2016 to 2020.

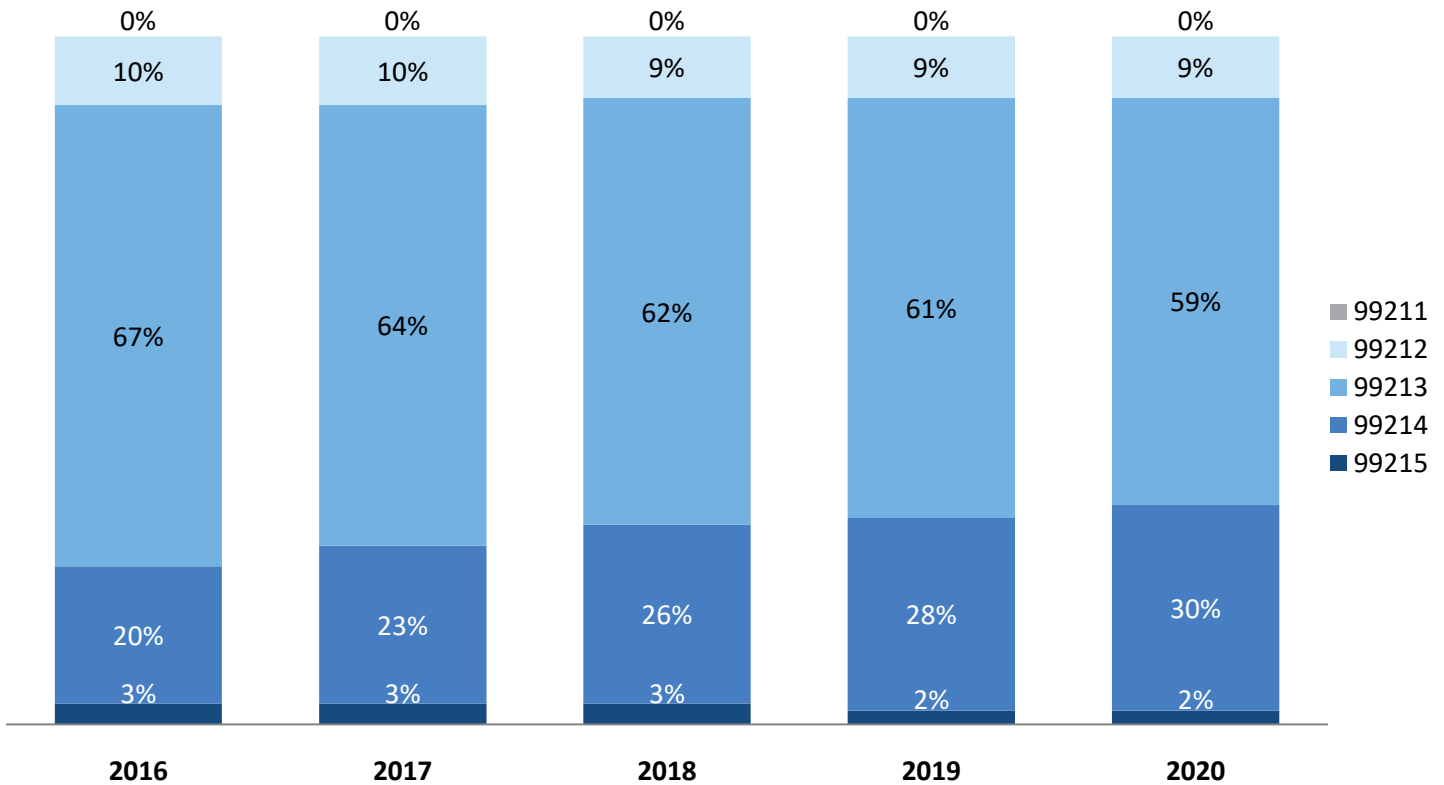
Code	Severity/Time	Average PPT				
		2016	2017	2018	2019	2020
99201	Low to Moderate; 10 minutes with patient	\$43	\$44	\$43	\$46	\$44
99202	Low to Moderate; 20 minutes with patient	\$70	\$70	\$71	\$72	\$72
99203	Moderate; 30 minutes with patient	\$104	\$105	\$108	\$108	\$108
99204	Moderate to High; 45 minutes with patient	\$149	\$149	\$152	\$155	\$153
99205	Moderate to High; 60 minutes with patient	\$207	\$214	\$223	\$202	\$208

Similarly, for established patients, there are five periods of time spent with the patient, ranging from 5 minutes for Procedure Code 99211 to 40 minutes for Procedure Code 99215. Chart 22 shows a five-year snapshot of experience for each procedure type and the average amount paid per transaction for an established patient.

**Chart 22**

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

**Distribution of Payments by Procedure Code**



Source: NCCI's Medical Data Call, Service Years 2016 to 2020.

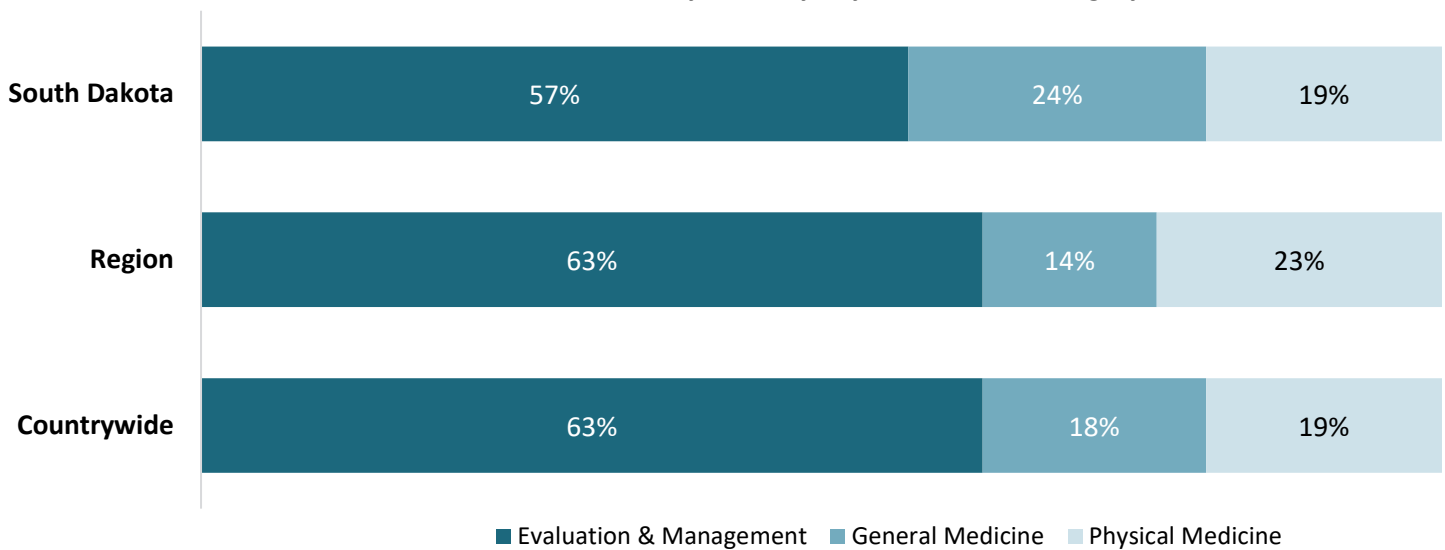
Code	Severity/Time	Average PPT				
		2016	2017	2018	2019	2020
99211	Low to Moderate; 5 minutes with patient	\$25	\$25	\$27	\$25	\$26
99212	Low to Moderate; 10 minutes with patient	\$44	\$44	\$44	\$46	\$45
99213	Moderate; 15 minutes with patient	\$68	\$69	\$70	\$70	\$70
99214	Moderate to High; 25 minutes with patient	\$104	\$105	\$106	\$106	\$107
99215	Moderate to High; 40 minutes with patient	\$151	\$148	\$152	\$154	\$152

In Service Year 2020, telemedicine services were utilized more than in prior years<sup>8</sup> and were generally observed in the evaluation and management, physical medicine, and general medicine physician service categories. Telemedicine services represent about 2% of the physician costs in these categories countrywide. The share of payments varies across jurisdictions, ranging from about 1% to about 5%.

In South Dakota, the share of claimants receiving physician services (evaluation and management, physical medicine, and general medicine) who had telemedicine encounters increased from 0.2% in 2019 to 4.5% in 2020. Chart 23 shows the distribution of telemedicine payments for these physician service categories in South Dakota, the region, and countrywide.

**Chart 23**

**Distribution of Telemedicine Payments by Physician Service Category**



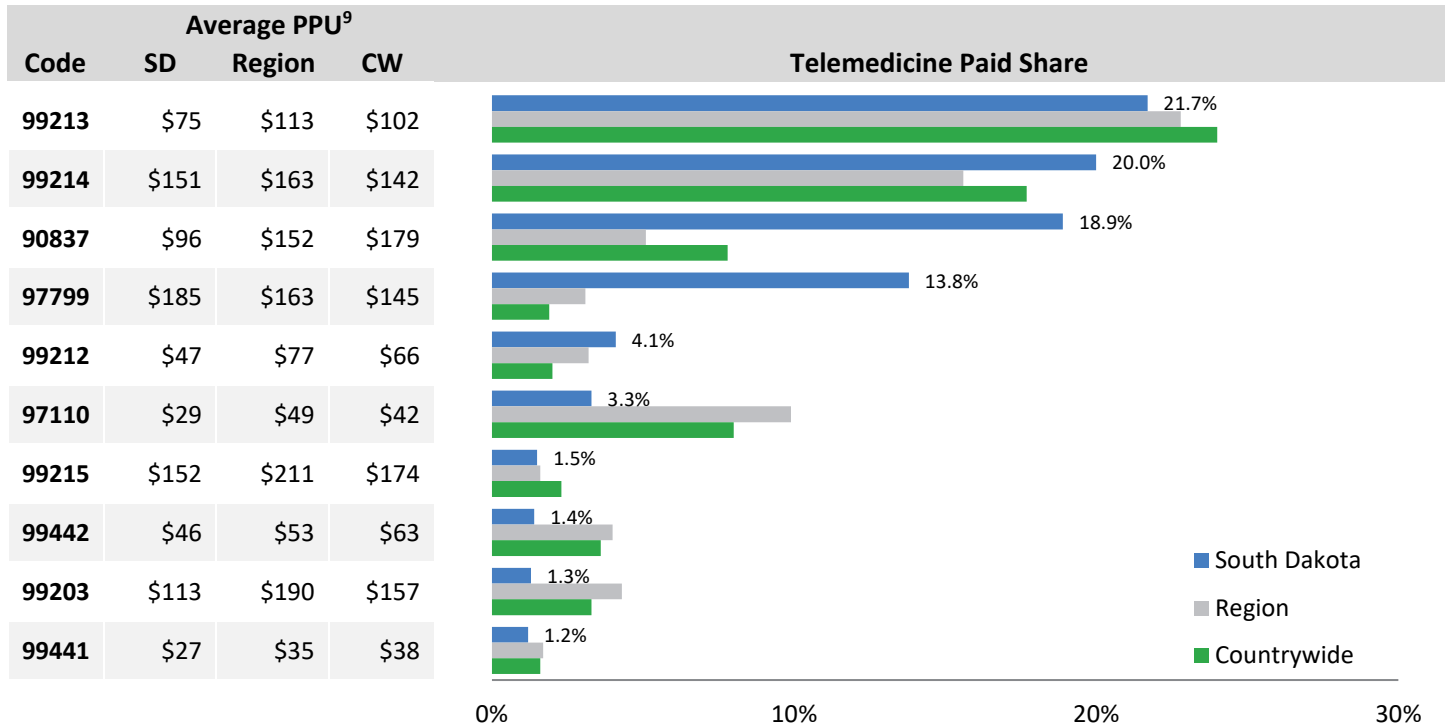
<sup>8</sup> [www.ncci.com/Articles/Documents/Insights-COVID-19-Impact-Medical-Treatment-Workers-Comp-3QTR-2020-Perspective.pdf](http://www.ncci.com/Articles/Documents/Insights-COVID-19-Impact-Medical-Treatment-Workers-Comp-3QTR-2020-Perspective.pdf)



Chart 24 shows the top 10 procedure codes reported as a telemedicine service by paid amount for South Dakota with comparative values for the region and countrywide.

Chart 24

Top 10 Procedure Codes by Amount Paid for Telemedicine Services



Code	Description
99213	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.
99214	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.
90837	Psychotherapy, 60 minutes with patient
97799	Unlisted physical medicine/rehabilitation service or procedure
99212	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.
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
99215	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.
99442	Telephone evaluation and management service by a physician or other qualified health care professional; 11-20 minutes of medical discussion.
99203	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.
99441	Telephone evaluation and management service by a physician or other qualified health care professional; 5-10 minutes of medical discussion.

<sup>9</sup> Based on the number of units for the procedure code (typically in increments of time) but can also be one transaction.

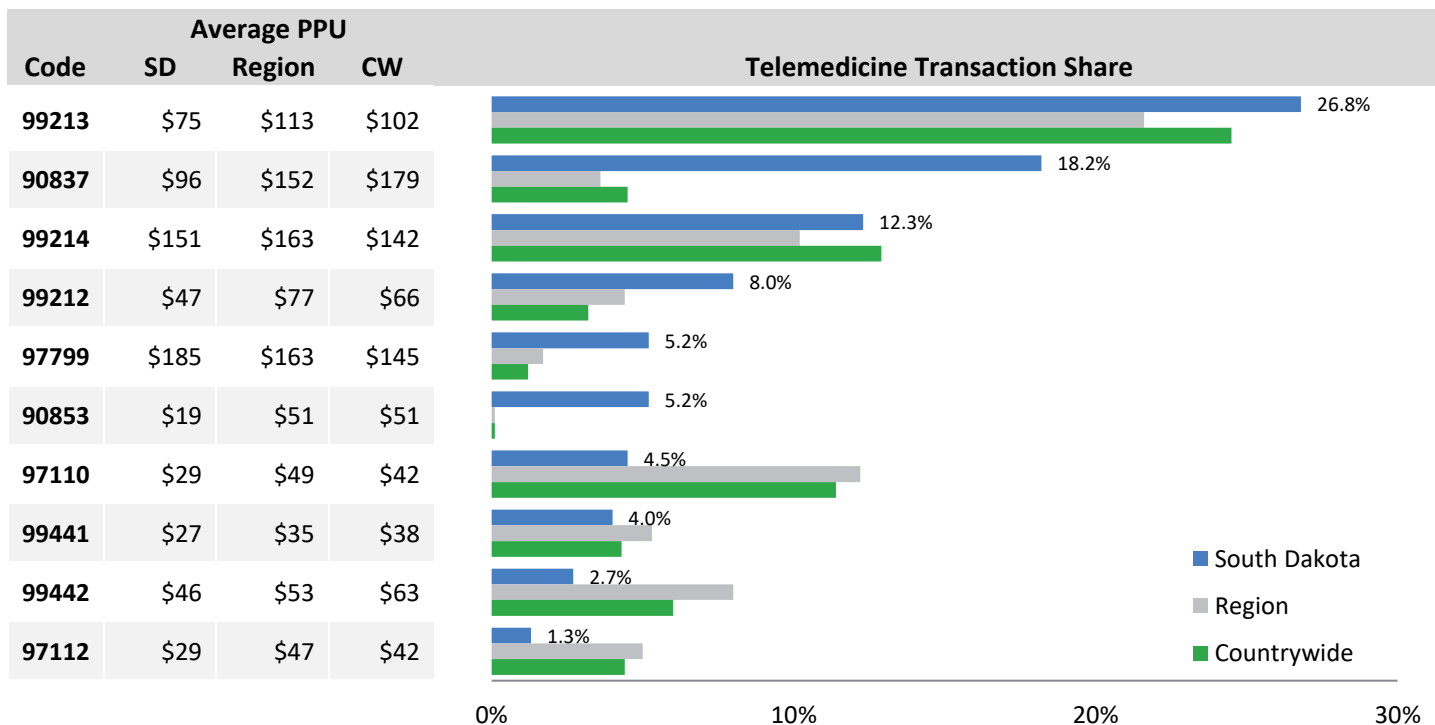




Chart 25 shows the top 10 procedure codes reported as a telemedicine service by transaction count for South Dakota with comparative values for the region and countrywide.

Chart 25

Top 10 Procedure Codes by Transaction Counts for Telemedicine Services



Code	Description
99213	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.
90837	Psychotherapy, 60 minutes with patient
99214	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.
99212	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.
97799	Unlisted physical medicine/rehabilitation service or procedure
90853	Group psychotherapy (other than of a multiple-family group)
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
99441	Telephone evaluation and management service by a physician or other qualified health care professional; 5-10 minutes of medical discussion.
99442	Telephone evaluation and management service by a physician or other qualified health care professional; 11-20 minutes of medical discussion.
97112	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



### Hospital Inpatient

Payments attributed to facilities represent hospital inpatient services, hospital outpatient services, and ambulatory surgical center services. 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 vary across jurisdictions. Some states have fee schedules based on a group of facility services related to the hospital admission, such as a diagnosis-related group (DRG); others are on a per-diem basis, with some variation on the per-diem amount by type of admission. Other states have provisions for the reimbursement to be a certain percentage of hospital charges. Several states remain without any regulation today.

A hospital inpatient stay is typically reported with one of two types of codes: 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, 51% 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, the region, 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.

Unless otherwise stated, the inpatient results are based on inpatient stays with a discharge date in 2020.

A measure of workers compensation hospital inpatient costs is a comparison of current payments to the Medicare rates. The chart below shows the average percentage of Medicare-scheduled reimbursement amounts for hospital inpatient payments for South Dakota, the region, and countrywide, based on hospital episodes that are reported with a DRG code.

**Chart 26**

**Hospital Inpatient Payments as a Percentage of Medicare**

Medical Cost Category	South Dakota	Region	Countrywide
Hospital Inpatient	239%	193%	194%

Source: NCCI's Medical Data Call for inpatient stays discharged in Calendar Year 2020. Region includes IA, IL, IN, KS, MI, MN, MO, NE, OK, and WI. Countrywide data includes AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.

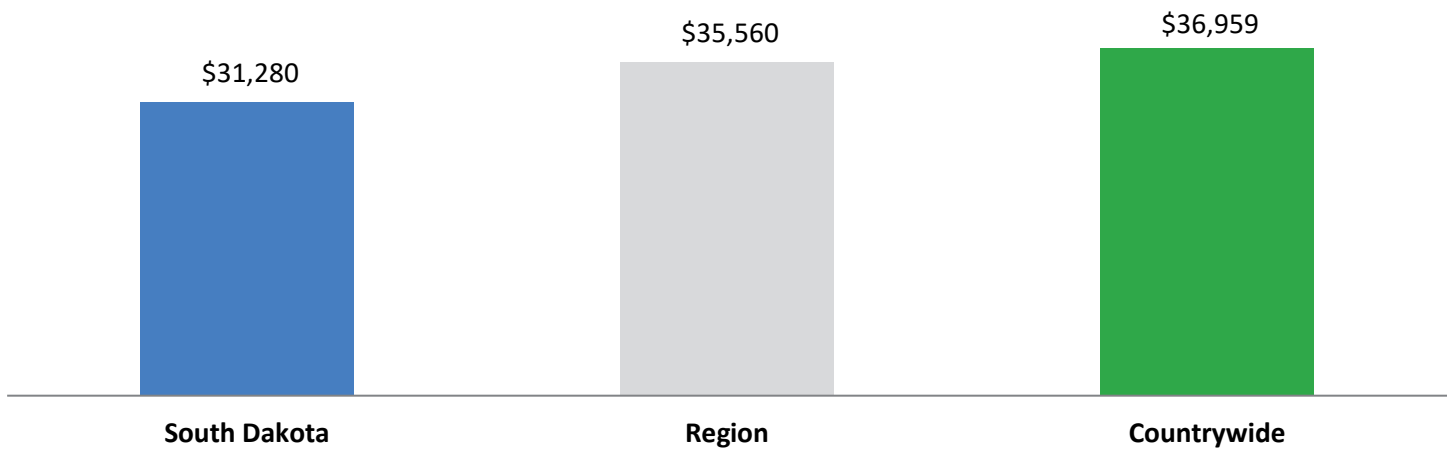


The distribution of medical payments for hospital inpatient is 12% for South Dakota, 11% for the region, and 13% for countrywide. One comparative measure of inpatient service costs is the average payment per inpatient stay. An inpatient stay is defined as any hospital service or set of services provided 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 27 displays the average amount paid per stay for hospital inpatient services, while Chart 28 displays the average amount paid 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 27**

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



**Chart 28**

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

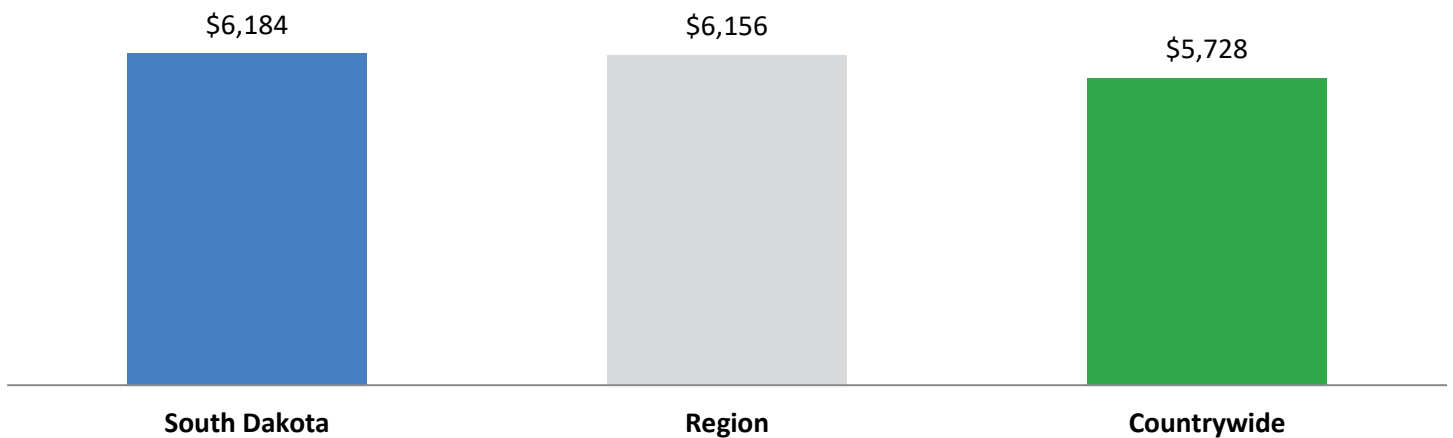
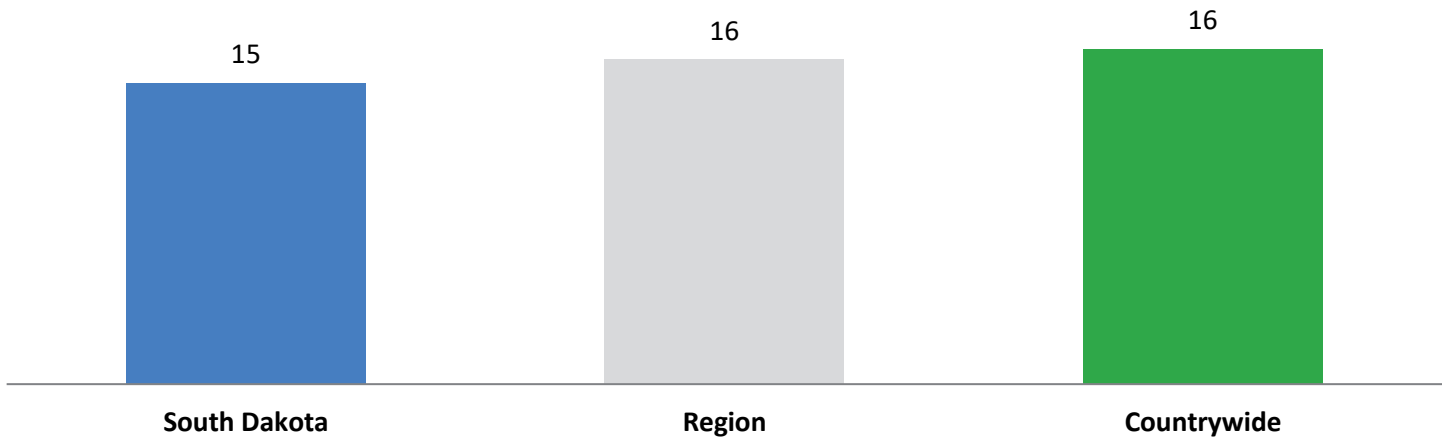




Chart 29 displays the average number of hospital inpatient stays per 1,000 active claims in 2020 for South Dakota, the region, and countrywide. An active claim is a workers compensation claim for which there is at least one medical service provided during that service year. Chart 30 displays the average and median length of 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 29**

**Average Number of Inpatient Stays per 1,000 Active Claims**



**Chart 30**

**Length of Stay for Hospital Inpatient Services (in Days)**

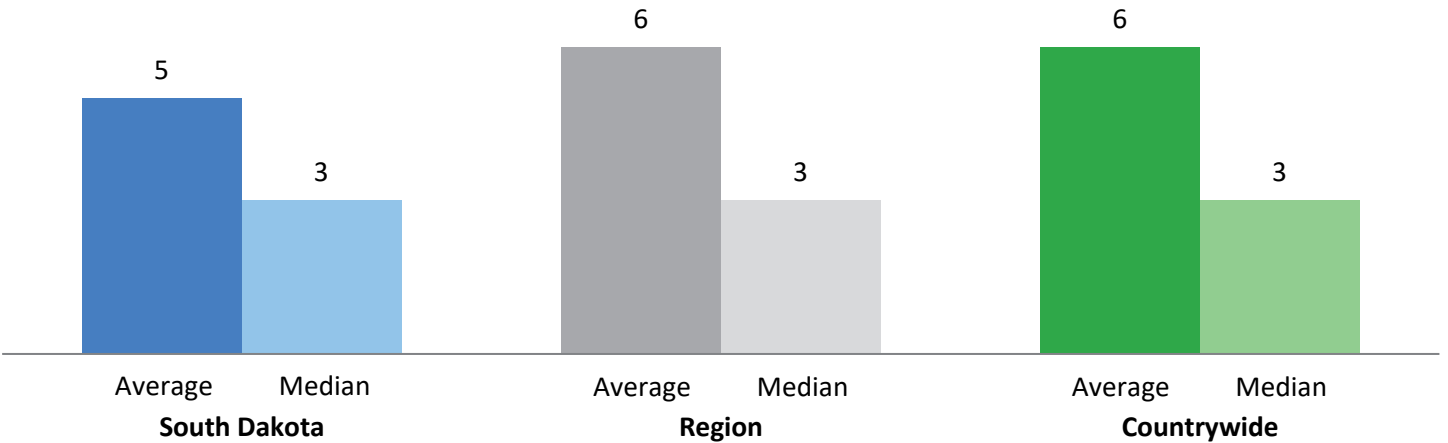
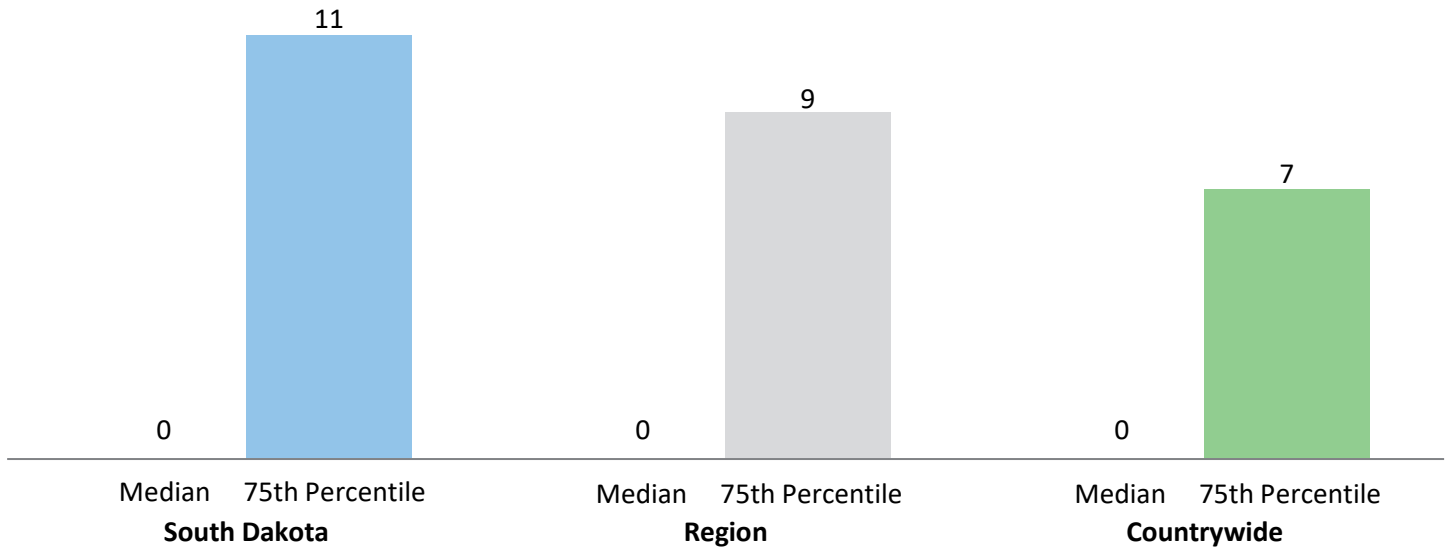


Chart 31 shows the median and 75th percentile time until first treatment for inpatient stays, other than emergency room visits, for South Dakota, the region, and countrywide.

**Chart 31**

**Time Until First Treatment for Hospital Inpatient Stays (in Days)**



Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



Charts 32 and 33 display the top 10 diagnosis groups and top 10 DRG codes for hospital inpatient stays. A diagnosis group is identified for each stay based on an ICD-10 (International Classification of Diseases) code. The diagnosis groups and DRG codes are ranked based on total payments for hospital inpatient services in South Dakota. A brief description of each DRG code is displayed in the table below chart 33. The information is based on inpatient stays with a discharge date in 2019 or 2020.

**Chart 32**

**Top 10 Diagnosis Groups by Amount Paid for Hospital Inpatient Services**

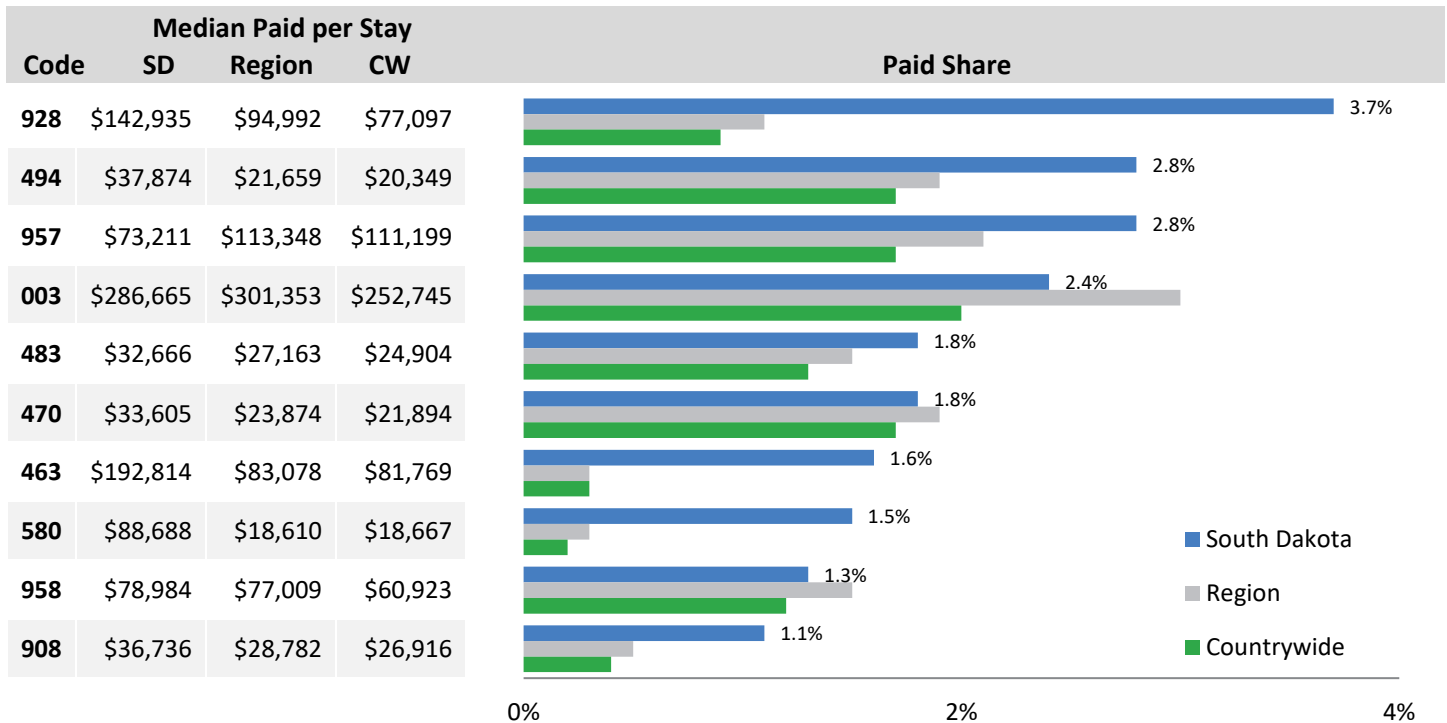
Diagnosis Group	Paid Share	Median Amount Paid per Stay		
		South Dakota	Region	Countrywide
Hip/pelvis fracture/major trauma	9.7%	\$23,540	\$22,542	\$21,518
Tibia/fibula fracture	8.4%	\$32,835	\$24,324	\$23,339
Traumatic brain injury	5.9%	\$15,055	\$23,061	\$24,706
Complication from surgical device	4.2%	\$19,962	\$22,698	\$24,149
Burn and corrosion, third degree, other than head, face, and neck	4.2%	\$123,607	\$37,547	\$44,946
Lumbar spine degeneration	3.5%	\$55,657	\$39,361	\$37,580
Lumbosacral intervertebral disc disorders	3.4%	\$30,742	\$29,090	\$30,566
Chest trauma major	2.7%	\$26,722	\$20,059	\$21,188
Cellulitis	2.4%	\$7,070	\$8,787	\$9,025
Knee degenerative/overuse injuries	2.3%	\$19,481	\$21,759	\$20,008

Source: NCCI’s Medical Data Call for inpatient stays with a discharge date in Calendar Year 2019 or 2020.



Chart 33

Top 10 DRG Codes by Amount Paid for Hospital Inpatient Services



Code	Description
928	Full thickness burn with skin graft or inhalation injury with complications or comorbidities/major complications or comorbidities
494	Lower extremity and humerus procedures except hip, foot, and femur without complications or comorbidities/major complications or comorbidities
957	Other operation room procedures for multiple significant trauma with major complications or comorbidities
003	Extracorporeal membrane oxygenation (ECMO) or tracheostomy with mechanical ventilation 96+ hours or principal diagnosis except face, mouth, and neck with major operating room
483	Major joint/limb reattachment procedure of upper extremities
470	Major joint replacement or reattachment of lower extremity without major complications or comorbidities
463	Wound debridement and skin graft except hand for musculoskeletal system and connective tissue disorders with major complications or comorbidities
580	Other skin, subcutaneous tissue and breast procedures with complications and comorbidities
958	Other operation room procedures for multiple significant trauma with complications or comorbidities
908	Other operating room procedures for injuries with complications or comorbidities

Source: NCCI's Medical Data Call for inpatient stays with a discharge date in 2019 or 2020. Region includes IA, IL, IN, KS, MI, MN, MO, NE, OK, and WI. Countrywide data includes 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.

Note: In South Dakota, 51% of hospital inpatient payments are reported with a DRG code.



## Hospital Outpatient

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 current procedure terminology (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 service is classified as “surgical” if it falls within the surgical category as defined by the AMA. A service is further classified as “major surgery” if it has a global follow-up period of 90 days as defined by the Centers for Medicare & Medicaid Services and is not an injection. In this section, we provide measures of hospital outpatient payments that account for the type of visit because the level of reimbursement varies considerably by type of visit. A hospital outpatient visit could be the result of an emergency visit. Outpatient visits arising from emergency room services are shown separately. Next, nonemergency outpatient visits are shown for visits with major surgery services and for visits without major surgery services.

The distribution of medical payments for hospital outpatient is 36% for South Dakota, 24% for the region, and 19% for countrywide.

One measure of workers compensation hospital outpatient costs is a comparison of current payments to the Medicare rates. The chart below shows the average percentage of Medicare-scheduled reimbursement amounts for hospital outpatient payments for South Dakota, the region, and countrywide. In South Dakota, 66% of hospital outpatient payments are included in the chart below.

**Chart 34**

**Hospital Outpatient Payments as a Percentage of Medicare**

<b>Medical Cost Category</b>	<b>South Dakota</b>	<b>Region</b>	<b>Countrywide</b>
Hospital Outpatient	254%	261%	242%

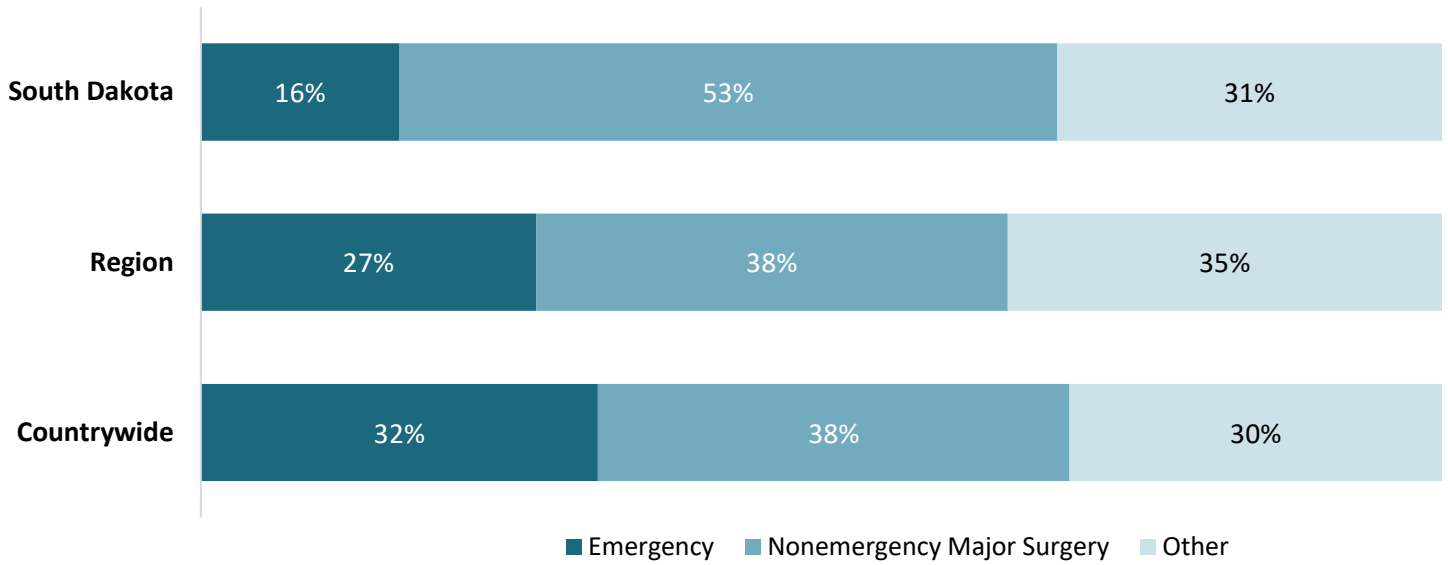
Source: NCCI’s Medical Data Call for Service Year 2020. Region includes IA, IL, IN, KS, MI, MN, MO, NE, OK, and WI. Countrywide data includes AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, ME, MI, MN, MO, MS, MT, NC, NE, NH, NJ, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



Chart 35 displays the distribution of hospital outpatient payments by visit type for South Dakota, the region, and countrywide.

**Chart 35**

**Distribution of Payments for Outpatient Services by Hospital Outpatient Visit Type**

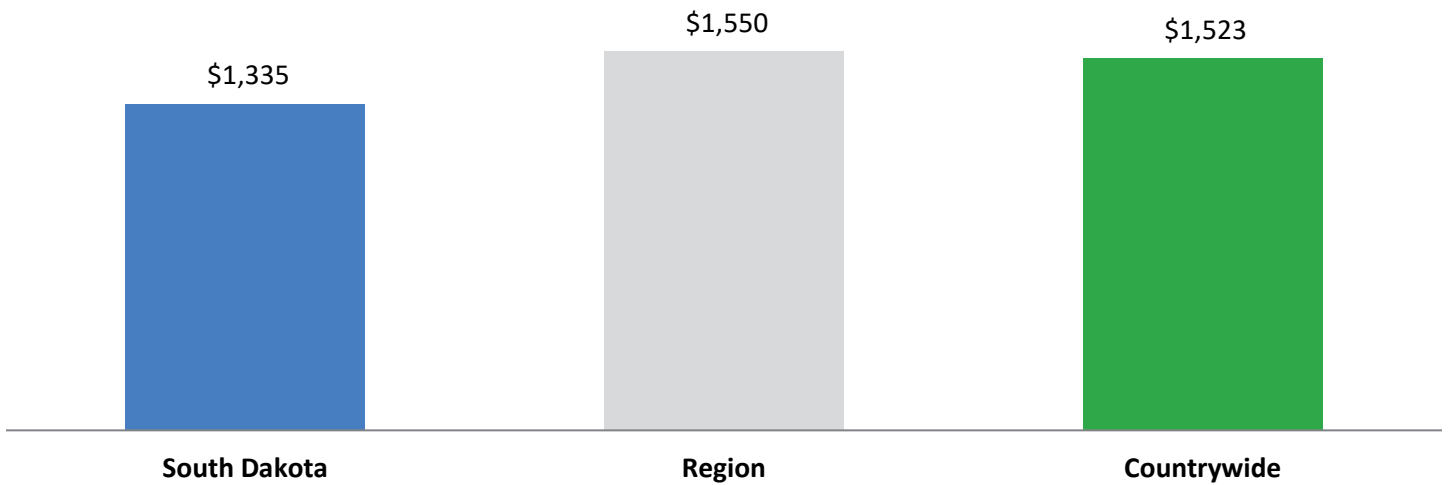




Emergency hospital outpatient visits represent 16% of hospital outpatient payments in South Dakota. Chart 36 displays the average amount paid per emergency visit for outpatient services, while Chart 37 displays the average number of emergency hospital outpatient visits per 1,000 active claims for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 36**

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



**Chart 37**

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

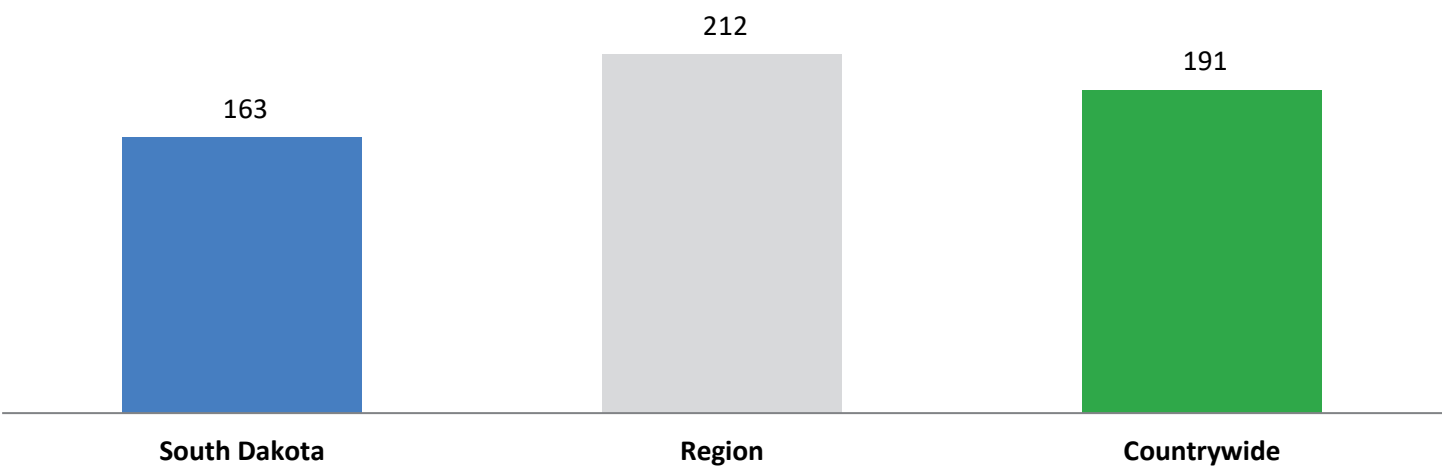




Chart 38 displays the top 10 diagnosis groups for emergency outpatient visits. The diagnosis groups are ranked based on total payments for outpatient services in South Dakota.

**Chart 38**

**Top 10 Diagnosis Groups by Amount Paid for Emergency Hospital Outpatient Visits**

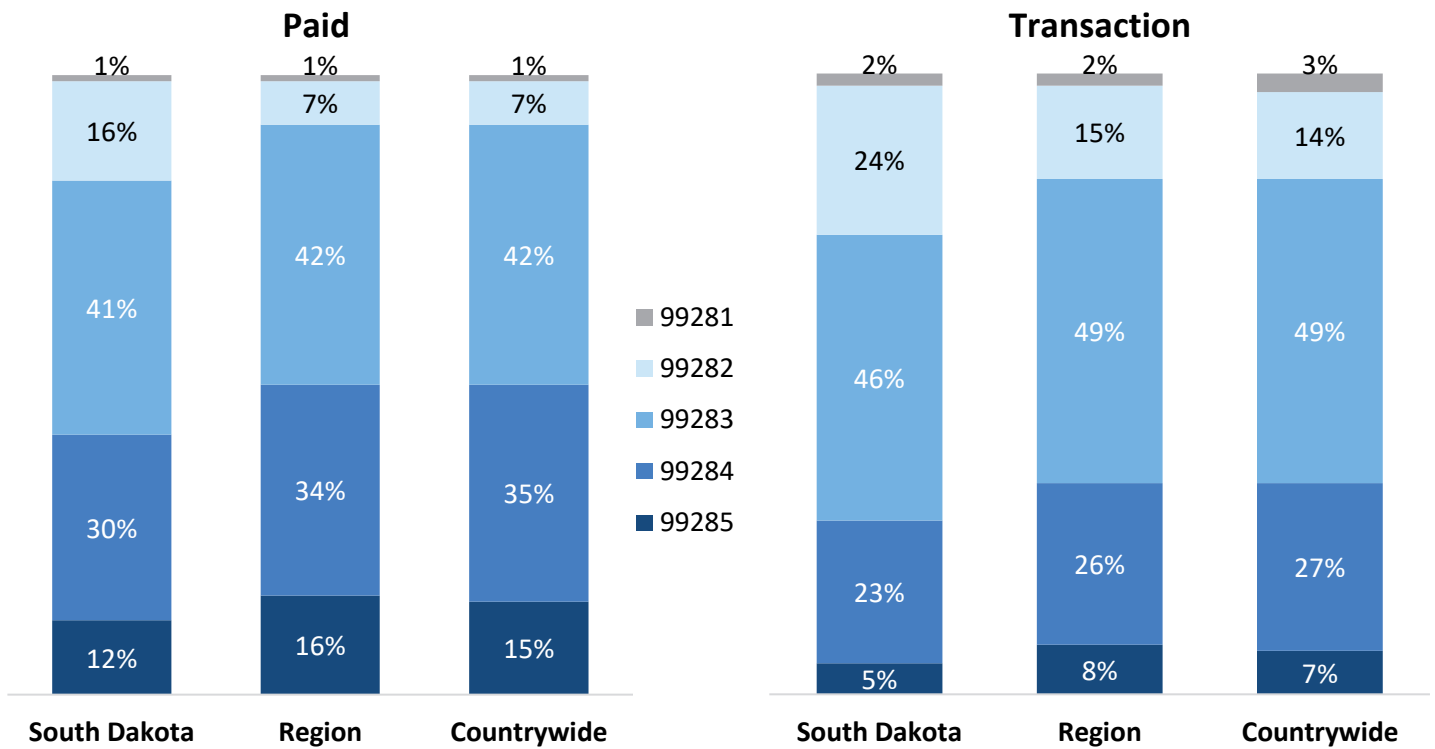
Diagnosis Group	Paid Share	Median Amount Paid Per Visit		
		South Dakota	Region	Countrywide
Minor hand/wrist injuries	11.5%	\$643	\$776	\$710
Hand/wrist fracture	8.4%	\$1,068	\$1,215	\$1,139
Head/face wound	4.9%	\$822	\$1,016	\$929
Concussion/minor traumatic brain injury	3.6%	\$1,238	\$1,433	\$1,206
Neck pain	3.6%	\$1,437	\$1,516	\$1,218
Head injury not otherwise classified	3.1%	\$906	\$1,374	\$1,151
Low back pain	3.0%	\$620	\$836	\$794
Minor ankle/foot injuries	2.8%	\$650	\$743	\$706
Minor shoulder injury	2.6%	\$632	\$774	\$711
Ankle fracture	2.5%	\$1,376	\$1,484	\$1,317



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. About 85% of all emergency visits had outpatient services. Chart 39 shows the distribution of emergency room outpatient services by procedure code for both paid amount and transactions for Service Year 2020 as well as the average payment per transaction.

Chart 39

Distribution of Emergency Room Outpatient Services by Procedure Code



Emergency Room Outpatient Paid per Transaction by Procedure Code

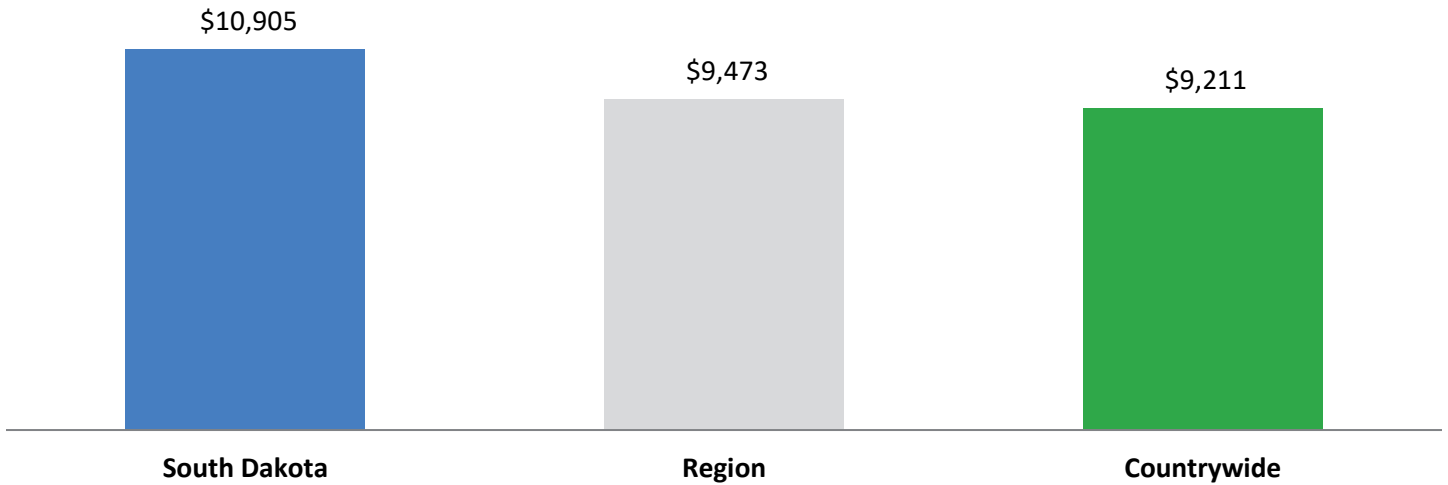
Code	Severity	Average PPT		
		South Dakota	Region	Countrywide
99281	Minor	\$108	\$201	\$190
99282	Low to Moderate	\$250	\$294	\$288
99283	Moderate	\$348	\$516	\$491
99284	High	\$501	\$796	\$739
99285	High and immediately life-threatening	\$968	\$1,265	\$1,153



Nonemergency outpatient visits with major surgery services represent 53% of hospital outpatient payments in South Dakota. Chart 40 displays the average amount paid per major surgery visit for outpatient services, while Chart 41 displays the average number of major surgery hospital outpatient visits per 1,000 active claims for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 40**

**Average Amount Paid for Hospital Outpatient Services per Nonemergency Major Surgery Visit**



**Chart 41**

**Average Number of Nonemergency Major Surgery Hospital Outpatient Visits per 1,000 Active Claims**

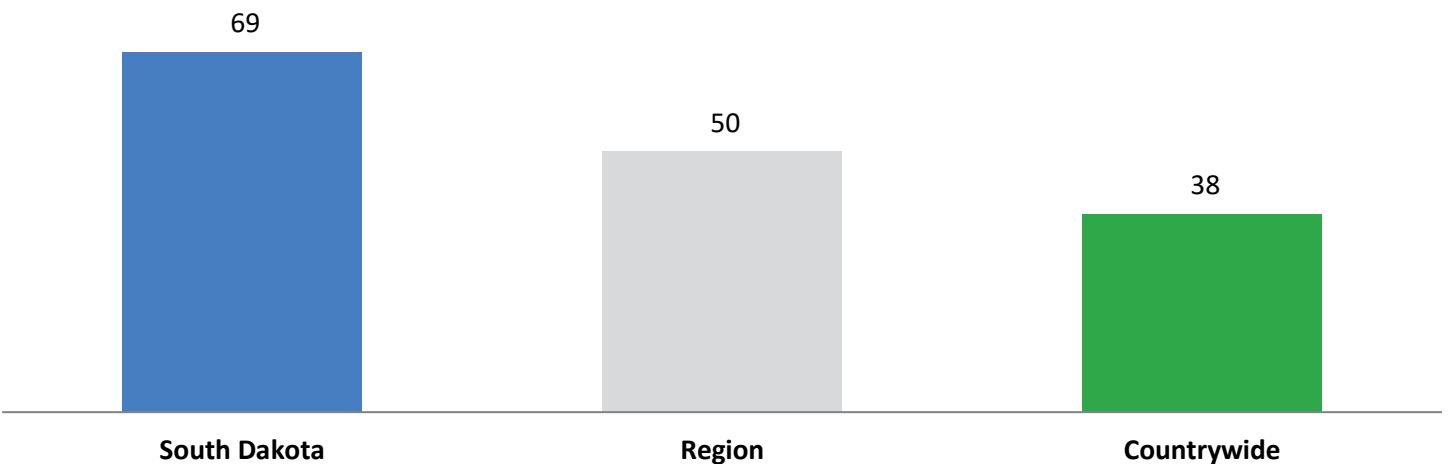
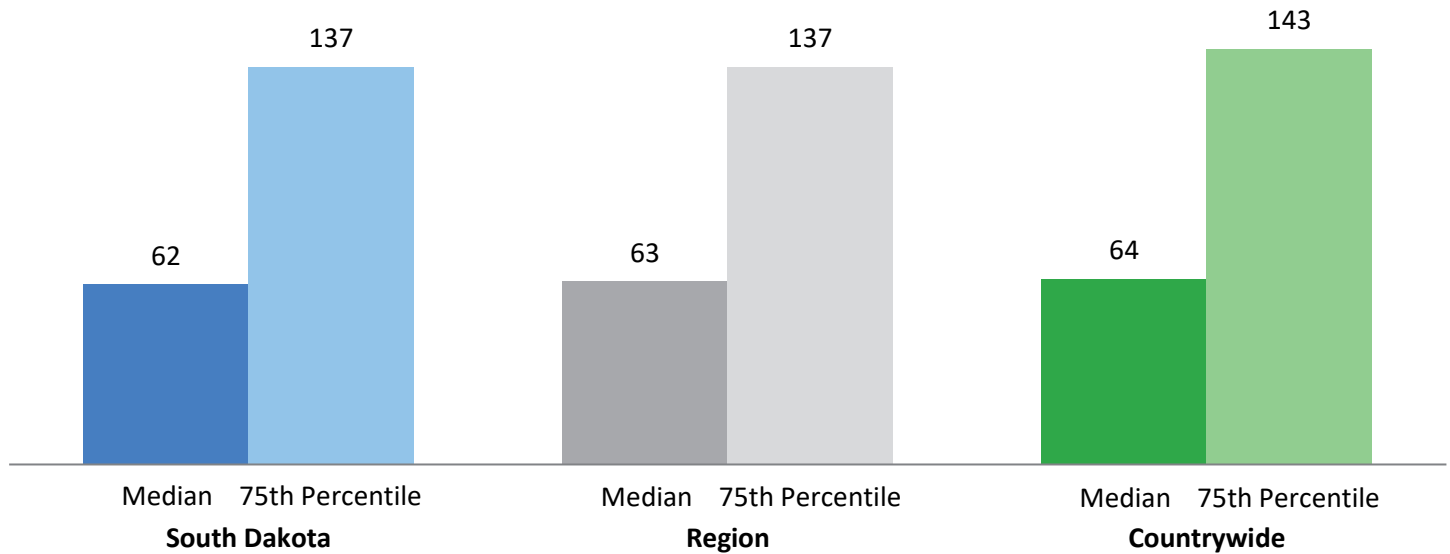


Chart 42 shows the median and 75th percentile time until first treatment for nonemergency major surgery outpatient visits for South Dakota, the region, and countrywide.

**Chart 42**

**Time Until First Treatment for Nonemergency Major Surgery Outpatient Visits (in Days)**



Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



Chart 43 displays the top 10 diagnosis groups for nonemergency major surgery outpatient visits. The diagnosis groups are ranked based on total payments for outpatient services in South Dakota.

**Chart 43**

**Top 10 Diagnosis Groups by Amount Paid for Nonemergency Major Surgery Hospital Outpatient Visits**

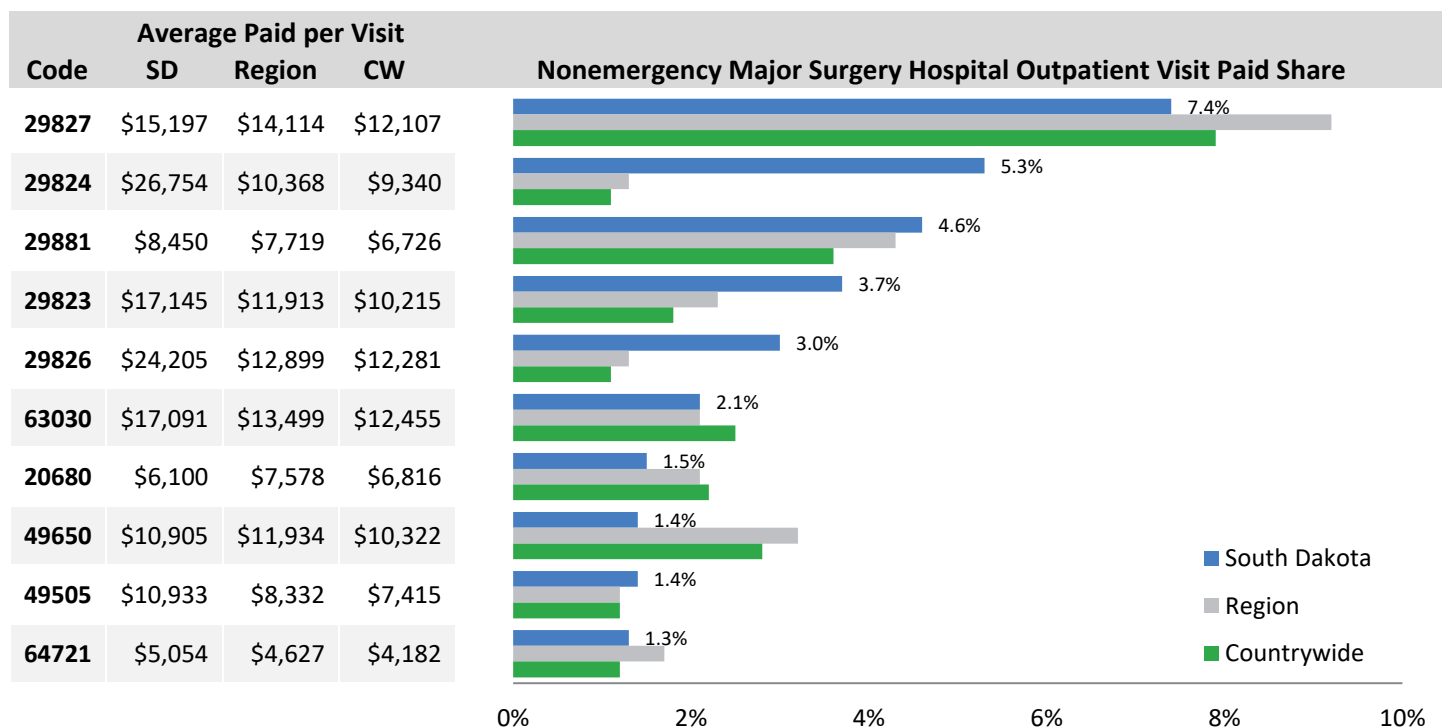
Diagnosis Group	Paid Share	Median Amount Paid Per Visit		
		South Dakota	Region	Countrywide
Rotator cuff tear	19.9%	\$14,492	\$10,925	\$9,808
Knee internal derangement - meniscus injury	8.6%	\$7,354	\$6,192	\$5,219
Hand/wrist fracture	5.5%	\$8,261	\$5,999	\$5,946
Degenerative shoulder	5.1%	\$12,650	\$9,781	\$8,589
Inguinal hernia	3.6%	\$10,334	\$8,590	\$7,809
Minor shoulder injury	3.6%	\$10,465	\$9,880	\$8,814
Lumbosacral intervertebral disc disorders	3.2%	\$16,779	\$11,437	\$10,417
Shoulder impingement syndrome	3.0%	\$13,130	\$8,384	\$7,877
Carpal tunnel syndrome	2.9%	\$4,786	\$3,930	\$3,468
Ankle fracture	2.7%	\$9,180	\$9,650	\$9,015



Charts 44 displays the average amount paid per nonemergency major surgery visit for outpatient services in South Dakota, the region, and countrywide for the top 10 CPT codes in South Dakota. The codes are ranked based on total outpatient payments in South Dakota, where the code shown below is the code with the highest total paid on a nonemergency major surgery visit. In 2020, 71% of Hospital Outpatient costs were reported with a CPT code being the highest paid code. A brief description of each code is displayed in the table below.

### Chart 44

#### Top 10 Procedure Codes by Amount Paid for Hospital Outpatient Services in Nonemergency Major Surgery Visits



Code	Description
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29824	Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)
29881	Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving), including debridement/shaving of articular cartilage
29823	Arthroscopy, shoulder, surgical; debridement, extensive
29826	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (i.e., arch) release, when performed
63030	Laminotomy (hemilaminectomy) with decompression of nerve root(s) including partial facetectomy, foraminotomy, and/or excision of herniated intervertebral disc; 1 interspace lumbar
20680	Removal of implant; deep (e.g., buried wire, pin, screw, metal, band, nail, rod, or plate)
49650	Laparoscopy, surgical; repair initial inguinal hernia
49505	Repair initial inguinal hernia, age 5 years or older; reducible
64721	Neuroplasty and/or transposition; median nerve at carpal tunnel

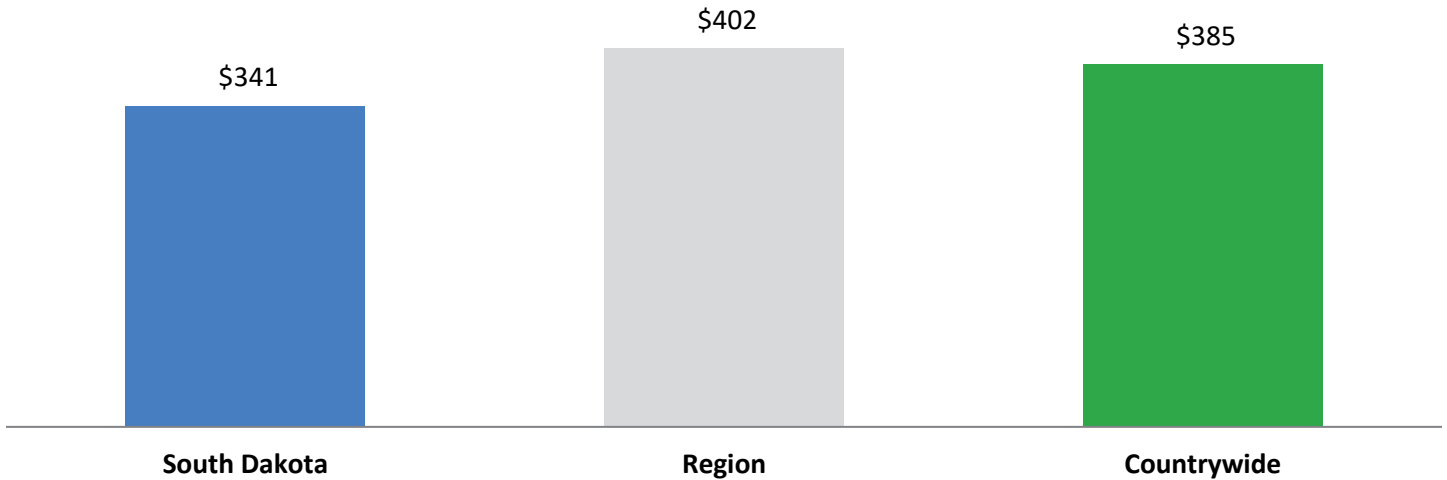




Nonemergency outpatient visits without a major surgery service, referred to as “Other” outpatient visits, represent 31% of hospital outpatient payments in South Dakota. Chart 45 displays the average amount paid per other visit for hospital outpatient services, while Chart 46 displays the average number of other visits per 1,000 active claims for hospital outpatient 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 45**

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



**Chart 46**

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

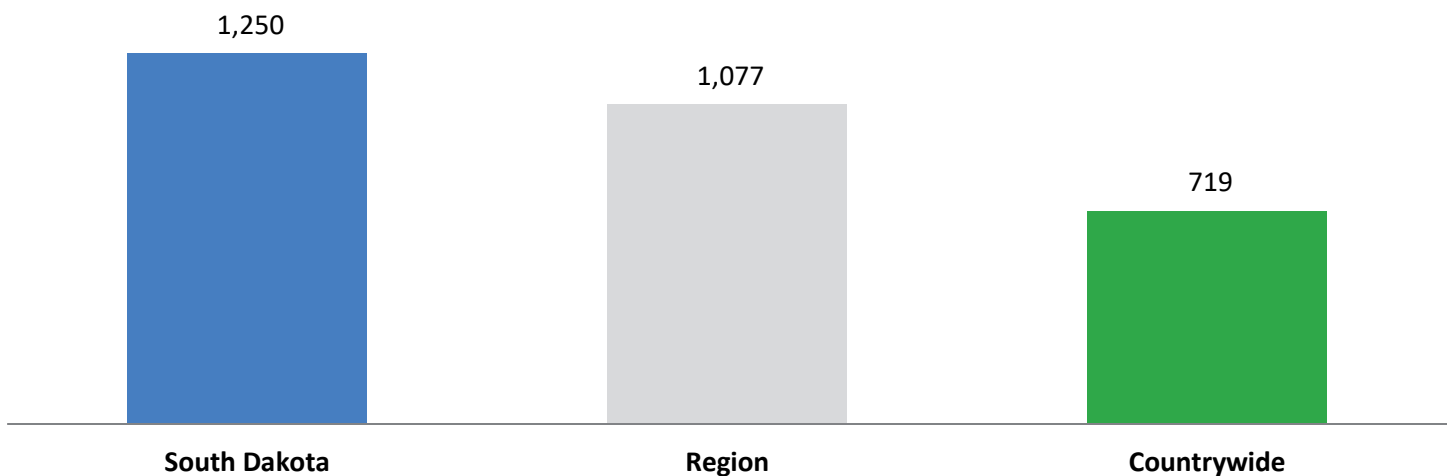
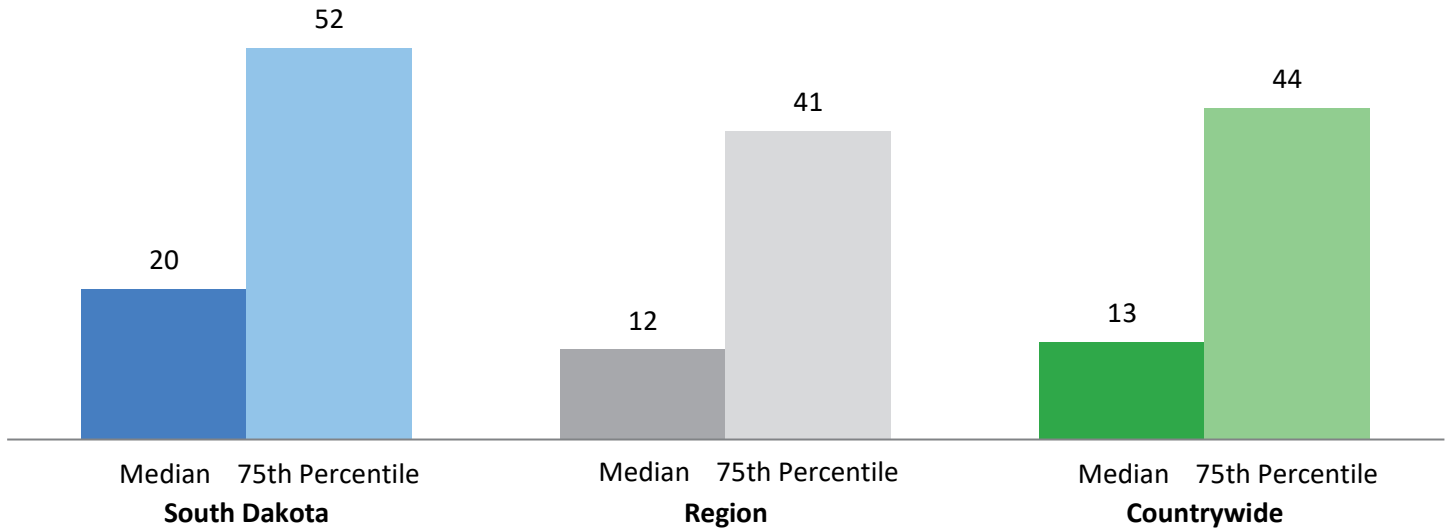


Chart 47 shows the median and 75th percentile time until first treatment for other outpatient visits for South Dakota, the region, and countrywide.

**Chart 47**

**Time Until First Treatment for Other Outpatient Visits (in Days)**



Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



Chart 48 displays the top 10 diagnosis groups for other outpatient visits. The diagnosis groups are ranked based on total payments for outpatient services in South Dakota.

Chart 48

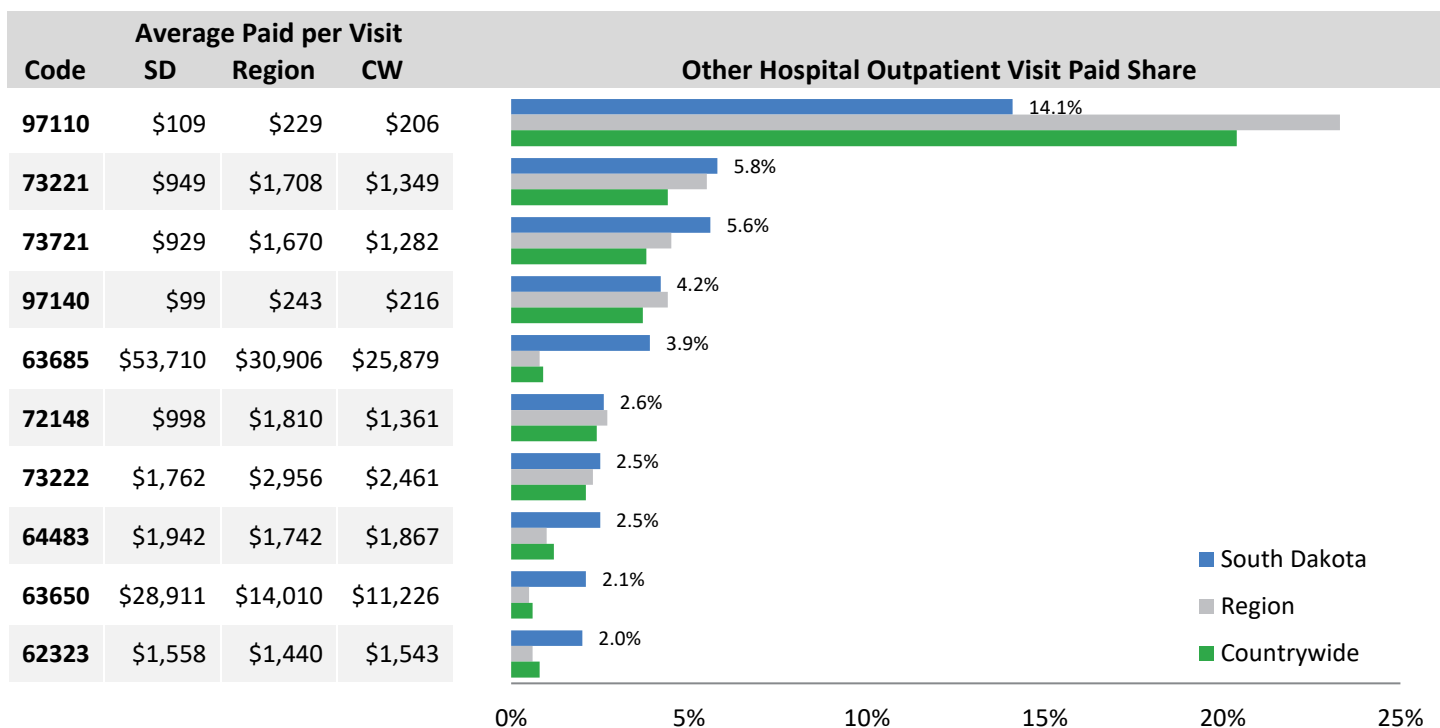
Top 10 Diagnosis Groups by Amount Paid for Other Hospital Outpatient Visits

Diagnosis Group	Paid Share	Median Amount Paid per Visit		
		South Dakota	Region	Countrywide
Minor shoulder injury	9.1%	\$96	\$217	\$175
Chronic pain	8.8%	\$131	\$225	\$194
Lumbar spine degeneration	5.5%	\$741	\$365	\$349
Lumbar radiculopathy/sciatica	4.9%	\$109	\$252	\$208
Lumbosacral intervertebral disc disorders	4.6%	\$192	\$325	\$279
Minor knee injury	4.3%	\$96	\$213	\$176
Rotator cuff tear	3.8%	\$97	\$201	\$173
Low back pain	3.6%	\$99	\$206	\$166
Minor hand/wrist injuries	2.9%	\$100	\$197	\$163
Orthopedic aftercare	2.2%	\$99	\$185	\$176

Charts 49 displays the average amount paid per other visit for outpatient services in South Dakota, the region, and countrywide for the top 10 CPT codes in South Dakota. The codes are ranked based on total outpatient payments in South Dakota, where the code shown below is the code with the highest total paid on an “Other” outpatient visit. A brief description of each code is displayed in the table below.

**Chart 49**

**Top 10 Procedure Codes by Amount Paid for Hospital Outpatient Services in Other Visits**



Code	Description
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion, and flexibility
73221	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; without contrast material
73721	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; without contrast material
97140	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes
63685	Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling
72148	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; without contrast material
73222	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; with contrast material
64483	Injection(s), anesthetic agent, and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or computed tomography (CT)); lumbar or sacral, single level
63650	Percutaneous implantation of neurostimulator electrode array, epidural
62323	Injection(s) of diagnostic or therapeutic substance(s) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral



### Ambulatory Surgical Centers

An Ambulatory Surgical Center (ASC) is often used as an alternative facility to a hospital for conducting outpatient surgeries. The distribution of medical payments for ASCs is 1% for South Dakota, 8% for the region, and 7% for countrywide.

Typically, surgery-related services are performed in ASCs. The most prevalent procedure code types reported are CPT codes and revenue codes.

One measure of workers compensation ASC costs is a comparison of current payments to the Medicare rates. The chart below shows the average percentage of Medicare-scheduled reimbursement amounts for ASC payments for South Dakota, the region, and countrywide. In South Dakota, 66% of ASC payments are included in the chart below.

Chart 50

ASC Payments as a Percentage of Medicare

Medical Cost Category	South Dakota	Region	Countrywide
Ambulatory Surgical Center	214%	304%	265%

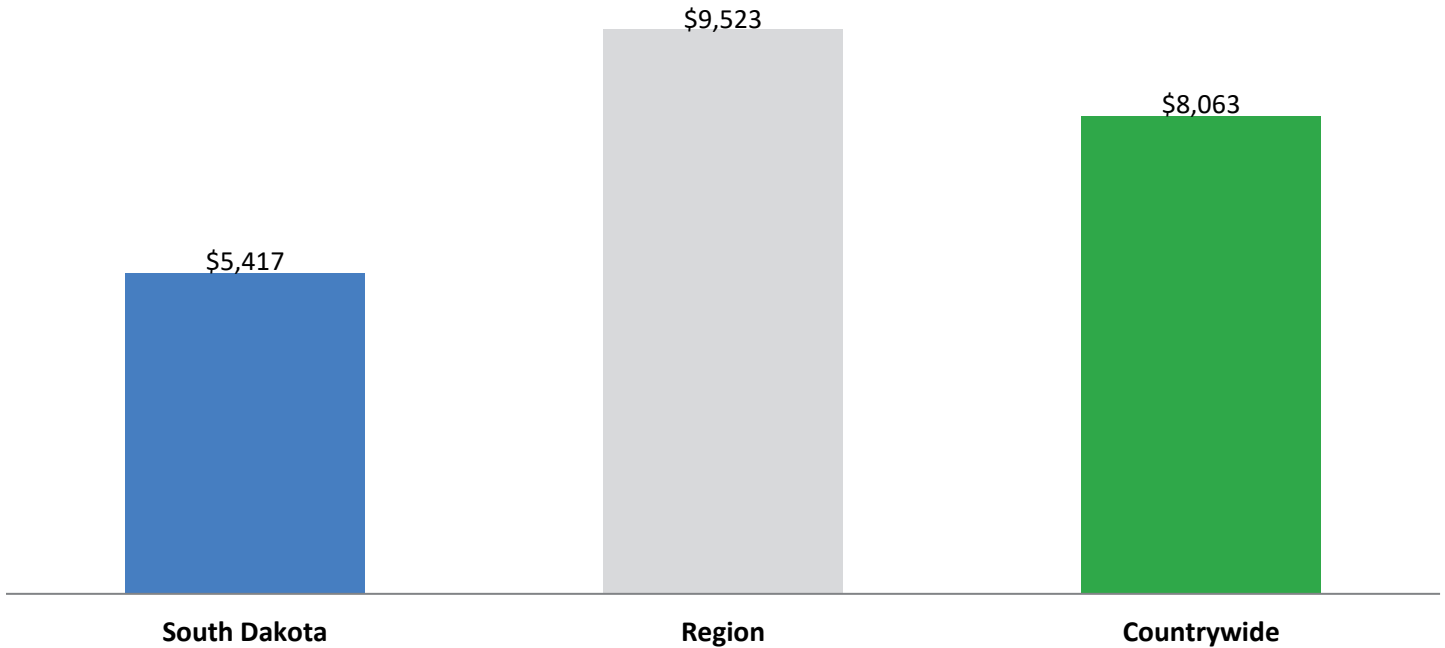
Source: NCCI's Medical Data Call for Service Year 2020. Region includes IA, IL, IN, KS, MI, MN, MO, NE, OK, and WI. Countrywide data includes AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, ME, MI, MN, MO, MS, MT, NC, NE, NH, NJ, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV.



ASC visits with major surgery services represent 62% of ASC payments in South Dakota. Other ASC visits typically include minor procedures, with injections for therapeutic or diagnostic purposes being the most common. Chart 51 displays the average amount paid per major surgery visit for ASC services, while Chart 52 displays the average number of major surgery ASC visits per 1,000 active claims for South Dakota, the region, and countrywide. Note that there are no controls for mix of diagnosis or severity of claims between jurisdictions.

**Chart 51**

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



**Chart 52**

**Average Number of ASC Major Surgery Visits per 1,000 Active Claims**

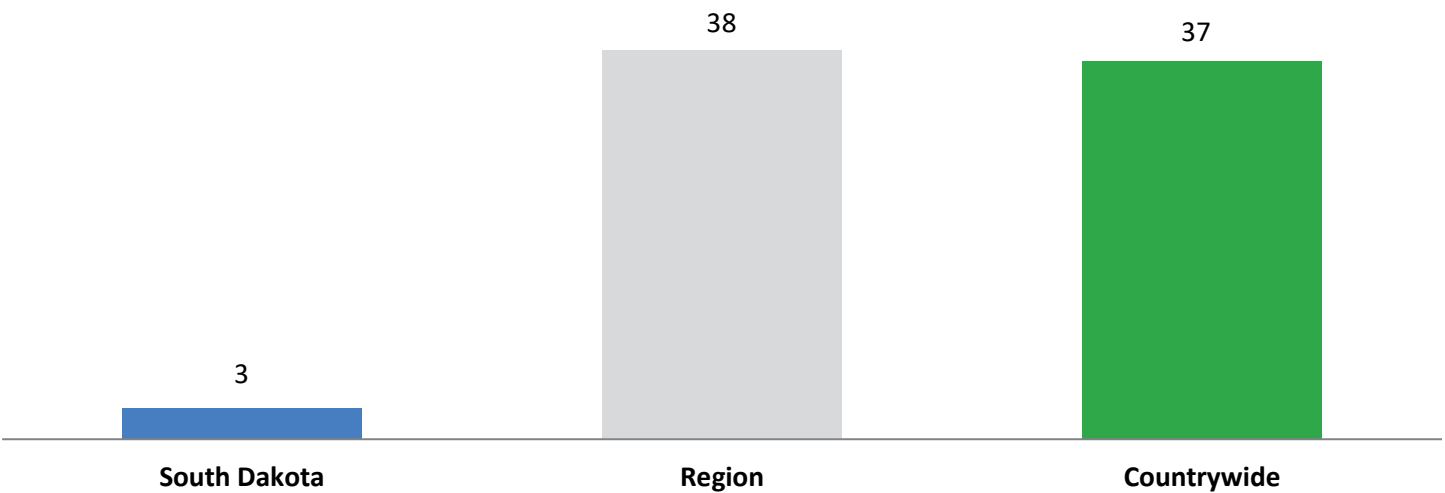
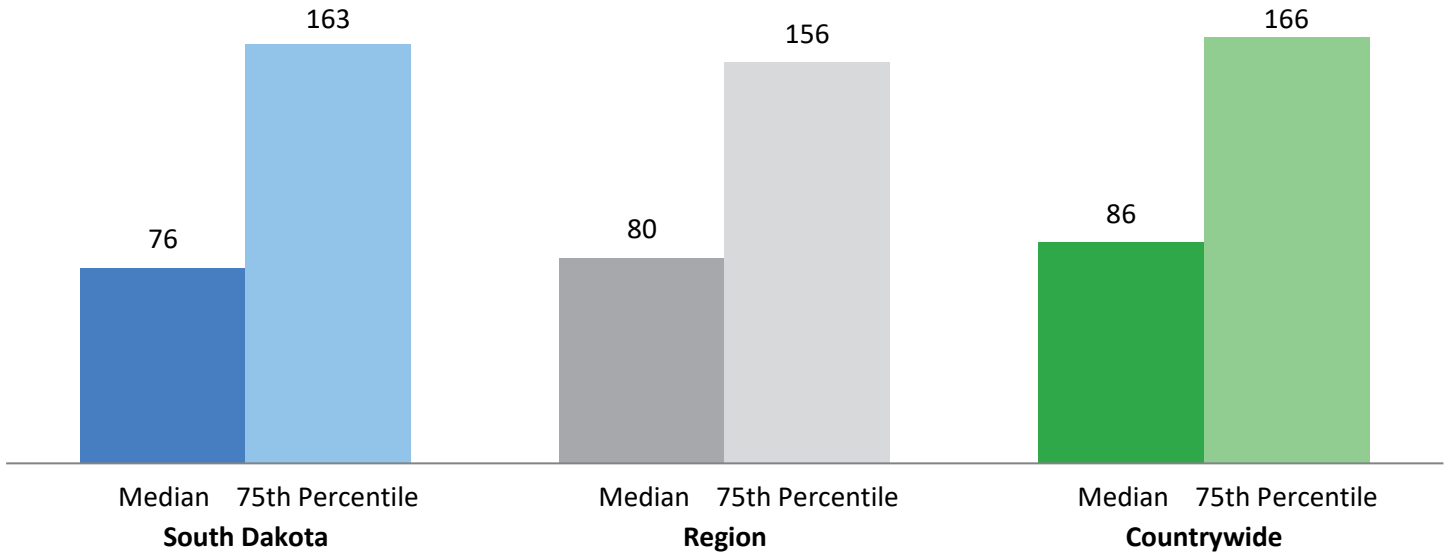


Chart 53 shows the median and 75th percentile time until first treatment for ASC major surgery visits for South Dakota, the region, and countrywide.

**Chart 53****Time Until First Treatment for ASC Major Surgery Visits (in Days)**

Source: NCCI's Medical Data Call for Accident Year 2019 and Service Years 2019 and 2020.



Chart 54 displays the top 10 diagnosis groups for ASC major surgery visits. The diagnosis groups are ranked based on total payments for ASC services in South Dakota.

**Chart 54**

**Top 10 Diagnosis Groups by Amount Paid for ASC Major Surgery Visits**

Diagnosis Group	Paid Share	Median Amount Paid per Visit		
		South Dakota	Region	Countrywide
Minor shoulder injury	10.2%	\$20,911	\$9,366	\$7,932
Hand/wrist fracture	9.1%	\$4,300	\$6,464	\$5,351
Degenerative arthritis, ankle/foot	8.2%	\$16,812	\$8,681	\$8,369
Retinal detachments and breaks	7.6%	\$6,382	\$2,739	\$3,068
Knee internal derangement - cruciate ligament tear	7.6%	\$7,806	\$11,183	\$9,355
Inguinal hernia	6.0%	\$2,946	\$6,111	\$4,897
Lumbosacral intervertebral disc disorders	5.3%	\$10,885	\$9,547	\$8,793
Synovitis/tenosynovitis, ankle/foot	4.9%	\$10,170	\$5,971	\$5,525
Other disorders of bone	4.4%	\$9,000	\$6,819	\$6,521
Neck pain	4.1%	\$8,392	\$18,496	\$11,340

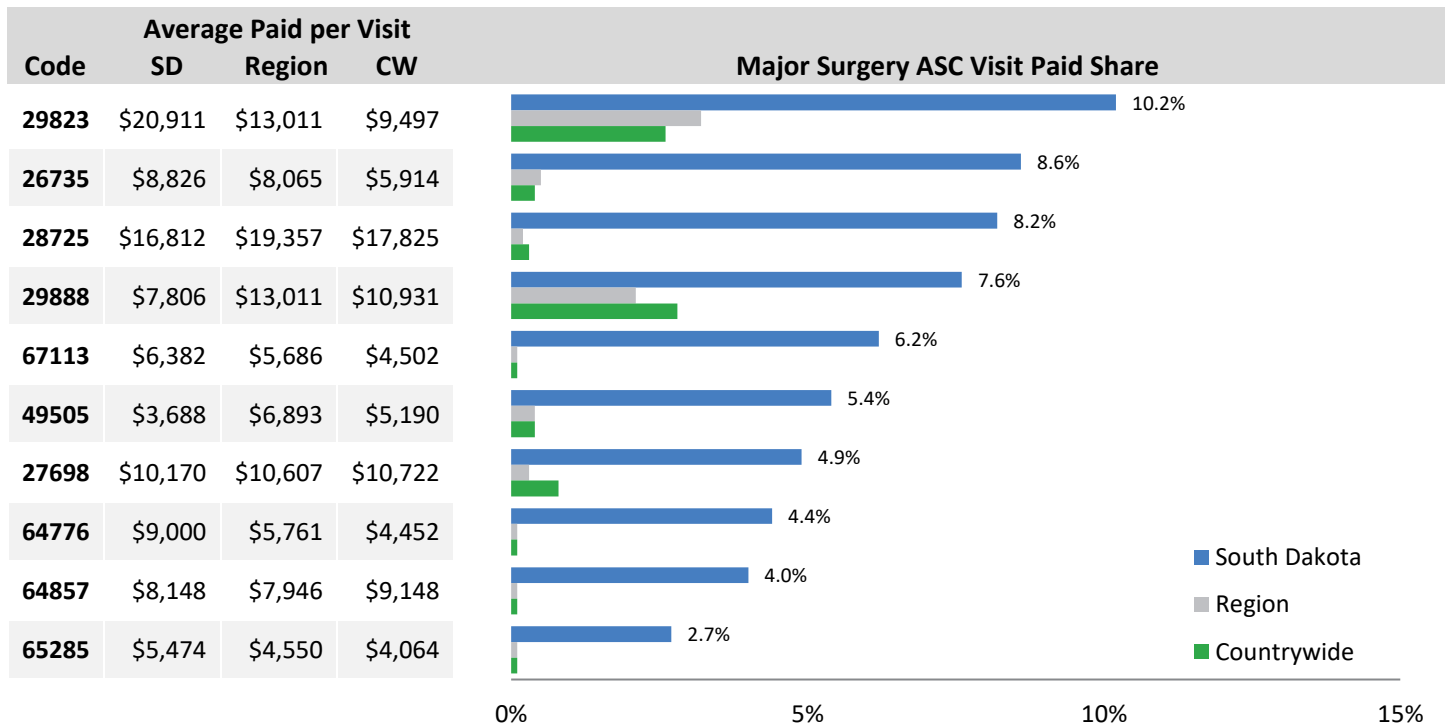




Chart 55 displays the average amount paid per major surgery visit for ASC services in South Dakota, the region, and countrywide for the top 10 CPT codes in South Dakota. The codes are ranked based on total ASC payments in South Dakota, where the code shown below is the code with the highest total paid on a major surgery visit. A brief description of each procedure code is displayed in the table beneath the chart. Chart 56 displays similar results for visits in an outpatient setting for the list of codes in Chart 55, if applicable.

### Chart 55

#### Top 10 Procedure Codes by Amount Paid for ASC Services in Major Surgery Visits



Code	Description
29823	Arthroscopy, shoulder, surgical; debridement, extensive
26735	Open treatment of phalangeal shaft fracture, proximal or middle phalanx, finger or thumb, includes internal fixation, when performed, each
28725	Arthrodesis; subtalar
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
67113	Repair of complex retinal detachment with vitrectomy and membrane peeling
49505	Repair initial inguinal hernia, age 5 years or older; reducible
27698	Repair, secondary, disrupted ligament, ankle, collateral (e.g., Watson-Jones procedure)
64776	Excision of neuroma; digital nerve, 1 or both, same digit
64857	Suture of major peripheral nerve, arm or leg, except sciatic; without transposition
65285	Repair of laceration; cornea and/or sclera, perforating, with reposition or resection of uveal tissue



Chart 56

Major Surgery Outpatient Visit Comparisons for Procedure Codes in Chart 55

Code	Average Paid per Visit in SD		Distribution of Major Surgery Visits in SD in an ASC or Outpatient Setting	
	ASC	Outpatient		
29823	\$20,911	\$17,145	5%	95%
26735	\$8,826	\$17,239	50%	50%
28725	\$16,812	\$28,127	50%	50%
29888	\$7,806	\$15,912	20%	80%
67113	\$6,382	N/A	100%	
49505	\$3,688	\$10,933	20%	80%
27698	\$10,170	\$12,854	25%	75%
64776	\$9,000	\$8,005	50%	50%
64857	\$8,148	N/A	100%	
65285	\$5,474	N/A	100%	

## Prescription Drugs

The distribution of medical payments for drugs is 11% for South Dakota, 5% for the region, and 8% for countrywide. Prescription drugs are uniquely identified by a national drug code (NDC). Charts 57 through 62 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.

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

In South Dakota, the share of claims observed in Service Year 2020 with at least one controlled substance was 8%. This compares to the region and countrywide shares of 9% and 10%, respectively. In 2020, South Dakota spent \$0.6M on Schedule II and Schedule III drugs for workers compensation claims.

Chart 57 shows the distribution of prescription drug payments by CSA schedule in South Dakota, the region, and countrywide.

**Chart 57**

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

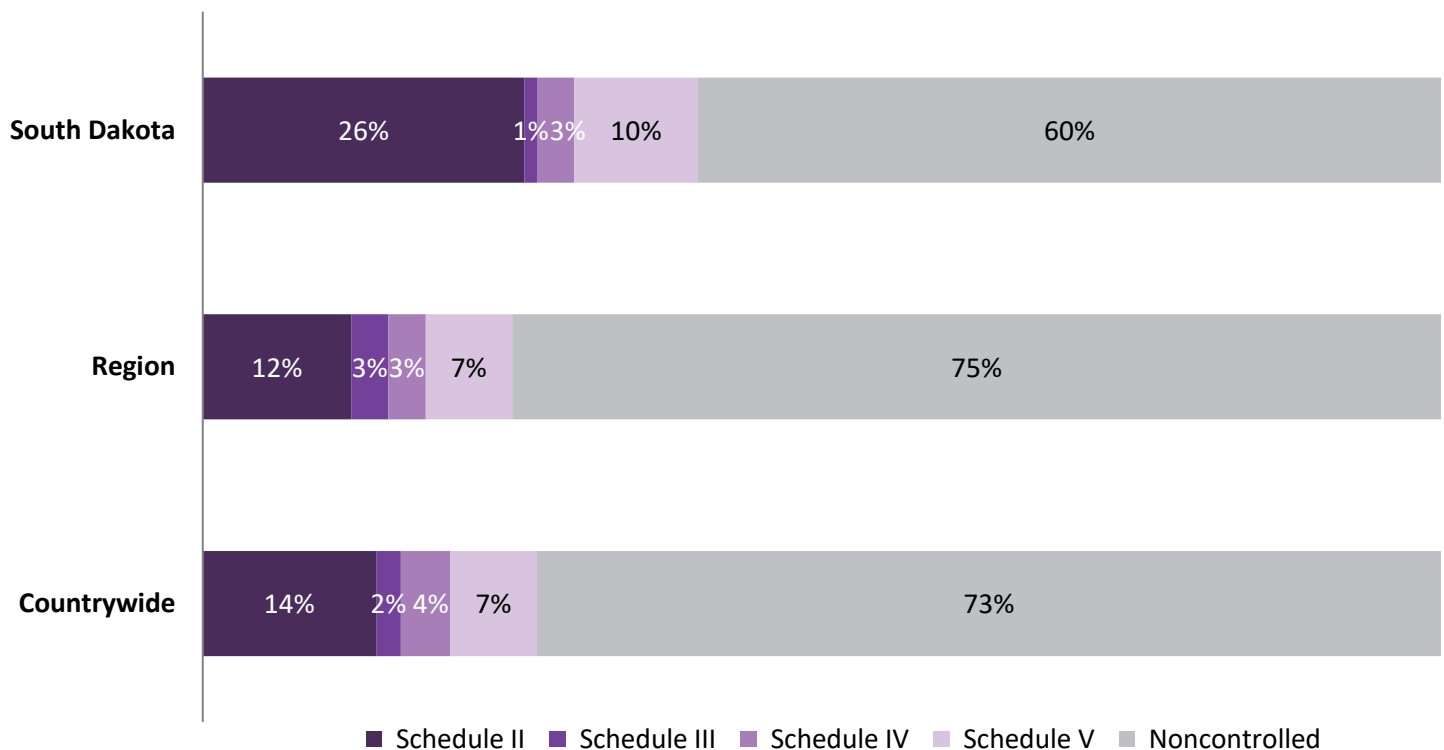




Chart 58 displays the shares of the payments of prescription medication for the top 10 drugs used in workers compensation treatment, by amount paid in South Dakota. This chart also indicates whether the drugs are generic (G) or brand name (B); for generic drugs, a commonly used brand name equivalent is also provided. This method of ranking shows which drugs have the highest percentage share of payments. Also included is the average price per unit (PPU). (See the Glossary for the definition of *unit*.)

Chart 58

Top 10 Workers Compensation Drugs by Amount Paid

Drug Name	Average PPU			South Dakota Paid Share
	SD	Region	CW	
Pregabalin	\$3.65	\$4.34	\$4.61	7.5%
Oxycontin®	\$7.55	\$9.70	\$9.67	7.1%
Fentora®	\$135.44	N/A	\$127.22	6.6%
Duloxetine HCl	\$3.54	\$4.02	\$4.44	5.3%
Gabapentin	\$0.68	\$0.79	\$0.91	4.7%
Nucynta®	\$8.02	\$8.40	\$8.86	4.0%
Lyrica®	\$8.46	\$8.49	\$8.47	2.3%
Baclofen	\$1.34	\$1.58	\$1.64	2.2%
Lidocaine	\$4.05	\$6.75	\$6.49	2.1%
Dupixent®	\$821.76	\$796.40	\$810.40	2.1%

Drug Name	B/G	Common Brand Name	Category	CSA Schedule	CW Rank
Pregabalin	G	Lyrica®	Miscellaneous Central Nervous System Agents	V	1
Oxycontin®	B	N/A	Analgesics/Antipyretics	II	5
Fentora®	B	N/A	Analgesics/Antipyretics	II	134
Duloxetine HCl	G	Cymbalta®	Psychotherapeutic Agents	None	8
Gabapentin	G	Neurontin®	Anticonvulsants	None	4
Nucynta®	B	N/A	Analgesics/Antipyretics	II	20
Lyrica®	B	N/A	Miscellaneous Central Nervous System Agents	V	24
Baclofen	G	Lioresal®	Muscle Relaxants, Skeletal	None	14
Lidocaine	G	Lidoderm®	Antipruritics/Local Anesthesia, Skin/Mucous Membrane	None	3
Dupixent®	B	N/A	Immunosuppressants	None	109



Chart 59 displays the top 10 drugs used in workers compensation treatment, according to the number of prescriptions in South Dakota. This chart reveals the most frequently prescribed drugs and the average PPU.

Chart 59

Top 10 Workers Compensation Drugs by Prescription Counts

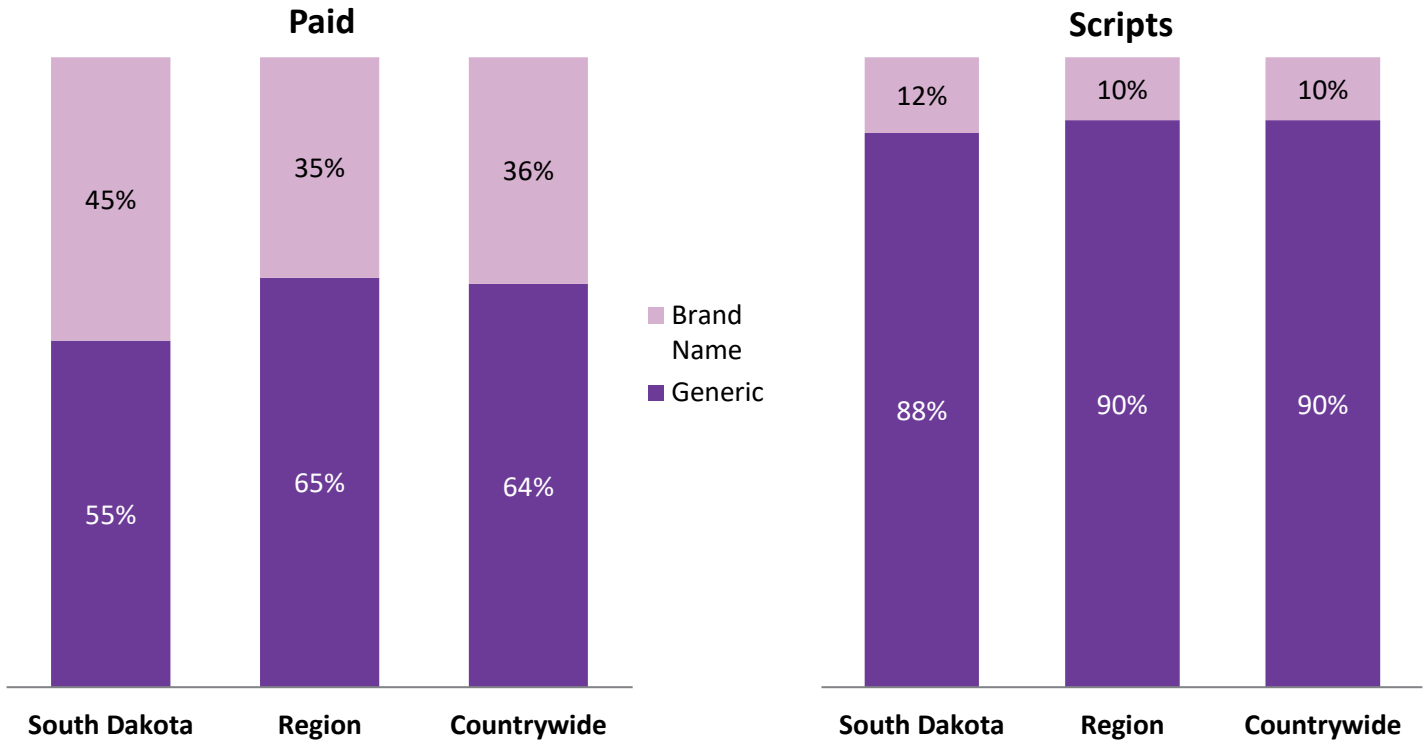
Drug Name	Average PPU			South Dakota Prescription Share
	SD	Region	CW	
Gabapentin	\$0.68	\$0.79	\$0.91	7.5%
Tramadol HCl	\$0.57	\$0.84	\$0.90	6.4%
Hydrocodone Bitartrate-Acetaminophen	\$0.47	\$0.52	\$0.53	6.2%
Duloxetine HCl	\$3.54	\$4.02	\$4.44	5.1%
Pregabalin	\$3.65	\$4.34	\$4.61	3.8%
Cyclobenzaprine HCl	\$0.76	\$1.43	\$1.74	3.7%
Meloxicam	\$1.79	\$2.88	\$3.03	3.6%
Oxycodone HCl	\$0.52	\$0.67	\$0.80	3.3%
Baclofen	\$1.34	\$1.58	\$1.64	2.3%
Oxycodone HCl-Acetaminophen	\$1.00	\$0.89	\$0.97	2.2%

Drug Name	B/G	Common Brand Name	Category	CSA Schedule	CW Rank
Gabapentin	G	Neurontin®	Anticonvulsants	None	2
Tramadol HCl	G	Ultram®	Analgesics/Antipyretics	IV	6
Hydrocodone Bitartrate-Acetaminophen	G	Vicodin®	Analgesics/Antipyretics	II	1
Duloxetine HCl	G	Cymbalta®	Psychotherapeutic Agents	None	14
Pregabalin	G	Lyrica®	Miscellaneous Central Nervous System Agents	V	12
Cyclobenzaprine HCl	G	Flexeril®	Muscle Relaxants, Skeletal	None	3
Meloxicam	G	Mobic®	Analgesics/Antipyretics	None	5
Oxycodone HCl	G	Oxycontin®	Analgesics/Antipyretics	II	9
Baclofen	G	Lioresal®	Muscle Relaxants, Skeletal	None	17
Oxycodone HCl-Acetaminophen	G	Percocet®	Analgesics/Antipyretics	II	7

Chart 60 shows the distribution of prescription drugs by brand name and generic for South Dakota, the region, and countrywide. The share between brand name and generic 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 many states, a prescription drug fee schedule includes rules regarding the dispensing and reimbursement rates for brand name and generic drugs.

**Chart 60**

**Distribution of Drugs by Brand Name and Generic**



The rules on drug dispensing vary from state to state. Some states allow physician dispensing of drugs, while other states limit 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.

Chart 61 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 countrywide.

**Chart 61**

**Distribution of Drugs by Pharmacy and Nonpharmacy**

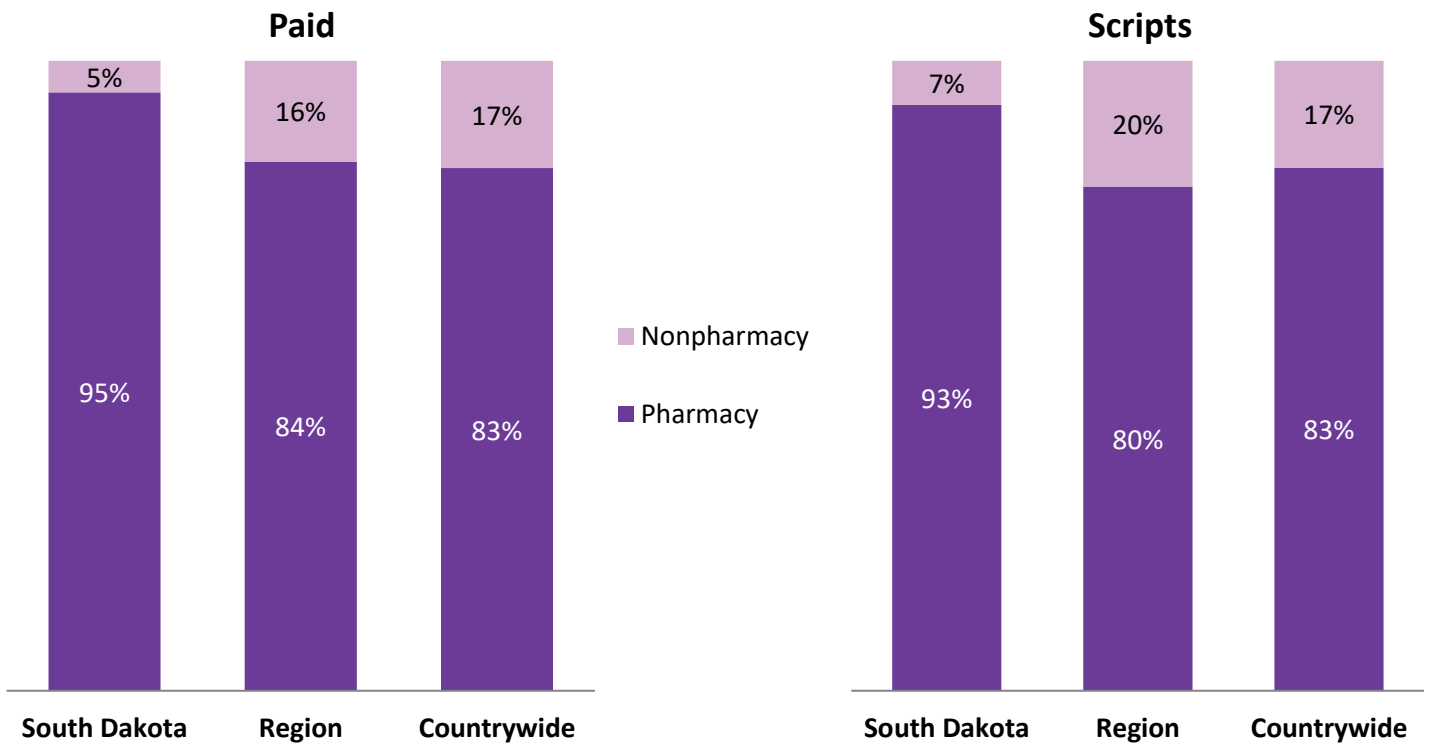




Chart 62 displays the shares of the payments for the top 5 nonpharmacy-dispensed prescription drugs used in workers compensation treatment, by amount paid in South Dakota. A pharmacy-dispensed comparison, along with values for the region and countrywide, are also included. All values shown below are specific either to nonpharmacy-dispensed prescription drugs or to pharmacy-dispensed prescription drugs.

Chart 62

Top 5 Nonpharmacy-Dispensed Drugs by Amount Paid with Pharmacy-Dispensed Comparison

Drug Name	Nonpharmacy-dispensed				Pharmacy-dispensed			
	Paid Share	SD PPU	Region PPU	CW PPU	Paid Share	SD PPU	Region PPU	CW PPU
Botox®	22.0%	\$451.65	\$211.57	\$252.95	N/A	N/A	\$531.20	\$650.14
Zerbaxa®	12.3%	\$99.00	N/A	\$99.00	N/A	N/A	\$93.41	\$93.41
Synvisc One®	8.9%	\$104.18	\$90.32	\$85.21	N/A	N/A	\$227.46	\$214.14
Boostrix®	6.1%	\$60.94	\$57.76	\$55.55	N/A	N/A	\$64.98	\$56.86
Naproxen	5.2%	\$1.10	\$1.24	\$1.28	0.2%	\$0.55	\$0.80	\$0.83

Drug Name	B/G	Common Brand Name	Category	CSA Schedule	Nonpharmacy CW Rank
Botox®	B	N/A	Toxins	None	9
Zerbaxa®	B	N/A	Antibiotics	None	256
Synvisc One®	B	N/A	Biological Lubricant	None	32
Boostrix®	B	N/A	Serums, Toxoids, Vaccines	None	33
Naproxen	G	Aleve®	Analgesics/Antipyretics	None	26



## Durable Medical Equipment, Prosthetics, Orthotics, and Supplies

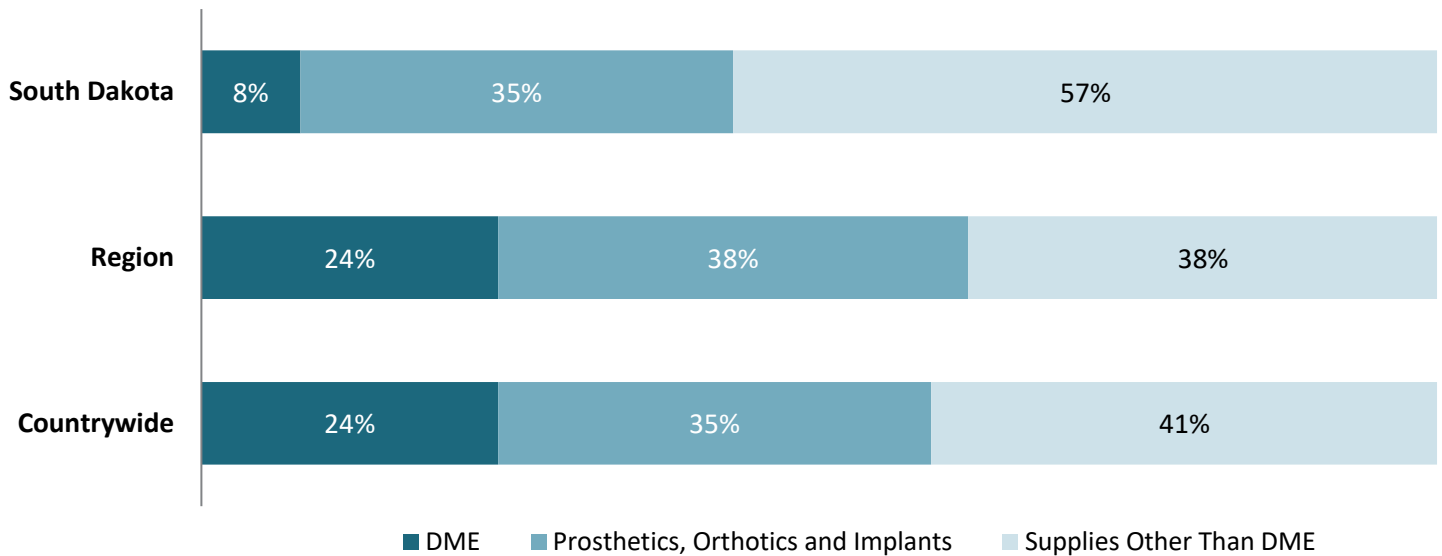
The distribution of medical payments for DMEPOS is 12% for South Dakota, 7% for the region, and 8% for countrywide.

Chart 63 displays the distribution of payments among three separate DMEPOS categories:

- Durable Medical Equipment (DME)
- Prosthetics, Orthotics and Implants
- 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 63**  
**Distribution of Payments by DMEPOS**





Injuries that include an implant or prosthetic device tend to be more expensive than other injuries. Chart 64 shows the top 10 diagnosis groups for claims that include an implant or a prosthetic device by total paid amount. Chart 65 shows the same diagnosis groups with the average amount paid per claim for claims that do not include an implant or prosthetic.

Chart 64

**Top Diagnosis Groups by Amount Paid for Dates of Injury in 2019 for Claims *With* an Implant or Prosthetic**

Diagnosis Group	Paid Share	Average Amount Paid Per Claim South		
		Dakota	Region	Countrywide
Rotator cuff tear	13.4%	\$53,800	\$43,356	\$39,641
Tibia/fibula fracture	10.5%	\$72,916	\$76,202	\$78,888
Traumatic brain injury	6.3%	\$329,651	\$268,413	\$274,511
Hip/pelvis fracture/major trauma	5.9%	\$88,650	\$79,075	\$80,031
Degenerative shoulder	4.8%	\$55,798	\$44,061	\$43,012
Ankle fracture	4.3%	\$32,158	\$35,858	\$38,542
Hand/wrist fracture	3.9%	\$22,684	\$28,390	\$28,519
Edema, not elsewhere classified	3.1%	\$318,648	N/A	\$96,595
Injury of blood vessels at lower leg level	2.7%	\$283,090	N/A	\$130,598
Cervical spine degeneration	2.6%	\$68,090	\$77,162	\$70,717

Chart 65

**Average Amount Paid per Claim *Without* an Implant or Prosthetic for Diagnosis Groups in Chart 64**

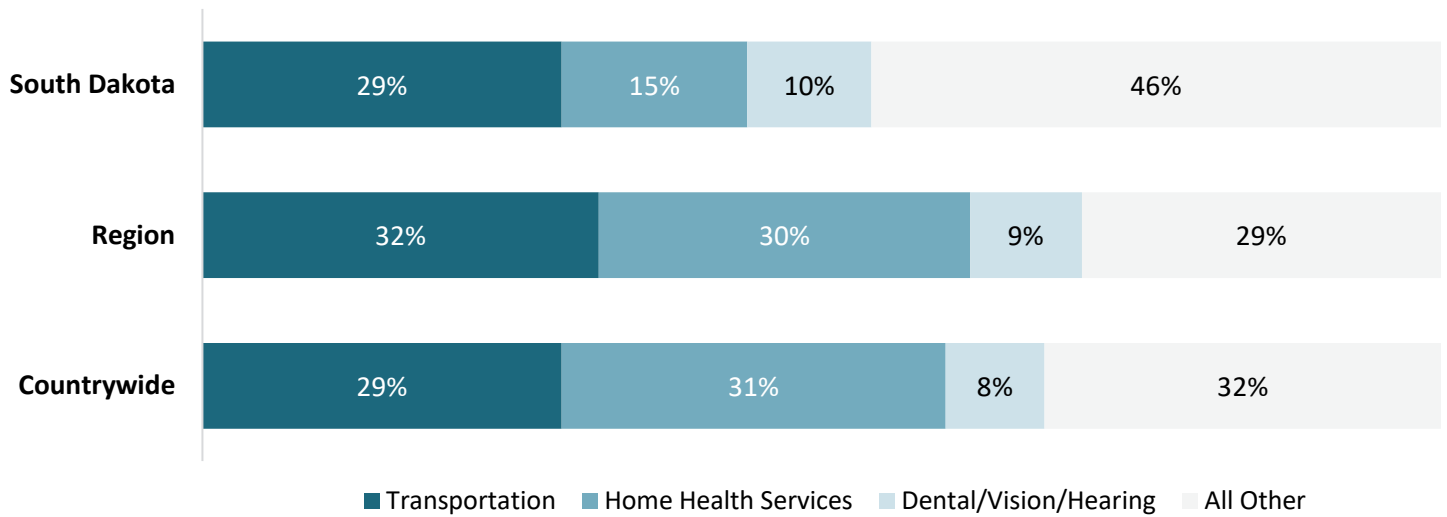
Diagnosis Group	Average Amount Paid Per Claim South		
	Dakota	Region	Countrywide
Rotator cuff tear	\$19,728	\$24,924	\$19,965
Tibia/fibula fracture	\$11,771	\$16,216	\$18,063
Traumatic brain injury	\$49,402	\$43,902	\$46,768
Hip/pelvis fracture/major trauma	\$31,343	\$37,744	\$38,263
Degenerative shoulder	\$17,795	\$18,716	\$18,238
Ankle fracture	\$19,636	\$18,185	\$15,730
Hand/wrist fracture	\$5,765	\$6,011	\$5,981
Edema, not elsewhere classified	\$2,343	\$2,485	\$2,063
Injury of blood vessels at lower leg level	\$250	\$9,689	\$13,347
Cervical spine degeneration	\$18,565	\$21,550	\$19,357



### Other Medical Services

For Service Year 2020, other medical services represent 5% of total medical costs countrywide. Chart 66 shows the distribution of these services by four categories: transportation, home health services, dental/vision/hearing, and all other. The “All Other” category typically includes services that may have a missing, invalid, or unlisted procedure, in addition to some other valid services (e.g., payments for interpreters, vehicle modifications, etc.).

**Chart 66**  
**Distribution of Other Medical Services Payments**





**Diagnosis Group and Body System**

Charts 67 and 68 display the top 10 body systems and diagnosis groups, respectively. A body system and diagnosis group are identified for each claim based on an ICD-10 code. 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 body systems and diagnosis groups are ranked by total claim payments for South Dakota. This method of ranking shows which body systems and diagnosis groups have the highest percentage share of payments. Payments are based on claims with dates of injury between January 1, 2019, and December 31, 2019, and they include all reported services provided for those claims through December 31, 2020.

**Chart 67**

**Top Body Systems by Amount Paid for Dates of Injury in 2019**

Body System	Paid Share	Average Amount Paid Per Claim South		
		Dakota	Region	Countrywide
Shoulder	22.7%	\$10,294	\$12,292	\$9,995
Hand/wrist	10.6%	\$1,803	\$2,734	\$2,427
Knee	10.5%	\$5,447	\$6,984	\$6,096
Lumbar spine	8.1%	\$2,999	\$5,035	\$4,584
Ankle/foot	7.4%	\$3,662	\$4,062	\$3,666
Leg	6.5%	\$6,650	\$6,929	\$6,606
Head	6.2%	\$4,694	\$3,806	\$3,934
Arm	4.7%	\$4,617	\$6,248	\$5,895
Neck	3.8%	\$3,361	\$6,852	\$6,178
Symptoms not otherwise classified	2.3%	\$3,368	\$3,149	\$2,875

**Chart 68**

**Top Diagnosis Groups by Amount Paid for Dates of Injury in 2019**

Diagnosis Group	Paid Share	Average Amount Paid Per Claim South		
		Dakota	Region	Countrywide
Rotator cuff tear	9.5%	\$25,371	\$28,488	\$23,192
Minor shoulder injury	4.3%	\$3,094	\$5,669	\$4,660
Hand/wrist fracture	4.2%	\$6,969	\$7,709	\$7,480
Knee internal derangement - meniscus injury	4.2%	\$13,790	\$15,326	\$13,347
Minor hand/wrist injuries	3.7%	\$833	\$1,471	\$1,330
Tibia/fibula fracture	3.6%	\$30,115	\$28,482	\$30,785
Traumatic brain injury	3.3%	\$82,372	\$58,947	\$71,118
Degenerative shoulder	2.8%	\$25,072	\$21,839	\$21,633
Lumbosacral intervertebral disc disorders	2.6%	\$15,134	\$23,515	\$20,240
Ankle fracture	2.3%	\$24,019	\$22,660	\$20,561

## Comparison of Selected Results by Year

The charts in this section provide a comparison of results for South Dakota. These comparisons are over the latest five service years unless otherwise noted. 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.

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 (Chart 4)**

Medical Category	2016	2017	2018	2019	2020
Physician	26%	25%	25%	25%	24%
Hospital Outpatient	31%	32%	32%	35%	36%
Hospital Inpatient	13%	13%	15%	12%	12%
Drugs	13%	13%	11%	11%	11%
DMEPOS	10%	11%	12%	11%	12%
ASC	4%	3%	2%	1%	1%
Other	3%	3%	3%	5%	4%

**Distribution of Physician Payments by AMA Service Category (Chart 6)**

AMA Service Category	2016	2017	2018	2019	2020
Physical Medicine	27%	30%	27%	28%	28%
Surgery	27%	28%	30%	29%	28%
Evaluation and Management	23%	21%	22%	22%	22%
Radiology	11%	10%	10%	10%	10%
Anesthesia	5%	5%	6%	5%	5%
General Medicine	4%	4%	3%	3%	4%
Other	2%	1%	1%	2%	2%
Pathology	1%	1%	1%	1%	1%

**Median Time Until First Treatment (in Days) (Charts 11, 14, 17, 20, 31, 42, 47, and 53)<sup>10</sup>**

Medical Category	AY 2015	AY 2016	AY 2017	AY 2018	AY 2019
Physicians – Major Surgery	36	33	33	35	30
Physicians – Radiology	1	1	1	1	1
Physicians – Physical and General Medicine	10	12	12	12	13
Physicians – Evaluation and Management	2	1	2	2	2
Hospital Inpatient	0	0	0	0	0
Hospital Outpatient – Major Surgery	70	69	59	59	62
Hospital Outpatient – All Other	20	16	18	19	20
ASC – Major Surgery	48	41	44	31	76

**75th Percentile of Time Until First Treatment (in Days) (Charts 11, 14, 17, 20, 31, 42, 47, and 53)<sup>10</sup>**

Medical Category	AY 2015	AY 2016	AY 2017	AY 2018	AY 2019
Physicians – Major Surgery	111	109	102	103	99
Physicians – Radiology	7	7	7	7	6
Physicians – Physical and General Medicine	34	37	36	38	42
Physicians – Evaluation and Management	9	8	10	11	11
Hospital Inpatient	4	5	15	7	11
Hospital Outpatient – Major Surgery	140	141	133	138	137
Hospital Outpatient – All Other	51	48	51	49	52
ASC – Major Surgery	119	111	120	77	163

**Hospital Inpatient Statistics (Charts 27 and 29)**

	2016	2017	2018	2019	2020
Average Amount Paid Per Stay	\$30,175	\$29,355	\$28,165	\$28,692	\$31,280
Number of Stays per 1,000 Active Claims	15	16	18	16	15

<sup>10</sup> In the charts displaying the distribution of time until first treatment, the data is organized by the year in which the injury occurred, rather than by service year, and includes services performed within 365 days of the date of injury.

**Distribution of Hospital Outpatient Payments by Outpatient Visit Type (Chart 35)**

Visit Type	2016	2017	2018	2019	2020
Emergency	18%	18%	17%	17%	16%
Nonemergency Major Surgery	45%	50%	52%	54%	53%
Other	37%	32%	31%	29%	31%

**Emergency Hospital Outpatient Statistics (Charts 36 and 37)**

	2016	2017	2018	2019	2020
Average Amount Paid Per Visit	\$1,038	\$1,080	\$1,027	\$1,209	\$1,335
Number of Visits per 1,000 Active Claims	182	195	204	189	163

**Emergency Room Outpatient Services Paid per Transaction (Chart 39)**

Code	Severity	2016	2017	2018	2019	2020
99281	Minor	\$107	\$105	\$95	\$113	\$108
99282	Low to moderate	\$158	\$172	\$189	\$217	\$250
99283	Moderate	\$221	\$247	\$276	\$293	\$348
99284	High	\$363	\$394	\$437	\$440	\$501
99285	High and immediately life-threatening	\$669	\$830	\$713	\$783	\$968

**Nonemergency Major Surgery Hospital Outpatient Statistics (Charts 40 and 41)**

	2016	2017	2018	2019	2020
Average Amount Paid Per Visit	\$8,268	\$8,752	\$9,427	\$10,706	\$10,905
Number of Visits per 1,000 Active Claims	57	68	69	70	69

**Other Hospital Outpatient Statistics (Charts 45 and 46)**

	2016	2017	2018	2019	2020
Average Amount Paid Per Visit	\$376	\$316	\$309	\$324	\$341
Number of Visits per 1,000 Active Claims	1,049	1,218	1,252	1,209	1,250

**ASC Major Surgery Statistics (Charts 51 and 52)**

	2016	2017	2018	2019	2020
Average Amount Paid Per Visit	\$7,322	\$7,272	\$6,683	\$5,574	\$5,417
Number of Visits per 1,000 Active Claims	14	14	11	4	3

**Distribution of Prescription Drug Payments by CSA Schedule (Chart 57)**

<b>CSA Schedule</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Schedule II	30%	29%	25%	25%	26%
Schedule III	1%	1%	1%	1%	1%
Schedule IV	5%	4%	4%	3%	3%
Schedule V	14%	16%	17%	16%	10%
Noncontrolled	50%	50%	53%	55%	60%

**Distribution of Drug Payments by Brand Name and Generic (Chart 60)**

<b>Type of Drug</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Brand Name	47%	48%	50%	49%	45%
Generic	53%	52%	50%	51%	55%

**Distribution of Drug Payments by Pharmacy and Nonpharmacy (Chart 61)**

<b>Type of Provider</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Pharmacy	97%	94%	92%	94%	95%
Nonpharmacy	3%	6%	8%	6%	5%

**Distribution of Payments by DMEPOS (Chart 63)**

<b>Category</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
DME	7%	9%	7%	9%	8%
Prosthetics, Orthotics and Implants	43%	41%	44%	33%	35%
Supplies Other Than DME	50%	50%	49%	58%	57%

**Distribution of Payments by Other Medical Services (Chart 66)**

<b>Category</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Transportation	47%	39%	25%	32%	29%
Home Health Services	12%	15%	34%	18%	15%
Dental/Vision/Hearing	13%	12%	11%	10%	10%
All Other	28%	34%	30%	40%	46%





## Glossary

**75th Percentile:** The point on a distribution that is higher than 75% of observations and lower than 25% of observations.

**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 it generally has a separate fee schedule.

**Controlled Substances:** Drugs that are regulated by the Controlled Substances 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 Groups:** Based on ICD-10 codes; groups based on similar injuries and parts of body.

**Diagnosis-Related Groups (DRG):** A system of hospital payment classifications 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), which is referred to as a prescription drug. 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 Services:** Services performed for patients requiring immediate attention.

**Emergency Visit:** A visit where emergency services are performed.



**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.

**ICD-10 Codes:** The *International Classification of Diseases, Tenth Revision*, is a system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms, and procedures recorded in conjunction with hospital care in the United States.

**Hospital Inpatient 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).

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

**Hospital Outpatient 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).

**International Statistical Classification of Diseases and Related Health Problems (ICD-10):** A classification of diseases and other health problems based on a diagnosis maintained by the World Health Organization (WHO).

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

**Major Surgery Visit:** A visit in which at least one surgery procedure is performed based on the reported procedure code, and where the surgery procedure has a global follow-up period of 90 days, as defined by the Centers for Medicare & Medicaid Services, and is not an injection.

**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.

**Other Outpatient Visit:** A nonemergency outpatient visit where no major surgery services are performed.

**(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.

**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.



**Telemedicine Service:** Services reported with a telemedicine-specific procedure code, modifier, or place of service.

**Time to Treatment (TTT):** The amount of time, measured in days, between the date on which an accident occurs and the date on which the first medical service in a given category is provided.

**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* represent 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, such as milliliters, grams, or 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 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.

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

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 or medical bill review vendors. 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 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).

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