



Research Update

Injury Classification in California Workers' Comp Part 1: Medical Coding During the ICD-10 Transition

Stacy L. Jones

Executive Summary

Accurate injury descriptions are essential to many workers' compensation system activities, including medical care delivery, return to work planning, managed care support services and the setting of claim reserves. Claims adjusters, case managers, utilization review experts and others depend on precise information concerning the evolving nature of an injured worker's health and injury status. This information is derived from the physician's assessment and documentation on medical forms and reports, and from the claims administrator's coding of the nature of injury, cause of injury, and the body part injured, which are noted on required Unit Statistical Reports.¹

Evolving federal and state laws and regulations establish the tools and framework for current injury classification systems. In October 2015, the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) code set, developed and maintained by the World Health Organization, became the standard classification system for all healthcare delivery in the U.S., including group health, federal programs and workers' compensation. A one-year transition period was allowed before the use of the ICD-10 codes became mandatory.

This report, the first in a two-part series, provides a detailed analysis of the components of injury classification and compares ICD-9 diagnostic codes submitted by California workers' comp medical providers under the old coding system to the ICD-10 codes submitted during the first nine months of the transition period. Part 2 of the series will compare the two diagnosis and injury classification systems now used in California workers' compensation: the ICD-10 codes submitted by medical providers and the body part, nature of injury, and cause of injury data noted by claims administrators. Key findings from this initial analysis:

- The top 10 ICD-10 diagnoses accounted for 20.4 percent of the primary diagnoses submitted during the first nine months after the transition to the new coding system began.
- Non-specific low back pain represented 4.4 percent of the 1.8 million ICD-10 codes submitted during the first nine months of the transition period.
- Diagnosis codes related to lumbar spine injuries accounted for 6 of the top 10 ICD-10 codes for services rendered during the initial nine months of the transition period.
- A diagnosis of "injury, unspecified" continued to account for 1.6 percent of primary diagnosis codes under ICD-10, as was the case under ICD-9 submissions.

¹ Data, including losses and payroll by classification, resulting from every workers' compensation insurance policy written in California is reported by the claims administrator to the WCIRB in a Unit Statistical Report (USR). <https://www.wcirb.com/guide-to-workers-compensation/experience-rating/usr>

Background

In October 2015, the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10-CM)² became the required classification system for all healthcare delivery in the United States. The adoption of the ICD-10 system in group health, federal programs (Medicare, Medicaid and Veterans Administration) and workers' compensation allowed for long-awaited and much needed improvements for reporting the nature of the injury, which can be used to correlate the cause, treatment and outcome. In its September 2015 Spotlight Report,³ CWCI provided the chronology and rationale for the conversion to the ICD-10 system in California workers' compensation, which affects the diagnoses used to describe an injured worker's clinical status and to facilitate communication between medical providers, payers, and government agencies.

The transition from the outdated ICD-9 coding system, which had not been updated in 21 years, required a significant effort by individuals and organizations across the healthcare delivery and support spectrum, and included modifications to database structures, data sharing and transfer protocols and agreements, and billing and adjudication forms. In California workers' compensation, those changes affected:

- Medical service providers (physicians, hospitals, ancillary medical providers)
- Medical bill payers (claims administrators, bill review vendors)
- Electronic billing clearinghouses
- Medical dispute resolution organizations, including Utilization Review Organizations (URO), Independent Medical Reviewers (IMR), Independent Medical Examiners/Qualified Medical Examiners (IME/QME)
- The Workers' Compensation Information System (WCIS) used to report claims data to the state
- Medicare Secondary Reporting and Set-Aside reporting
- Public policy research databases

This analysis updates CWCI's earlier report by providing more detailed information on the transition from the ICD-9 coding system to the ICD-10 in California workers' compensation.

The ICD-10 Classification System: Following the lead of the Centers for Medicare and Medicaid Services (CMS), in October 2015, the California Division of Workers' Compensation provided a 12-month transition period that allowed medical providers to utilize ICD-10 codes that did not strictly comply with the level of coding specificity required by the ICD-10 classification structure and format.⁴

² "CM" denotes Clinical Modifications, referring to the United States' clinical modification of the World Health Organization's ICD-10.

³ Jones, S.L., Swedlow A. *CWCI Spotlight Report: ICD-10s and the Workers' Compensation System*. September 2015.

⁴ California Division of Workers' Compensation Medical Billing and Payment Guide, Version 1.2.2, Section 3.0 (a)(2) "Although ICD-10 coding is required on or after October 1, 2015, for a twelve month period ending October 1, 2016, no medical treatment shall be denied based solely on an error in the level of specificity of the ICD-10 diagnosis code(s) used."

The specificity of ICD-10 coding is driven by the classification system structure and format and includes categories, subcategories and codes. All categories are three-digit characters (Appendix 1 contains a complete list of the ICD-10 categories), and most of these categories are broken out into subcategories. Subcategories are either 4 or 5 characters, and may be further subdivided into 6 or 7 character codes. A code is the final level of subdivision and may be 3, 4, 5, 6 or 7 characters. An example of required digits under the ICD-10 coding structure is shown below:

M25 – Category code for “Other joint disorder, not elsewhere classified but a 4th character is required:

M25.5 – “Pain in joint” a 5th character is required:

M25.51 – “Pain in shoulder” a 6th character is required:

M25.511 – “Pain in right shoulder”

In this example the valid code used to communicate the diagnosis of pain in the right shoulder would be M25.511. Use of the M25, M25.5 or the M25.51 codes would be considered invalid because they do not represent the final subdivision. Note that the 6th character identified laterality, which is a component of ICD-10 that was not included in ICD-9 and accounts for about 40 percent of the codes.

Under the ICD-10 classification system, injuries are grouped first by anatomical site, whereas the ICD-9 classification system grouped first by type of injury. The ICD-10 coding structure shows separate categories for each part of the back (S13 for cervical and S33 for lumbar), which are then further subdivided by injury and type of encounter. The example below shows the ICD-10 coding structures for three different types of medical visits for a sprain of the cervical spine (an initial visit, subsequent visit, and a visit for treatment of an aftereffect of the injury):

S13 Dislocation and sprain of joints and ligaments at neck level

S13.4 Sprain of ligaments of cervical spine

S13.4XXA Sprain of ligaments of cervical spine, **initial encounter**

S13.4XXD Sprain of ligaments of cervical spine, **subsequent encounter**

S13.4XXS Sprain of ligaments of cervical spine, **sequela**

The 4th, 5th, 6th and 7th characters provide greater detail of etiology, anatomical site, and severity. A code is invalid if it has not been coded to the full number of characters required for that code, including the 7th character, if applicable.⁵

The type of encounter is identified by the 7th character when required, and the ICD-10 system utilizes “X” as a placeholder to allow for future subcategory expansion where a 6th character does not exist. The addition of the 7th character is intended to indicate whether the encounter is the initial visit with the physician for the injury or condition, while subsequent encounters are defined as those where the patient receives care during the healing or recovery phase. The 7th character (S) indicates sequela, and is used for complications or conditions that arise from the injury (i.e., chronic pain is sequela of the injury). An additional example of the specificity enabled by the ICD-10 subdivisions and 7th characters is provided in Appendix 2.

⁵ Centers for Medicare & Medicaid Services (CMS). *ICD-10-CM Official Guidelines for Coding and Reporting FY 2016*. Retrieved from <https://www.cms.gov/medicare/coding/icd10/downloads/2016-icd-10-cm-guidelines.pdf>

Objective of this Research

The 12-month transition period from the ICD-9 system to the ICD-10 system ended September 30, 2016, so all ICD-10 codes submitted for California workers' compensation medical services since then should be coded at the required specificity level. The objective of this research is to assess the level of coding compliance during the initial period after the ICD-10 transition began in October 2015.

The report also provides benchmark data for measuring changes in California workers' compensation medical coding by examining the codes submitted for California workers' compensation medical services rendered in the final nine months under the old ICD-9 system (January through September 2015) and comparing those results to the new ICD-10 codes submitted for services in the first nine months after the transition to the ICD-10 system began (October 2015 through June 2016).

To measure the level of reporting that is taking place, the author determined the distribution of primary ICD-10 codes submitted for services provided during the transition period, with results broken out by the number of characters within the submitted code to assess the level of detail. Because there are significantly more codes under the ICD-10 system, if they were utilized, the transition period results should show billing submissions dispersed across a wider range of codes. To evaluate whether that was the case, the author identified the 10 most heavily utilized codes for services rendered during the final nine months under the old ICD-9 system, as well as the 10 most heavily used ICD-10 codes for services rendered during the first nine months under the new system, then calculated and compared the percentage of all codes represented by those top 10 lists.

Because the ICD-10 system uses more detailed codes that define the type of encounter (initial visit, subsequent visit, or a sequela visit for a condition that was an outgrowth of the original injury) the author combined the various encounter subcategories for each primary diagnosis category to produce a revised ranking of the top 10 diagnoses submitted under the ICD-10 system. These rankings were then compared to the top 10 ICD-9 codes from the prior nine-month period to see if there had been a shift in the types of diagnoses submitted under the new coding system.

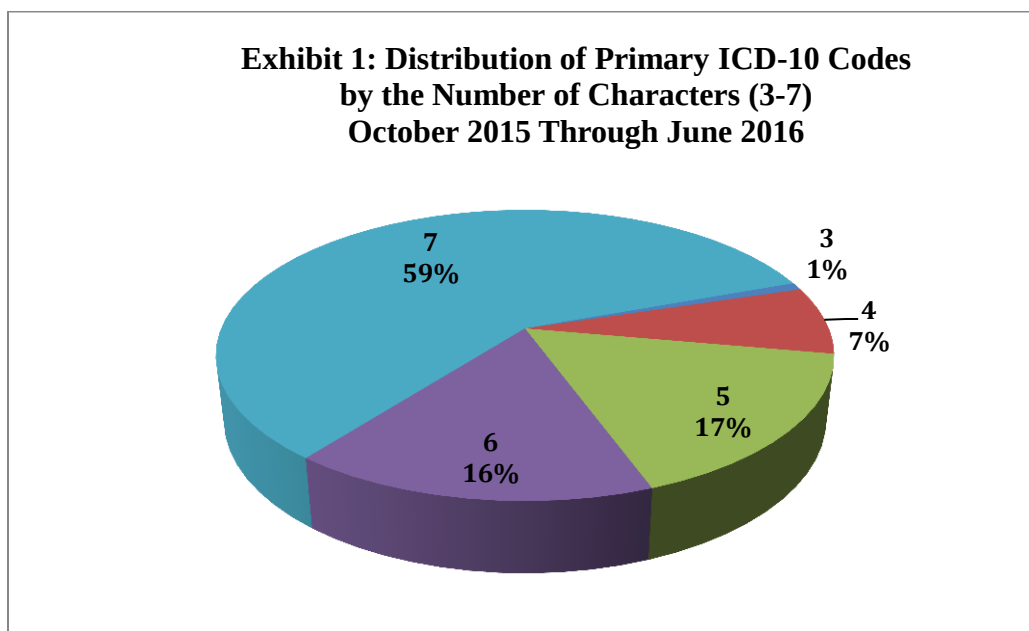
Data and Methods

To compare reporting of ICD-9 and ICD-10 codes before and after the transition began in October 2015, the author extracted diagnosis code data for all medical bills, excluding pharmacy, with dates of service between January 1, 2015 and June 30, 2016 from CWCI's Industry Research Information System (IRIS) database.⁶ The counts were tabulated based on claim identification number, date of service and associated primary ICD-9 or ICD-10 code. The medical bills for services rendered during from January through September 2015 contained 5,095 distinct ICD-9 codes, which encompassed a total of 1.7 million submissions, while the bills for medical services rendered from October 2015 through June 2016 contained 17,678 distinct ICD-10 codes, encompassing 1.8 million submissions. A complete list of the ICD-9 and ICD-10 category chapters, the code counts for each chapter is in Appendix 1. The distribution of primary diagnosis codes for each nine-month study period is also included in the Appendix 1 tables.

Findings

Distribution of Submitted Medical Bills by Number of ICD-10 Code Characters

The initial analysis of coding specificity involved a simple calculation of the number of characters in the submitted ICD-10 code and the proportion of codes with 3, 4, 5, 6 or 7 characters. The distribution of codes by number of characters is shown in Exhibit 1.



Just 1 percent of all ICD-10 codes submitted for services in the first 9 months of the ICD-10 transition period used only 3 code characters, so the vast majority of the submitted codes provided detail to the first subdivision level or greater. Furthermore, nearly 6 out of 10 (59 percent) of the submitted codes included a 7th character to indicate an initial, subsequent or sequela encounter.

⁶ IRIS is CWCI's proprietary database containing data on employee and employer characteristics, medical service data, benefits, and administrative costs on approximately 5 million California workers' compensation claims.

The top ten ICD-9 diagnosis codes submitted for California workers' compensation medical services rendered during the last nine months of the ICD-9 system are listed in Exhibit 2. Together these 10 codes accounted for 30.4 percent of all ICD-9 codes submitted during this period.

Exhibit 2: Top Ten ICD-9 Codes in Rank Order (Services 01/01/15 – 9/30/15)

ICD-9	% of Total	Description
847.2	7.2%	Sprains and strains, lumbar
847.0	4.6%	Sprains and strains, neck
719.41	3.0%	Pain in joint, shoulder region
354.0	2.4%	Carpal tunnel syndrome
719.46	2.3%	Pain in joint, lower leg
724.4	2.3%	Thoracic or lumbosacral neuritis or radiculitis, unspecified
724.2	2.3%	Lumbago
840.9	2.1%	Sprains and strains of unspecified site of shoulder and upper arm
722.10	2.1%	Displacement of lumbar intervertebral disc without myelopathy
723.1	2.1%	Cervicalgia
Top 10	30.4%	

Exhibit 3 shows the top ten ICD-10 codes submitted for medical services rendered in the first nine months of the transition period and the proportion of all ICD-10 codes represented by each of these codes. As noted at the bottom of the table, the 10 most heavily used ICD-10 codes for services rendered during this period accounted for 17.7 percent of all ICD-10 codes submitted. The significantly smaller share of ICD-10 codes represented by the top 10 codes reflects the expansion of the descriptive codes related to laterality and encounter type (e.g., initial, subsequent, sequelae, etc.) in the ICD-10 system.

Exhibit 3: Top Ten ICD-10 Codes Submitted for Services Rendered 10/1/15 – 6/30/16

ICD-10	% of Total	Code Description
M54.5	4.4%	Low back pain
M54.2	2.1%	Cervicalgia
T14.90	1.6%	Injury, unspecified
M54.16	1.6%	Radiculopathy, lumbar region
S33.5XXA	1.4%	Sprain of ligaments of lumbar spine, initial encounter
M25.511	1.4%	Pain in right shoulder
M51.26	1.3%	Other intervertebral disc displacement, lumbar region
G56.01	1.3%	Carpal tunnel syndrome, right upper limb
S39.012D	1.3%	Strain of muscle, fascia and tendon of lower back, subsequent encounter
S33.5XXD	1.3%	Sprain of ligaments of lumbar spine, subsequent encounter
Top 10	17.7%	

Exhibit 4 reflects a revised ranking of the top ten ICD-10 diagnoses based on a rollup of diagnosis codes for different types of visits within a subcategory for the same nine-month period. Combining the codes for the initial and subsequent encounters related to a diagnosis of sprain of lumbar spine ligaments (S33.5XXA & S33.5XXD) results in the diagnosis moving into the number two spot in the rankings, behind M54.5 for low back pain. Including the sequela encounter code (S33.5XXS – 0.1 percent) and the incorrectly submitted category code S33.5 (0.5%) increases the total percentage for sprain of lumbar spine ligaments to 3.2 percent of total ICD-10 codes submitted. Similarly, when the initial and sequela encounters for strain of muscle, fascia and tendon of the lower back are combined with the subsequent encounters (S39.012D), this diagnosis increases to 2.3 percent of the total ICD-10 codes submitted, and moves up to number three on the list of top 10 diagnoses. Furthermore, after combining the different encounter subcategories for all of the diagnoses on the top 10 ICD-10 list, the adjusted results show the 10 most heavily utilized codes accounted for 20.2 percent of the rolled up diagnosis codes, which was still a notably smaller share than the 30.4 percent of all submissions accounted for by the top 10 ICD-9 codes.

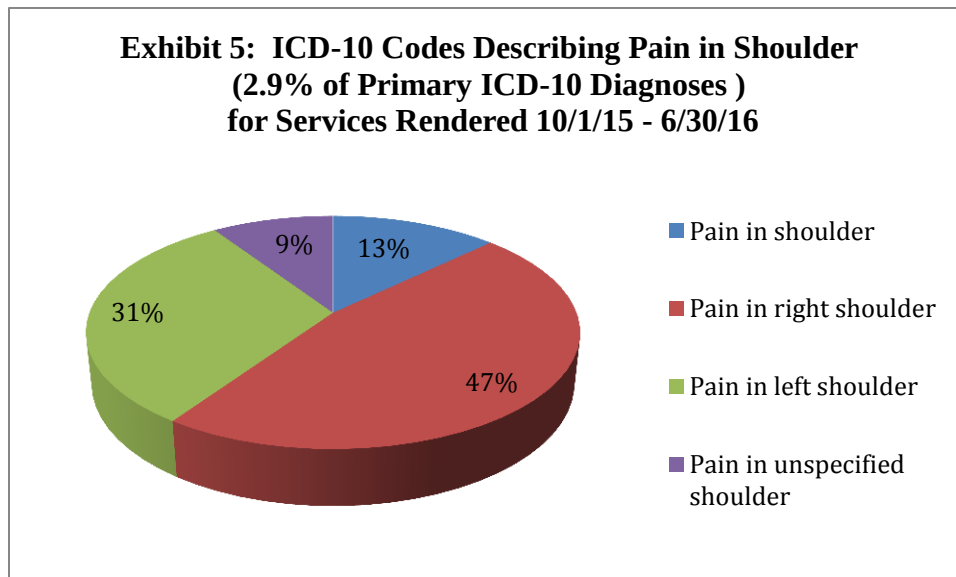
Exhibit 4: Adjusted Top Ten ICD-10 Codes (combining encounter subcategories) for Services Rendered 10/1/15 – 6/30/16

ICD-10	% of Total	Code Description
M54.5	4.4%	Low back pain
S33.5, S33.5XXA, D, S	3.2%	Sprain of ligaments of lumbar spine
S39.012, S39.12A, D, S	2.3%	Strain of muscle, fascia and tendon of lower back
M54.2	2.1%	Cervicalgia
T14.90	1.6%	Injury, unspecified
M54.16	1.6%	Radiculopathy, lumbar region
M25.511	1.4%	Pain in right shoulder
M51.26	1.3%	Other intervertebral disc displacement, lumbar region
G56.01	1.3%	Carpal tunnel syndrome, right upper limb
M51.36	1.0%	Other intervertebral disc degeneration, lumbar region
Top 10	20.2%	

There were 5,095 distinct ICD-9 codes in the study data set, compared to 17,678 distinct ICD-10 codes in the ICD-10 data set, which in part explains the higher combined proportion accounted for by the top 10 ICD-9 codes. Relatively non-descriptive pain in the low back (lumbago) represented 4.4 percent of the 1.8 million ICD-10 codes submitted for services in the transition period and 2.3 percent of the 1.7 million ICD-9 codes submitted for services in the nine months prior to the transition. Pain in the neck (cervicalgia) represented 2.1 percent of the ICD-10 and ICD-9 code populations, though this diagnosis, which ranked 10th among ICD-9 codes, ranked 4th among the ICD-10 codes, reflecting the expanded number of codes under the new system.

Lumbar spine injury codes accounted for six of the top 10 ICD-10 diagnosis codes submitted for services in the first nine months of the transition period. While the ICD-10 system provides detailed levels of specificity that can be used to identify and describe similar types of injuries to a specific anatomical region, Exhibit 4 shows that the lumbar spine codes that were submitted ranged from very low specificity (i.e., “low back pain,” which was the number one code submitted) to more specific radiculopathy, disc displacement and disc degeneration diagnoses.

ICD-10 codes describing shoulder pain (M25.51, M25.511, M25.512 and M25.519) together comprised 2.9 percent of all primary diagnostic codes submitted for services in the first nine months of the transition period, which ranked third among all diagnoses during the period. Exhibit 5 shows the distribution of the codes that were submitted for the shoulder pain diagnoses. While 78 percent of the ICD-10 codes submitted for the treatment of shoulder pain included a sixth character code (laterality) to identify which shoulder was injured (47 percent were right shoulder injuries, 31 percent were left shoulder injuries), more than one in five (22 percent) failed to provide this subcategory information, and instead only provided a code for “pain in shoulder” or “pain in unspecified shoulder.”



While low back pain, neck pain and right shoulder pain represent low specificity diagnoses, the ICD-10 diagnosis code that provides the least detail is T14.90, which represents the vaguest diagnosis, described as an injury that is unspecified to a body part that is also unspecified. A diagnosis of “injury, unspecified,” reported with ICD-10 code T14.90, or its predecessor, ICD-9 code 959.9 (injury, other and unspecified, unspecified site), accounted for 1.6 percent of the primary diagnoses in both the ICD-10 and the ICD-9 study populations.

Discussion

The primary purpose behind the adoption of the ICD-10 system as the standard classification system for healthcare delivery in the U.S. was to provide more detailed and accurate descriptions of a patient’s clinical status, which in turn would improve the quality of information communicated between medical providers, providers and payers, and payers and government agencies. The additional detail also was expected to result in more accurate reporting of the nature of injury, which can be used to correlate cause, treatment and outcome, improve clinical decision making and make it easier to identify fraud and abuse.

In California workers’ compensation, the changes in databases, data transfer protocols and business processes under the ICD-10 system required a significant and ongoing commitment of resources by healthcare providers, claims administrators, utilization review organizations, independent medical reviewers, independent medical examiners/qualified medical examiners,

medical bill payers, state regulators, and public policy researchers. Diagnosis codes, which must be included in a Doctor's First Report of Injury, progress reports and Requests for Authorization (RFAs), are used to communicate the medical condition(s) being treated, and these codes should correlate with those submitted with medical service charges. Treatment plans and diagnostic studies are intended to address clinical symptoms and medical conditions that may be diagnosed to a greater or lesser degree at any point in time, supporting the use of the most accurate diagnosis code descriptors.

This study finds that 99 percent of the ICD-10 codes submitted for California workers' compensation medical services in the first nine months of the transition period provided detail to the first subdivision level or greater, which is perhaps not surprising since the transition to these same codes was concurrently taking place in all other healthcare programs. Furthermore, the study confirms that compared to the final months under the ICD-9 system, the submitted ICD-10 codes during the first nine months of the transition period were much more broadly dispersed across a wide range of diagnoses – a result that was widely anticipated given that the number of available codes more than tripled. That is not to say, however, that there is no room for improvement, as evidenced by the finding that a large percentage of the ICD-10 codes submitted provided only minimal detail, lacking the additional characters that could better define the injury, identify the type of encounter, and better inform other providers, payers, and others who utilize the codes. Absent specificity in diagnosis codes, payers and others who are involved in delivering medical benefits to injured workers must rely to a greater degree on a careful review of the information contained in the medical providers' chart notes and reports. Codes that offer only minimal information do little to improve communication, and those that describe an unspecified injury to an unspecified body part are not helpful for any purpose, including support of fee-for-service charges.

Diagnosis codes associated with medical treatment also may have to be reported by the workers' compensation claims administrator to the Centers for Medicare and Medicaid Services (CMS) under Section 111 of the Medicare, Medicaid, and SCHIP Extension Act (MMSEA) of 2007.⁷ The ICD-10 codes reported by the workers' compensation claims administrator are used by CMS to identify medical services associated with work-related injuries that were subject to a lump sum settlement, as well as those for which Medicare will not assume primary responsibility and which will instead remain the ongoing responsibility of the workers' compensation payer.

The ICD-10 coding system provides a mechanism for greater specificity for communicating clinical diagnostic information, as depicted in Exhibit 5, but that benefit can only be realized if the information is correctly captured. The transition period for conversion to the ICD-10 system has ended and data on reporting during the transition indicate that progress has been made, but as the importance of accurate coding related to utilization review, consultation services, medical bill payment and federal reporting requirements continues to grow, the results also make it clear that ongoing efforts to utilize the codes to provide more detail and specificity will be required.

The specificity of the diagnosis provided in the medical forms and reports is an important component in helping to accurately and precisely define an injured worker's injury and health

⁷ Centers for Medicare & Medicaid Services. *MMSEA Section 111 Mandatory Insurer Reporting Quick Reference Guide: The what, why, and how of MMSEA Section 111 reporting for non-group health plan (NGHP) insurers Version 1.2.* October 6, 2014.

status, so this review of the ICD-10 codes submitted with medical bills is an important first step in analyzing injury classifications in California workers' compensation. At the same time, the claims administrator also contributes important information that is used to classify the types of injuries that occur within workers' compensation. Part 2 of this series will examine the coding system that claims administrators use for their unit statistical reports to capture data on the injured body part, the nature of injury, and the cause of injury, with a goal of identifying the level of conformity between the two classification systems over the life of a claim.

Appendix 1:

ICD-10 Chapters, Code Ranges and 9-Month Distribution				
Chapter	Code Range	# of Codes in Chapter	Description	Percent of 9-Month Total
1	A00-B99	1,056	Certain infectious and parasitic diseases	0.09%
2	C00-D49	1,620	Neoplasms	0.09%
3	D50-D89	238	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	0.04%
4	E00-E89	675	Endocrine, nutritional and metabolic diseases	0.21%
5	F01-F99	724	Mental, Behavioral and Neurodevelopmental disorders	2.85%
6	G00-G99	591	Diseases of the nervous system	5.02%
7	H00-H59	2,452	Diseases of the eye and adnexa	0.27%
8	H60-H95	642	Diseases of the ear and mastoid processes	0.12%
9	I00-I99	1,254	Diseases of the circulatory system	0.83%
10	J00-J99	336	Diseases of the respiratory system	0.22%
11	K00-K95	706	Diseases of the digestive system	0.54%
12	L00-L99	769	Diseases of the skin and subcutaneous tissue	0.51%
13	M00-M99	6,339	Diseases of the musculoskeletal system and connective tissue	44.07%
14	N00-N99	591	Diseases of the genitourinary system	0.17%
15	O00-O9A	2,155	Pregnancy, childbirth and the puerperium	0.00%
16	P00-P96	417	Certain conditions originating in the perinatal period	0.00%
17	Q00-Q99	790	Congenital malformations, deformations and chromosomal abnormalities	0.05%
18	R00-R99	639	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	1.62%
19	S00-T88	39,869	Injury, poisoning and certain other consequences of external causes	38.95%
20	V00-Y99	6,812	External causes of morbidity	0.47%
21	Z00-Z99	1,178	Factors influencing health status and contact with health services	3.87%

ICD-9 Chapters, Code Ranges and 9-Month Distribution				
Chapter	Code Range	# of Codes in Chapter	Description	Percent of 9-Month Total
1	001-139	1,455	Infectious and parasitic diseases	0.18%
2	140-239	1,208	Neoplasms	0.09%
3	240-279	622	Endocrine, nutritional and metabolic diseases, and immunity disorders	0.21%
4	280-289	162	Diseases of the blood and blood-forming organs	0.04%
5	290-319	661	Mental disorders	2.67%
6	320-389	1,642	Diseases of the nervous system and sense organs	4.97%
7	390-459	560	Diseases of the circulatory system	0.67%
8	460-519	299	Diseases of the respiratory system	0.18%
9	520-579	730	Diseases of the digestive system	0.57%
10	580-629	478	Diseases of the genitourinary system	0.18%
11	630-679	2,092	Complications of pregnancy, childbirth, and the puerperium	0.01%
12	680-709	340	Diseases of the skin and subcutaneous tissue	0.45%
13	710-739	1,161	Diseases of the musculoskeletal system and connective tissue	40.54%
14	740-759	622	Congenital anomalies	0.14%
15	760-779	386	Certain conditions originating in the perinatal period	0.01%
16	780-799	478	Symptoms, signs, and ill-defined conditions	1.57%
17	800-999	7,295	Injury and poisoning	43.35%
Supplementary	E800-E999	1,420	Supplementary classification of external causes of injury and poisonings	0.40%
Supplementary	V01-V89	3,061	Supplementary classification of factors influencing health status and contact with health services	3.79%

Appendix 2: Example of ICD-10 Subdivisions and 7th Character

S99 Other and unspecified injuries of ankle and foot

S99.1 Physeal fracture of metatarsal

S99.10 Unspecified physeal fracture of metatarsal

S99.101 Unspecified physeal fracture of right metatarsal

S99.101A Unspecified physeal fracture of right metatarsal, initial encounter for closed fracture

S99.101B Unspecified physeal fracture of right metatarsal, initial encounter for open fracture

S99.101D Unspecified physeal fracture of right metatarsal, subsequent encounter for fracture with routine healing

S99.101G Unspecified physeal fracture of right metatarsal, subsequent encounter for fracture with delayed healing

S99.101K Unspecified physeal fracture of right metatarsal, subsequent encounter for fracture with nonunion

S99.101P Unspecified physeal fracture of right metatarsal, subsequent encounter for fracture with malunion

S99.101S Unspecified physeal fracture of right metatarsal, sequela

About the Author

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California Workers' Compensation Institute

The California Workers' Compensation Institute (CWCI) , incorporated in 1964, is a private, nonprofit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system. CWCI members include insurers that collectively write more than 83 percent of California workers' compensation direct written premium, as well as many of the largest public and private self-insured employers in the state. Additional information about CWCI research and activities is available on the Institute's website (www.cwci.org).

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