Fourth Edition

CCDS

EXAM Study Guide

Fran Jurcak, MSN, RN, CCDS
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About the Author and Reviewer

Fran Jurcak, MSN, RN, CCDS, Author

Fran Jurcak is an experienced nursing professional and has spent the past 13 years in clinical documentation improvement (CDI). She has utilized her clinical knowledge and experience to provide education, support process improvement, and report outcomes for CDI programs across the country for JA Thomas & Associates and Huron Consulting Group. For the past three years, she has been employed at Iodine Software, where she is the vice president of clinical affairs and is responsible for clinical services and product development. Her goal is to support healthcare systems as they seek to ensure accurate reflection of care provided and resources consumed in patient care via clinical documentation and medical record processes. Additionally, Jurcak is focused on creating efficient workflows, preventing duplication of effort, and supporting professional communication between the clinical and coding teams. She has worked side-by-side with CDI specialists and coding staff, CDI leaders, and corporate executives to develop workflows and processes that support positive outcomes for healthcare organizations. She received the 2017 ACDIS award for Professional Achievement for her efforts in the CDI profession. She is currently serving a three-year term on the ACDIS Advisory Board and also sits on the ACDIS inpatient and outpatient CCDS certification boards.

Sharme Brodie, RN, CCDS, Reviewer

Sharme Brodie, RN, CCDS, is a clinical documentation improvement (CDI) education specialist for HCPro, a division of Simplify Compliance, in Middleton, Massachusetts. Brodie serves as a full-time instructor for CDI Boot Camps and a subject matter expert for ACDIS. She has more than 35 years of experience in the healthcare industry, including multiple areas of nursing, serving in a variety of roles at both large academic and small community hospitals. Prior to joining HCPro, Brodie worked as a consultant providing pro-
gram audits, implementation advice, and continuing education for CDI departments—including physician education—in various healthcare facilities across the country. She has been responsible for the successful implementation and oversight of a CDI department and the revitalization of a CDI department at a small community hospital. She is the co-author of *The Essential Guide to Supporting Quality Care Measures Through Documentation Improvement* and is a frequent contributor of articles for ACDIS’ *CDI Journal* and *CDI Strategies*. Brodie has presented nationally at both the ACDIS Conference and the CDI Outpatient Symposium, and is a frequent co-host on ACDIS Radio.
The healthcare system in the United States continues to undergo a significant transformation motivated by the need to control healthcare costs while delivering quality patient-centered care. The need to accurately reflect the severity of illness and appropriateness of resource consumption in the medical record is imperative for recognition of the severity of illness of patient populations as well as for financial stability. If severity is not properly documented within a patient’s record and consequently not coded properly, it could mean denial of patient care, substantial revenue loss, and lack of recognition of the quality of care provided for both the provider and the hospital. A key component in ensuring accurate and compliant coding and reporting is accurate documentation. It is important to ensure documentation integrity in the medical record in order to achieve the clinical documentation program goals and the function of clinical documentation specialists.

Clinical documentation improvement (CDI) specialists possess knowledge of a wide range of specialized disciplines, including anatomy and physiology, pathophysiology, pharmacology, content of official medical coding guidelines, Centers for Medicare & Medicaid Services regulations, and private payer regulations related to the inpatient prospective payment system (IPPS). They analyze and interpret medical record documentation and formulate appropriate physician queries to benchmark and analyze clinical documentation program performance. This knowledge base is essential to serving as a resource to providers as they document the care they provided in the patient’s medical record. The CCDS Exam Study Guide is designed to provide support to individuals seeking the Certified Clinical Documentation Specialist (CCDS) credential based upon the criteria established by the Association of Clinical Documentation Improvement Specialists (ACDIS).
CDI staff members frequently ask about the availability of an education program or guidebook to help them prepare for the certification exam, so the first edition of this study guide was born back in 2009. Since that time there have been a lot of changes in the profession as well as in the broader healthcare industry. The latest edition reflects current industry philosophy, changes in federal healthcare reimbursement and coding regulations, updates to clinical best practices, and advances in healthcare treatments for common diagnoses. It aims to provide high-level overview information for those seeking to take the exam, which supports current CDI efforts and aligns with clinical examples frequently encountered in the role.

I hope that this study guide continues to serve as a reference that supports successful completion of the credentialing process. As I stated in the first edition, the hard part is not sitting for the exam but putting forth the daily effort of supporting healthcare providers in trying to maneuver through the confusing codes and guidelines that direct healthcare coding and reimbursement today.

**Purpose of Credential**

The purpose of the credentialing process is to recognize those individuals who perform at the highest level in the role during completion of their daily work. The CCDS credential has been created to serve as a mark of distinction for this unique profession, and candidates who pass the exam receive the designation CCDS.

The *CCDS Candidate Handbook* identifies the mission of the credential as follows:

*The mission of the Certified Clinical Documentation Specialist credentialing program is to identify, recognize, and support a high level of experience, proficiency, and know-how among clinical documentation specialists. The program accomplishes this mission by drawing upon a board of experienced clinical documentation specialists hailing from diverse, multidisciplinary fields, including nursing, HIM/coding, quality, and case management. The board has established eligibility requirements to ensure that only experienced professionals with an ability to perform the functions of a clinical documentation specialist may possess this certification.*

This mission is important to understand, as it reflects the purpose of recognizing outstanding professionals in the role. It is not designed to serve as a tool to identify proper candidates. It is neither necessary nor possible to hold the credential prior to working in the role.

The exam content supports the objectives and outline stated in the *CCDS Candidate Handbook*. The handbook is available for free to download on the ACDIS website at [www.acdis.org/certification/ccds/apply](http://www.acdis.org/certification/ccds/apply). Handbook content is reviewed regularly and was updated based upon feedback obtained through a 2015 ACDIS survey completed by current CCDS credentialed professionals. The survey assisted in identifying consistent knowledge common to those employed as CDI specialists, supporting accuracy of the exam content in the credentialing of the role. Information was also obtained regarding how individuals prepared for the exam and suggestions they had for future candidates. This information was used to update not only the exam but also the handbook and this study guide. Additionally, the exam is reviewed and updated regularly as coding guidelines change and impact the industry.
Introduction

Applied Measurement Professionals, Inc. (AMP) provides ACDIS with administrative support for the certification process, including examination development, validation, and other administrative tasks. AMP applies industry standards for development of practice-related, criterion-referenced examinations to assess competency. It provides practice analyses and development of examination specifications and psychometric guidance to the CCDS Certification Committee to assist with examination question writing, development of content, and creation of valid examination instruments, scoring, and reporting of examination results.

Exam Format

The CDI specialist role is complex and multidisciplinary, suitable for coding and clinically knowledgeable professionals who are proficient in analyzing and interpreting medical record documentation and capable of tracking and trending their CDI program goals and objectives. These professionals possess knowledge of healthcare and coding regulations, anatomy, physiology, pharmacology, and pathophysiology. Furthermore, such professionals possess the valuable ability to engage physicians in dialogue and educational efforts regarding how appropriate clinical documentation benefits patient outcomes and the overall well-being of the healthcare system.

Therefore, the CCDS exam content stems from:

- Analysis of the activities of clinical documentation specialists in a wide range of settings, hospital sizes, and circumstances
- Input from ACDIS member surveys, including the 2015 CCDS survey
- Input from and research by members of the CCDS Certification Committee, which is comprised of experienced CDI specialists
- Current coding guidelines and their application to the documentation process

The examination is an objective, multiple-choice test consisting of 140 questions, 120 of which AMP uses to compute the final score. The exam questions have been designed to test candidates’ multidisciplinary knowledge of clinical, coding, and healthcare regulations, as well as the roles and responsibilities of a clinical documentation specialist. The answer choices for examination questions will be identified as A, B, C, or D and consist of the following question types:

- Recall questions, which test candidates’ knowledge of specific facts and concepts relevant to the day-to-day work of CDI professionals. The examination is an open-book test; candidates may use reference resources in answering recall questions, as this is how professionals frequently carry out their responsibilities.
- Application questions, which require candidates to interpret or apply information, guidelines, or rules to a particular situation.
- Analysis questions, which test candidates’ ability to evaluate and integrate a range of information in problem solving to address a particular challenge.
Introduction

According to the CCDS Candidate Handbook, approximately 40% of the questions can be classified as the recall type, 40% as the application type, and 20% as the analysis type. This study guide provides 100 online sample questions and answers to help you test yourself and gauge your readiness for the exam.

The CCDS exam covers the following core competencies:

- Healthcare regulations, reimbursement, and documentation requirements related to the IPPS
- Anatomy and physiology, pathophysiology, pharmacology, and medical terminology
- Medical record documentation
- Healthcare facility CDI program analysis
- Communication skills
- Official Guidelines for Coding and Reporting
- Professionalism, ethics, and compliance
- Impact of reportable diagnoses on quality of care

Note that while each of these domains is explored in The CCDS Exam Study Guide, Fourth Edition, the format has been shifted to match a more chronological approach related to the core elements of the CDI function an individual would need to understand before moving on to the next core competency. For example, those new to CDI first need to know what healthcare coding is all about. They need to understand the rules governing code assignment, how those rules get made, and where to find information and additional instructions. With information about the code set firmly in place, they then obtain awareness about how federal and private payers employ those codes for reimbursement—as well as the rules, regulations, and documentation requirements related to that reimbursement. The concept of professionalism represents an essential skill for effective communication but also applies to ethically performing the role.

The CCDS Exam Study Guide, Fourth Edition, is a companion to the CCDS Candidate Handbook. Refer to the handbook for a breakdown of the number and types of questions within each domain as well as a thorough list of potential question subjects. The handbook is also the place to look for all logistical questions and concerns regarding making an appointment to take the test as well as recertification and continuing education obligations once you’ve passed.

I wish you the best as you enter this phase of your CDI career. I encourage you to thoroughly review the materials available to you, study hard, and get a good night’s sleep ahead of your set examination date. The CCDS credential remains our profession’s mark of distinction, and know that once you pass, you wear it proudly.

Access the practice exam

A practice version of the exam is available online at http://hcpro.com/downloads/13719. This exam is available to anyone who has purchased this book. Follow the instructions on the page to access the test.
The ability to assign the most appropriate Medicare-severity diagnosis-related group (MS-DRG) is driven by the correct assignment of an International Classification of Diseases (ICD) code. This chapter will discuss the origins of this system, the rules and regulations that govern code assignment, and the implications of these rules on clinical documentation improvement (CDI) specialists’ activities.

**The Origins of Healthcare Coding**

ICD-10 (the tenth revision/version of the ICD code set) is published by the World Health Organization (WHO) and is the foundation of codes that the United States has used to report causes of death since 1999. Although most other countries implemented ICD-10 years ago, the United States implemented a unique version of codes on October 1, 2015, labeled ICD-10-Clinical Modification (CM), as well as a procedure coding system (PCS). The United States uses these codes to classify morbidity data from hospital inpatient and outpatient records, physician offices, and National Center for Health Statistics (NCHS) surveys and, uniquely to the United States, for reimbursement purposes. The ICD-10 codes allow for the capture of greater specificity of diseases.

In the United States, the ICD-10-CM/PCS code sets—as well as the Alphabetic Index, Tabular List, and *Official Guidelines for Coding and Reporting*, which provide instruction regarding how to assign healthcare codes to describe diagnoses and procedures—are the official rules for ICD-10-CM/PCS coding. They are regularly updated and approved by the four governing Cooperating Parties, which include the:

- American Hospital Association (AHA)
- American Health Information Management Association (AHIMA)
- Centers for Medicare & Medicaid Services (CMS)
- National Center for Health Statistics (NCHS)
• The fifth character describes the approach, or the technique used to reach the site of the procedure. There are seven different approaches that describe the point of access, method, and any instrumentation used.

• The sixth character describes whether a device was implanted. This character will also further differentiate the type of device and its purpose. There is an appendix within the PCS code book that provides a device key identifying manufacturer names of devices matched with the appropriate PCS descriptions. This key is followed by a device aggregation table that assists in identifying the applicable root operation and body system for specific devices, identified by manufacturer name.

• The seventh character is known as the qualifier. This character has unique meaning for different procedures. It provides an extra piece of information that completes the picture of the code.

An ICD-10-PCS code is not complete unless all seven characters are identified.

**Figure 1.2 ICD-10-PCS Code Structure**

<table>
<thead>
<tr>
<th>1st Digit</th>
<th>2nd Digit</th>
<th>3rd Digit</th>
<th>4th Digit</th>
<th>5th Digit</th>
<th>6th Digit</th>
<th>7th Digit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>Body</td>
<td>Root</td>
<td>Body Part</td>
<td>Approach</td>
<td>Device</td>
<td>Qualifier</td>
</tr>
</tbody>
</table>

**DRGs**

As previously stated, these ICD-10-CM codes are reported and compiled to create national and world healthcare statistics. This system is designed to promote international comparability in the collection, processing, classification, and presentation of these statistics. However, several payers in the United States, including Medicare, group ICD-10-CM codes together with conditions of similar complexity and resource requirements into DRGs, which determine payment for services provided.

Proper code identification and sequencing of diagnoses is directed by compliant application of the rules governing code assignment (within the resources listed earlier in the chapter). Therefore, CDI specialists need to understand these rules, and while they do not need to specialize in inpatient coding or come from a coding background, it’s imperative they understand the coding classification system and the skills of their coding colleagues for optimum role performance.
Adherence to the guidelines appears simple at first. The difficulty arises not from the guidelines themselves but from the process of identifying appropriate documentation provided in the medical record to match with an appropriate code. When the documentation does not provide clear identification of a condition, finding the most appropriate code becomes more difficult. For example, a physician documents that a patient is admitted with a fever but does not document the site of any infection. Physiologically, several conditions can cause a fever. So while the physician may have an idea of the cause of the infection and documented an appropriate plan of care to treat the fever, without documentation to identify the underlying infectious source, the coder would likely pick the ICD-10-CM code for a simple fever: R50.9. However, this code may not fully capture the level of care the patient received.

This scenario represents one of the most difficult aspects of the CDI specialist’s role: the separation of the inferred clinical condition from the application of the most specific code, driven solely by the documentation contained in the medical record. Although clinical indicators cause a coder or CDI specialist to suspect the source of the infection, that suspicion cannot be documented in the form of an ICD-10-CM code. According to coding guidelines, only conditions documented in the record can be coded and reimbursed. Therefore, it becomes necessary to query the provider for specification of the condition that caused the fever, and the physician must document that source in the record before the coder can code it.

The Official Guidelines for Coding and Reporting uses the term provider to mean physician or any qualified healthcare practitioner legally accountable for establishing a patient’s diagnosis. This could include nurse practitioners and physician assistants in certain states where these roles are licensed to diagnose and treat medical conditions. There are circumstances in which documentation from an ancillary healthcare provider such as a physical therapist, nurse, or dietitian can be used for coding purposes when providing specificity of a procedure. For example, the documentation of body mass index (BMI) may come from the dietitian’s documentation, staging of decubitus ulcers may come from nursing documentation, or the specificity of a debridement may come from a wound care nurse. It is important for CDI specialists and coders to review documentation from all healthcare providers to determine and clarify all potential clinical conditions.

Assigning a Code

**Signs and symptoms codes**

Healthcare providers typically start with evaluation of the patient’s chief complaint and work toward specification of the symptom’s cause. Coding from documentation in which the physician notes the patient’s symptoms but documents no working medical diagnosis is a definite sign that there is a documentation issue. Per coding guidelines, signs or symptoms of an underlying condition should be coded only if no definitive diagnosis is determined. The Official Guidelines for Coding and Reporting is very clear, stating, “Codes for symptoms, signs, and ill-defined conditions from Chapter 18 are not to be used as principal diagnosis when a related definitive diagnosis has been established” (AHA, 2018).
Neoplasm guidelines

The guidelines for coding neoplasms are very detailed, driven by the type of neoplasm—benign, in situ, malignant, or of uncertain behavior. If the neoplasm is malignant, the metastatic sites should also be coded. The driving force for assignment of the correct principal diagnosis depends on documentation and treatment. If the provider directs the documentation and treatment at the primary site of the neoplasm, then that site must be sequenced as the principal diagnosis. If, however, the provider directs documentation and treatment at a metastatic site, then the coder would sequence that site as the principal diagnosis, with the primary site as secondary.

Examples include the following:

- If the provider admits the patient due to complaints of chest pain and the workup reveals a new lung neoplasm, then the coder would sequence the lung neoplasm first as the principal diagnosis. However, if a patient with a known history of lung cancer is admitted and the provider thinks that the cancer has metastasized to the bone and directs treatment for the bone metastasis, then the coder would sequence the bone malignancy as the principal diagnosis.
- If the patient receives chemotherapy for a neoplasm and is admitted with anemia due to chemotherapy, receiving blood transfusions without any other care, then the anemia is sequenced as the principal diagnosis.
- If the patient is admitted with dehydration from nausea and vomiting related to chemotherapy treatment for breast cancer and receives IV fluids and antiemetics without treatment for the breast cancer, then dehydration is sequenced as the principal diagnosis, with the neoplasm as secondary.

The coding and sequencing of complications of neoplasms and neoplasm treatment are outlined in Figure 1.3.

### Figure 1.3  Neoplasm Coding

<table>
<thead>
<tr>
<th>Treatment directed at:</th>
<th>Sequenced first:</th>
<th>Sequenced as secondary diagnoses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary neoplasm</td>
<td>Primary neoplasm</td>
<td>Other documented conditions</td>
</tr>
<tr>
<td>Malignancy</td>
<td>Malignancy</td>
<td>Primary neoplasm*</td>
</tr>
<tr>
<td>Anemia secondary to chemo, radiation of immune therapy</td>
<td>Anemia</td>
<td>Neoplasm/malignancy*</td>
</tr>
<tr>
<td>Dehydration</td>
<td>Dehydration</td>
<td>Neoplasm/malignancy*</td>
</tr>
<tr>
<td>Complication of surgery</td>
<td>Complication</td>
<td>Neoplasm/malignancy*</td>
</tr>
<tr>
<td>Surgery and chemo of a neoplasm</td>
<td>Neoplasm</td>
<td>Other documented conditions</td>
</tr>
<tr>
<td>Chemo only</td>
<td>Code Z51.11</td>
<td>Other documented conditions</td>
</tr>
<tr>
<td>Radiation only</td>
<td>Code Z51.0</td>
<td>Other documented conditions</td>
</tr>
<tr>
<td>Immunotherapy</td>
<td>Code Z51.12</td>
<td>Other documented conditions</td>
</tr>
<tr>
<td>Determining extent of malignancy</td>
<td>Malignancy</td>
<td>Primary (if not excised)*</td>
</tr>
<tr>
<td>Pain control</td>
<td>Code G89.3</td>
<td>Neoplasm/malignancy*</td>
</tr>
<tr>
<td>Neoplasm of transplanted organ</td>
<td>Complication of transplanted organ</td>
<td>Malignancy*</td>
</tr>
</tbody>
</table>

### Figure 1.4  Diabetes Code Assignments

<table>
<thead>
<tr>
<th>Code</th>
<th>Manifestation</th>
<th>Description/Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>E11.9</td>
<td>No associated manifestation</td>
<td></td>
</tr>
<tr>
<td>E13.10</td>
<td>Ketoacidosis</td>
<td>Without coma</td>
</tr>
<tr>
<td>E11.0</td>
<td>Hyperosmolarity</td>
<td>Hyperosmolar nonketotic coma</td>
</tr>
<tr>
<td>E11.2</td>
<td>Renal</td>
<td>DM nephropathy, renal failure</td>
</tr>
<tr>
<td>E11.3</td>
<td>Ophthalmic</td>
<td>DM glaucoma, retinopathy</td>
</tr>
<tr>
<td>E11.4</td>
<td>Neurological</td>
<td>DM neuropathy, gastroparesis</td>
</tr>
<tr>
<td>E11.5</td>
<td>Peripheral circulatory</td>
<td>DM PVD</td>
</tr>
<tr>
<td>E11.8</td>
<td>Other</td>
<td>DM bone changes</td>
</tr>
</tbody>
</table>

Another group of codes exist for diabetes that develops as a manifestation of another disease process, such as pancreatitis or steroid use. ICD-10-CM codes describe the underlying cause associated with the diabetes, such as E09.9 (drug- or chemical-induced diabetes mellitus without complications) and E10.9 (type 1 diabetes mellitus without complication).
Clinical documentation improvement (CDI) programs’ goal is to ensure the integrity of the medical record and ensure that it accurately reflects the care and services provided to that patient for the duration of his or her hospital stay. However, the effect of CDI efforts related to hospital compensation cannot be ignored.

Those studying for the Certified Clinical Documentation Specialist (CCDS) credential from the Association of Clinical Documentation Improvement Specialists (ACDIS) have at least two years’ worth of working knowledge from which to draw on. Successful candidates will know how the ICD-10-CM/PCS coding system works, the highlights of which were explained in Chapter 1. And CCDS candidates must also understand how the United States government (the largest payer of healthcare services in the country) governs how it spends those ever more valuable healthcare dollars.

In the United States, the final codes identified from the patient’s record are submitted as part of the billing process and drive final compensation for care provided to the hospital. This chapter focuses on the inpatient prospective payment system (IPPS) and how healthcare regulations affect documentation practices and the role of the CDI specialist.

The federal government, through the Centers for Medicare & Medicaid Services (CMS) and other payers, compensates physicians and healthcare facilities for the services they provide. CMS administers Medicaid, Medicare, and other government health insurance programs, sometimes contracting with other payers. These programs have specific rules governing the amount of compensation provided for each service. CMS also works in tandem with a number of federal regulatory bodies to develop rules adjusting reimbursement related to quality assessments in an attempt to move from a pay-for-service model to a pay-for-quality one. These quality-focused reimbursement measures will be discussed later in this study guide.
Each DRG includes the patient’s documented principal diagnosis and secondary diagnoses, including comorbid conditions and complications. Any needed procedures (such as surgeries, etc.) that are completed and documented are also coded and may affect the final assigned DRG.

An example of different diagnoses that group to the same DRG are acute respiratory failure and pulmonary edema. Both require immediate care with oxygen therapy, nebulizer treatments, and a workup of the underlying condition causing the respiratory symptoms, which may include radiological tests, pulmonary function testing, and monitoring of oxygen saturation levels. Both these conditions have a unique ICD-10-CM code but “group” to the same DRG, Pulmonary Edema and Respiratory Failure, since the SOI and resource consumption are very similar.

**ICD-10 Coding Grouping Mechanisms**

**CMS-DRGs and MS-DRGs**

The original CMS-DRG system, implemented in 1986, focused primarily on resource intensity. It did not allow reimbursement for patients with multiple conditions treated during a single hospitalization. In October 1, 2007, CMS implemented Medicare-severity DRGs (MS-DRG) designed to better identify the effect of comorbid conditions on the care of a patient, including up to three levels of SOI for specific diagnostic categories. These are classified as:

1. Major complication/comorbidity (MCC)
2. Complication/comorbidity (CC)
3. No complication/comorbidity (non-CC/MCC)

MCCs reflect secondary diagnoses of the highest level of severity. CCs reflect secondary diagnoses of the next lower level of severity. Secondary diagnoses that are not MCCs or CCs (non-CCs) are diagnoses that do not significantly affect SOI or resource use. CMS reviews the codes and charges associated with the care of these conditions annually to ensure accuracy and appropriateness of assigned CC or MCC status, adjusting CC/MCC designation annually in the IPPS.

**Example of MS-DRG assignment differentiation**

To understand the levels of severity within an MS-DRG, let’s use the example of a patient admitted with pneumonia. Pneumonia codes to an unspecified pneumonia, which groups to base MS-DRG 195, Simple Pneumonia and Pleurisy. If the patient has no additional diagnoses or specificity regarding type or cause of the condition, the final reported MS-DRG should be 195, Simple Pneumonia and Pleurisy without CC/MCC. This patient requires simple, straightforward treatment, including the use of antibiotics and monitoring of chest x-rays and white blood cell counts.
Clinical documentation improvement (CDI) efforts can be measured in many ways—perhaps the most important is how such endeavors help illustrate the quality of the care provided through quality scores.

**Public Report Cards**

Public and private agencies use coded data to depict the type of care provided through public scoring sites. Private payers often leverage this data when negotiating contracts and payments. Patients use this data—with the help of Web-based platforms such as U.S. News and World Report, Hospital Compare, Leapfrog, and others—to make decisions about the providers they see and the healthcare facilities they choose. While many of these so-called report cards operate with proprietary logic and various studies have shown wild inconsistencies between the reports, CDI programs need to understand where their facilities and physicians stand and how simple documentation improvement efforts can help improve those rankings.

In an unprecedented use of such data, UnitedHealthcare (UHC), a diversified managed healthcare company headquartered in Minnetonka, Minnesota, told 810 primary care physicians and 1,440 specialists they would be dropped from UHC’s physician network for Medicare Advantage patients effective February 2014. UHC reportedly made that decision due to the Centers for Medicare & Medicaid Services’ (CMS) Five-Star Ratings program for health plans. Because a plan’s rating helps determine the reimbursement rate from CMS, the contract terminations may have been a move to increase United’s profitability (Becker’s Hospital Review, 2013).
**Medicare’s public reporting**

Medicare’s Hospital Compare website has information about the quality of care at more than 4,000 Medicare-certified hospitals across the country. Patients can use it to find hospitals and compare the quality of their care. CMS created Hospital Compare in collaboration with organizations representing consumers, hospitals, doctors, employers, accrediting organizations, and other federal agencies.

Physicians aren’t left out, either. Medicare’s Physician Compare website allows patients to find and choose physicians and other healthcare professionals enrolled in the Medicare program, as required by the Affordable Care Act. The information on Physician Compare comes primarily from the Provider, Enrollment, Chain, and Ownership System (PECOS) and other information sources. The information on Physician Compare is also checked against Medicare claims data. Visitors to the Physician Compare website can find:

- Addresses where the professional sees patients (always confirm the address when making an appointment; some professionals work at more than one location)
- Primary and secondary specialties
- Medicare assignment status
- Whether the individual or group participates in select CMS quality programs
- Gender
- Medical school education and residency information
- Groups that individuals work with (individual profile) or individuals who work with the group (group profile)

**Hospital affiliation**

To the extent that scientifically sound measures are developed and are available, CMS is required to include, to the extent feasible, the following types of measures for public reporting:

- Measures collected under the Physician Quality Reporting System (PQRS)
- An assessment of patient health outcomes and functional status of patients
- An assessment of the continuity and coordination of care and care transitions, including episodes of care and risk-adjusted resource use
- An assessment of efficiency
- An assessment of patient experience and patient, caregiver, and family engagement
- An assessment of the safety, effectiveness, and timeliness of care
- Other information as determined appropriate
**Figure 3.3 Patient Safety Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Included in PSI 90</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI 02: Death rate in low-mortality diagnosis-related groups (DRG)</td>
<td>No</td>
</tr>
<tr>
<td>PSI 03: Pressure ulcer rate</td>
<td></td>
</tr>
<tr>
<td>PSI 04: Death rate among surgical inpatients with serious treatable conditions</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 05: Retained surgical item or unretrieved device fragment rate</td>
<td>No</td>
</tr>
<tr>
<td>PSI 06: Iatrogenic pneumothorax rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 07: Central venous catheter-related blood stream infection rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 08: Postoperative hip fracture rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 09: Perioperative hemorrhage or hematoma rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 10: Postoperative physiologic and metabolic derangement rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 11: Postoperative respiratory failure rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 12: Perioperative pulmonary embolism or deep vein thrombosis rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 13: Postoperative sepsis rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 14: Postoperative wound dehiscence rate</td>
<td>Yes</td>
</tr>
<tr>
<td>PSI 15: Accidental puncture or laceration rate</td>
<td>No</td>
</tr>
<tr>
<td>PSI 16: Transfusion reaction count</td>
<td>No</td>
</tr>
<tr>
<td>PSI 17: Birth trauma rate – injury to neonate</td>
<td>No</td>
</tr>
<tr>
<td>PSI 18: Obstetric trauma rate – vaginal delivery with instrument</td>
<td>No</td>
</tr>
<tr>
<td>PSI 19: Obstetric trauma rate – vaginal delivery without instrument</td>
<td>No</td>
</tr>
</tbody>
</table>

**HRRP**

The HRRP was implemented by CMS on October 1, 2012, with the goal of reducing a facility’s base operating DRG payments to account for excessive readmissions for certain conditions. Currently, CMS uses excess readmission ratios to measure performance for each of the six conditions/procedures in the program, including:

- Acute myocardial infarction
- Chronic obstructive pulmonary disease
- Heart failure
- Pneumonia
- Coronary artery bypass graft surgery
- Elective primary total hip arthroplasty and/or total knee arthroplasty
Throughout this study guide, the primary purpose of clinical documentation improvement (CDI) efforts has been repeated: It is the concurrent review of the medical record to identify concerns regarding accurate, clear, and specific documentation.

Once a concern is identified, a query is generated to support the provider in clarifying the documentation for accuracy and consistency. Clear and specific documentation results in accurate coding for reporting and reimbursement purposes. A precise medical record captures the clinical severity of a patient’s condition, affects quality metrics and reimbursement, and provides justification for the expenditure of hospital resources. Documentation of all the conditions that are monitored and treated during a patient’s admission is essential to accurate public reporting and profiling. Without documentation of the acuity of patient conditions, hospitals cannot report accurate codes, resulting in poor risk of mortality scores, incorrect expected length of stay, and inappropriate reimbursement related to the resources consumed for that care.

Knowing that the outcomes of inaccurate documentation can negatively affect organizational metrics and finances, CDI specialists must remain true to the professional ethics of the profession and not use their position to support inaccurate documentation unsupported by appropriate clinical evidence in order to obtain greater reimbursement for the facility or physician.
Ensuring Compliant Processes

CDI specialists need a thorough understanding of the ethical principles outlined by their professional organization and should adhere to them, as stated in the Association of Clinical Documentation Improvement Specialists’ (ACDIS) Code of Ethics. Additionally, organizational policies and procedures related to CDI practices should be drafted with the ACDIS Code of Ethics principles in mind, and program administrators should compare these processes to those provided by ACDIS and codeveloped by the American Healthcare Information Management Association (AHIMA) in their various physician query guidance releases.

Annual review of policies, procedures, and query templates helps ensure CDI practices remain compliant with current industry standards, changes in coding and payment regulations, and updates to accepted clinical practices and clinical indicators for specific diseases and diagnoses. This annual review should also include random audits of CDI specialists’ chart reviews and queries to ensure adherence to organizational policies and procedures. As stated earlier, these policies and procedures should be developed with ethical principles of CDI practice in mind as outlined by the professional organization. The ACDIS Code of Ethics supports CDI professional values such as:

- Honesty and integrity
- Acting in a manner that brings honor to self, peers, and profession
- Committing to continuing education and lifelong learning

The ACDIS Code of Ethics describes the professional behaviors and values that should be upheld by those employed in the role of CDI specialist. CDI professionals need to review these materials on an annual basis to refresh their query practices and ensure that clarifications to physicians are conducted in a non-leading, non-biased manner.

Avoidance of leading queries

Policies regarding query practice ensure CDI specialists do not lead or direct physicians to specific documentation without clinical indicators to support the query. As stated in the ACDIS/AHIMA Guidelines for Achieving a Compliant Query Practice (ACDIS/AHIMA, 2016):

A leading query is one that is not supported by the clinical elements in the health record and/or directs a provider to a specific diagnosis or procedure. The justification (i.e., inclusion of relevant clinical indicators) for the query is more important than the query format.

Leading queries do not provide the physician with other options or the ability to disagree. Examples of leading queries include:

- “Please document acute renal failure in your next progress note.”
- “Was the patient’s documented congestive heart failure acute?”
CDI programs should try to leverage existing physician education. Rather than asking busy providers to add another meeting to their schedule, look at the possibilities to provide education in unique settings that allow for regular communication of documentation issues. Initially, the agenda should include information defining the value of specific documentation that correctly describes patient conditions. Once the initial presentation has been provided, documentation topics should be communicated regularly, ideally monthly. Topics for these meetings should include but are not limited to:

- Metrics with success stories or action plans specific to the audience
- Documentation coding guideline changes
- Case examples, including cases that were denied

A good concurrent query process results in documentation integrity that allows for timely coding of records and accurate reporting of conditions being treated and monitored. Concurrent query processes should also support positive relationships between clinicians and coding professionals, allowing for interactions that result in accurate documentation and reporting of SOI, quality-of-care measures, and reimbursement. Accurate and timely reporting of codes allows for a reduction in denials and ensures proper reimbursement and profiling of the hospital and physicians.
Identification of Clinical Indicators

The main responsibility of a clinical documentation improvement (CDI) specialist is to support documentation integrity of the medical record, ensuring that all conditions being monitored and treated throughout the patient stay are properly recorded. This chapter will focus on key clinical indicators of common patient conditions that frequently require greater specificity in provider documentation.

Certainly, any condition not clearly identified should be clarified with a concurrent or retrospective query. This chapter is designed to assist CDI specialists in their effort to support complete and accurate documentation, but it is in no way exhaustive of all the possible conditions that may require greater specificity. Knowledge and understanding of clinical conditions and indicators will aid in the identification of the patient’s severity of illness (SOI). Strong clinical knowledge supports CDI specialists in their ability to serve as a resource to providers and ensure accurate and compliant documentation of patient conditions and care.

Review of conditions will be limited to those that have multiple codes that typically cause confusion or controversy or are conditions that often go undocumented even though being treated. They will be in numeric order of the major diagnostic categories (MDC), starting with the medical side. Discussion of procedures will be limited to those that frequently influence CDI specialists’ work or are bundled into the medical diagnostic-related group (DRG).
MDC 1: Diseases and Disorders of the Nervous System

There are several neurological conditions that may require greater specificity in documentation to capture the appropriate level of acuity. Because many neurological conditions share the same signs and symptoms, it may be necessary to clarify the particular condition that initiated the given symptom.

A patient with a nervous system neoplasm may experience a severe headache, lack of coordination, visual changes, sensory changes, difficulty with speech, seizures, loss of consciousness, or personality changes. A patient suffering from a cerebral infarct may also be admitted with the same signs and symptoms. Further workup of these conditions is accomplished through use of the same neurological studies, such as a CT or MRI scan of the brain. A neurosurgery consult is also often ordered to provide further evaluation of the symptoms’ underlying cause. Specificity of the condition depends on evaluation and clarification of key clinical indicators and clear documentation that identifies the SOI and resources required in the patient’s treatment.

Cerebrovascular accident (CVA)

Effects of a CVA may develop over time or be described as late effects of a previous stroke. ICD-10-CM official guidelines indicate there is no time limit as to when these conditions may develop as long as the documentation is clear that the current condition is related to a previous stroke. Examples of conditions that may be a sequela or late effect of a stroke include:

- Aphasia
- Dysphasia
- Hemiplegia
- Ataxia
- Vertigo
- Dysphagia
- Seizures

Typically, the patient presents with a history of CVA and new, vague symptoms of increasing weakness, gait disturbance, altered mental status, or seizures without other cause. Clarifying whether these conditions relate to the previous stroke provides a better picture of the patient’s SOI and the resources the facility required to evaluate and treat the patient.

CDI specialists should obtain proper determination of the most definitive diagnosis and include:

- Specificity of the location or source of a hemorrhage or occlusion
- Laterality of the location
- Artery or arteries affected
• Infarction, if present
• Use of any thrombolytic agents, either at current facility or transferring facility
• If multiple conditions occur, each event, location, and cause should be captured in the documentation and coding

Note that hemiplegia is not inherent to a CVA. Therefore, it should be appropriately documented and coded even if the hemiplegia resolves, with or without treatment.

**Cerebral edema**

Cerebral edema is defined as an increase in water content in the brain above the normal content of approximately 80% and is invariably a response to a primary brain insult. It is a life-threatening condition and most frequently a consequence of cerebral trauma, massive cerebral infarction, hemorrhages, abscess, tumor, allergy, sepsis, hypoxia, and other toxic or metabolic factors. Without proper treatment, this edema can cause a shift in the tissues of the brain, resulting in herniation into the ventricles and ultimately causing death. There are three types of cerebral edema, which are outlined in Figure 6.1.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>ICD-10 Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cytotoxic</td>
<td>Results from swelling of the cellular elements due to substrate and energy failure and affects both gray and white matter</td>
<td></td>
</tr>
<tr>
<td>Vasogenic</td>
<td>Increased vascular permeability, predominate-ly affects white matter</td>
<td>G93.6</td>
</tr>
<tr>
<td>Interstitial</td>
<td>Consequence of impaired absorption or ob-struction of cerebrospinal fluid (CSF) resulting in acute hydrocephalus</td>
<td></td>
</tr>
</tbody>
</table>

Treatment is focused on reducing pressures in the brain and resolving the underlying condition that caused the edema to occur. Medical treatment includes osmotherapy, which is the use of medications such as Mannitol to facilitate the removal of excess water from the brain. Corticosteroids such as Decadron can be utilized to reduce capillary permeability, and hypoventilation may be utilized to reduce intracranial pressure. Surgical treatment may include insertion of a ventriculostomy, removal of the underlying tumor, or decompression craniectomy.
Severe tachycardia (e.g., due to supraventricular tachycardia) in an individual with normal coronary arteries can also lead to increased troponins, presumably due to increased oxygen demand and inadequate supply to the heart muscle. Troponins are also increased in patients with heart failure, where they also predict mortality and ventricular rhythm abnormalities. They can rise in inflammatory conditions, such as myocarditis and pericarditis with heart muscle involvement. Troponins can also indicate several forms of cardiomyopathy, ventricular hypertrophy, Takotsubo cardiomyopathy, or infiltrative disorders such as cardiac amyloidosis.
### Metric Analysis Summary

<table>
<thead>
<tr>
<th>At or above benchmark</th>
<th>Below benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review rate</strong></td>
<td><strong>Review rate</strong></td>
</tr>
<tr>
<td>• Good productivity</td>
<td>• Poor productivity</td>
</tr>
<tr>
<td>• Decreased census</td>
<td>• Look at:</td>
</tr>
<tr>
<td></td>
<td>– Staffing</td>
</tr>
<tr>
<td></td>
<td>– Process</td>
</tr>
<tr>
<td><strong>Query rate</strong></td>
<td><strong>Query rate</strong></td>
</tr>
<tr>
<td>• Good productivity</td>
<td>• Internal/external audit</td>
</tr>
<tr>
<td>• Physician education needed</td>
<td>• Review workflow/process</td>
</tr>
<tr>
<td><strong>Response rate</strong></td>
<td><strong>Response rate</strong></td>
</tr>
<tr>
<td>• Program education and query process working</td>
<td>• Review CDI workflow/process</td>
</tr>
<tr>
<td></td>
<td>• Audit query compliance/templates</td>
</tr>
<tr>
<td></td>
<td>• Change policy/procedure to ensure physician response</td>
</tr>
<tr>
<td><strong>Acceptance rate</strong></td>
<td><strong>Acceptance rate</strong></td>
</tr>
<tr>
<td>• Program working</td>
<td>• Review credibility of queries</td>
</tr>
<tr>
<td>• If at 100%, review data entry for accuracy</td>
<td>• Review query follow-up process</td>
</tr>
<tr>
<td><strong>CMI</strong></td>
<td><strong>CMI</strong></td>
</tr>
<tr>
<td>• Program working</td>
<td>• Review CDI specialist process</td>
</tr>
<tr>
<td>• Change in service lines</td>
<td>• Review productivity</td>
</tr>
<tr>
<td>• Increased number of surgeries</td>
<td>• Review physician acceptance</td>
</tr>
<tr>
<td>• Monitor changes in census</td>
<td>• Monitor changes in census</td>
</tr>
<tr>
<td><strong>SOI/ROM</strong></td>
<td><strong>SOI/ROM</strong></td>
</tr>
<tr>
<td>• Does it align with patient population documentation of comorbid conditions being captured</td>
<td>• Does it align with patient population</td>
</tr>
<tr>
<td>• Program education and query process working</td>
<td>• Review CDI specialist workflow/process</td>
</tr>
<tr>
<td><strong>CC/MCC capture rate</strong></td>
<td><strong>CC/MCC capture rate</strong></td>
</tr>
<tr>
<td>• Does it align with patient population</td>
<td>• Does it align with patient population</td>
</tr>
<tr>
<td>• Documentation of comorbid conditions being captured</td>
<td>• Review CDI specialist workflow/process</td>
</tr>
<tr>
<td>• Program education and query process working</td>
<td>• Review all CDI program metrics to determine action plan for improvement</td>
</tr>
</tbody>
</table>
The first two years of a clinical documentation improvement (CDI) specialist’s career often feels like a whirlwind of learning. Many in the field call it the steepest learning curve of their professional lives. After their two-year anniversary, committed individuals can show their professional dedication by sitting for the Certified Clinical Documentation Specialist (CCDS) exam.

The CCDS Exam Study Guide, Fourth Edition, helps those ready to sit for the test ensure they’re prepared to excel.

The latest edition of this book aligns the testing content domains in a chronological manner with how new CDI professionals obtain core skill sets. The Study Guide provides targeted information regarding test objectives prepared by the CCDS Certification Committee, letting candidates focus their time on areas of CDI practice with which they are least familiar. It also includes updates related to changes in Official Guidelines for Coding and Reporting, Coding Clinic ICD-10-CM/PCS recommendations, new query practice guidance from ACDIS/AHIMA’s “Guidelines for Achieving a Compliant Query Practice,” and information on emerging CDI activities related to clinical validation and record reviews for quality-of-care concerns.

The CCDS Exam Study Guide, Fourth Edition, comes with an updated 140-question practice exam complete with remediation, which provides candidates with the rationale behind the correct answers.

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