

**Clinical Documentation  
Improvement  
TOOLKIT**





# Clinical Documentation Improvement TOOLKIT

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## FOREWORD

Clinical documentation is the foundation of every health record in every setting. Clinical documentation is any manual or electronic notation made by a clinical care provider or their authorized “medical scribe.” In the rapidly changing healthcare environment, patients, providers, health plans, regulatory initiatives, and organizations are recognizing the need for accurate, timely, and consistent documentation. The variety of uses and users of clinical documentation illustrated the importance of clinical documentation and led to the need for clinical documentation improvement (CDI) programs. The 2015 transition to ICD-10 has intensified the need for comprehensive CDI programs in both inpatient and outpatient settings.

High-quality clinical documentation is the goal of every CDI program. However, consistent, high-quality documentation can be difficult to achieve without a structured CDI program. This toolkit provides many of the necessary tools and documents needed for developing, implementing, and maintaining a robust CDI program.

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## INTRODUCTION

A CDI toolkit is useful not only to the professionals who work in CDI but also helpful to physicians, hospital administrators, *health information management (HIM) professionals*, nursing staff, and others in a variety of healthcare settings. Understanding the background, purpose, and functionality of a CDI program will be key to the success of that program and will provide a true reflection of the patient encounter for data integrity. Putting in the time and effort to improve clinical documentation has many benefits and positive results beyond *reimbursement*. This toolkit will help you understand these benefits and how to achieve them.

## BACKGROUND

At the center of healthcare today is the clinical documentation in the *health record*. Clinical documentation improvement efforts can occur in many healthcare settings, but acute care hospitals, in particular, have become more dependent on provider documentation to obtain the specifics on patient diagnosis and treatment. In addition, clinical documentation improvement efforts assist in compliance of the *Centers for Medicare and Medicaid Services (CMS)* regulations regarding quality and reimbursement.

The need for complete and accurate documentation has taken a more important role with recent changes, beginning with the adoption of *Medicare Severity Diagnosis Related Groups (MS-DRGs)* in 2007 for hospital inpatient prospective payment in order to better reflect the patient's *severity level*. The patient's *principal diagnosis* and secondary diagnoses determine these two assessments.

In October 2008, CMS began to require a *Present on Admission (POA)* indicator for all coded diagnoses to differentiate conditions that are present when a patient is admitted from those that are acquired in the hospital.

As CMS changes reimbursement methodology in other settings to a prospective payment system, CDI efforts have entered those settings, as is the case with Medicare Advantage. Drivers in the *Medicare Advantage or Part C* payment structure rely heavily on clinical documentation and coding to capture clinical diagnoses. This coded data drives reimbursement structure and captures resource intensity of care.

In some states, *Medicaid* and other payer programs are moving toward a *Diagnosis Related Group (DRG)* structure for hospital payment through the *All Patient Refined DRGs (APR DRG)*. This payment methodology is also very focused on documentation and coding to drive coding and grouping. Future payment methodologies may surface, but clinical documentation will continue to play a major role in healthcare. It will also improve outcomes data and assist in preparing the healthcare entity for a variety of future payment methodologies.

Coupled with these developments, healthcare continues to experience the scrutiny of *compliance* and regulatory bodies that require more accurate and specific data. Improved clinical documentation plays a part in compliance with national core measures. Clinical documentation that is precise, thorough, and accurate can provide a defense for regulatory compliance reviews, including the *Recovery Auditors (RA)* initiative, *Zone Program Integrity Contractors*, *Medicare Administrative Contractors*, and *Medicaid Integrity Contractors* program.

In October 2015, the US adopted ICD-10-CM/PCS, a code set that involves significantly greater detail than ICD-9-CM. This transition has led to an increased need for the expertise of CDI professionals. Allotting a strong role for CDI in healthcare organizations will ensure an accurate and complete medical record for data capture and reporting. From a clinician's perspective, many of the documentation requirements have increased significantly following ICD-10-CM/PCS implementation. The documentation of types of heart failure (systolic and/or diastolic), pneumonia (etiologies/mechanism), or orthopedic fracture causes (pathological/traumatic), and other conditions continue to require similar specificity that was needed with ICD-9-CM. With ICD-10-CM, however, the expanded detail encompassed by the code set requires additional documentation and specification in such areas as myocardial infarctions, asthma, respiratory failure, and the causes and the types of fractures.

## WHAT IS CDI?

The purpose of a CDI program is to initiate concurrent and, as appropriate, retrospective reviews of health records for conflicting, incomplete, or nonspecific provider documentation. These reviews usually occur on patient care units or in outpatient clinics, or they can be conducted remotely via the *electronic health record (EHR)*.

The diagnoses and procedures documented in the record need to be clearly supported by clinical indicators so that the ICD-10-CM/PCS codes assigned are accurate and correctly assigned. The method of clarification used by the CDI professional is often written queries in the health record. Verbal and electronic communications are also methods used to make contact with providers. These efforts result in improved accuracy and completeness in documentation, coding, reimbursement, and severity of illness (SOI) and risk of mortality (ROM) classifications.

Often CDI programs begin with focused concurrent review of a specific payer type (such as Medicare) or payment type (such as DRG), but this is not a requirement and the focus will depend on the individual organization.

Although CDI programs are traditionally found in the acute inpatient setting, they also exist in other healthcare settings such as provider offices, ambulatory care, acute rehabilitation hospitals, and skilled nursing facilities.

## WHO ARE THE CDI STAFF?

The individuals who are qualified to serve in CDI role(s) include, but are not limited to, HIM professionals, physicians, nurses, and other professionals with a clinical and/or HIM coding background.

Depending on the structure and design of the CDI program, the program may be staffed entirely by HIM coding professionals, entirely by nurses, or a combination of both. In some programs there may be dedicated provider liaisons or *provider champions* who conduct reviews and communicate with other providers on documentation issues. And in other organizations, the CDI program may have staff who come from several professions and work together in daily collaboration.

These individuals may possess many skills and attributes, including clinical knowledge, payment systems and methodologies, ICD-10-CM/PCS coding concepts and guidelines, healthcare regulatory compliance, experience in hospital acute care or other settings, and strong verbal and written communication skills.

For the purposes of this toolkit, the term “CDI professional” encompasses the following titles: clinical documentation improvement practitioner (CDIP), clinical documentation improvement specialist (CDIS), clinical documentation specialist (CDS), and other similar titles. See Appendix A for sample CDI job descriptions.

It's important to remember that to create a successful CDI program, it is necessary to have the right individuals in place making key decisions. Key stakeholders who encompass a variety of departments within the organization or practice should represent a cross-section of clinical and nonclinical participants in the CDI program, depending on their role and scope.

## KEY CDI STAKEHOLDERS

Key CDI stakeholders include:

- HIM and coding departments
- Case management and utilization review
- Medical staff and provider leadership
- Executive leadership
- Patient financial services or billing
- Finance and revenue cycle
- Quality and risk management
- Nursing
- Compliance and ethics

## WHAT ARE THE CDI GOALS?

A variety of research reveals that lack of adequate clinical documentation is a problem throughout the healthcare industry. Inadequate documentation, coupled with low healthcare literacy, can produce ineffective care plans that patients cannot maintain. While high-quality documentation is always sought, it remains uncommon within most healthcare settings. CDI programs are seen as the bridge between a host of professionals, such as providers, case management, coding professionals, quality management, and financial services. Any successful program operates by utilizing clearly defined goals and measurements.

Some examples of CDI goals include:

- Obtain clinical documentation that captures the patient SOI and ROM
- Identify and clarify missing, conflicting, or nonspecific provider documentation related to diagnoses and procedures
- Support accurate diagnostic and procedural coding, MS-DRG assignment, leading to appropriate reimbursement
- Promote health record completion during the patient's course of care, which promotes patient safety
- Improve communication between physicians and other members of the healthcare team
- Provide awareness and education
- Improve documentation to reflect quality and outcome scores
- Improve coding professionals' clinical knowledge

A CDI educational component that is supplemented and complemented by usable, efficient, compliant, and meaningful documentation tools that enhance provider optimal patient care workflow can enhance one's success. This concept must be part of the CDI formula to achieve success. Such a program will not only be effective, it will be sustainable and cost effective because the documentation tools can also undergo continuous improvement to meet sophisticated reporting needs.

CDI programs may also provide new strategies, provider tips, and tools to move the program to success. A newsletter or articles on documentation improvement can help demonstrate the benefits and increase collaboration and participation in the program.

Tracking and trending the CDI program metrics, key performance indicators (KPIs), and results is pivotal to demonstrating that the goals and benefits of the program are being achieved. This will also provide insight into patient care data and profiles. Regular and ongoing reporting will need to be in place and must include metrics that are reviewed, updated, and vetted with medical staff and executive leadership on a regular basis.

## QUERIES

A variety of tools should support the documentation improvement process of a CDI program. Organizations may customize these tools to meet their particular needs. For the purposes of this toolkit, the term *query* will be used to identify the provider communication tool used concurrently or retrospectively to obtain documentation clarification. Other terms synonymous with "query" include clarification, clinical clarification, documentation alert, and documentation clarification. The organization should define how queries will be developed and maintained in its CDI program (such as concurrently, retrospectively, or a combination of both). To meet the increased demands to produce accurate and timely coded data, many organizations choose to use query forms as a type of formal communication to ensure data integrity. In some organizations, these queries become a permanent component of the medical record, that is, discoverable and often requested as part of an RA review. Responses to queries should be within the medical record, such as a progress note or discharge summary, to support code assignment.

To support the request for documentation, CDI professionals should provide clinical indicators and/or medical evidence that prompted the request for clarification. Organizations may choose to use standardized templates specific to certain diagnoses (such as heart failure) whereby the CDI professional checks the indicators, their location within the health record, and supporting data. If templates are used, the titles of the queries should be compliant and not lead the provider to a particular response.



## ELECTRONIC QUERY

An electronic query is a process in which the physician can provide any clarification or specificity on the case by creating an electronic document that is linked to the patient's EHR and made available as a permanent part of the health record metadata. In most cases, electronic queries simply perform electronically what is currently done in paper form. Electronically created queries allow the physician to answer the query remotely, saving him or her a trip to the facility to answer the query and/or document in the paper record.

Depending on system functionality, the organization may choose to utilize a different module to document the physician query. Some EHR systems may utilize features and functions such as a "Dear Doctor Note" and "Shared Notes" that can be utilized to store or maintain queries. It is important for HIM and CDI professionals to understand the system functionality and where the queries will be stored and maintained if the information must be recreated or produced in the case of a third-party audit.

The key indicator for electronic queries is twofold. The electronic query should be easy for the provider to locate and complete, regardless of the system used. In addition, no two systems are alike and no two organizations will use the same system the same way. It is important for HIM and CDI to be a part of system functionality reviews and discussion so that the appropriate location for queries is identified and used.

## PAPER QUERY

A paper query is a process that may use of a standardized template seeking clarification or specificity and submitted to the provider. The paper query is generally used in a hybrid record system. The template is completed manually by the CDI specialist, routed to the physician for completion, and then maintained in a paper chart.

It is important to note that the electronic or paper format is one piece to the query puzzle. All queries being presented to the provider should follow guidelines set forth in AHIMA's practice brief "Managing Effective Queries" and should be written in a compliant manner. Format examples are especially useful to new CDI programs and staff as templates, which can standardize the query process.

## QUERY MANAGEMENT

Organizations are free to determine the amount of information, or clinical indicators, needed to link the request for clarification to the health record. Queries maintained as a part of the health record will require more patient information than those that are only part of the *business record* or those that are shredded when the record is complete. Organizations should seek the advice of legal counsel pertaining to the *retention* of queries. Regardless of how the query is created (electronically or on paper), the organization must determine where to place the query within the chart and if the query will be a part of the *legal health record* or designated record set.

Increases in third-party audits continue to cause concerns with query documentation. It is usually at the discretion of the audit reviewer (such as RAC, *Office of Inspector General, Quality Improvement Organization*) to determine whether they will accept a query to support the claim billed. Some auditors do not accept query forms as a part of the health record, thus creating coding issues if the query was used to substantiate a code assignment. When fulfilling audit requests, organizations should always submit all documents believed to have supported the claim, which may include the entire legal health record. Organizations must determine the best approach when submitting queries as a part of a third-party audit and include a review of applicable local, state, and federal payment guidelines when considering submission. Many organizations choose to ask the provider to document answers in the progress notes or as an addendum to the discharge summary.

In order to address third-party audit concerns, it is important to have a robust CDI program capturing documentation concurrently rather than retrospectively. It is recommended that organizations follow internal policies and procedures for retrospective documentation clarification.



## CDI TOOLS

### QUALITY ASSURANCE AUDIT TOOL

The CDI *quality assurance* (QA) audit tool helps monitor the work of the CDI professional. Although there are quality and quantity standards in place for coding professionals, these programs may not have standards specific to coding professionals who perform CDI functions. In addition, CDI programs can be staffed by nurses or other clinicians who would be unfamiliar with the standards applied to coding professionals. See Appendix B for a sample CDI QA auditor job description.

It is important for a facility to have checks and balances in place to ensure the highest level of integrity as CDI programs mature. External audits will be scrutinizing health records closely for documentation. When developing a CDI program, a strong QA process can aid in achieving a successful and compliant program.

Currently, there are no recommendations as to how often these reviews should be completed or what volume of cases should be reviewed. The frequency and volume of QA review may be greater for a new CDI staff member or at the beginning of program implementation.

Ongoing internal monitoring is recommended to determine the skill level of CDI staff and appropriateness of queries placed. Organizations may also choose to have a more formal external audit to validate internal findings. It is recommended that each organization specify the frequency and volume of audits within its departmental policy. See Appendix C for sample audit and review tools.

### COMPUTER-ASSISTED CODING AND THE EHR

*Computer-assisted coding* (CAC) tools can be leveraged to automate and improve documentation, coding, data extraction, and ultimately patient care. This type of software has the ability to search and compare to assist in potential query opportunities. It can also assist in specification and clarification of diagnoses, therefore improving the overall documentation in the patient health record.

The EHR offers an opportunity to use current technology to improve documentation and patient care. In addition to improved documentation, an EHR can improve the productivity of the CDI program. All patient information is readily available for documentation review and the electronic query process. This allows providers to receive communication electronically, decreasing the turnaround time for clarification. The many advantages of the EHR include facilitating improved communication between healthcare providers, assisting with medication safety, tracking, and reporting, and promoting quality of care through optimized compliance with guidelines.

With the advent of CAC and natural language processing (NLP) applications, history and physical reports and admission notes can be scanned for key phrases indicating the necessity for a CDI review. CDI professionals typically review unstructured notes in the medical record that are recorded by clinicians treating the patient. The goal is to clarify the documentation with the attending provider, in consideration of other pertinent data available in the medical record, such as lab results, in order to facilitate more accurate coding for analytical and reimbursement purposes. By running NLP software across “free text” clinical documentation for a specific set of cases—for example, all admissions to a specific clinical service in the last 24 hours—the software can present a prioritized list of cases for CDI review.

## CDI METRICS FOR SUCCESS

There is more to a successful CDI program than hiring the appropriate staff and using the available tools for documentation improvement. An additional and necessary component requires establishing KPIs and analyzing data to determine the success of the program. It is necessary to identify the appropriate criteria for screening data that will correctly measure the success or failure of a CDI program.

**Several options are available to measure the performance of a CDI program. It is a best practice to have a monthly dashboard with the following associated monthly reports:**

- Total discharges available to review/Actual CDI reviews percentage
  - » By financial class, e.g., DRG payer vs. no DRG payer
- Physician clarification impact percentage
  - » The number of clarifications placed by a CDI that had an impact on the DRG
- Severity clarification percentage
  - » The number of clarifications that resulted in a severity change
- Physician response to CDI specialist
  - » The number of times a physician responds to a CDI question
- Physician response turnaround time (may identify a bill-hold issue)
- Physician agreement with CDI specialist
  - » For non-agreements, try to understand from the physician why there was a non-agreement (such as did not understand the query, did not have enough clinical information to make a judgment, etc). This collaboration fosters better queries and better understanding on both sides.
  - » For agreements, trend if impact was for principal diagnosis, major complication/co-morbid and complication/co-morbid conditions (MCC/CC), procedure, present on admission/hospital-acquired condition (POA/HAC), etc.
- CDI specialist/coder DRG match
  - » Use as learning opportunities for both CDI and coding
- Baseline medical/surgical case mix index (CMI)—set at time of initial program assessment
- Trending actual CMI to goal CMI
  - » Can break the trend into medical and surgical CMI
- Physician specialty/service line CMI
- Actual CMI—medical and surgical—based on population CDI program reviews, such as Medicare only or all inpatient discharges, etc.
  - » May want to exclude OB, newborn, psychiatry, rehabilitation, etc.
  - » Most healthcare facilities review CMI over time, both overall and by specialty. There is quite a bit of controversy over using CMI as the only metric to measure CDI program success, as many variables are included in CMI.
  - » It is important to have a clear understanding of the implications of changes in CMI and how a CDI program may impact it. Some examples of other metrics that could affect the CMI include but are not limited to:
    - » Census
    - » Surgeries being performed as outpatient rather than inpatient
    - » Loss of a provider group or surgical group
    - » Addition/deletion of services such as cardiothoracic surgery, neurosurgery, or adding a specific service line
- If the documentation is accurate and the specificity is captured, the CMI will be an accurate reflection

- DRG Proportions
  - » Low/high DRGs
  - » Opportunities for DRG movement, such as from DRG 193-195, Simple Pneumonia, to DRG 177-179, Respiratory Infections & Inflammations
- Medical/surgical MCC/CC capture rates

It may be helpful to establish metrics or benchmarks that have a threshold, which can be tracked via a dashboard using a stoplight report with red, yellow, and green scoring to indicate status in each area. The metrics/benchmark will depend on the organization, how it benchmarks to peers, how involved the CDI team is with the quality team, and other internal variations.

Some examples to consider include:

- >80 percent total discharges reviewed
- >80 percent provider response to clinician
- >80 percent provider agreement with clinician
- >75 percent CDI/Coder DRG match
- CMI to be determined by each facility
- 80 percent MCC/CC capture rate

In addition to the dashboard it is also important to track and trend other areas of the CDI program. These trends can be compared to peers, MedPAR data, PEPPER reports, etc. CDI professionals should make sure that benchmarking efforts only include other organizations or providers similar to their own.

Other potential trending areas to monitor:

- Top DRGs reviewed
  - » May want to focus on where there is greater opportunity for impact
  - » Consider removing some cases from MCC monitoring if a CDS cannot impact them:
  - » Ventilators
  - » Transplants
  - » Tracheostomies
  - » Elective surgeries such as orthopedic joint replacements
- Quality impact, e.g. core measures, patient safety indicators, POA/HAC, SOI/ROM, heart failure specificity, etc.
- Reimbursement due to CDI based on clarification impact (positive or negative)
  - » Trend the financial impact /benefit of CDI queries
  - » Report only those DRGs that are impacted by the CDI team, such as after final coding, did the CDI team ask the question and receive the response that impacted the DRG?
- CDS productivity
  - » Facility-specific metrics depending on scope and responsibilities of the CDS may also include core measures, HAC/POA, quality, readmissions, medical necessity, etc.
  - » Include both impact and severity queries/clarifications
- Conditions most often queried or requiring additional or more specific documentation
- Clinicians most often queried
- ROM and SOI, overall and by physician (increase/decrease) (observed to expected)
- DRG payer denials on cases followed by the CDI program (negatively and positively)
- Documentation habit changes as a result of the CDI program

- Volume of post-discharge queries versus concurrent queries
- Cost-adjusted CMI (average cost per case)
- Length of stay (observed to expected)

If using CAC software, it would be advantageous to track whether the cases identified by the software for CDI review resulted in a query. This data can be used to modify the CAC review logic. These tools require consistent monitoring and adjustments to the review logic.

There are many different strategies for measuring clinical documentation improvement success. Organizations should ensure that goals are clarified and that both quick wins and long-term success are measured. There are many complex disease processes that need to be carefully considered when determining if the opportunity for documentation clarification exists and its potential impact.

The bottom line is to capture the most specific diagnoses that tell the story of the patient's medical conditions and to do so in a compliant and ethical manner. Quality documentation captures quality of care. CDI specialists should never stop measuring performance, embracing opportunities for continuous improvement, and celebrating successes.

See Appendix D for sample metric monthly and quarterly reports.

## THE PHYSICIAN ROLE IN CDI

Accurate reporting of classification codes, MS-DRGs, and APR-DRGs requires precise analysis of the health record and application of coding guidelines. A physician who understands the complexities of coding, prospective payment, and third-party audits can be a valuable asset to bridge the gap in communication between CDI professionals, HIM professionals, and medical staff. As more physicians become involved in the role of physician advisor, these guidelines are presented for prospective candidates and as a general tool for development of existing physician advisors. For purposes of this toolkit, the term “advisor” encompasses other terms, such as champion, liaison, or similar terminology.

### BENEFITS OF THE PHYSICIAN ADVISOR ROLE

Physician leadership is essential to a successful documentation integrity program. The physician advisor should have sufficient clinical and leadership experience consistent with the needs of the individual organization. Incorporating the role of physician advisor in the CDI program can benefit the facility by:

- Providing in-service education regarding medical conditions, for CDI specialists and HIM coding professionals
- Serving as a liaison between the health information department, the clinical documentation specialist, and the medical staff to encourage provider cooperation for complete and supportive documentation reflecting the patient's condition
- Providing education to the medical staff regarding payment methodologies, documentation requirements for medical necessity, and physician profiling
  - » Assisting the hospital in reviewing and appealing potential coding and payment denials
  - » Assisting with level of care determination

## SELECTING A PHYSICIAN ADVISOR

Ideally, a hospital's physician advisor should be someone who communicates well and has the clinical respect of his or her peers. The needs and situations for each hospital will vary. In healthcare systems where there are multiple hospitals, a single physician might serve as the CDI physician advisor to more than one facility. Sometimes, a physician who already works in a contractual capacity (such as a utilization review physician advisor) might also assume the responsibility of CDI physician advisor. Or, a facility may consider appointing more than one physician to this process. See Appendix E for a sample physician advisor job description.

The hospital should develop a contractual agreement with the physician to define responsibilities and compensation. It is ideal if the physician is:

- Able to devote a minimum of six to 10 hours per week to review charts, consult with coding professionals, and meet with the CDI professional and physicians regarding specific charts
- Willing to serve on the utilization review committee (e.g., performance improvement committee) and become involved in potential adverse DRG determinations
- Willing to conduct in-house education and training programs for medical departments related to prospective payment systems, DRGs, and review processes
- Optimally, possessing leadership skills and respected in the medical community

## ROLE OF THE PHYSICIAN ADVISOR

In general, the physician advisor will act as a liaison between CDI specialists, coding professionals, quality professionals, and providers to facilitate complete and accurate documentation to support the diagnoses, treatment, medical necessity, and severity of illness, which in turn substantiate accurate code assignment and correct DRG assignment. This is usually accomplished by the following mechanisms:

- **Educating healthcare providers on:**
  1. Correlating between clinical language and coding guidelines
  2. Reflecting the true picture of patient's severity of illness
  3. Capturing services/treatment/utilization for the organizations
  4. Translating classification codes to individual physician profiles
  5. Ensuring that documentation supports code assignments
  6. Interpreting coded data in quality measures and reporting
  7. Payment methodologies
- **Work in collaboration with HIM coding and CDI specialists to:**
  1. Review medical record documentation on a concurrent and retrospective basis
  2. Discuss clinical issues identified in record review activities, such as specificity of congestive heart failure
  3. Discuss clinical criteria for disease processes, such as sepsis or respiratory failure
  4. Assist in the development of appropriate and compliant provider queries
  5. Review hospital-acquired conditions and/or treatment complications

## STARTING A CDI PROGRAM

Organizations must start with a goal to have a top-quality, sustainable program. To achieve this goal, executive sponsorship, provider engagement, and oversight structure are essential.

A great CDI program starts with a clear vision and demonstrated business value aligned with strategic goals. While preparing to begin a CDI program, collecting and summarizing relevant data prior to program implementation can assist leaders in identifying potential benefits and considerations.

Benefits may include:

- Fair and accurate reimbursement
- Improved documentation representing the severity of illness treated
- ROM reported accurately
- Quality care
- Improved patient outcomes
- Public reporting, scorecards, and improved profiling for providers and facilities
- Improved specificity and accuracy in code selection

A retrospective chart audit should be performed to determine the volumes and types of potential query opportunities that exist in previously billed records. Organizations analyze the case mix index (CMI) and top MS-DRGs to identify and prioritize specific areas for the audit, thus defining record criteria and time frame (for example, discharges for the last six months with symptom principal diagnoses, without complication or comorbidity (CC) or a major complication or comorbidity (MCC) and/or non-excisional debridement cases).

Output performance measures should also be used to identify areas of opportunity, comparing the CMI, Hierarchical Condition Categories (HCCs), CC and MCC capture rates (broken down by payer or grouper), to comparable facilities. This data can be further scrutinized by prospective payment system (PPS) to give a better understanding of the clinical significance of the findings.

The impact of these findings can then be described and communicated as anticipated business values relevant to organization's strategic goals (for example, potential estimated dollar amounts, increase in relative weight/CMI, SOI, and ROM scores, and/or positive impact to patient safety indicators).

## HARDWARE AND SOFTWARE REQUIREMENTS

CDI professionals will need to have a process in place to identify their patient population, such as an ADT feed or daily census report. Each CDI professional should have a workstation equipped with a computer or lap top that has Internet access and connects to a network printer. The workstation should be loaded with an *encoder*, query forms, communication templates, and references. The references may vary depending on the needs of the facility and the CDI professional's service area.

Most encoder software vendors have reference packages available as add-on products. These include subscriptions to AHA's *Coding Clinic*® and *ICD-10-CM and ICD-10-PCS Coding Handbook*, AMA's *CPT Assistant*®, a medical dictionary, *The Merck Manual*, Elsevier's anatomy plates, *Mosby's Manual of Diagnostic and Laboratory Tests*, a dictionary of medical acronyms and abbreviations, and a clinical pharmacology drug reference.

Additional resources are also available through memberships to community resources such as AHIMA's Engage community, AHIMA's CDI blog ("[Documentation Detective](#)"), and AHIMA's Body of Knowledge.

A CDI professional reviewing outpatient encounters will require access to local coverage determinations and will benefit from forums and sites like CMS that discuss the risk adjustment model.

Since coding is ever-changing, both the CDI and coding professionals should have current coding resource materials along with clinical references to enable the most efficient and accurate performance of the CDI and coding process.

As facilities transition to an electronic health record (EHR), CDI workflows and resources need to be considered within the EHR. Potential software functions should include the ability to add a concurrent clarification query into an active chart and within the provider's routine workflow, generate reports to track and monitor CDI activities, and individualized reports based on facility preferences and requirements. More advanced systems may use CAC software or natural language processing to identify possible opportunities for greater specificity in documentation.

## CHALLENGES

Administrative support is vital to the success of a CDI program. Initially, the challenges are creating urgency and a business case to create a CDI program, having a stakeholder group, a provider advisor, and administrative support. Once the program is started, the challenge comes in maintaining momentum, communicating the program results, impacts, and needs, and connecting CDI program business values relevant to the organization's strategic goals.

Physician buy-in and engagement can be a challenge, especially when first starting a program. Consider the programs at your organization that are successfully engaging providers and how the CDI program can leverage the same success factors. Educating physicians, physician assistants, and advanced registered nurse practitioners who round with physicians may be a successful pre-program strategy.

Training and education should be tailored to specific services such as cardiology and gastroenterology, as each specialty has specific documentation requirements. Using the vision and business value developed to support the CDI program, trainers should emphasize how greater specificity in documentation will benefit the provider, their patients, and the organization. Provider education can feel never-ending as the health care environment is dynamic. For long term impact and sustainability, the CDI program should have support, structure, and expectations set for ongoing education.

Hiring the right individual in CDI positions is important for many reasons, including program scaling and growth, positive image, and desired results. The ideal candidate may come from various backgrounds, particularly HIM, nursing, and physicians. A candidate should have a current license and/or credential. CDI professionals should have a strong clinical background, solid oral and written communication skills, and working knowledge of coding guidelines and conventions. These skills will empower them to provide a clinically succinct provider query and also be recognized as a member of the healthcare team. By understanding the ethics and compliance issues surrounding the provider query process, CDI professionals may have a supporting role serving as "another set of eyes" during chart reviews for other disciplines such as nursing (abnormal tests that are not addressed directly affecting the quality of patient care), quality core measures, case management (admissions status to inpatient or observation orders), and HACs/denials/RAs (strong clinical support for diagnoses coded).

The CDI professional is a new player to the coding team, communicating with providers on documentation improvement opportunities often before the coding professional codes the case. In the past, this communication may have been completed retrospectively as a function of coding. Recognizing that CDI concurrent reviews are significantly more effective than retrospective coding queries allows both the coding and CDI team to focus where they can have the best impact and outcomes. Both CDI professionals and the hospital coding professionals have important skills and contributions to the organization and to each other. Team partnerships and regular communication and training should be encouraged to accomplish the goals of both teams. Examples include systems to communicate clarifications, joint end-to-end case reviews, lessons learned, audit results, trending of findings, and celebration of successes. Collaboration between coding and CDI professionals is helpful in enhancing operational synergies.

Program effectiveness audits and evaluations should be performed to monitor the performance of the team. The components of these audits may include: assessment of progress towards stated business value and improvement goals and feedback to individual CDI professionals and to the team for performance and achievement recognition/celebrations and improvement opportunities. A regular (monthly or quarterly) audit program should be implemented. Building on the business case and findings from the pre-program audit and findings, audit program criteria should be selected and established based on risk areas, improvement goals, or other strategic goals. For example, discharged and billed cases may be reviewed to assess if the CDI professional's working DRG matches the final DRG. Another example is end-to-end review of cases with final DRGs that are considered outside of the organization's



strategy. From the audits, determine if there were missed query opportunities. Are there trends creating opportunities for education of the team or CDI professional? Is the program having the intended positive impacts and outcomes? From the findings, action plans can be determined and steps taken.

For a successful CDI program to be maintained, a plan should be in place to address the need for ongoing and/or updating education of CDI professionals on ever-changing codes, rules, regulations, and guidelines. It is to the facilities' advantage to ensure that CDI professionals attend classes, seminars, conferences, or conventions where the latest information is presented. Continuing education is critical in sustaining a valuable CDI program.

## DEPARTMENT ALIGNMENT

Starting a CDI department begins with planning the reporting structure. Although CDI professionals review the concurrent health record and work closely with the coding department, they do not always fall under the same leadership alignment. The CDI team might report to the chief financial officer (CFO) or within departments, including HIM, quality, compliance, and case management.

The internal reporting structure is also important when planning how the team will disperse data and remain value driven. Many CDI departments have a dedicated CDI manager who provides monthly reports while keeping a handle on the daily census, query compliance, and team support.

## GETTING STARTED

Starting the CDI program begins by analyzing 12 months of DRG data. Review data by DRG pairs, physicians, and specialties to identify documentation improvement opportunities. Identify the MS-DRGs that were coded without a CC and MCC. A team consisting minimally of HIM, case management, nursing, quality, and the physician advisor should review the chart documentation of the top 10 DRGs (review a sample of 100 charts; 10 by each DRG).

When reviewing documentation, the team should look at the following: treatment protocols, retrospective queries, and forms (e.g., anesthesia form for history documentation). They should identify the DRG billed, determine what the potential DRG could have been with additional documentation, and apply a dollar amount to the records reviewed. This review can serve as the basis of a documentation handbook for physicians.

The following decisions must be made prior to implementing a CDI program, depending on the size and needs of the organization:

1. Who will comprise the CDI staff
2. Alignment of the CDI program
3. Determine the types of health records to review
4. Number and frequency of chart reviews
5. Budget
6. Training needs
7. Who will train
8. Location of training
9. Scope of practice
10. Reports to administration

See Appendix F for a full list of questions and decisions to consider.

## SAMPLE PROCESS FLOW

Launching a CDI program also requires drafting a process flow. The following sample applies to a paper-based facility and would be adjusted for an EHR system.

After midnight, obtain a hospital census. Information should include (but not be limited to) room number, patient name, insurance carrier, date of admission, physician name, and admitting diagnosis.

Each CDI professional will review every patient within the determined CDI program scope on the assigned floor census every one to two days (or according to policy). New CDI programs may wish to begin performing chart reviews with high potential admit diagnosis and surgeries to review for complications.

The CDI professional will initiate a worksheet on new admissions, which should be placed in a designated section of the health record on the floor. Each worksheet will include (but not be limited to) patient name, encounter number, admission date, working DRG, procedures, principal diagnosis, and additional diagnoses that impact the DRG or severity. (The CDI worksheet might be electronic or paper based.)

If a physician query opportunity is identified, the CDI professional should query the physician verbally, place a written query in the designated section of the health record with patient identifiers and CDI contact information, or submit the query electronically. Notation will be written on the worksheet regarding date, type of query (verbal, electronic, or written), and reason for query. If no query opportunity is identified, the CDI professional will continue to review the patient daily for further query opportunities.

Physician queries will be followed concurrently. If physician documentation affects an assigned DRG or severity, the CDI professional will update the working DRG on the worksheet. If the physician does not respond to the query, the CDI professional will contact the designated physician to review the current documentation and plan of care.

If the physician query is unanswered, a policy should be in place on how to manage this. The policy for managing unanswered queries should have minimal impact on the final coding and billing process. An unanswered query can be addressed in several ways. It can be:

- Designated as an incomplete chart and subject to the same rules for delinquency and suspension
- Forwarded to the physician advisor for direct follow-up with the physician
- Forwarded through the medical peer review QA process

After discharge, the coder will assign a DRG based on the health record documentation, answered queries, and coding guidelines. The coder will document the final DRG on the CDI worksheet, attaching any queries left in the health record. DRGs without discrepancies will be billed, and the worksheet will be returned to the CDI department. The worksheet may be retained in the health record.

Charts with discrepancies (prior to final bill) will be given to the CDI professional assigned to the admission for a third review. If the CDI professional confirms or discovers documentation that would change the assigned DRG, a validation sheet is completed with clinical evidence and quoted physician documentation for final coding review. If an opportunity remains, based on physician documentation (either unanswered query or ambiguous language), the CDI professional will contact the physician for final clarification.

All queries and validation sheets will be tracked and trended. Retention of queries should be addressed in facility policies and procedures. Auditors may request copies of queries to validate query language, even if they are not kept as part of the legal health record.

See Appendix G for a sample process workflow.

## GETTING PROVIDER QUERIES ANSWERED

Depending on the organizational culture, rounding with providers or communicating verbally may be the best ways to get queries answered. Direct contact allows the opportunity for documentation education. CDI professionals should form appropriate queries and avoid asking for diagnoses not specifically supported in the health record.

Having a standard query form in a consistent area of the health record makes the query easy for the provider to find. Consider making the query a permanent part of the record. Attend patient care conferences and ask the other services to assist in getting the query answered. If the physician has a great relationship with a certain nurse, ask the nurse for assistance. Be a resource to the physician in other areas, for example, helping with their provider practice coding. Make query and CDI program information available online via the organization's intranet.

Emphasis should be made on educating physicians about clinical documentation to decrease the need for frequent querying on the same diagnosis. For example, a cardiologist who has learned the importance of documenting about congestive heart failure (CHF) will consistently document the acuity (acute, chronic, acute on chronic) and type (systolic, diastolic, systolic and diastolic) of heart failure without having to be queried again and again.

Feedback to physicians such as thanking them for responding to the query also gets positive response for future responses to queries. A doctor once responded, "It is nice to hear that I did something good instead of hearing complaints all the time." This same cardiologist now consistently documents the acuity and type of his patients' CHF.

## MAINTAINING A CDI PROGRAM

Maintaining a successful CDI program involves more than daily reviews and DRG assignments; it requires professional growth, ongoing program needs assessments, and a dynamic strategic plan. Growth and collaboration with the medical staff can be reinforced by scheduling in-services and using physician publications regarding disease process, new treatment plans, or surgical procedures. Include the coding staff to bring depth and understanding to grouper phraseology and CDI queries. Planning roundtables with coding staff to discuss guidelines, updates, and ambiguous language in the health record will facilitate open dialogue and teamwork. These meetings will stimulate conversations and help align the departments to reach billing accuracy and regulatory excellence. Encourage the staff to attend seminars, discuss journal articles, and network with other CDI programs in the area, all of which support best practice and professional development.

Scheduling quarterly meetings with executive sponsors, administration and physician leadership, including physician advisors, maintains program visibility and continued support for the CDI program. In addition to reporting metrics such as CMI and CC/MCC capture rates, attendees can discuss recently encountered problems. Discussing possible solutions positions leadership to provide guidance and intervention when needed. Benchmark data from peer organizations can help demonstrate program success or areas for improvement.

Developing articles and documentation tips sheets will bring value and help keep the program visible and vibrant. Working with the medical staff department (or office) could provide a vehicle to publish information and share it with the medical staff as a whole.

To be successful, a CDI program should be based on a strategic plan that aligns with the organization's strategic goals and mission. Effective plans are built on a foundation of purpose, vision, mission, and short- and long-term goals. This is a dynamic process that must be continually assessed and reevaluated. And although it is important to partner with other departments, it is critical to avoid being overtasked. Balance and alignment are important considerations for effective outcomes.

## HIRING FOR CDI POSITIONS

CDI programs require structure to ensure success and sustainability. When considering CDI positions, the organization must address staffing and management of the program within the context of current organizational dynamics. The ultimate success of the program will depend on how well it is tailored to meet the needs of the organization.

The size of the CDI department, or unit, will depend on the size of the organization as well as the functional requirements of the program. No two programs will be exactly alike. Ideally, the program will have a full-time manager and staff sufficient to develop a return on investment.

The CDI staff should be responsible for the day-to-day activities of the program. These functions include concurrent chart review, writing appropriate queries, interacting with clinical staff, and analyzing data.

Once the number of staff has been defined, CDI managers can turn their attention to the type of skills and knowledge required for the job. The job description referenced earlier in the toolkit can provide guidelines for hiring in terms of experience, credentials, education, and work function. The hard part is identifying the right person among the field of candidates.

## FINDING THE RIGHT PERSON

There is no cookie-cutter approach to finding the right individual. However, there are key competencies that can be judged when interviewing candidates. Each organization should define which competencies are important to their needs. Suggested core competencies for a CDI specialist include:

- Financial knowledge
- Clinical knowledge
- Coding skills
- Years of experience
- Interpersonal skills
- Communication skills (both written and verbal)
- Leadership skills
- Team player
- Organizational skills

In addition, CDI positions require key personality traits to look for when interviewing. Personality, along with team dynamics and the ability to work well with multiple different healthcare providers, can sometimes make up for lack of experience. For example, if a candidate is positive, speaks and writes well, but only has three years of healthcare experience, an organization may offer employment that hinges on expanding his/her clinical and coding knowledge. Examples of key personality traits for a CDI specialist include:

- Positive
- Outgoing
- Energetic
- Independent
- Responsible
- Flexible

See Appendix H for a list of potential interview questions for a CDI specialist.

See Appendix I for a pre-hire assessment tool.

## ORIENTATION REQUIREMENTS

Similar to staffing models and job descriptions, orientation programs vary widely from organization to organization. The best and most successful programs share many common components. Orientation first begins upon making a job offer. Notify the new hire prior to their first day at work regarding orientation details. Most CDI staff will attend facility general orientation before reporting to their unit. This orientation should be clearly outlined in terms of time and structure.

The best orientation programs do not end after general orientation. They continue with a department-specific training phase that is complete and comprehensive, with clear objectives for training. These department-specific training periods can last from 90 days to up to one year. The level of competencies that the new hire should have at the end of the orientation phase should be clearly outlined at the beginning and progress monitored throughout the process.

In order to monitor progress, regular follow-up sessions should be scheduled with the new staff member. Although much of the feedback for a CDI specialist may occur on the floor as they directly interact with clinical care providers, it is still important for their immediate supervisor/manager to meet with them and inform them of their progress, identify learning needs, and check off items that are completed or closed.

The final step in the orientation process should be a complete evaluation of the CDI professional's performance. Throughout the orientation process notes should be made, measurements taken, and progress noted. At the end of your orientation, the preceptor or instructor should fill out a complete evaluation of the employee's performance. During orientation, nurse managers and supervisors should measure the CDI professional's success and progress toward clinical competence. During the interview process, the process of receiving feedback, as well as how often that feedback will be provided, should be discussed.

The orientation program should continually be evaluated by new hires and changes made accordingly. Feedback should include an evaluation of both the formal organization-wide and department-specific programs and suggestions for improvement.

See appendix J for a sample 90-day assessment.

## QUALITY MEASURES

Quality healthcare is a high priority for the healthcare industry and specifically for the Department of Health and Human Services and CMS. CMS has implemented quality measures to assure patients of federal strategies that are aimed at improving the quality of healthcare in the US. The agency uses quality measures through a variety of programs such as pay for reporting and public reporting that ensure accountability and public disclosures.

Quality measures are tools that the industry uses to measure and quantify the quality of healthcare processes, outcomes, patient satisfaction, and organizational structures. All of the quantifiable measures are associated with the organization's and provider's abilities to provide high-quality, cost-efficient care and relate to one or more goals. CMS goals include measures for effective, safe, efficient, patient-centered, and timely patient care.

Data on quality measures are collected and/or reported in a variety of ways, such as claims submission, assessment instruments, manual chart abstraction, and registries. Many data collection agencies are focusing on the submission of quality measures via an electronic system, using the EHR.

Organizations must ensure that data submitted for quality measures is accurate. Submission of inaccurate data can have a tremendous negative impact for the organization if they are publicly available. Many organizations choose to use the CDI program as a way to monitor and ensure appropriate data collection and submission of quality measures. Organizations that choose to neglect or underfund CDI programs are at risk for substandard quality reporting.

Because clinical documentation is at the heart of each patient visit, the need for complete and accurate documentation is more pronounced than ever before. Adding to the importance of accurate documentation is the need for secondary data use. Persuading organizations to participate in quality measure programs, such as CMS, will provide hospital financial incentives for reporting. Other initiatives such as Hospital Compare, Physician Compare, and Heathgrades use healthcare data to provide quality reports to consumers and are available online.

Many organizations have already begun evaluating documentation within the EHR, and some have found that electronic notes can improve issues such as legibility and availability of clinical information. The EHR also has the ability to enable automated decision support and data analysis. The key is to turn physician documentation into coded language needed to support accurate quality measure reporting.

Physician documentation and clinical care is turned into a complex coded language by coding professionals. This data is then used for a variety of purposes. As healthcare moves forward with initiatives such as quality-driven reimbursement and clinical quality measure reporting, both organizations and physicians will have to provide justification for patient care and demonstrate quality outcomes. Coded data is used to measure quality and the continued need for coded data to serve in this function will continue.

Physicians and other healthcare providers documenting within the health record are often not trained on proper documentation skills. This often provides large gaps of information that the clinical care provider knows, but does not accurately convert to coded data. For example, the term “bacteremia” to a clinical care provider may mean “urinary tract infection” to the provider. Organizations need to compensate for this lack of training to ensure that coded data matches the diagnosis and severity of the patient’s illness in order for quality reporting to be accurate.

## THIRD-PARTY AUDITS

Clinical documentation is often the reason for audits by third parties. The lack of documentation or poor documentation habits are a few examples of issues that can result in both *medical necessity* and coding denials. Other issues such as incomplete documentation of bedside procedures can result in denials related to procedural coding. As the healthcare industry experiences a record number of external audits, both federal and private, the need to clearly articulate the patient’s need for admission within the health record has become paramount.

A CDI program can reduce the number of audits by identifying what is being audited and why. CDI professionals should focus on documentation that clearly justifies the reason patients need inpatient care. CDI professionals can also target diagnoses that result in high-profile DRGs, such as congestive heart failure, unspecified. Medical necessity and severity of illness can be validated by appropriate documentation. CDI professionals can assist in this endeavor by asking questions of clinical care providers, who in turn explain in detail why admissions occur and procedures are performed.

CDI staff can focus on a number of techniques to reduce the likelihood of denials, such as:

- Documenting a condition that is present on admission, such as pressure ulcer
- Documenting a condition that is current issue or historical, such as Hepatitis C versus acute hepatitis versus chronic hepatitis
- Defining a condition, such as alcohol dependence, alcohol abuse, alcohol use
- Explaining the etiology of symptoms, such as nausea and vomiting versus gastroenteritis
- Explaining the etiology of a condition, such as seizures due to cerebrovascular accident
- Defining severity of illness, such as chronic obstructive pulmonary disease versus acute respiratory failure
- Defining reasons for intervention, such as intubation for airway protection versus intubation for respiratory failure
- Clarifying when two conditions are equally causal for admission, such as pneumonia and acute asthma

CDI staff should meet regularly with the staff responsible for audits, appeals, and denials. They should understand the key documentation issues that result in denials or reductions of payment to the organization as well as national trends in audit results. Staff should be aware of clinical guidelines used by third-party auditors that pertain to admission criteria, severity of illness, and hospital-acquired conditions.

CDI staff should routinely receive reports regarding organization-specific denial data. Information should include diagnoses that result in medical necessity denials, principal diagnosis changes, and trending of organizational data. In an effort to mitigate potential denials, CDI staff should be trained on appropriate documentation for present on admission, hospital-acquired conditions, appropriate selection of principal diagnosis, correlating documentation to symptom etiology, and quality measures.

The high cost of healthcare delivery in the US will continue to put a focus on appropriate reimbursement. Organizations can mitigate the risk of third-party denials by implementing a successful CDI program that reviews for potential denials prior to final billing.

## CASE MANAGEMENT

Case managers have always played an important role in documentation improvement. They have had a strong working relationship with medical staff and other healthcare providers as they coordinate care for the patient. This professional relationship with physicians is vital to the CDI program success, and case management can be a major asset to a CDI program.

The impact of CDI on case management is a positive one. Improving documentation to support severity of illness and risk of mortality will decrease denials significantly. Working together, the case management and CDI staff can ensure the care of the patient is documented appropriately and follows compliance guidelines. The working relationship between case management and CDI improves the query process and supports the goals of the CDI program.

The case management nurses are the first line of defense for the CDI program. They are notified when a patient is admitted to the floor and begin to review documentation to support admission. Optimizing the success of the CDI program through a collaborative approach with CM is only logical. Communication between the case management and CDI staff can improve provider response to queries by tapping into the professional relationship case managers have already developed with the provider. Case managers can notify the physician when a query has been placed and explain the necessity for clarification if necessary. This team approach to documentation improvement will ensure compliance with guidelines, improve patient care, and reduce denials.



## HOW TO GET CDI APPROVED

The myriad uses and users of health information can illustrate the importance of accurate and timely clinical documentation as well as the need for a health record that incorporates that information. The information derived from clinical documentation in the health record drives decision-making efforts at an organizational level and, in some part, the healthcare industry as a whole. For many organizations, the approval for new programs is directly tied to revenue that will result from the change. However, to some a CDI program is not seen as a direct revenue producer, so its advocates will need to build a case for it.

A CDI program is only as good as the information within the health record. The health record is in turn used by many different individuals within the healthcare continuum. The list of individuals who utilize a health record for decision making is as vast and varied as the number of organizations providing patient care. It is the volume of users that depend on accurate documentation that can often begin selling the need for a successful program. Some users of health information include:

- Patient and families
- Physicians
- Nurses
- Other clinical care providers (respiratory therapy, laboratory, radiology, etc.)
- Insurers
- Government and regulatory agencies
- Research organizations
- HIM professionals
- Public health agencies

The financial impact of a CDI program is important to the organization, and many programs are developed for that reason. However, to establish a CDI program specifically for financial reasons is shortsighted. An initial review of organizational specific data will assist the facility in determining its initial focus for the CDI program. The focus may be a particular unit or specialty that has the ability to reap immediate rewards. In addition, the organization should review other key indicators that provide “soft statistics,” or those items that do not necessarily equal a revenue impact.

Soft statistics include items such as:

- Increase in severity of illness, such as the difference between a diagnosis of pneumonia and aspiration pneumonia
- Decreased days to billing because coding professionals have clear and concise information at discharge
- Correct patient status, for example observation versus inpatient
- Decrease in retrospective queries
- Reduction in inappropriate admissions
- Decrease in readmissions

## CDI GLOSSARY

### A

**Acute care prospective payment system:** The Medicare reimbursement methodology system referred to as the inpatient prospective payment system (IPPS). Hospital providers subject to the IPPS use the Medicare Severity Diagnosis Related Groups (MS-DRGs) classification system, which determines payment rates

**Addendum:** A late entry added to a health record to provide additional information in conjunction with a previous entry. The late entry should be timely and bear the current date and reason for the additional information being added to the health record

**Admitting diagnosis:** A provisional description of the reason why a patient requires care in an inpatient hospital setting

**All patient refined diagnosis-related groups (APR-DRGs):** An expansion of the inpatient classification system that includes four distinct subclasses (minor, moderate, major, and extreme) based on the severity of the patient's illness

**Amendment:** Alteration of health information by modification, correction, addition, or deletion

**Autocoding:** The process of extracting and translating dictated and then transcribed free-text data (or dictated and then computer-generated discrete data) into ICD- 9-CM and CPT evaluation and management codes for billing and coding purposes

### B

**Benchmark:** The systematic comparison of the products, services, and outcomes of one organization with those of a similar organization; or the systematic comparison of one organization's outcomes with regional or national standards

**Business record:** A record that is made and kept in the usual course of business, at or near the time of the event recorded

### C

**Case management:** 1. The ongoing, concurrent review performed by clinical professionals to ensure the necessity and effectiveness of the clinical services being provided to a patient 2. A process that integrates and coordinates patient care over time and across multiple sites and providers, especially in complex and high-cost cases, with goals of continuity of care, cost-effectiveness, quality, and appropriate utilization 3. The process of developing a specific care plan for a patient that serves as a communication tool to improve quality of care and reduce cost

**Case-mix index (CMI):** The average relative weight of all cases treated at a given facility or by a given physician, which reflects the resource intensity or clinical severity of a specific group in relation to the other groups in the classification system; calculated by dividing the sum of the weights of diagnosis-related groups for patients discharged during a given period by the total number of patients discharged

**CDI:** See clinical documentation improvement

**Centers for Medicare and Medicaid Services (CMS):** The division of the Department of Health and Human Services that is responsible for developing healthcare policy in the United States and for administering the Medicare program and the federal portion of the Medicaid program and maintaining the procedure portion of the International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM); called the Health Care Financing Administration (HCFA) prior to 2001

**Clinical documentation:** Any manual or electronic notation (or recording) made by a physician or other healthcare clinician related to a patient's medical condition or treatment

**Clinical Documentation Improvement (CDI):** The process an organization undertakes that will improve clinical specificity and documentation that will allow coders to assign more concise disease classification codes

**CMS:** See Centers for Medicare and Medicaid Services

**Compliance:** 1. The process of establishing an organizational culture that promotes the prevention, detection, and resolution of instances of conduct that do not conform to federal, state, or private payer healthcare program requirements or the healthcare organization's ethical and business policies 2. The act of adhering to official requirements 3. Managing a coding or billing department according to the laws, regulations, and guidelines that govern it

**Computer-assisted coding (CAC):** The process of extracting and translating dictated and then transcribed free-text data (or dictated and then computer-generated discrete data) into ICD-10-CM and CPT evaluation and management codes for billing and coding purposes; See also autocoding

**Core measure/core measure set:** Standardized performance measures developed to improve the safety and quality of healthcare (for example, core measures are used in the Joint Commission's ORYX initiative)

## D

**Dashboards:** Reports of process measures to help leaders follow progress to assist with strategic planning; Also called scorecards

**Diagnosis-related groups (DRGs):** A unit of case-mix classification adopted by the federal government and some other payers as a prospective payment mechanism for hospital inpatients in which diseases are placed into groups because related diseases and treatments tend to consume similar amounts of healthcare resources and incur similar amounts of cost; in the Medicare and Medicaid programs, one of more than 500 diagnostic classifications in which cases demonstrate similar resource consumption and length-of-stay patterns. Under the prospective payment system (PPS), hospitals are paid a set fee for treating patients in a single DRG category, regardless of the actual cost of care for the individual

## E

**Electronic health record (EHR):** An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one healthcare organization

**Encoder:** Specialty software used to facilitate the assignment of diagnostic and procedural codes according to the rules of the coding system

## H

**Health information management (HIM) professional:** An individual who has received professional training at the associate or baccalaureate degree level in the management of health data and information flow throughout healthcare delivery systems; formerly known as medical record technician or medical record administrator

**Health record:** 1. Information relating to the physical or mental health or condition of an individual, as made by or on behalf of a health professional in connection with the care ascribed that individual 2. A medical record, health record, or medical chart that is a systematic documentation of a patient's medical history and care

**Home health prospective payment system (HHPPS):** The reimbursement system developed by the Centers for Medicare and Medicaid Services to cover home health services provided to Medicare beneficiaries

**Hospital-acquired conditions (HAC):** Certain conditions recognized by CMS that occur during a hospital admission that have a high cost and/or volume, have an assignment of a DRG with a higher payment when present as a secondary diagnosis, and could have been reasonably prevented by applying evidence-based guidelines.

**Hospital Outpatient Prospective Payment System (OPPS):** The reimbursement system created by the Balanced Budget Act of 1997 for hospital outpatient services rendered to Medicare beneficiaries; maintained by the Centers for Medicare and Medicaid Services (CMS)

**I**

**International Classification of Diseases, Tenth Revision, Clinical Modification Procedural Classification System (ICD-10-CM/PCS):** A coding and classification system used in the United States to report diagnoses in all healthcare settings and inpatient procedures and services as well as morbidity and mortality information

**L**

**Legal health record (LHR):** Documents and data elements that a healthcare provider may include in response to legally permissible requests for patient information

**M**

**MCC/CC:** acronym to describe major complication/co-morbid and complication/co-morbid conditions in reimbursement methodology

**Major Diagnostic Categories (MDCs):** Under the diagnostic-related groups (DRGs), 25 mutually exclusive categories grouped by similar diagnostic-related conditions that affect a specific organ system or systems of the body

**Medicaid:** An entitlement program that oversees medical assistance for individuals and families with low incomes and limited resources; jointly funded between state and federal governments and legislated by the Social Security Act

**Medicaid Integrity Contract (MIC):** CMS contracts with eligible entities to review and audit Medicaid claims to identify overpayments and provide education on program integrity issues

**Medical necessity:** 1. The likelihood that a proposed healthcare service will have a reasonable beneficial effect on the patient's physical condition and quality of life at a specific point in his or her illness or lifetime 2. Healthcare services and supplies that are proven or acknowledged to be effective in the diagnosis, treatment, cure, or relief of a health condition, illness, injury, disease, or its symptoms and to be consistent with the community's accepted standard of care. Under medical necessity, only those services, procedures, and patient care warranted by the patient's condition are provided 3. The concept that procedures are only eligible for reimbursement as a covered benefit when they are performed for a specific diagnosis or specified frequency; Also called need-to-know principle

**Medical scribe:** An individual who enters information into the medical record at the direction of a physician

**Medicare:** A federally funded health program established in 1965 to assist with the medical care costs of Americans 65 years of age and older as well as other individuals entitled to Social Security benefits owing to their disabilities

**Medicare Advantage (Medicare Part C):** Optional managed care plan for Medicare beneficiaries who are entitled to Part A, enrolled in Part B, and live in an area with a plan; types include health maintenance organization, point-of-service plan, preferred provider organization, and provider-sponsored organization

**Medicare Provider Analysis and Review (MEDPAR) database system:** A database containing information and files submitted by fiscal intermediaries that is used by the Office of the Inspector General to identify suspicious billing and charge practices

**Medicare severity diagnosis-related groups (MS-DRGs):** The US government's 2007 revision of the DRG system, the MS-DRG system better accounts for severity of illness and resource consumption

**MEDPAR database system:** See Medicare Provider Analysis and Review database system

**Metric:** A performance indicator used to track and trend performance

**N**

**Need-to-know principle:** The release-of-information principle based on the minimum necessary standard

**O**

**Office of the Inspector General (OIG):** Mandated by Public Law 95-452 (as amended) to protect the integrity of Department of Health and Human Services (HHS) programs, as well as the health and welfare of the beneficiaries of those programs. The OIG has a responsibility to report both to the Secretary and to the Congress program and management problems and recommendations to correct them. The OIG's duties are carried out through a nationwide network of audits, investigations, inspections, and other mission-related functions performed by OIG components

**P**

**Pay for performance (P4P):** 1. A type of incentive to improve clinical performance using the electronic health record that could result in additional reimbursement or eligibility for grants or other subsidies to support further HIT efforts 2. The Integrated Healthcare Association initiative in California based on the concept that physician groups would be paid for documented performance

**Performance improvement (PI):** The continuous study and adaptation of a healthcare organization's functions and processes to increase the likelihood of achieving desired outcomes

**Performance measure:** A quantitative tool used to assess the clinical, financial, and utilization aspects of a healthcare provider's outcomes or processes

**Physician champion:** An individual who assists in communicating and educating medical staff in areas such as documentation procedures for accurate billing and appropriate EHR processes

**Present on admission (POA):** A condition present at the time of inpatient admission

**Principal diagnosis:** The disease or condition that was present on admission, was the principal reason for admission, and received treatment or evaluation during the hospital stay or visit or the reason established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care

**Prospective payment system (PPS):** A type of reimbursement system that is based on preset payment levels rather than actual charges billed after the service has been provided; specifically, one of several Medicare reimbursement systems based on predetermined payment rates or periods and linked to the anticipated intensity of services delivered as well as the beneficiary's condition; See acute care prospective payment system; home health prospective payment system; hospital outpatient prospective payment system; skilled nursing facility prospective payment system

**Q**

**Quality assurance (QA):** A set of activities designed to measure the quality of a service, product, or process with remedial action, as needed, to maintain a desired standard

**Query:** The process by which questions are posed to a provider to obtain additional, clarifying documentation to improve the specificity and completeness of the data used to assign diagnosis and procedure codes in the patient's health record

**Quality improvement organization (QIO):** An organization that performs medical peer review of Medicare and Medicaid claims, including review of validity of hospital diagnosis and procedure coding information; completeness, adequacy, and quality of care; and appropriateness of prospective payments for outlier cases and non-emergent use of the emergency room. Until 2002, called *peer review organization*

**Quality management:** Evaluation of the quality of healthcare services and delivery using standards and guidelines developed by various entities, including the government and independent accreditation organizations

**Quality measures:** See performance measure

## R

**RAC:** See recovery audit contractor

**Recovery audit contractor (RAC):** A governmental program whose goal is to identify improper payments made on claims of healthcare services provided to Medicare beneficiaries. Improper payments may be overpayments or underpayments

**Reimbursement:** Compensation or repayment for healthcare services

**Relative weight (RW):** Assigned weight that reflects the relative resource consumption associated with a payment classification or group; higher payments are associated with higher relative weights

**Retention:** 1. Mechanisms for storing records, providing for timely retrieval, and establishing the length of times that various types of records will be retained by the healthcare organization 2. The ability to keep valuable employees from seeking employment elsewhere

**Revenue cycle:** 1. The process of how patient financial and health information moves into, through, and out of the healthcare facility, culminating with the facility receiving reimbursement for services provided 2. The regularly repeating set of events that produce revenue

**Risk of mortality (ROM):** The likelihood of an inpatient death for a patient

## S

**Scorecards:** Reports of outcomes measures to help leaders know what they have accomplished; also called dashboards

**Secondary diagnosis:** A statement of those conditions coexisting during a hospital episode that affect the treatment received or the length of stay

**Severity of illness (SI or SOI):** A type of supportive documentation reflecting objective clinical indicators of a patient illness (essentially the patient is sick enough to be at an identified level of care) and referring to the extent of physiologic decompensation or organ system loss of function

**Skilled nursing facility prospective payment system (SNF PPS):** A per diem reimbursement system implemented in July 1998 for costs (routine, ancillary, and capital) associated with covered skilled nursing facility services furnished to Medicare Part A beneficiaries

**Strategic plan:** The document in which the leadership of a healthcare organization identifies the organization's overall mission, vision, and goals to help set the long-term direction of the organization as a business entity

## Z

**Zone program integrity contractor (ZPIC):** A CMS program that replaces the Medicare Program Safeguard Contractors (PSCs). ZPICs are responsible for detection and prevention of fraud, waste, and abuse across all Medicare claim types by performing medical reviews, data analysis, and auditing

## CDI ONLINE RESOURCES

AHIMA: [www.ahima.org](http://www.ahima.org)

AAPC: [www.aapc.com](http://www.aapc.com)

American Hospital Association (AHA) Coding Clinic: [www.ahacentraloffice.org](http://www.ahacentraloffice.org)

Association of Clinical Documentation Improvement Specialists (ACDIS): <http://www.hcpro.com/acdis/>

Centers for Disease Control (CDC): <http://www.cdc.gov>

CMS: [www.cms.gov](http://www.cms.gov)

Medicare Quarterly Provider Compliance Newsletter Archive

[https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/MedQtrlyCompNL\\_Archive.pdf](https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/MedQtrlyCompNL_Archive.pdf)

OPPS

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Hospital-Outpatient-Regulations-and-Notices-Items/CMS-1589-P.html>

IPPS

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY-2013-IPPS-Final-Rule-Home-Page-Items/FY-2013-Final-Rule-Data-Files.html>

Recovery Audit Program

<https://www.cms.gov/research-statistics-data-and-systems/monitoring-programs/medicare-ffs-compliance-programs/recovery-audit-program/>

HAC & POA

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired-Conditions.html>

Conditions for Coverage and Conditions of Participation  
<http://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/index.html>

Policy Manuals

<https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs.html>

Provider Compliance *MLN Matters* Articles

[http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/ProvCmpl\\_Articles.pdf](http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/ProvCmpl_Articles.pdf)

Risk Adjustment Model

<https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html>

Official ICD-10-PCS information

<https://www.cms.gov/Medicare/Coding/ICD10/>

Joint Commission: [http://www.jointcommission.org/performance\\_measurement.aspx](http://www.jointcommission.org/performance_measurement.aspx)

MAC/FI (Medical Administrative Contractor (MAC)/Fiscal Intermediary (FI):

<https://www.cms.gov/Medicare/Medicare-Contracting/Medicare-Administrative-Contractors/MedicareAdministrativeContractors.html>

National Center for Health Statistics official ICD-10-CM information:

<http://www.cdc.gov/nchs/icd.htm>

National Healthcare Quality Reporting:

<http://www.ahrq.gov/>

Office of Inspector General—2013 OIG Work plan:

<https://oig.hhs.gov/reports-and-publications/archives/work-plan/2013/Work-Plan-2013.pdf>

PEPPER: The Program for Evaluation Payment Patterns

Electronic Report: <http://www.pepperresources.org/>

Report Cards:

<http://www.healthgrades.com/>

[http://www.jointcommission.org/accreditation/top\\_performers.aspx](http://www.jointcommission.org/accreditation/top_performers.aspx)

<http://www.leapfroggroup.org/>



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## APPENDIX A

## CLINICAL DOCUMENTATION IMPROVEMENT SPECIALIST

<b>Job Description</b>		
Job/Position Title:	Reports To:	
Department: Health Information Management	Review Date:	
Job/Position Code:	Status: Exempt/Nonexempt	
<p><b>Purpose:</b> Under minimal direction, the Clinical Documentation Improvement Specialist will provide active concurrent/retrospective review, provide feedback, and educate clinical care providers to improve the documentation of all conditions, treatments, and care plans within the health record to accurately reflect the condition of the patient and promote patient care. In addition, documentation should reflect documentation associated with MS-DRG assignment, case mix index, severity of illness, risk of mortality, physician profiling, hospital profiling, and reimbursement rules.</p>		
<p><b>Scope:</b> Insert appropriate scope such as Inpatient Acute Care, Outpatient Clinic, Outpatient Surgery, Emergency Department, Wound Care, etc.</p>		
<b>Education/Experience</b>	<b>Minimum</b>	<b>Preferred</b>
<b>Healthcare Degree</b>	Associate degree in healthcare field	Bachelor's degree in healthcare field
<b>Work Experience</b>	Three years in healthcare field such as clinical care, utilization review, health information management	Five years in healthcare field such as clinical care, utilization review, health information management
<b>Equivalent Combinations</b>	One year of education equals one year experience	
<b>Credentials</b>	Obtain credential within one year of employment	CDIP, CCDS
<p><b>Skills/Knowledge:</b> This position requires critical thinking, problem solving, ability of managing multiple priorities, able to work with little or minimum direct supervision, excellent writing skills, clear and accurate verbal communication skills, and ability to work in Microsoft Word, Excel, and Outlook e-mail.</p>		
<b>JOB FUNCTIONS</b>		
<ol style="list-style-type: none"> <li>1. Conducts initial and extended-stay concurrent review on selected admissions and documents findings in insert document/module here (e.g., CDIS module).</li> <li>2. Demonstrate successful completion of ongoing proficiency and compliance with regulatory requirements.</li> <li>3. Identifies co-morbidities and complications and documents appropriately.</li> <li>4. Queries the medical staff and other clinical caregivers as necessary via written/verbal communication to obtain accurate and complete documentation.</li> <li>5. Identifies potential quality, severity of illness, risk of mortality, hospital/physician profiling, and reimbursement issues or missing documentation.</li> <li>6. Communicate documentation issues clearly and succinctly to clinical care providers.</li> <li>7. Makes an effort to capture all potential secondary diagnoses.</li> <li>8. Act as the liaison between clinical care providers and coding professionals.</li> <li>9. Identifies documentation issues and trends, and reports them to the appropriate manager per hospital reporting requirements. <ol style="list-style-type: none"> <li>a. Coding–Coding Manager</li> <li>b. Documentation – CDI Manager</li> <li>c. Query–Physician Liaison or CDI Manager</li> <li>d. Risk–Risk Manager/Legal</li> <li>e. Privacy/Security–Privacy/Security Officer</li> </ol> </li> <li>10. Interact with coding team as documentation issues are identified through the coding process for discussion with clinical staff.</li> <li>11. Provides ongoing education to physicians and other clinical care providers, related to documentation, changes in coding, compliance issues, profiling concerns, and reimbursement changes.</li> <li>12. Interact with Case Management as they perform admission and continued stay review.</li> <li>13. Monitor changes in law, regulations, rules, and code assignment that impact documentation and reimbursement.</li> </ol>		

## CLINICAL DOCUMENTATION IMPROVEMENT SPECIALIST

<b>Job Description</b>	
Job/Position Title:	Reports To:
Department:	Review Date:
Job/Position Code:	Status: Exempt/Nonexempt
<b>Purpose:</b> Coordinates and maintains the elements and requirements of the Clinical Documentation Improvement Program, including staff and physician education, to ensure the highest quality of documentation in support of compliance and accurate representation of the care provided to the patient.	
<b>Scope:</b> Insert appropriate scope such as Inpatient Acute Care, Outpatient Clinic, Outpatient Surgery, Emergency Department, Wound Care, etc.	

**Experience:** Bachelor's degree in healthcare field (e.g. nursing, health information management) OR equivalent combination of education/experience combined required. (One year of education equals one year of experience).

**Minimum Experience:** Minimum of one to three years experience in clinical quality, utilization management, case management, nursing, coding or a related field.

**Preferred Experience:** Three to five years experience in a Clinical Documentation Improvement Program with previous experience in clinical quality, utilization management, case management, nursing, coding, or related field (e.g. physician) of which a minimum of three years experience is in a management or supervisory role.

**Education:** Bachelor's degree, with a healthcare related credential (such as RN, RHIA) with additional clinical documentation improvement credential preferred (such as CDIP).

**Skills:** Successful leadership skills with the use of critical thinking, problem solving, and deductive reasoning required.

Successfully manages multiple priorities required. Successful completion of specialized training in organizational, analytical, writing, and interpersonal skills required.

Specialized training in advanced computer skills with proficiency in Microsoft Word, Excel, Power Point, and Outlook e-mail required.

Additional training in Access database management, Medicare Part A and B programs, DRG assignment, and knowledge of MCC/CC preferred.

**Essential Functions:**

1. Coordinates and maintains all elements of the Clinical Documentation Improvement Program in order to meet the goals and objectives of the organization and its stakeholders.
2. Meet CDI program objectives, goals, and balance scorecard metrics.
3. Ensures timely, accurate, and complete documentation of clinical information used for measuring and reporting physician and hospital outcomes.
4. Ensure effective communications with key stakeholders.
5. Analyzes data, creates reports to meet desired outcomes.
6. Identifies trends and opportunities for improvement in clinical documentation.
7. Meets program quality and productivity guidelines and standards.
8. Collaborates with coding professionals to fully support the needs of clinical code assignment, communicates proficiently with coding professionals to resolve identified discrepancies.
9. Work effectively with CDI team members to accomplish departmental goals.
10. Demonstrates continued advancement in professional growth.

## CLINICAL DOCUMENTATION IMPROVEMENT MANAGER

<b>Job Description</b>		
Job/Position Title:	Reports To:	
Department: Health Information Management	Review Date:	
Job/Position Code:	Status: Exempt/Nonexempt	
<p><b>Purpose:</b> Under the direction of the (insert title here) the Clinical Documentation Improvement Manager is responsible for managing, coordinating, and performing the day-to-day operations and workflow of the CDI program. These include providing concurrent documentation review, and DRG and coding reviews that ensure in high quality documentation that supports a compliant and accurate representation of the care provided to the patient.</p>		
<p><b>Scope:</b> Insert appropriate scope such as Inpatient Acute Care, Outpatient Clinic, Outpatient Surgery, Emergency Department, Wound Care, etc.</p>		
<b>Education/Experience</b>	<b>Minimum</b>	<b>Preferred</b>
<b>Healthcare Degree</b>	Bachelor Degree in healthcare field	Master's Degree
<b>Work Experience</b>	Three years in a previous supervisory capacity	Five years in supervisory capacity in a healthcare field such as clinical care, utilization review, health information management
<b>Equivalent Combinations</b>	One year of education equals one year experience	
<b>Credentials</b>	RHIA, RN	CDIP, CCDS
<b>Skills/Knowledge</b>		
<ol style="list-style-type: none"> <li>1. Technical skills—thorough knowledge of federal and state documentation guidelines.</li> <li>2. Initiative—ability to independently take proactive steps towards problem resolution.</li> <li>3. Managing conflict—ability to deal with others in order to reduce tension or conflict.</li> <li>4. Energy—maintains a high level of energy or productivity.</li> <li>5. Organization—proactively prioritize initiatives, resources, time, with an ability to multi-task.</li> <li>6. Communication—communicate clearly, proactively, positively, concisely with all key stakeholders.</li> <li>7. PC skills—ability to demonstrate proficiency in Microsoft Office, Excel, Power Point, and e-mail.</li> <li>8. Writing skills—ability to write accurately, and prepare senior level reports.</li> <li>9. Presentation—ability to present to small and medium size groups comfortably.</li> </ol>		
<b>JOB FUNCTIONS</b>		
<ol style="list-style-type: none"> <li>1. Develops and maintains effective working relationships with key stakeholders in the CDI Program.</li> <li>2. In conjunction with CDI Specialists, serve as the liaison to key stakeholders in the CDI Program.</li> <li>3. Coaches and assists in developing CDI Specialists, and ensures continuing education is maintained.</li> <li>4. Responsible for ensuring the day to day activities of the CDI Program are conducted in an accurate and timely manner.</li> <li>5. Assists in identifying CDI issues and trends, and communicating those items to (insert direct report title here).</li> <li>6. Conducts initial and extended-stay concurrent review on selected admissions and documents findings in insert document/module here (such as CDIS module).</li> <li>7. Demonstrate successful completion of ongoing proficiency and compliance with regulatory requirements.</li> <li>8. Identifies co-morbidities and complications and documents appropriately.</li> <li>9. Queries the medical staff and other clinical caregivers as necessary via written/verbal communication to obtain accurate and complete documentation.</li> <li>10. Identifies potential quality, severity of illness, risk of mortality, hospital/physician profiling, and reimbursement issues or missing documentation.</li> <li>11. Provides ongoing education to physicians and other clinical care providers, related to documentation, changes in coding, compliance issues, profiling concerns, and reimbursement changes.</li> <li>12. Monitor changes in law, regulations, rules, and code assignment that impact documentation, and reimbursement.</li> </ol>		

## APPENDIX B

### CLINICAL DOCUMENTATION IMPROVEMENT QUALITY ASSURANCE AUDITOR

<b>Job Description</b>	
Job/Position Title:	Reports To:
Department:	Review Date:
Job/Position Code:	Status: Exempt/Nonexempt
<p><b>Purpose:</b> This position uses clinical, code assignment, documentation requirements, and reimbursement methodologies to review the work of clinical documentation improvement specialists. The goal of the audit is to improve documentation and patient quality, and capture severity, acuity and risk of mortality. Documented results will be used to track and trend the success of the overall program, provide educational follow up, and identify changes in medical practice that should be reflected in documentation.</p>	
<p><b>Scope:</b> Insert appropriate scope such as Inpatient Acute Care, Outpatient Clinic, Outpatient Surgery, Emergency Department, Wound Care, etc.</p>	
<p><b>Experience:</b> Degree in healthcare field (such as nursing, health information management) OR equivalent combination of education/experience combined required. (One year of education equals one year of experience).</p>	
<p><b>Minimum Experience:</b> Associate degree in a healthcare field and one to three years experience in clinical quality, utilization management, case management, nursing, coding or a related field. Years of experience can be substituted for degree.</p>	
<p><b>Preferred Experience:</b> Bachelor’s degree in a healthcare field and three to five years experience in a Clinical Documentation Improvement Program with previous experience in clinical quality, utilization management, case management, nursing, coding, or related field (e.g. physician) of which a minimum of three years experience is in a management or supervisory role.</p>	
<p><b>Education:</b> Healthcare-related credential (such as RN, RHIA) with additional clinical documentation improvement credential preferred (such as CDIP, CCS).</p>	

**Skills/Qualifications:**

- Strong interpersonal skills
- Excellent communication skills (verbal, written and listening)
- Competent computer skills including Microsoft Word, Excel, and e-mail
- Strong analytical skills
- Understanding coding classification assignments
- Knowledge of reimbursement methodologies such as MS-DRGs, POA, HAC
- Ability to conduct and interpret quantitative/qualitative analysis
- Proven project management skills
- Results oriented
- Ability to work independently, and organize one’s self
- Exhibit collaboration, candor, and openness

**Key Functions:**

1. Adheres to hospital standards and promotes cooperative work environment by utilizing communication skills, interpersonal relationship and team building.
2. Established effective working relations with key stakeholders.
3. Facilitates appropriate clinical documentation to support diagnosis capture, ensure appropriate level of service is provided, and support severity of illness. Identify and review for accurate MCC/CC capture, appropriate POA assignment, HAC, and provider queries.
4. Perform CDI QA reviews, both concurrent and retrospective.
5. Serves as an expert resource for CDI staff, clinical care providers, and coding professionals.
6. Provide ongoing education to all key stakeholders in the CDI program.
7. Communicate issues and concerns accurately, timely, and proficiently to all key stakeholders.
8. Working with their supervisor, implement and monitor departmental policies and procedures that support the CDI program goals, business objectives, and reflect ongoing regulatory changes.
9. Conduct data and root cause analysis and share findings via formal reporting mechanisms.

## APPENDIX C

### CLINICAL DOCUMENTATION IMPROVEMENT CLARIFICATION FORM

Date: \_\_\_\_\_ Patient Name: \_\_\_\_\_

CDI Professional: \_\_\_\_\_ Health Record Number: \_\_\_\_\_

CDI Professional Phone #: \_\_\_\_\_ Account Number: \_\_\_\_\_

A review of the health record by the Clinical Documentation Team found a need for documentation clarification. There are clinical indicators in the health record that may support further specificity in the diagnosis of this patient. The relevant information is provided below for your expedited review.

Please address these findings using your independent professional judgement in the health record by providing an applicable diagnosis and/or clarification of an existing diagnosis in the next progress note, dictated report, discharge summary, and/or in an addendum.

Clinical Indicators/Medical Evidence	Location in the Health Record

**If no additional documentation is warranted, please check the following box:**

- I disagree with the need for additional documentation.

CLINICAL DOCUMENTATION IMPROVEMENT QUALITY ASSURANCE AUDIT TOOL

Name of CDI staff: \_\_\_\_\_ Review date: \_\_\_\_\_

MR# of reviewed chart: \_\_\_\_\_ Admission Date: \_\_\_\_\_ D/C Date: \_\_\_\_\_

Date of Initial CDI review: \_\_\_\_\_ Date of subsequent review(s) \_\_\_\_\_

Which of the following was the rationale for issuing the query? The documentation was (circle all that apply):

- Illegible Incomplete Unclear Inconsistent Imprecise Conflicting

Did the query contain relevant medical evidence?

Could the query be perceived as leading?

Did the physician respond to the query?

Did the physician agree with the recommendation?

Was the additional documentation added to the health record?

Were all opportunities for Present on Admission (POA) clarified?

Was there clinical evidence to support further specificity of a diagnosis or procedure which did not result in a query?

Were subsequent reviews performed?

If more than one review occurred, were the subsequent reviews at appropriate intervals?

Was the working DRG revised during the review process?

Was the final working DRG the same as the billed DRG?

If not, what was the difference between the two DRGs, i.e., CC found, CC not verified, etc.?

What were the medical evidence and the possible diagnosis and/or procedure?

General comments/suggestions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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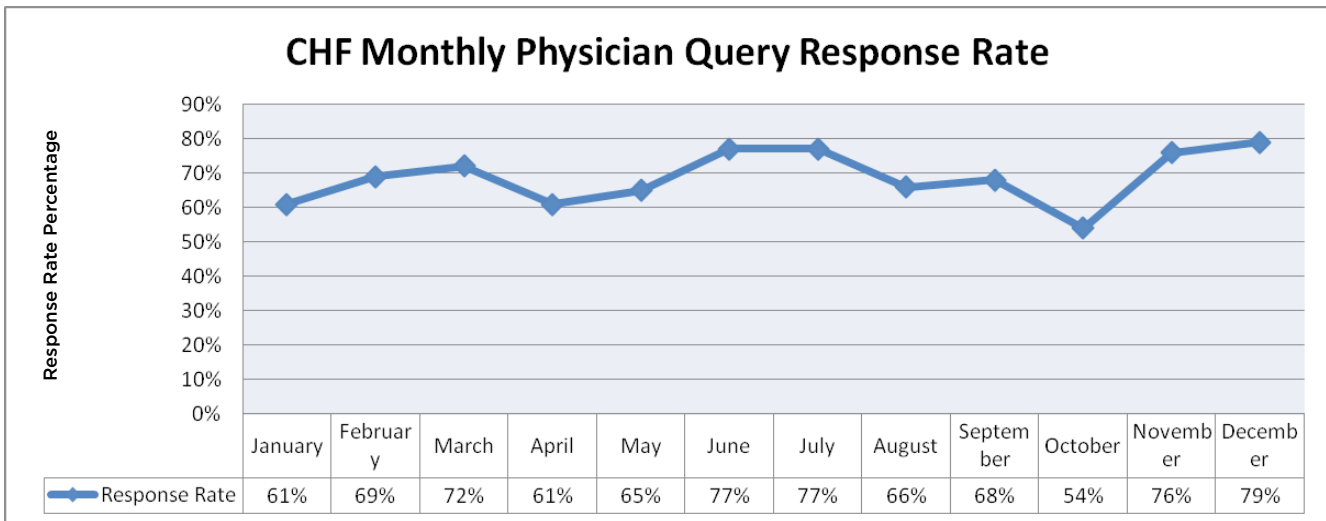


## APPENDIX D

### MONTHLY QUERY RESPONSE RATE REPORT

The CHF Monthly Physician Response to Query Process report below shows how important physician engagement is in the query process, which directly impacts a CDI program. An additional report element, related to CHF, can be included to identify specific versus nonspecific documentation of heart failure (e.g., acute vs. chronic and systolic vs. diastolic). Any diagnosis or procedure can be used with this type of report, and this will depend on the specific needs of the healthcare facility.

CHF Monthly Physician Response to Query Process Report							
1st quarter				2nd quarter			
Mo.	# CHF Queries	# Answers	% Response	Mo.	# CHF Queries	# Answers	% Response
JAN	150	92	61%	APR	180	110	61%
FEB	89	61	69%	MAY	160	104	65%
MAR	110	79	72%	JUN	98	75	77%
3rd quarter				4th quarter			
Mo.	# CHF Queries	# Answers	% Response	Mo.	# CHF Queries	# Answers	% Response
JUL	172	133	77%	OCT	99	53	54%
AUG	132	87	66%	NOV	186	141	76%
SEP	169	115	68%	DEC	201	159	79%



### CASE MIX INDEX QUARTERLY REPORT

The report below demonstrates a quarterly CMI rate over a period of time, although this report can be designed based on the needs of the facility. Most organizations choose to report CMI on a monthly basis. For clinical documentation analysis purposes, an unexpected change in CMI could signal a possible problem with clinical documentation.

Quarterly Case Mix Index Report				
Year	1st quarter	2nd quarter	3rd quarter	4th quarter
2012	1.6342	1.6471	1.7539	1.8004
2013	1.7681	1.7734	1.7384	1.7621
2014	1.7762	1.7526	1.8189	1.8345
2015	1.8011	1.8101	1.8112	1.8301

#### Quarterly Case Mix Index

	1	2	3	4
1st quarter	1.6342	1.7681	1.7762	1.8011
2nd quarter	1.6471	1.7734	1.7526	1.8101
3rd quarter	1.7539	1.7384	1.8189	1.8112
4th quarter	1.8004	1.7621	1.8345	1.8301

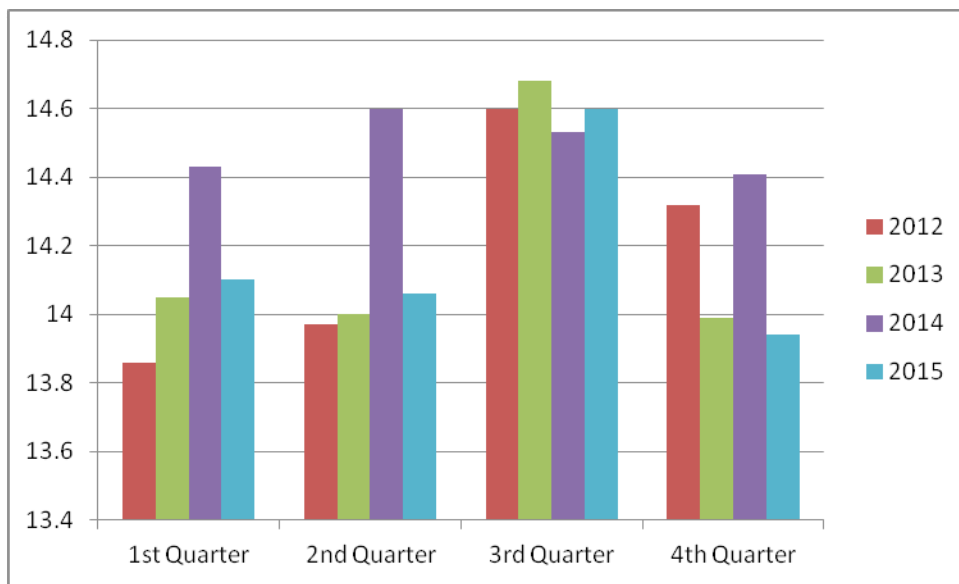
  

Number of Patients for the Quarter				
Year	1st quarter	2nd quarter	3rd quarter	4th quarter
2012	8245	8007	8116	8351
2013	8349	7998	8205	8391
2014	8298	8016	8377	8432
2015	8460	8127	8423	8501

### QUARTERLY SECONDARY DIAGNOSES REPORT

This CDI report focuses on secondary diagnoses, which is also tracked quarterly. The number of secondary diagnoses for inpatient cases can provide some insight into the level of detail of documentation available to the coding staff for code assignment. If this measure is used for CDI, the review team will want to make sure its members are familiar with the coding guidelines at the hospital and understand any possible limitations.

Secondary Diagnosis Quarterly Report						
	1st Quarter			2nd Quarter		
Year	# Patients	# Sec Dx	Avg # Sec per Pt	# Patients	# Sec Dx	Avg # Sec per Pt
2012	1521	21085	13.86	1601	22368	13.97
2013	1796	25231	14.05	1802	25231	14.00
2014	2123	30625	14.43	1963	28652	14.60
2015	2475	34887	14.10	2179	30642	14.06
	3rd Quarter			4th Quarter		
Year	# Patients	# Sec Dx	Avg # Sec per Pt	# Patients	# Sec Dx	Avg # Sec per Pt
2012	1681	24536	14.60	1605	22981	14.32
2013	1801	26445	14.68	1736	24291	13.99
2014	1916	27843	14.53	1873	26985	14.41
2015	1920	28024	14.6	1898	27856	13.94



## APPENDIX E

### CLINICAL DOCUMENTATION IMPROVEMENT PHYSICIAN ADVISOR

<b>Job Description</b>	
Job/Position Title:	Reports To:
Department:	Review Date:
Job/Position Code:	Status: Exempt/Nonexempt
<p><b>Purpose:</b> The Physician Advisor conducts clinical reviews on cases referred by the CDI specialist, CDI manager, or coding professional to meet regulatory requirements in accordance with the organizational objectives for providing quality patient care and effective utilization of resources. The advisor will interact with medical staff members to discuss the needs of the patients, alternative levels of care, and clinical documentation.</p>	
<p><b>Scope:</b> The advisor will act as a liaison between CDI professionals, coding professionals and the organization medical staff to facilitate accurate and complete clinical documentation.</p>	
<p><b>Education:</b> Graduate of an accredited medical school with a current medical license.</p>	
<p><b>Experience:</b> Minimum of five years experience in clinical practice.</p>	

#### Skills/Qualifications:

- Strong interpersonal skills
- Excellent communication skills (verbal, written, and listening)
- Strong analytical skills
- Understanding coding classification assignments and reimbursement methodologies

#### Key Functions:

1. Assist with level of care and length of stay management.
2. Assist with denial management.
3. Review health records and clinical documentation and make suggestions related to resource and service management.
4. Provide feedback to medical staff regarding level of care, length of stay, and clinical documentation.
5. Documents patient care reviews, decisions, and other pertinent information.
6. Acts a liaison with payers to facilitate approvals and prevent denials.
7. Provides education to physicians and other clinical staff related to regulatory requirements and utilization of resources.
8. Educates medical staff regarding coding guidelines, severity of illness, risk of mortality, and DRG assignment.
9. Educates medical staff regarding correct disease and public reportable data, and the need for accurate clinical documentation to capture profiling data.
10. Collaborate with coding professionals and CDI professions on a routine basis to review selected health records, explain clinical issues, and assist in developing appropriate and compliant queries.

## APPENDIX F

### CHECKLIST FOR STARTING A CDI PROGRAM

<b>Check off each step once completed</b>	
<input type="checkbox"/>	<p><b>Step 1</b></p> <p>Determine who will comprise the CDI staff such as nurses, coding professionals, physicians, or a combination.</p>
<input type="checkbox"/>	<p><b>Step 2</b></p> <p>Determine how the department will line up within the organization. Who will the team report to (case management, HIM, finance, compliance, etc.)?</p>
<input type="checkbox"/>	<p><b>Step 3</b></p> <p>Determine which health records will be reviewed. Will you review a specific insurance group such as Medicare, Medicare HMOs, Medicaid, DRG payer? Other possibilities are reviewing specific areas such as a unit with a low CC/MCC capture rate, a service with a low CMI, or an at-risk patient population.</p>
<input type="checkbox"/>	<p><b>Step 4</b></p> <p>Determine the number and frequency of reviews:</p> <ul style="list-style-type: none"> <li>• All new admissions                             <ul style="list-style-type: none"> <li>» Within 24 hours</li> <li>» Within 48 hours</li> </ul> </li> <li>• Charts with queries reviewed daily</li> <li>• Charts without CC/MCC reviewed daily</li> <li>• What are the productivity expectations for the CDI team (between 20-35 records per day)?</li> </ul>

**■ Step 5**

Determine budget:

- Number of CDI staff (including salary, wages, and benefits)
- CDI manager salary, wages, and benefits
- Provider adviser salary (hourly/ flat monthly fee)
- Training costs
  - » Initial training
    - » CDI staff—40 hours classroom then 4-6 weeks preceptor
    - » Coding staff—40 hours
    - » Providers—2-3 hours
    - » Ancillary Staff- 5-8 hours (case management, quality, finance, senior leadership)
  - » Ongoing training
    - » CDI staff
    - » Coding staff
    - » Physician Advisor
    - » New Physicians
    - » New Staff
- Equipment costs
  - » Computers/laptops
  - » Software
  - » Licenses (such as encoder)
  - » Printers
  - » Supplies
- Office space
  - » Desks
  - » Phones
  - » Pagers
  - » Fax
- Uniforms (if required)
- Consultation fees
  - » Implementation
  - » Annual training

■	<p><b>Step 6</b></p> <p>Determine the training content:</p> <ul style="list-style-type: none"> <li>• ICD-10-CM/PCS</li> <li>• Coding rules and guidelines</li> <li>• Annual code updates</li> <li>• MDC/MS-DRGs</li> <li>• Transfer MS-DRG</li> </ul>
■	<p><b>Step 7</b></p> <p>Determine who will perform the training:</p> <ul style="list-style-type: none"> <li>• Consultants</li> <li>• CDI manager</li> <li>• Utilize external meetings (such as, academies)</li> <li>• Train the trainer approach</li> </ul>
■	<p><b>Step 8</b></p> <p>Determine the location of training:</p> <ul style="list-style-type: none"> <li>• On site (at the facility)</li> <li>• Off site (external academies and meetings)</li> <li>• Internet training/remote</li> </ul>
■	<p><b>Step 9</b></p> <p>Determine the scope practice:</p> <ul style="list-style-type: none"> <li>• Process flow chart</li> <li>• Job description             <ul style="list-style-type: none"> <li>» Physician advisor</li> <li>» CDI manager</li> <li>» CDI supervisor</li> <li>» CDI lead</li> <li>» CDI staff</li> </ul> </li> <li>• Credential requirements             <ul style="list-style-type: none"> <li>» CDIP</li> <li>» CCS</li> <li>» RN</li> <li>» RHIA/RHIT</li> <li>» Other</li> </ul> </li> </ul>

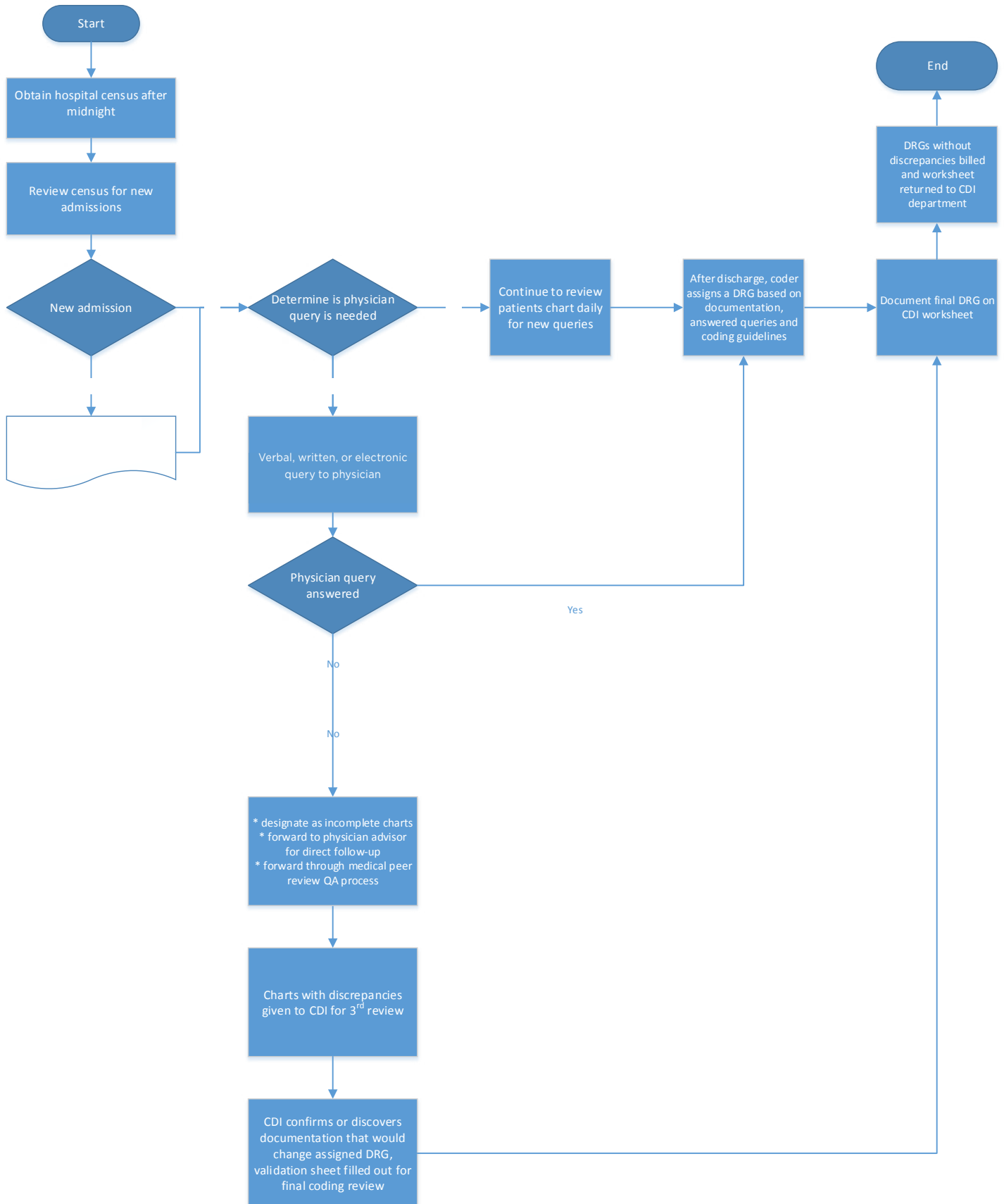


**■ Step 10**

Determine the metrics to be monitored:

- Administration
  - » Case mix index
  - » Revenue
  - » SOI and ROM
- Physicians
  - » Query responses
  - » Query validation
  - » Physician profiles
  - » SOI and ROM
- CDI staff
  - » Queries by CDI staff
  - » Query validation by CDI staff
  - » Provider response rate
  - » Provider issues or concerns
  - » Productivity
  - » LOS
  - » CMI

## APPENDIX G



## APPENDIX H

### SAMPLE INTERVIEW QUESTIONS FOR A CDI SPECIALIST

#### Knowledge/Skills Questions:

- Financial:** Tell me your understanding of Case Mix Index, DRGs, and MCC/CCs?  
Why do you feel that CDI is important to the organization's revenue cycle?
- Clinical:** Where would you expect to find clinical documentation in a health record?  
How much clinical training and/or experience do you have?  
The CDI specialist position requires clinical knowledge: what references would you need as a part of this position and why?
- Coding:** What is a principal diagnosis?  
What is a secondary diagnosis?  
How often are ICD codes updated?
- Interpersonal:** Explain a situation in which you have had to compromise and why?  
How would you interact with a negative person?
- Communication:** Give me an example of how you have communicated a difficult decision?  
What is your preferred mode of communication, verbal or written, and why?
- Leadership:** Tell me about a leadership position you have been in, professionally or personally.  
Are you a member of a professional association? Why and for how long?
- Team Player:** Tell me about the best team you have been a part of professionally or personally.  
Explain what a high functioning team is.  
When working on a team, what role do you usually take and why?
- Organization:** How do you organized yourself each day?  
How do you achieve work/life balance?

#### Behavior Questions:

- Positive:** Tell about a time in your life that you have been disappointed and why?  
How do you handle a challenge? Give me an example.  
How do you find ways to make sure your job more rewarding?
- Outgoing:** What motivates you and why?  
Tell me about a time you had to use your verbal communication skills in order to get an important point across.  
Give me an example of when you have had to “read” or “gauge” another person when interacting with them.
- Energetic:** Tell me about your favorite activities.  
Share an example of how you motivate others.  
Give me an example of when you did more than what was expected of you.
- Independent:** Tell me about a time that you have been responsible for a project.  
Give me an example of a goal that you reached and explain how you achieved it.
- Responsible:** Who is your role model and why?  
Tell me about a time you worked effectively under pressure.  
How do you handle a variety of different functions in your job?
- Flexible:** Tell me about a time when you have had to make a last minute schedule change.  
Tell me about a time when you had to develop an innovative approach to completing a task or assignment.  
How do you minimize stress in your life?

## APPENDIX I

### CLINICAL DOCUMENTATION IMPROVEMENT PRE-HIRE ASSESSMENT TOOL

1. In what year did ICD-10-CM/PCS go into effect in the United States?
  - a. 2013
  - b. 2014
  - c. 2015
  - d. 2016
2. Which of the following is an inpatient classification scheme that categorizes patients who share similar clinical characteristics?
  - a. DRG
  - b. SOI
  - c. ROM
  - d. FAQ
3. What is the most important factor in DRG assignment?
  - a. Relative weight
  - b. Payment
  - c. Principal diagnosis
  - d. Secondary diagnosis
4. A patient is admitted for chronic diastolic congestive heart failure and pneumonia. The patient is placed on IV Lasix and IV antibiotics on admission. Which coding rule applies?
  - a. Two or more diagnoses that equally meet the criteria for principal diagnosis; either may be sequenced first.
  - b. Two or more diagnoses that meet the criteria for principal diagnosis; code the sign or symptom first.
  - c. Two or more diagnoses that equally meet the criteria for principal diagnosis; always choose the higher-paying DRG.
  - d. Two or more diagnoses that meet the criteria for principal diagnosis, code the diagnosis as “probable.”
5. A physician documents “Right lower lobe pneumonia due to aspiration.” What is the principal diagnosis?
  - a. RLL pneumonia
  - b. Aspiration pneumonia
  - c. Infectious pneumonia
  - d. Simple pneumonia
6. Discharge summary states “Chest pain due to gastroesophageal reflux versus esophageal spasm.” What is the correct principal diagnosis?
  - a. Chest pain
  - b. Gastroesophageal reflux
  - c. Esophageal spasm
  - d. Either gastroesophageal reflux or the esophageal spasm can be principal diagnosis

7. Which of the following terms represents a brief period of focal neurologic deficit lasting less than 24 hours, and sometimes less than one hour, due to a temporarily blocked blood flow to a specific area of the brain?
  - a. CVA
  - b. Cerebral embolism
  - c. TIA
  - d. Stroke
8. Which of the following is characterized by dilated, weak heart, thin ventricular wall, decreased outflow of blood from the heart, and a low ejection fraction.
  - a. CHF
  - b. Acute CHF
  - c. Diastolic heart failure
  - d. Systolic heart failure
9. Which of the following is commonly characterized by the following evidence and treatments, SpO<sub>2</sub> on room air, ABGs, intubation and/or initiations of BiPAP?
  - a. Respiratory failure
  - b. Acute respiratory failure
  - c. Chronic respiratory failure
  - d. Acute on chronic respiratory failure
10. Which of the following is the highest weighted DRG?
  - a. Heart transplant with MCC
  - b. Liver transplant without MCC
  - c. Multiple sclerosis without CC/MCC
  - d. Headaches with MCC
11. Physician queries should:
  - a. Be made on every record
  - b. Be leading
  - c. Be utilized to clarify ambiguous documentation
  - d. Be electronic
12. A CDI program should allow concurrent documentation review so that:
  - a. Providers clarify hospital acquired conditions
  - b. Providers clarify present on admission indicators
  - c. Education is given to clinical care providers
  - d. All the above

### CLINICAL DOCUMENTATION IMPROVEMENT PRE-HIRE ASSESSMENT TOOL ANSWER KEY

1. In what year did ICD-10-CM/PCS go into effect in the United States?
  - a. 2013
  - b. 2014
  - c. 2015
  - d. 2016

Answer: C

2. Which of the following is an inpatient classification scheme that categorizes patients who share similar clinical characteristics?
- DRG
  - SOI
  - ROM
  - FAQ

Answer: A

3. What is the most important factor in DRG assignment?
- Relative weight
  - Payment
  - Principal diagnosis
  - Secondary diagnosis

Answer: C

4. A patient is admitted for chronic diastolic congestive heart failure and pneumonia. The patient is placed on IV Lasix and IV antibiotics on admission. Which coding rule applies?
- Two or more diagnoses that equally meet the criteria for principal diagnosis; either may be sequenced first.
  - Two or more diagnoses that meet the criteria for principal diagnosis; code the sign or symptom first.
  - Two or more diagnoses that equally meet the criteria for principal diagnosis; always choose the higher-paying DRG.
  - Two or more diagnoses that meet the criteria for principal diagnosis, code the diagnosis as “probable.”

Answer: A

5. A physician documents “Right lower lobe pneumonia due to aspiration.” What is the principal diagnosis?
- RLL pneumonia
  - Aspiration pneumonia
  - Infectious pneumonia
  - Simple pneumonia

Answer: B

6. Discharge summary states “Chest pain due to gastroesophageal reflux versus esophageal spasm.” What is the correct principal diagnosis?
- Chest pain
  - Gastroesophageal reflux
  - Esophageal spasm
  - Either gastroesophageal reflux or the esophageal spasm can be principal diagnosis

Answer: D

7. Which of the following terms represents a brief period of focal neurologic deficit lasting less than 24 hours, and sometimes less than one hour, due to a temporarily blocked blood flow to a specific area of the brain?
- CVA
  - Cerebral embolism
  - TIA
  - Stroke

Answer: C

8. Which of the following is characterized by dilated, weak heart, thin ventricular wall, decreased outflow of blood from the heart, and a low ejection fraction.
- CHF
  - Acute CHF
  - Diastolic heart failure
  - Systolic heart failure

Answer: D

9. Which of the following is commonly characterized by the following evidence and treatments, SpO<sub>2</sub> on room air, ABGs, intubation and/or initiations of BiPAP?
- Respiratory failure
  - Acute respiratory failure
  - Chronic respiratory failure
  - Acute on chronic respiratory failure

Answer: B

10. Which of the following is the highest weighted DRG?
- Heart transplant with MCC
  - Liver transplant without MCC
  - Multiple sclerosis without CC/MCC
  - Headaches with MCC

Answer: A

11. Physician queries should:
- Be made on every record
  - Be leading
  - Be utilized to clarify ambiguous documentation
  - Be electronic

Answer: C

12. A CDI program should allow concurrent documentation review so that:
- Providers clarify hospital acquired conditions
  - Providers clarify present on admission indicators
  - Education is given to clinical care providers
  - All the above

Answer: D



## APPENDIX J

### 90-DAY EVALUATION

#### Clinical Documentation Improvement Specialist

Purpose: The purpose of the 90 day evaluation is to identify CDI development opportunities. The value of the review lies in the communication between manager and specialist.

Employee Name: \_\_\_\_\_ Hire date: \_\_\_\_\_

Evaluation date: \_\_\_\_\_

- 1 = Poor (Unable to complete basic job functions) **requires action plan**
- 2 = Less than satisfactory (Lacks knowledge in basic job functions)
- 3 = Satisfactory (Adequate grasp of job functions)
- 4 = Very good (Understands all phases of functions)
- 5 = Superior (Has completely mastered all functions) **requires comments**

*\*\*scores of 1 or 5 require comments*

Function	1	2	3	4	5	Comments
Job Knowledge (test score)						
Quality of work (query validation score)						
Quantity of work (query rate)						
Responsibility						
Attendance (less than three absences)						
Communication						
Initiative						

Performance Strengths: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Educational Needs: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Overall Rating (1-5): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Manager Signature/Date: \_\_\_\_\_

Employee Signature/Date: \_\_\_\_\_

Supporting Documents:

- 90-day CDI Test
- Completed department orientation
- Query review statistics (number of queries placed versus target)
- Query validation statistics (number of physician agreement with queries)
- Discharge DRG comparison (number of final DRG versus working DRG changes)
- Copies of appropriate queries placed (de-identified)
- Copies of inappropriate queries placed (de-identified)

## 90-DAY CDI POST TEST

20 questions

18–20: Passing

16–17: Identify improvement areas

15 or below: Requires PIP

\*\*Choose any 20 questions

### Coding

1. A patient is admitted through the emergency room for shortness of breath. The patient is given epinephrine and nebulizer treatments. The shortness of breath and wheezing are unabated following treatment. What diagnosis should be suspected?
  - a. Acute bronchitis
  - b. Acute bronchitis with COPD
  - c. Asthma with status asthmaticus
  - d. Chronic obstructive asthma
  
2. An elderly patient with a history of lung cancer is admitted from the nursing home with ataxia, syncope, and a fractured arm as the result of a fall. The patient undergoes a closed fracture reduction of the humerus in the ED, and a complete work up for metastatic carcinoma of the brain. The patient is found to have metastatic carcinoma of the brain. Which of the following is the principal diagnosis?
  - a. Ataxia
  - b. Fracture humerus
  - c. Metastatic carcinoma of the brain
  - d. Carcinoma of the lung
  
3. A patient is admitted for abdominal pain with diarrhea and was diagnosed with infectious gastroenteritis. The patient also had angina and COPD. Which of the following is the correct sequencing?
  - a. Abdominal pain, infectious gastroenteritis, COPD, angina
  - b. Infectious gastroenteritis, COPD, angina
  - c. Gastroenteritis, abdominal pain; angina
  - d. Gastroenteritis, abdominal pain, diarrhea, COPD, angina
  
4. A patient is admitted to the hospital with shortness of breath and congestive heart failure. The patient subsequently develops respiratory failure. The patient undergoes intubation with ventilator management. Which of the following would be the correct sequencing and coding of this case?
  - a. Congestive heart failure, respiratory failure, ventilator management, intubation
  - b. Respiratory failure, intubation, ventilator management
  - c. Respiratory failure, congestive heart failure, intubation, ventilator management
  - d. Shortness of breath, congestive heart failure, respiratory failure, ventilator management
  
5. An elderly patient is admitted to the hospital for Sepsis secondary to staphylococcus aureus and abdominal pain secondary to diverticulitis of the colon. What is the correct code assignment?
 

A41.01 Sepsis due to Methicillin susceptible Staphylococcus Aureus

A41.9 Sepsis, unspecified organism

A49.01 Methicillin Susceptible Staphylococcus Aureus

- K57.92 Diverticulitis of the intestine, part unspecified, without perforation or abscess without bleeding  
R10.9 Abdominal Pain, unspecified site
- A41.01; K57.92; R10.9
  - A41.01; K57.92
  - A49.01; A41.9; K57.92
  - K57.92; R10.9; A41.01
6. A patient is admitted with a Stage II pressure ulcer on admission. The ulcer progresses to a Stage IV throughout the seven-day admission. The correct POA assignment for the Stage IV pressure ulcer is?
- Y-yes
  - N-no
  - U-unknown
  - None of the above
7. Hospital acquired conditions (HACs) are defined by CMS as those conditions that:
- Are high cost, volume, or both
  - Result in a higher paying MS-DRG assignment when present as a secondary diagnosis
  - Could have reasonably been prevented during the admission
  - All of the above
8. A woman is admitted for acute blood loss anemia due to dysfunctional uterine bleeding. What is the correct code assignment?
- D25.9 Leiomyoma of uterus, unspecified  
D50.0 Iron Deficiency Anemia, secondary to Blood Loss  
D62 Acute Posthemorrhagic Anemia  
N93.8 Disorders of Menstruation and Other Abnormal Bleeding from Female Genital Tract, Other
- D50.0; N93.8
  - D62; N93.8
  - N93.8; D50.0
  - D50.0; D25.9
9. A patient is admitted with right senile cataract; diabetes mellitus, and extracapsular cataract extraction with simultaneous insertion of a synthetic intraocular lens. What is the correct code assignment?
- E11.9 Diabetes Mellitus without Mention of Complication, Type II or Unspecified  
Type, Not Stated as Uncontrolled  
E13.36 Other specified diabetes mellitus with diabetic cataract  
H25.9 Senile Cataract  
H26.9 Incipient Cataract  
08RJ3JZ Replacement of Right Lens with Synthetic, Substitute, Percutaneous Approach
- H25.9; E13.36; 08RJ3JZ
  - E11.9; H25.9
  - E11.9; H26.9
  - H25.9; E11.9; 08RJ3JZ

10. A patient is admitted with acute exacerbation of COPD, chronic renal failure, and hypertension. What is the correct code assignment?
- I10 Essential Hypertension, unspecified
  - I12.9 Hypertensive Chronic Kidney Disease, with Chronic Kidney Disease Stage I through Stage IV, or unspecified
  - J44.1 Obstructive Chronic Bronchitis, with Acute exacerbation
  - N18.9 Chronic Kidney Disease, unspecified
- a. J44.1; I12.9; N18.9
  - b. N18.9; I10; J44.1
  - c. J44.1; N18.9; I10
  - d. J44.1; I12.9

### Terminology

11. The definition of Urosepsis is:
- a. Urinary tract infection
  - b. Sepsis
  - c. SIRS
  - d. Urosepsis is not a medical term
12. The decline in performance of one or both heart ventricles during the phase of cardiac function in which the heart is not contracting to propel blood to the body, but instead is relaxing is the definition of:
- a. Congestive Heart Failure
  - b. Diastolic Heart Failure
  - c. Systolic Heart Failure
  - d. Chronic Diastolic and Systolic Heart Failure
13. The suffix “itis” means:
- a. Essential
  - b. Primary
  - c. Inflammation
  - d. Induced
14. A severe blood infection that can lead to organ failure and death is:
- a. Sepsis
  - b. Bacteremia
  - c. MRSA
  - d. Urosepsis
15. Malnutrition is defined as:
- a. A broad term used to define under nutrition
  - b. A broad term used to define over nutrition
  - c. A broad term used to define both under and over nutrition
  - d. A broad term used to define iron deficiency malnutrition

**Pharmacology**

16. Which of the following medications would you expect to see ordered for a patient with Diabetes?
  - a. Albuterol
  - b. Amoxicillin
  - c. AZT
  - d. Digoxin
  - e. Glucotrol
  - f. Lisinopril
  
17. Which of the following medications would you expect to see ordered for a patient with a urinary tract infection?
  - a. Albuterol
  - b. Amoxicillin
  - c. AZT
  - d. Digoxin
  - e. Glucotrol
  - f. Lisinopril
  
18. Which of the following medications would you expect to see ordered for a patient with COPD?
  - a. Albuterol
  - b. Amoxicillin
  - c. AZT
  - d. Digoxin
  - e. Glucotrol
  - f. Lisinopril
  
19. Which of the following medications would you expect to see ordered for a patient with CHF?
  - a. Albuterol
  - b. Amoxicillin
  - c. AZT
  - d. Digoxin
  - e. Glucotrol
  - f. Lisinopril
  
20. Which of the following medications would you expect to see ordered for a patient with hypertension?
  - a. Albuterol
  - b. Amoxicillin
  - c. AZT
  - d. Digoxin
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  - f. Lisinopril

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### Queries

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*Dr. Smith—this patient was seen in the ED two weeks prior to this admission for pneumonia and prescribed antibiotics. She is admitted today for fluid overload due to chronic congestive heart failure. Please document the pneumonia in your progress notes.*
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  - This query brings in information not documented within the chart and is inappropriate
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26. The following query was found in a patient's health record. Which of the answers best applies to this query?

*Dr. Smith—Can the etiology of the patient's pneumonia be further specified? It is noted in your H/P that this obtunded patient had a history of nausea and vomiting prior to admission, and admission orders state Clindamycin for RLL pneumonia. Please document the type or etiology of pneumonia.*

- a. This is a leading query
- b. This query brings in information not documented within the chart and is inappropriate
- c. This is a yes/no query
- d. This is an appropriate query

## 90-DAY CDI POST TEST—ANSWER KEY

20 questions

18–20: Passing

16–17: Identify improvement areas

15 or below: Requires PIP

\*\*Choose any 20 questions

### Coding

1. A patient is admitted through the emergency room for shortness of breath. The patient is given epinephrine and nebulizer treatments. The shortness of breath and wheezing are unabated following treatment. What diagnosis should be suspected?
  - a. Acute bronchitis
  - b. Acute bronchitis with COPD
  - c. Asthma with status asthmaticus
  - d. Chronic obstructive asthma

Answer: C

2. An elderly patient with a history of lung cancer is admitted from the nursing home with ataxia, syncope, and a fractured arm as the result of a fall. The patient undergoes a closed fracture reduction of the humerus in the ED, and a complete work up for metastatic carcinoma of the brain. The patient is found to have metastatic carcinoma of the brain. Which of the following is the principal diagnosis?
  - a. Ataxia
  - b. Fracture humerus
  - c. Metastatic carcinoma of the brain
  - d. Carcinoma of the lung

Answer: C

3. A patient is admitted for abdominal pain with diarrhea and was diagnosed with infectious gastroenteritis. The patient also had angina and COPD. Which of the following is the correct sequencing?
  - a. Abdominal pain, infectious gastroenteritis, COPD, angina
  - b. Infectious gastroenteritis, COPD, angina
  - c. Gastroenteritis, abdominal pain, angina
  - d. Gastroenteritis, abdominal pain, diarrhea, COPD, angina

Answer: B

4. A patient is admitted to the hospital with shortness of breath and congestive heart failure. The patient subsequently develops respiratory failure. The patient undergoes intubation with ventilator management. Which of the following would be the correct sequencing and coding of this case?
- Congestive heart failure, respiratory failure, ventilator management, intubation
  - Respiratory failure, intubation, ventilator management
  - Respiratory failure, congestive heart failure, intubation, ventilator management
  - Shortness of breath, congestive heart failure, respiratory failure, ventilator management

Answer: A

5. An elderly patient is admitted to the hospital for Sepsis secondary to staphylococcus aureus and abdominal pain secondary to diverticulitis of the colon. What is the correct code assignment?

A41.01 Sepsis due to Methicillin susceptible Staphylococcus Aureus

A41.9 Sepsis, unspecified organism

A49.01 Methicillin Susceptible Staphylococcus Aureus

K57.92 Diverticulitis of the intestine, part unspecified, without perforation or abscess without bleeding

R10.9 Abdominal Pain, unspecified site

- A41.01; K57.92; R10.9
- A41.01; K57.92
- A49.01; A41.9; K57.92
- K57.92; R10.9; A41.01

Answer: B

6. A patient is admitted with a Stage II pressure ulcer on admission. The ulcer progresses to a Stage IV throughout the 7 day admission. The correct POA assignment for the Stage IV pressure ulcer is?

- Y-yes
- N-no
- U-unknown
- None of the above

Answer: A

7. Hospital acquired conditions (HACs) are defined by CMS as those conditions that:

- Are high cost, volume, or both
- Result in a higher paying MS-DRG assignment when present as a secondary diagnosis
- Could have reasonably been prevented during the admission
- All of the above

Answer: D

8. A woman is admitted for blood loss anemia due to dysfunctional uterine bleeding. What is the correct code assignment?

D25.9 Leiomyoma of uterus, unspecified

D50.0 Iron Deficiency Anemia, secondary to Blood Loss

D62 Acute Posthemorrhagic Anemia

N93.8 Disorders of Menstruation and Other Abnormal Bleeding from Female Genital Tract, Other

- a. D50.0; N93.8
- b. D62; N93.8
- c. N93.8; D50.0
- d. D50.0; D25.9

Answer: B

9. A patient is admitted with right senile cataract, diabetes mellitus, and extracapsular cataract extraction with simultaneous insertion of a synthetic intraocular lens. What is the correct code assignment?

E11.9 Diabetes Mellitus without Mention of Complication, Type II or Unspecified

Type, Not Stated as Uncontrolled

E13.36 Other specified diabetes mellitus with diabetic cataract

H25.9 Senile Cataract

H26.9 Incipient Cataract

08RJ3JZ Replacement of Right Lens with Synthetic, Substitute, Percutaneous Approach

- a. H25.9; E13.36; 08RJ3JZ
- b. E11.9; H25.9
- c. E11.9; H26.9
- d. H25.9; E11.9; 08RJ3JZ

Answer: D

10. A patient is admitted with acute exacerbation of COPD, chronic renal failure, and hypertension. What is the correct code assignment?

I10 Essential Hypertension, unspecified

I12.9 Hypertensive Chronic Kidney Disease, with Chronic Kidney Disease Stage I through Stage IV, or unspecified

J44.1 Obstructive Chronic Bronchitis, with Acute exacerbation

N18.9 Chronic Kidney Disease, unspecified

- a. J44.1; I12.9; N18.9
- b. N18.9; I10; J44.1
- c. J44.1; N18.9; I10
- d. J44.1; I12.9

Answer: A

### Terminology

11. The definition of Urosepsis is:

- a. Urinary tract infection
- b. Sepsis
- c. SIRS
- d. Urosepsis is not a medical term

Answer: D

12. The decline in performance of one or both heart ventricles during the phase of cardiac function in which the heart is not contracting to propel blood to the body, but instead is relaxing is the definition of:
- Congestive Heart Failure
  - Diastolic Heart Failure
  - Systolic Heart Failure
  - Chronic Diastolic and Systolic Heart Failure

Answer: B

13. The suffix “itis” means:

- Essential
- Primary
- Inflammation
- Induced

Answer: C

14. A severe blood infection that can lead to organ failure and death is:

- Sepsis
- Bacteremia
- MRSA
- Urosepsis

Answer: A

15. Malnutrition is defined as:

- A broad term used to define under nutrition
- A broad term used to define over nutrition
- A broad term used to define both under and over nutrition
- A broad term used to define iron deficiency malnutrition

Answer: C

### Pharmacology

16. Which of the following medications would you expect to see ordered for a patient with Diabetes?

- Albuterol
- Amoxicillin
- AZT
- Digoxin
- Glucotrol
- Lisinopril

Answer: E

17. Which of the following medications would you expect to see ordered for a patient with a urinary tract infection?

- Albuterol
- Amoxicillin

- c. AZT
- d. Digoxin
- e. Glucotrol
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Answer: B

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Answer: A

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- a. Albuterol
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- c. AZT
- d. Digoxin
- e. Glucotrol
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Answer: D

20. Which of the following medications would you expect to see ordered for a patient with hypertension?

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- c. AZT
- d. Digoxin
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Answer: F

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Answer: C

## Queries

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Answer: E

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Answer: D