Best Practices in the Art and Science of Clinical Documentation Improvement (2018 Update)

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Editor's Note: This Practice Brief update supersedes the July 2015 Practice Brief titled "Best Practices in the Art and Science of Clinical Documentation Improvement."

Clinical documentation improvement (CDI) is a discipline focused on improving the clinical clarity of the health record. It is practiced by health information management (HIM) professionals, registered nurses, and a host of other clinically oriented professions. CDI has emerged as one of the most important vehicles for bridging the gap between the clinical documentation contained in the health record and the resulting clinical and claims data utilized for reimbursement, quality, research, and outcomes management.

CDI began as a hospital inpatient process, but organizations are realizing the benefits of expanding into the hospital outpatient, physician practice, and ambulatory settings.

The impact of CDI programs is as vast as the types of professionals that perform the function. Healthcare payment is increasingly tied to quality care metrics under reimbursement methodologies such as value-based purchasing. Risk adjustment is an important concept for any setting because it normalizes the patient population across and within healthcare delivery systems. The primary impact of CDI efforts across care settings is a more accurate depiction of patient acuity, which typically translates into a positive impact on reimbursement and quality measures performance data.

Effective CDI programs result in the capturing of all diagnoses and procedures supported by clinical documentation, which is ultimately reflected through final code assignment. In the inpatient setting, the impact of a more accurate depiction of patient severity and acuity is measured by case mix index; severity of illness (SOI) and risk of mortality (ROM) scores; reductions in clinical denials for documentation related issues; and improved clinical outcomes and overall optimal continuity of care for patients.

The impact in hospital outpatient, ambulatory, and physician practices will vary depending on the setting. For example, in the physician office setting accurate depiction of patient acuity is typically measured by a Risk Adjustment Factor (RAF) score. The connection between clinical documentation and reimbursement is less direct in the outpatient setting than in the inpatient setting, which is also adjusted for performance on quality metrics. The Centers for Medicare and Medicaid Services (CMS) Quality Payment Program is greatly influenced by complete and accurate clinical documentation.

Healthcare data is utilized for more than reimbursement—examples include population health statistics, quality of care measurements and reporting, healthcare and disease research, best practices for medical care and treatment, as well as various regulatory body reporting. It is imperative this healthcare data is accurate and truly reflects the condition of the patient and the resources required to care for and treat the patient.

A critical focus of a CDI program is to identify deficiencies in clinical documentation and develop processes to ensure the complete and accurate picture of a patient's clinical encounter. Outcomes reporting should be monitored to measure the overall impact of the CDI program and track areas of opportunity and success. A CDI program can develop specific case examples as education for physicians, clinicians, and administrators, highlighting impacts as applicable.

While financial benefits are often key to demonstrating a measurable value proposition for a CDI program, chief quality officers, patient safety officers, chief information officers, and chief medical officers are counted among the stakeholders realizing tangible benefits from CDI programs. Mature CDI programs can synchronize clinical workflow with clinical documentation, as well as enhance physician productivity and satisfaction with electronic health record (EHR) systems. CDI programs can also assist in reducing clinical ambiguity and clarifying conflicting documentation between all care providers. The keen and well-trained eye of a CDI professional can often tie together multiple disparate pieces of clinical information into a cohesive fact pattern, which can be the catalyst for a clinician to provide more specific and descriptive diagnoses and/or procedures.

The discipline of CDI, whether practiced by clinicians or coding professionals, has the potential to deliver great value to the healthcare system—including to the patient, who deserves a clear, concise, consistent, and accurate health record to support continuity of care.

Essential Characteristics of the CDI Professional Skill Set

Recruiting ideal individuals to launch and nurture a CDI program is critical to the success of the program. The ideal candidate should have a combination of coding competence and clinical expertise. Additional skills can assist in moving the program forward and establishing the foundation for a results-driven program. Aptitude for critical/analytical thinking, along with effective communication and interpersonal skills, are

essential traits for a CDI professional. Individuals who can correlate coding knowledge with clinical practice and expertise are vital to a CDI program's success. There are important attributes to keep in mind when recruiting new staff or evaluating current staff. These skills are important to both inpatient and outpatient CDI programs. A CDI professional must possess advanced skills to perform their job, including but not limited to:

- Strong clinical skills, ability to interpret clinical indicators found among diagnostic tests and study results, recognize/understand disease processes, identify therapeutic and diagnostic orders that demonstrate attention to undocumented conditions, and understand the structure and format of ICD-10-CM, ICD-10-PCS, and/or Healthcare Common Procedure Coding System (HCPCS) and Current Procedural Terminology (CPT®) codes.
- Applicable knowledge of code assignment requirements as required by the setting which may include the Official Coding Conventions and Guidelines from CMS, *Coding Clinic*® from the American Hospital Association, *CPT Assistant* from the American Medical Association, etc.
- Effective communication skills are essential as CDI professionals must communicate with a host of individuals.

Success in CDI is achieved by taking the fundamental knowledge of coding, advancing it through critical thinking, and formulating the big picture. The following attributes foster growth within the CDI program and prepares a facility for maintaining data integrity, compliance, and quality revenue management:

- Ability to interpret regulatory initiatives and promote development of practices that support compliance of these initiatives
- Analytical and critical thinking skills
- Detail-oriented mentality
- Ability to recognize the uses and significance of complete and accurate coded data
- Ability to perform data analysis and reporting

CDI professionals must possess effective communication skills as they interact with organization leaders, physicians, clinicians, coding professionals, auditors, etc. The CDI professional of the future is a facilitator of communication between multiple caregivers, ancillary staff, and the revenue cycle team.

Essential Job Duties of the CDI Professional

The CDI professional is responsible for identifying documentation gaps in the health record and seeking clarification from the provider through the query process. This process assists the facility in reporting accurate, complete, and timely data, regardless of the healthcare setting. Health record data should represent the resources utilized for patient care, reflect the quality of care, and ensure data is both clinically supported and clinically significant—which will, in turn, support appropriate reimbursement. Patient outcomes data will be more accurately reflected when clinical documentation practices are performed in a manner that facilitates coding to capture information describing patients' acuity. This can be captured by a variety of risk-adjustment strategies, including:

- Hierarchical Condition Categories (HCCs)
- Medicare Severity Diagnostic Related Groups (MS-DRGs)
- Severity of Illness (SOI) and Risk of Mortality (ROM) within All Patient Refined Diagnostic Related Groups (APR-DRG) methodology

The needs of the organization and maturity of the CDI program will determine which risk adjustment strategies are employed by CDI staff as well as any CDI activities extending beyond the inpatient setting.

The benefit of CDI is being discovered in the outpatient setting. Implementing an outpatient CDI program may be challenging and requires the ability to identify current documentation, reimbursement, and/or quality performance gaps. Before implementation, a facility should define the goals and scope to facilitate a starting point. Understanding the facility baseline performance regarding quality metrics and denials management will provide valuable information that can be utilized to prioritize focus areas for documentation improvement. The CDI professional can bring about these changes by consistently performing the essential duties of reviewer, educator, analyst, and collaborator.

CDI Professional Staff Duties: Reviewer

The goal of a CDI program is to support high-quality clinical documentation. The seven characteristics of high-quality clinical documentation are as follows:

- Legibility
- Reliability
- Precision
- Completeness
- Consistency
- Clarity
- Timeliness

In order to support high-quality clinical documentation, the CDI professional reviews health records regularly to identify opportunities for improvement of the clinical documentation. The CDI professional must be proficient in accessing and reviewing the electronic health record. They may be required to locate documentation not included in the electronic health record where hybrid records exist. The CDI professional must be informed of changing guidelines, regulations, and advice for querying, coding, and documentation practices, which may vary by setting, to perform these tasks compliantly.

In the inpatient setting, the CDI professional should be knowledgeable of ICD-10-CM and ICD-10-PCS codes. There should be a review of claims data for trends in coding and diagnosis-related group (DRG) assignments, as well as the annual coding and DRG updates to identify new query opportunities or to fine-tune existing opportunities. CDI professionals also need to be aware of which diagnoses are susceptible to clinical validation denials as well as organizational efforts to define the conditions and seek additional clinical evidence from providers as applicable. The CDI professional may also be charged with the review of retrospective DRG validation from third parties or to participate in validating or challenging payer denials. Participation in second level reviews often reveals trends that should be incorporated into future educational offerings.

An outpatient CDI professional must understand how coding guidelines differ between the inpatient and outpatient setting. Additionally, outpatient CDI professionals often specialize in the outpatient hospital setting or physician practice, which have different billing and reimbursement requirements and documentation workflows. The outpatient CDI professional should be knowledgeable about ICD-10-CM and HCPCS, and specifically CPT® codes that apply to the outpatient setting in which they are conducting reviews. The fast turnaround in the outpatient setting is a challenge to CDI programs. Due to the volume of outpatient claims, concurrent reviews may not be feasible, so the workflow may need to be structured to allow CDI efforts to be implemented before billing the claim.

CDI Professional Staff Duties: Educator

The CDI professional uses multiple mediums and avenues to deliver training and information to providers and others both within and outside of a healthcare facility. A major contribution to a successful CDI program is the ability to demonstrate the impact of the CDI program to a large percentage of the facility or physician practice's staff. At a minimum, the CDI professional will provide:

- Education to clinicians, through the querying process to assist in the understanding of the impact of their documentation practices on quality reporting, accurate reporting of a patient's clinical information, and reimbursement
- Ongoing education throughout the facility through presentations of data, examples of best practice documentation, and demonstration of the impact documentation has on healthcare data reporting
- Identification and reporting of documentation practices on negative and positive trends
- Collaborative development and reporting of quality measures including practitioner-specific data
- Education on clinical topics such as disease impact, medications, and current medical practice and the correlation to code assignment

Within the outpatient clinic and physician practice, in most cases, unless there is an edit that stops the claim, the account is billed based on the physician code selection since codes are assigned by providers. CDI has a tremendous opportunity within this venue to educate physicians on outpatient coding guidelines and documentation requirements. One area of significance is HCC coding, which adjusts Medicare capitation payments to Medicare Advantage healthcare plans for the health expenditure risk of their enrollees. Population health management and pay-for-performance is predicated on how practices are measured from a quality and risk adjustment standpoint. This is important to payer contract structures for negotiation and implementation of plan coverage, such as health insurance exchanges and accountable care organizations.

CDI Professional Staff Duties: Collaborator

The CDI professional must be able to collaborate with clinicians and ancillary staff across the healthcare spectrum including medical staff and leadership, executives, administrators, coding, and other support departments. A CDI program can only provide meaningful and sustained change when the CDI professional is able to work cooperatively to identify and solve challenging documentation issues. Clinicians who are working on reducing hospital-acquired conditions (HACs), patient safety indicators (PSIs), and other quality measures will be more effective in creating change when they understand the dynamics of documentation and how it impacts the identification of members of the measure population, code selection, and, ultimately, the facility's or practitioner's performance measures. Collaboration between CDI professionals and coding staff is critical as the exchange of clinical and coding knowledge and information will result in the most appropriate documentation that presents a true clinical picture of the patient's conditions and treatments during the hospitalization.

CDI Professional Senior Level Duties: Analyst

The senior level CDI professional typically has several years of CDI experience and advanced CDI skills. They must be able to review the data and look for trends or patterns over time as well as any variances that require further investigation. They must be able to understand data and be able to collate it into meaningful information. Data collected on a regular basis will promote understanding of program efficacy, the impact of documentation changes, trends on the reporting of patient outcomes, and how these trends impact organizational efforts. Data from external sources including Program for Evaluating Payment Patterns Electronic Report (PEPPER) and external third-party audits should be reviewed to ensure a compliant process. Skills needed to be successful in fulfilling this duty include an understanding of the Comprehensive Error Rate Testing Program (CERT) and Office of Inspector General (OIG) audits related to coding and billing practices.

CDI Professional Senior or Manager Level Duties

The CDI manager may be asked to be a member of the revenue cycle team. This involvement may incorporate the review of denied claims due to medical necessity, insufficient documentation, or lack of clinical validation.

CDI Reporting Structure

CDI departments tend to have a wide range of upward reporting requirements. The 2014 AHIMA Foundation's "Clinical Documentation Improvement Job Description Summative Report" identified that most CDI professionals report to the HIM department, while others may report to the nursing, revenue/finance, or the utilization or quality management department.

CDI can be successful under most organizational structures if the following fundamental elements are met:

- Executive oversight: Chief Medical Officer (CMO), Chief Financial Officer (CFO), Chief Operating Officer (COO)
- CDI steering committee (monthly/quarterly reporting)
- Physician advisor
- Physician engagement
- Key performance indicator (KPI) tracking
- Quarterly or annual CDI audits/opportunity revitalization
- CDI program analytics
- HIM coding communication/interaction (formal and informal)
- Compliance and denial management team player

An essential component of a CDI program is to have focused and collaborative leadership that understands how the activities of the various departments impact the overall initiatives of the institution.

Measuring CDI's Financial Impact

A robust CDI program can yield improved quality scores, expedient coding, increase accuracy in case mix indices, and facilitate the capture of appropriate revenue. It can identify potential DRG problem areas, contribute to a decrease in medical necessity denials and, most important of all, improve patient care. CDI has the potential to enhance a facility's or practitioner's compliance efforts, as better documentation reduces future exposure to external audits and risk.

Healthcare facilities have moved aggressively to implement inpatient CDI programs and technology solutions. The need for clinical documentation accuracy has driven these CDI initiatives toward their goals of widespread clinician adoption, improved quality of care, enhanced financial results, optimizing an organization's EHR investment, and improvement and accuracy in case mix index (CMI).

One of the initial motivators for adopting CDI solutions is the proven, demonstrable, and sustainable improvement in CMI, resulting in increased revenues and the best possible utilization of high-value specialists. CDI solutions are instrumental in ensuring full and timely reimbursement from payers, while avoiding the costly penalties of noncompliance. The appropriate capture of SOI and ROM indicators, as well as HCCs, contributes to the development of risk-adjusted outcome profiles, improved performance in provider and facility quality profiles, and appropriate payments.

Overview of Case Mix Index

Case Mix Index (CMI) is the measure of the relative complexity and severity of patients treated in a hospital. CMI serves as the basis for payment methodologies administered by CMS as well as other third-party payers. Several factors can affect a hospital's CMI, including volume changes in certain DRGs and documentation/coding improvements. CDI leadership should understand CMI fluctuations and declines in CMI. Through proper measurement and analysis, providers can identify ways to improve a stagnant or declining CMI. Examples include:

- Review CMI by comparing overall CMI, Medical and Surgical CMI, and drill down by service line.
- Explore DRGs to determine if CC capture rates or key DRG pairs are in the optimal DRG assignments.
- Compare the volume of distribution in key DRG pairs. For example, calculate the volume of complex versus simple pneumonia, chronic obstructive pulmonary disease (COPD) versus respiratory failure, and gastroenteritis versus dehydration. Review the distribution of cases in the higher-weighted DRGs compared to peers or industry benchmarks.
- Perform CDI coding DRG reconciliation. Review and monitor final coded DRGs to concurrently assigned codes and DRGs. Identify CDI impacts and opportunities for CDI, coding, and physician education.

CMI is a constant concern for healthcare financial leaders because of its impact on the revenue stream and should be consistently monitored and distributed to appropriate stakeholders. However, it is also important to understand that CMS's value-based payment methodologies limit the predictive power of CMI as penalties associated with these programs are not reflected in the CMI, which is based on the relative weight of the billed MS-DRG.

Measuring the Quality Impact

The impact of complete and precise clinical documentation for quality and outcomes reporting is an essential focus for CDI programs. Clinical documentation improvement efforts that include a focus on the "holistic aspects" of care are crucial in the current state of reliance on healthcare data and outcomes reporting.

Metrics for measuring the quality impact of the CDI program include, but are not limited to:

- Severity of illness (SOI)
- Risk of mortality (ROM)
- Hospital-acquired conditions (HACs)
- Patient safety indicators (PSIs)
- Hierarchical condition categories (HCCs)
- CMS Quality Payment Programs (QPPs)

For these elements, it is important to capture and report the impact achieved through CDI review and clarification of physician documentation. Based on chart review, specific questions include:

- Were there any conditions or procedures added that impact the complexity or severity of the case (SOI and ROM levels)?
- Were any conditions clarified or averted based on lack of supporting or clarifying documentation (HACs or PSIs)?

Obtaining Physician Engagement

CDI is a quality initiative and this message should be clearly relayed to providers during both initial and ongoing engagement. The key is to engage providers to appreciate how high-quality clinical documentation is an opportunity for them to demonstrate the quality of care they are providing by way of exhibiting complete and accurate documentation in a consistent and prescribed manner, which results in appropriate and accurate outcomes reporting.

Documentation must be complete, accurate, timely, and in a prescribed syntax (with nothing left to interpretation) that conveys the story of what transpired between the patient and provider. Without this "story" other providers may not have a complete picture of the patient's health. Providers see many patients, so proper documentation plays a vital role in continuity of care as it helps them to recall the events of the previous visits.

Incomplete documentation makes it difficult for patients to receive appropriate follow-up care as the current provider may not have a clear-cut picture of the patient's illness or what steps have been previously taken to address the patient's healthcare concerns. How can quality care be delivered if the provider does not have all the information necessary to make a sound medical decision? Remember, if it wasn't documented, then it wasn't done.

CDI professionals should remind providers that their documentation is the evidence that demonstrates the care provided to the patient. Clinical documentation substantiates patient treatment and patient responses to that treatment.

Providers have certainly heard of "quality measures," but they may not realize those quality measures are derived from their documentation. It is essential for providers to recognize how their documentation impacts data. Using data to measure performance is a crucial component in improving the quality of healthcare. Accurate healthcare data aids in determining where improvements can be made, such as inpatient outcomes or improving care processes.

CDI of the Future

Accurately reflecting patient acuity through risk adjustment methodologies like MS-DRGs, SOI, ROM, and HCCs represent resource consumption and contribute to complete and correct quality reporting. These are overarching concepts that CDI efforts impact. As the understanding of improved documentation and the direct impact it has on quality metrics is realized, more organizations are expanding the role of their CDI departments into other settings and creating closer alignment with quality performance efforts. The future of CDI is promising due to the value it brings to a variety of healthcare settings. Continued growth within the CDI profession is expected as payers continue to embrace value-based reimbursement methodologies, creating an even stronger link between clinical documentation and a variety of outcomes.

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