An Essential Guide to Clinical Documentation Improvement

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What is Clinical Documentation Improvement (CDI) and Why is it Important?

Because clinical documentation is at the core of every healthcare encounter, it must be complete, precise and reflect the full scope of care and services provided. The health record is the definitive and legal record of care provided to a patient; if the clinical documentation does not adequately and precisely reflect the process and outcome of each patient encounter, the actual quality of care that was delivered could be seen as irrelevant. Increasingly, the documentation, and resultant data and information extracted from that documentation, is how providers and organizations are being measured and adjudicated. Assuring consistency in clinical documentation that is accurate, specific, legible and timely is a key quality measure for any organization; at present, it is representing a challenge for many organizations. A comprehensive Clinical Documentation Improvement (CDI) program, accepted and adopted by all clinicians throughout an organization, is critical in overcoming this challenge.

Current fiscal and accountability pressures on hospitals and other healthcare providers are resulting in increased reliance on coded data for decision making and as a result, an increased focus on the quality of the documentation in the health record. Best practice for the HIM profession dictates that "if it isn't documented, you can't code it". While documentation in the health record has always been critical to the patient, the physician and the healthcare organization, hospitals are paying an increasing amount of attention to the *quality* of the documentation and the resulting data that is coded, abstracted and submitted to CIHI and provincial ministries. To justify increased resources in the absence of objective and quantifiable data, the adage typically used by physicians that "my patients are sicker" is no longer supportable. Studies have shown that improving high quality clinical documentation improves patient outcomes and provides for better planning and delivery of services.

Physicians and other healthcare providers typically are not trained to develop proper documentation skills in medical school and residency. Hospitals and healthcare systems need to compensate for this lack of training by instituting educational programs and tools that align healthcare providers with proper documentation practices and remove barriers to achieving better quality data and information. Allocating resources to CDI training and development is an investment that will produce future returns for healthcare organizations, including:

- Robust, concise and complete documentation that reflects the delivery of high-quality healthcare services, including a more accurate reflection of the complexity of the patient and the care provided to them.

- Support for the coding of health records to their greatest level of specificity and submission of high quality data and information to CIHI and the provincial ministries.
- Facilitation of more efficient collection of key data elements to ensure more accurate reporting and analysis of data and information.
- Greater ability to focus on accountability and quality around patient outcomes or mortality rates and meet the measures outlined in accountability agreements, activity based funding models and other quality based initiatives.

In addition to these objectives, high quality clinical documentation serves the best interest of the patient; fundamental attributes of accurate and complete documentation to achieve this goal include such items as:

- Complete description of patient assessment
- Documentation of reasons for tests and complete and accurate test results
- Documentation supporting all diagnoses and procedures/interventions, including changes in diagnoses
- Complete and comprehensive care & treatment plan
- Legibility and full dates and signatures on all documentation (to ensure that the health record meets legal standards)

Examples of poor documentation include:

- Inconsistent documentation among all providers / clinicians
- Incomplete progress notes
- Missing progression of illness, degree of severity or disease manifestations
- Missing causal relationships, e.g. hypertens*ive* heart/renal disease, sepsis *due to E.coli, UTI etc.*
- Post-operative complications not listed
- Historical diagnosis documented as current

The quality of physician documentation is often evaluated by measures such as:
- # or % of discharge summaries or operative reports missing at time of coding
- # or % of cases with a specific diagnosis or condition (i.e. diabetes) not documented by physician or not documented with the appropriate level of specificity
- # or % of cases with Lab or DI test results not confirmed by physician
- # or % of cases with date/time of palliative care assignment missing

Comparative examples of incomplete vs. high quality are included below as illustrations of the difference, including the impact on RIW calculation and potential funding implications.

Incomplete Documentation	Better Documentation	Complete Documentation
• 70 year old with colon cancer admitted for hemicolectomy • No co-morbid conditions	• 70 year old with colon cancer admitted for hemicolectomy • Pneumonia post-admission, organism unspecified	• 70 year old with colon cancer admitted for hemicolectomy • Pneumonia post-admission due to Streptococcus
▪ RIW 2.2, ELOS 10.2 ▪ Potential funding implication: $11,000	▪ RIW 3.8, ELOS 16.4 ▪ Potential funding implication: $19,000	▪ RIW 5.8, ELOS 24.4 ▪ Potential funding implication: $29,000

A sound Clinical Documentation Improvement Program will achieve the following for your facility:

- Clarify missing, conflicting or non-specific physician documentation.
- Capture of co-morbid conditions and high cost interventions that better reflect the complexity of the patient and your organization's case mix index.
- More accurate reflection of resource use and assignment of cases within a grouping methodology to support accurate funding.
- Build better relationship between clinicians and HIM department.
- Improve data to reflect indicators and outcomes of quality of patient care.
- Improve coders' clinical knowledge, improve efficiencies in coding and reduce turnaround times.

Who Should be Involved?

A comprehensive CDI program must engage and involve the following stakeholders from across the health care organization or system:

- An *engaged physician team*, including:
  - One or more physician advisor(s) who can provide advice and sponsorship to the program, guide its' development and promote it among his/her peers and colleagues in the organization.
  - Key physician leaders, such as Chief Medical Informatics Officer and Departmental Chiefs, particularly from targeted services or programs.
  - Selected representatives from physician groups such as residents, hospitalists, consultant physicians and others key stakeholder groups.

- A *qualified CDI specialist*, typically an HIM professional, who will direct and manage the daily and regular operations and process of the program, such as:
  - Review clinical documentation and identify gaps and opportunities for improvement
  - Gather data and analyze performance metrics to focus CDI efforts
  - Develop tools and resources to support both coding staff and clinicians
  - Provide training materials and deliver educational sessions
  - Implement solutions to leverage technology and electronic health record

  It is becoming a more common practice in organizations to include experienced nurses as an integral part of a CDI program; their skill sets are particularly useful during the concurrent review of documentation during an inpatient stay, including providing feedback and suggestions to physicians and other health care providers to improve documentation.

- *HIM Departmental directors and managers*. HIM professionals are integral to the CDI program; they can provide best practice advice on the content and quality of documentation and provide insight and practical recommendations about health record policy changes and/or process re-design.

- *HIM professional coders*. The coder role in a CDI program focuses on contributions to, and advice on, the quality and content of clinical documentation as it impacts their ability to accurately and comprehensively code and abstract the full set of diagnoses and procedures/interventions. Coding staff will also contribute to and participate in the delivery of physician education programs as well as participate in continuing education programs to advance their education and learning in the areas of data quality and excellent coding practice.

- *Directors/Managers of Decision Support and Quality Improvement/Outcomes departments*. As key stakeholders and ultimate customers and consumers of the data and information that is generated from the documentation and the coding/abstraction process, it is critical that these groups be fully engaged in the CDI program. Resources from these departments will provide performance metrics that can be used to guide CDI efforts and identify target opportunities in the organizational services or programs where data quality and clinical documentation can be improved.

- Other stakeholders may include Information Technology resources, to support any electronic tools or systems that are used to enhance the CDI program.

While a CDI program is typically found in acute care hospital settings, its philosophy, principles and practices can be applied to any healthcare sector where a clinician provider is documenting a health care encounter in a patient record. The outcome and impacts of quality clinical documentation, or lack thereof, will increasingly be impacted by funding decisions in all healthcare sectors; the goals of a CDI program to promote better patient care and outcomes and enhance the planning and delivery of clinical services apply equally across all sectors. This will be further emphasized as regional integrated decision support programs, systems and tools are better utilized to integrate data and information across the health care continuum.

How do I get Started? An Essential Guide

There are four key steps to a CDI program:
- Needs Assessment and Re-abstraction Study (Chart Audit) and Documentation Review
- Analysis of Study Results and synthesis into meaningful information, with recommendations for improvement
- Physician / Clinician Engagement & Education
- Ongoing Management and Evaluation

Following is a high level description of each of these steps.

1. *Needs Assessment and Re-abstraction Study (Chart Audit).*

   In advance of any effective program or initiative, an assessment of the scope and extent of any existing problems or issues requiring resolution should be conducted. This is particularly true of an effective CDI program. The following activities should be initiated as part of a needs assessment:

   - Determine the high volume or high risk diagnoses, services or programs which may have the highest potential for documentation improvement, such as areas with:
     - Cases with a "longer than expected" LOS or "lower than expected" RIW
     - Cases where the most responsible diagnosis is a symptom, not a condition
     - Complex cases which normally require high cost interventions and/or are accompanied by a number of comorbid conditions

   This determination is made from a detailed review of the most recent reports from the coded and abstracted data contained in the inpatient DAD data set. As the high volume or high risk groups are identified, it will be important to consider both the coding perspective (i.e. opportunities to improve coding) and the perspective of improving clinical documentation.

   Experience has shown that clinical documentation requirements will be higher for those cases with:
   - Complex conditions and health problems
   - Higher degree of risk in proposed treatment
   - More intensive or acute care

   Other measures that will be evaluated during the re-abstraction study will include items focused more on the process and quality of coding, such as:
   - coding discrepancies with the most responsible diagnosis or missed flagged interventions
   - accuracy of fields representing discharge disposition and patient stay in special care unit
   - appropriateness of diagnosis typing and assignment of significance to co-morbid conditions
   - capture of mandatory or pairs of coding (e.g., dagger/asterisk)

   - Once the high volume or high risk cases are identified, a detailed evaluation should occur in the form of a re-abstraction (chart audit) study.

2. *Analysis of Study Results and synthesis into meaningful information, with recommendations for improvement.*

   Upon completion of the re-abstraction study, an experienced HIM professional, expert in data analysis and clinical documentation reviews, will review the study results and identify the clinical services or programs where clinical documentation improvement is required. These areas are typically identified by the indication of potential changes in weighted cases and the resultant CMG/RIW or HIG/HIG weight calculations (note: the HIG calculation is relevant in Ontario only).

   As an example, the following is an example of coding specific metrics from an actual re-abstraction study recently conducted by CHIM Consulting.

   Diagnosis (ICD-10-CA)
   - In nn% of charts (n= nn/nn) disagreement with most responsible diagnosis
   - In nn% of charts (n= nn/nn) disagreement with 1 or more comorbid conditions
   - In nn% of charts (n= nn/nn) disagreement with the diagnosis typing
   - In nn% of charts (n= nn/nn) one or more co-morbid conditions were not captured

   Procedure/interventional (CCI)
   - In nn% of charts (n=nn/nn) one or more procedures were not captured
   - No flagged interventions were missed

   These findings led to the following calculations and potential RIW and HIG impacts:

   CMG+ Grouping data
   - No changes in CMG; change in RIW by 0.nn weighted cases (nn% impact, nn/nn cases)
     HIG Grouping data
   - No changes in HIG; change in HIG weight by 0.nn HIG weighted cases (nn% impact, nn/nn cases)

   While some of these results may be due to the need for improvement in coding practices, a detailed analysis would be completed to identify the key areas where improvement in physician documentation will result in improvement in these results.

3. *Physician / Clinician Engagement & Education*

To ensure a successful CDI program, physician involvement and support is critical to the acceptance and delivery of the program from its inception. Strong collaboration and evidence of effective leadership between physicians and the CDI program staff, including HIM managers and coders, will ensure long term success of the program.

Some key activities as part of delivering physician / clinical education and include:
- Establish a CDI taskforce or committee, including key physician stakeholders as integral members; their role is to provide input on the population of cases for the chart audit, provide feedback and advice on audit findings and ongoing support and peer leadership to any resultant CDI improvement initiatives.
- Jointly establish measurable goals for the program, linked to the key performance metrics used to measure the organization. Provide regular updates on results and performance improvements as reinforcement of the program's progress and activities.
- Focus on common (Top 10) clinical diagnoses, applicable to a specific specialty or program, and deliver customized presentations to service/program physician groups. Provide examples of the impact of poor documentation on performance metrics and program goals. The re-abstraction study results can be used to identify specific cases, including comparisons with other physicians, programs or peer hospitals.
- Develop training packages to deliver during orientation sessions for incoming residents and other staff, including documentation tip sheets and other tools.
- Engage physicians in the development of tools and resources that can be used to assist both HIM coder staff and physicians, i.e. coding directives or physician query forms.
- Facilitate physician leaders/advisors in the provision of peer-to-peer education to the broader physician groups on the importance of good documentation, including a frank discussion from a physician's perspective on the prevalent and common clinical documentation gaps.
- Invite physicians to speak at coding sessions on specific clinical conditions, diagnoses, or procedures; these discussions will provide a communication tool to enhance collaboration and understanding of the documentation requirements that are so necessary to ensure high quality coding.

4. *Ongoing Management and Evaluation*

As with any program or initiative, it is important to build in structures and processes to manage and evaluate the CDI program on an ongoing basis. Key elements of this management and evaluation include:
- Identify a CDI specialist to manage the program and direct (or conduct) the re-abstraction studies and subsequent analysis. This resource acts as the organizational lead and champion of the program, working closely with the physician lead and sponsor.
- Formalize the program by creating a governance structure, including a Steering Committee and working group. Include all key stakeholders, as identified above.
- Develop the program's overall strategy, scope and timelines; identify measurable program goals and metrics to demonstrate progress and improvement. Examples of metrics may include case mix index measured over time, change in physician query

response rate, rate of reported discrepancies between original coder and re-abstractor for most responsible diagnosis. These metrics can be tracked and reported over time and/or compared against other programs or peers within a program.

- Conduct regular meetings with the Steering Committee, working groups, physician groups and other forums to report on progress, discuss findings and determine ongoing actions and recommendations.
- Implement recommendations, working closely with all impacted stakeholder groups.
- Evaluate effectiveness of recommendations and changes on physician and HIM departmental workflow and processes. These evaluations could be done through survey, direct feedback or collection of performance metrics, e.g., reduction in number of charts audited or physician queries.

Using EHR Technologies and Tools to enhance your CDI Program

As Electronic Health Records (EHR's) have become prevalent in most health care organizations, the ability to leverage these tools within a CDI program is critical. While the key components of good clinical documentation remain the same regardless of method of documentation (paper, electronic, hybrid), the level of maturity of many EHR and other supporting technologies is now providing tools that should be leveraged and used to enhance and facilitate improved clinical documentation. The capture of structured and standardized data within an EHR / HIS system has been occurring for many years and is now stable and integral; the narrative documentation component of the health record is the "last mile" on the EHR journey.

Examples of technology enablers that can be used within an EHR/HIS to improve documentation include:
- Natural Language Processing (NLP) and other forms of speech recognition, integrated in dictation/transcription systems and processes.
- Post transcription physician self-edit and authentication functionality and processes.
- Structured templates integrated in EHR and developed with physician input and advice. These can be specific to a service or program or used generally by all clinicians.
- Identification of discrete data elements, either specific to a condition or disease state or general clinical data, which can be built into structured documentation forms. This method will allow standardization of terms and narrative resulting in a common terminology that can be "documented once and used many."

Reference List

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Author Biographies

Akeela Jamal

Akeela has over fifteen years of healthcare experience in both the public and private sectors, primarily in improving and leveraging health information for planning, funding and patient care. She has developed province-wide business intelligence tools, launched a provincial health information management advisory committee to improve the quality of clinical data and coding, established the provincial physician expert panel on clinical documentation, and is the author of "Guide to Better Physician Documentation". Akeela is certified as a Health Information Management Professional by the Canadian Health Information Management Association (CHIMA), and is a Certified Health Executive (CHE) with the Canadian College of Health Leaders. She has served on the board of the Canadian Health Information Management Association (CHIMA) and is currently an HIM instructor at McMaster University. Akeela has a Bachelor of Science in Anatomy from McGill University and an MBA from McMaster University with a focus on Health Services Management.

Cindy Grant

Cindy is a HIM Professional and an experienced project director. Leveraging her extensive consulting and hospital operations experience, in particular in the area of Health Information Management, implementation and use of clinical systems and project management, Cindy leads the project management and business development areas for CHIM Consulting. Cindy is certified as a Health Information Management professional by the Canadian Health Information Management Association (CHIMA). She is an experienced presenter to a wide variety of industry and sector forums and groups on a variety of HIM practice areas. In her HIM career, Cindy led several complex and multi-stakeholder projects, such as initiating and managing a complex, multi-year clinical documentation design and implementation project in the United States, managing the procurement, vendor engagement and initiation activities and early implementation of the Client Registry solution for the province of Ontario and a Chronic Disease Management Project for the province of Alberta acting as Interim CIO at a Complex Continuing Care, Rehabilitation, Mental Health and Long Term Care facility in Ontario.

About CHIMA

The Canadian Health Information Management Association (CHIMA) was established over 65 years ago to ensure sound record management principles in Canada. CHIMA's four Domains of Practice are Data Collection (ICD-10-CA & CCI) and Data Quality; Privacy, Confidentiality and Security of Health Information; and HIM Life Cycle Standards for the paper, hybrid and the Electronic Health Record. One of the CHIMA's key strategic directions is to promote health information management expertise in "data quality". The CHIMA mission is to ensure health information management (HIM) professionals are "Leaders in Quality Health Information". HIM professionals are the individuals who are trained to capture, utilize and manage health information within health facilities and community agencies across the health system. They are the only professionals certified by the federally chartered Canadian College of Health Information Management (CCHIM). CHIMA is the certifying body for HIM programs in Canadian colleges and universities.

About CHIM Consulting Inc.

The CHIMA Board of Directors researched the healthcare industry in response to a gap analysis and requests for consultative services; this research indicated a shortage of qualified expert HIM professionals available for consulting work in the Health Information sector. Accordingly, CHIM Information Consulting Inc. (CHIM) was established in December 2002.

The success of our organization is built on the talent and energy of outstanding people. CHIM employees are among the best HIM professionals available in Canada. As an organization, CHIM values growth, openness, trust and excellence with a focus on the customer. Corporate goals for CHIM include the need to exceed customer expectations by providing the right knowledge and service in the most professional and effective way. The organizational service standards are clear: Quality, Integrity, Courtesy and Efficiency.

Through CHIMA, CHIM staff are directly involved in working with all recognized Canadian colleges and universities that provide HIM programs and participate on boards and committees involved in course / program content development. CHIM staff were directly involved in working with the American Health Information Management Association (AHIMA) and the Ontario Ministry of Health and Long-Term Care (MoHLTC) to develop two (2) important HIM tools: a Professional Practice e-Learning and Assessment Tool (PPeAT) for all HIM coders employed in acute care hospitals across the province; and a web-based Communities of Practice (CoP) that would assist in communication between HIM professionals within the province. In addition, CHIM Inc staff was directly involved in the creation of the first and second editions of the Canadian HIM textbook "*Fundamentals of Health Information Management*". The textbook is based on the latest research and knowledge and includes chapters on the Canadian health care system, health informatics, the legal aspects of health information practice, electronic health records, health information standards, and ethical issues; each chapter discusses the role of the HIM professional within these subject areas. This textbook has become the premier reference for HIM professionals in Canada.

Many of the CHIM staff are experienced adult educators and have experience in creating and delivering standard and customized education courses and workshops on many subjects.