Are you ready for computer-assisted coding (CAC)?

White Paper
How to conduct a thorough CAC readiness assessment
Computer-Assisted Coding (CAC) is a term most hospital executives and health information management (HIM) professionals are exploring, but CAC continues to be an unknown technology. It has been defined by the American Health Information Management Association (AHIMA) as “…the use of computer software that automatically generates a set of medical codes for review, validation and use based upon clinical documentation provided by healthcare practitioners.”

The learning objective of this white paper is to identify the critical success factors for positioning CAC in your organization. These include:

1. Prepare your workplan to create a future state environment for CAC;
2. Assess your own readiness for CAC — resulting in next steps in workflow redesign and technology adoption;
3. Analyze documentation and workflow requirements; and
4. Analyze vendors — assess resources.

CAC is often misunderstood and mistakenly associated with the concept of auto-coding. Auto-coding completely supplants the need for human coding professionals. Indeed, in a few areas of clinical practice with very limited code selection — such as laboratory, radiology or physical therapy services, for instance — a CAC solution could significantly reduce the need for a human coder to validate code assignment. More often than not, however, CAC will transform the role and enhance the work of human coding professionals.

Identify the Goals and Objectives for Embracing CAC Technology:

THE BENEFITS OF CAC

Improved coder productivity; coding accuracy; data integrity; coding compliance; physician relations; and coder retention are among the many long-term benefits promised by a well-planned and well-executed CAC solution.

Throughout the healthcare industry, there is evidence that CAC increases coder productivity. In fact, hospitals report that CAC improves coder productivity by as much as 20 percent.² It is difficult to argue that a well-implemented automated code validation process could be less efficient than a traditional coding process in which every single code must be manually researched and entered. By automating formerly manual coding and documentation processes, healthcare organizations can also begin to take advantage of software interfaces. CAC systems are capable of linking code selections back to their original supporting documentation, which can help facilitate review and correction. In addition, documents that are well organized, with important terms and likely codes clearly highlighted, have been shown to help coders improve accuracy.³

With greater accuracy, of course, comes enhanced data integrity and quality. In the increasingly data-driven healthcare environment, higher quality data can have far-reaching implications for meeting Meaningful Use and quality care goals. Furthermore, improved accuracy better supports coding compliance efforts aimed at reducing potential payer audit liability.

CAC will strengthen the accuracy and speed of data for decision making, as it streamlines the revenue cycle workflow for clinical documentation improvement, coding and billing processes. In addition, a CAC work environment will be very inviting to recruit and retain top HIM talent. Consider, for example, the role a CAC could play in making the transition to ICD-10 a more interesting, empowering — and less daunting — experience.

Create a Future State for CAC and Prepare Your Workplan:

THE NEW ROLE OF THE CODER

Throughout the healthcare industry, enabling technologies that streamline workflow are rapidly changing traditional paper-based workflows. CAC, clinical documentation improvement methodologies and technology, and other tools are redesigning the role of the coding professional.

Whereas coders now are tasked with reviewing documentation and then assigning appropriate codes, the coders of the near future are destined to become code “validators.” On any given record, CAC will be used to narrow the field of applicable codes, with coders making the critical final affirmation based on their professional knowledge, skills, and ability to ensure accuracy and compliance.⁴

Assess Your Own Readiness for CAC and Create Your Action Items:

CHANGE MANAGEMENT, WORKFLOW AND TECHNOLOGY

BEST PRACTICE: Conduct a CAC Readiness Assessment

There is little debate about the ability of CAC technology to enhance HIM. However, without the proper data and workflows feeding CAC processes,

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³ ibid: 6.

⁴ AHIMA, “CAC 2010–11 Industry Outlook and Resources Report,” 2011: 3-4. Organizations will not realize all of the solution’s potential benefits. In fact, those who rush to implement CAC without first conducting a thorough analysis of their existing technologies and processes may well find that the implementation falls far short of expectations.
There are three main components to an effective CAC readiness assessment:

1. Understand the different types of clinical documentation capture.
2. Know the technology that will be affected by CAC within your organization.
3. Review your productivity standards.

**STEP 1: Understand the Types of Clinical Documentation Capture**

As the healthcare industry moves further away from paper-based documentation, it is important to understand the various ways in which information can be captured electronically. Digital data can be acquired through means such as automated speech recognition (ASR), digitized text (transcribed documents), or structured EHR text. Before CAC implementation, organizations must know what information they capture as narrative, structured data, or scanned data.

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<tr>
<th>TYPE OF DATA</th>
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<tr>
<td>STRUCTURED</td>
<td>Structured data capture is often associated with information entry into EHR fields. It is a method in which data is carefully constructed and coded.(^5) As a result, individual pieces of information within a record can be easily located and used.</td>
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<tr>
<td>UNSTRUCTURED</td>
<td>Unstructured data capture typically refers to paper/scanned documents. While information may be retrieved and viewed in electronic form, the data itself is not chopped into discrete bits to allow it to be effectively searched and used electronically.</td>
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<td>NARRATIVE</td>
<td>Narrative data generally enters the HIM workflow in the form of transcription. Many organizations use ASR to help turn providers’ spoken documentation into text, which medical transcriptionists then turn into a final document. Through a computer process known as Natural Language Processing (NLP), implied facts can then be extracted from the text as structured data.(^6)</td>
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| HYBRID       | Some form of hybrid data capture exists in most healthcare organizations today, usually a combination of electronic structured/narrative information and scanned document images. One key concept for organizations to recognize is that NLP — a vital element for CAC — will only be as good as:  
  - the quality of the documentation in the underlying system (EHR); and  
  - the ability to analyze structured data in the most important components of the EHR — which means moving away from hybrid records. |

**STEP 2: Understand Your Technology**

Healthcare organizations must be careful not to make the common mistake of confusing a true EHR with a document imaging system. Very often, the legal medical record that is coded resides in an electronic document management (EDM) system, not the EHR. The difference? An EDM typically does not offer a structured data environment. Instead, much of the information is imaged.


\(^6\) ibid: 16.
Likewise, CAC implementation requires scrutiny of the resources available within your organization. For example, do your in-house IT and HIM staff members have the expertise and bandwidth necessary for the endeavor? Before organizations can reap the benefits of CAC, HIM and IT staff must work together to champion its implementation.

**IN SUMMARY: An Upfront Assessment Can Yield Long-term Benefits**

With its inherent ability to improve data capture and integrity, CAC represents an exciting future for clinical coding. The challenge now is to ensure that your organization is asking the right questions and putting the right technologies in place to support and maximize its long-term benefits.

For more information on Quantim CAC, visit our website at [www.quadramed.com/Quantim/CAC](http://www.quadramed.com/Quantim/CAC) or call 703-709-2300.