Transitioning to CAC: The Skills and Tools Required to Work with Computer-assisted Coding

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The coding world is not immune to technology advancements. Computer-assisted coding (CAC) technology is changing how the coding process is accomplished across all healthcare settings. CAC technology continues to integrate into a coding professional's daily life. This article focuses on the tools to facilitate preparation for a successful transition.

The Coder as Editor

Just as word processing did not require individuals to relearn how to spell or create sentences, CAC will not require coding professionals to relearn how to code. Rather it allows coders to apply their analytical coding knowledge. The coding professional's role will transform to editor when working with CAC technology.[1]

Generally speaking, an editor reviews content to determine if revisions are necessary. A coding editor determines if the computer-suggested codes are ready for all downstream processes such as billing or public health reporting.

Coders determine the final code selection based upon their knowledge of coding guidelines, clinical concepts, and compliance regulations. They will have the opportunity to agree or disagree with the coding options provided by the software.

This transition from producing the code to editing codes requires critical thinking skills such as knowing why a diagnosis or procedure is or is not coded. CAC provides a link between documentation and a suggested code; however, coding professionals need to base their decisions on a combined knowledge of disease processes and coding principles. A common coding example that requires analysis is the determination of coding signs and symptoms.

Each health record is unique and requires coders to decide if the code assignment reflects the patient's clinical story (see "ICD-10-CM CAC Example," at right). Having a solid education from a reliable source in clinical foundations related to anatomy, physiology, and pharmacology, as well as a coding education, is important for coding professionals at all levels of their careers and can enhance their analytical skills.

Technology Skills

A qualitative research study revealed coding professionals support automation and technology advancements.[2] In today's healthcare environment individual technology skills are important to assess.

Electronic health record systems are changing the way coding professionals perform the coding function, from accessing records remotely to determining if the documentation necessary for proper code assignment is present in the electronic record.

Working remotely without an on-site IT department requires that coders possess familiarity with technology, such as connecting through a virtual protected network, ensuring information security, and troubleshooting if the technology is not performing at the expected level.

Specifically, coders must understand the logic that supports how the computer generates a list of suggested codes. There is a difference between how systems determine a code. Two common ways are natural language processing and structured text input.

A number of resources are available that outline the difference between the two methods. AHIMA's November–December 2004 practice brief "Delving into Computer-assisted Coding" provides an overview of the different technologies, and this month's practice brief provides further guidance for organizations looking to implement CAC.

Coders should be aware which type of system the organization is investigating, implementing, or maintaining because they will be responsible for validating the output from the system.

Computer-assisted coding technology is most efficient when interfaced with electronic documentation. Just as codes produced by coding professionals are dependent upon documentation, the computer-selected codes are dependent upon the available electronic documentation. The system receives documentation via system interfacing.

CAC systems typically interface with current encoding products, which interface with the organization's financial system. It is important to know which systems are interfacing with each other, as well as what information is part of the interface. Coders thus should assess their interface knowledge.

Next Steps

To prepare for CAC, coding professionals should create a continuing education plan based upon individual self-assessment. The plan should include specific actions, such as reviewing CAC articles or taking a class in anatomy from a reliable source.

Making a commitment to lifelong learning is important, because guidelines, regulations, and technology change the coding process. Integrating new and prior skills builds a coding professional's confidence in an ever-changing healthcare landscape.

ICD-10-CM CAC Example

In this example, the CAC software assigned the code T15.91A based on documentation in the emergency department record that states the patient had a "foreign body in the right eye." The coder is presented with the decision to accept the code or reject it based on further analysis.

Review of the documentation revealed that the foreign body was located on the edge of the cornea, which changes the fourth character in ICD-10-CM from 9 to 1. The coding professional replaces the T15.91xA code with T15.01A, Foreign body in cornea, right eye.

Emergency Department Record

A patient is brought to the emergency department due to a foreign body in the right eye. He was working with metal, and a piece flew in his eye. He reports slight irritation to the right eye but no blurred vision.

A slit lamp shows a foreign body approximately 2–3 o'clock on the edge of the cornea. The foreign body appears to be metallic. The iris is intact.

Procedure: Two drops of Alcaine were used in the right eye. Foreign body is removed from the right eye.

Computer-Generated Codes: T15.91xA, Foreign body, external eye, right.

Final Coding Decision: Coding professional selects the more specific code for foreign body of cornea, T15.01xA.

Notes

1. Foley, Margaret M., and Gail S. Garrett. "The Code Ahead: Key Issues Shaping Clinical Terminology and Classification." *Journal of AHIMA* 77, no. 7 (Jul.–Aug. 2006): 24–30.
2. Stanfill, Mary. "Coding Professionals' Feelings toward Computers and Automated Coding." Perspectives in Health Information Management, CAC Proceedings; Fall 2008. Available online at http://perspectives.ahima.org.

Additional Resources

Unless otherwise noted, all resources available in the AHIMA Body of Knowledge at www.ahima.org

AHIMA. "Automated Coding Workflow and CAC Practice Guidance." *Journal of AHIMA* 81, no. 7 (July 2010): 51–56.

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