

# 5 REASONS TO CHOOSE **KNOWLEDGE-BASED CODING**



## **CODING MATTERS**

Accurate coding is essential to effective healthcare delivery, correct reimbursements, and efforts to improve healthcare affordability. Since the arrival of ICD-10, the number of diagnoses and PCS codes has grown dramatically, requiring greater specificity and making the coding process more complex.

Over the years, a variety of encoding solutions have been developed to enable more accurate and faster coding by narrowing the choice of codes and providing supporting information to fully capture the details of even the most complex procedures.

Encoders can be organized into two categories: logic-based encoders and knowledge-based encoders. This article discusses the differences between the two approaches and the distinct advantages of knowledge-based encoders.

## THE TWO TYPES OF ENCODING SOLUTIONS

At first glance, any encoding software solution that helps coders be more accurate is worth considering. However, a closer look at how different encoding software products work reveals key differences that can have a significant impact on accuracy, productivity, and knowledge retention.



### LOGIC-BASED ENCODERS

Logic-based encoders work by guiding the user to the appropriate code by presenting a series of questions. The questions begin more generally and become increasingly specific as the user answers each one.

Most logic-based encoders start the process by asking the coder to begin entering a keyword or code. From that point, the user is prompted with a list of choices or a series of questions. The software requires the

user to follow the logic flow, rather than allowing users to take advantage of their knowledge to skip steps and accelerate the process. For experienced coders, this approach can add unnecessary time and effort to the process.

Logic-based encoders are also intolerant of user errors. If a coder chooses incorrectly during an early step in the process, it can lead them down a wrong path, resulting in an incorrect code without realizing it.



### KNOWLEDGE-BASED ENCODERS

Knowledge-based encoders are built around the official code sets as they are published by the cooperating parties. This allows the user to take full advantage of the inherent logic in the code sets. Like logic-based encoders, knowledge-based encoders begin the process by asking for a keyword or code. But the coder doesn't have to enter a full term. Usually they only have to enter a few letters of each word and the software can locate the code quickly. For example, if the patient had chronic pulmonary embolism, the user could type "chron pulm embo" and that would be enough information. It's important to note that the coder does not have to

"think" like the code book; they can put the terms in any order and still get to the correct location to verify the accuracy of the code.

If "abdominal pain" is entered in a knowledge-based encoder, the solution will likely respond with a recommended choice of codes for abdominal pain, as well as providing related instructional notes and reference resources. This approach takes advantage of the coder's knowledge to speed the process and automatically delivers supplemental information that helps to deepen understanding and ensure the correct code is being assigned.

## CHOOSING THE BEST ENCODER FOR YOUR NEEDS

Both logic-based and knowledge-based encoders provide guidance to the appropriate diagnostic and procedure codes. However, if your goals are to improve productivity and ensure fast, accurate codes, you may want to consider the long-term advantages of the knowledge-based approach when put into practice.

## THE ADVANTAGES OF KNOWLEDGE-BASED CODING

A knowledge-based encoder relies on the official code sets as published by the cooperating parties to assist the user in selecting the appropriate code. This approach delivers five distinct advantages:

**1 Knowledge-based encoders conform to each coder's preferred way of working.** Unlike logic-based encoders, which require users to follow the logic flow built into the software from start to finish, knowledge-based encoders conform to the way each coder prefers to work. They can start with a code or partial terms and then the system alerts them during the coding process if they are missing additional codes or need to address issues such as medical necessity. There is no need to go through a list of many questions just to assign one code.

One example is the process of coding a malignant neoplasm. In a logic-based encoder, there are several steps requiring the review of lengthy lists before arriving at a code. With a knowledge-based encoder, the coder can enter "neop liver" which would immediately open the neoplasm table to the body part 'liver' and present the coder with all the necessary codes.

**2 Knowledge-based encoders build on coders' training.** Coders devote hours and weeks to studying diagnostic and procedure codes, conventions, rules and guidelines—but logic-based encoders fail to take that knowledge into account, taking a lowest-common-denominator approach. By tightly linking to official code sets, knowledge-based encoders enable users to become quickly familiar with rules and regulations as an extension of their learning.

**3 Knowledge-based encoders deliver confidence.** Knowledge-based encoders provide the code set without unofficial, hidden modifications, thereby ensuring that it is used in the intended manner. This makes it easier for coders to follow proper rules and regulations. By providing instructional notes and access to resources at the point of coding, knowledge-based encoders provide users with opportunities to add to their knowledge while they are performing their work. The more they code, the more they deepen and broaden their expertise.

**4 Knowledge-based encoders improve productivity.** Because there's no requirement to answer a series of questions, knowledge-based encoders enable coders to work more quickly and accurately—and increase their productivity further as they gain experience.

**5 Knowledge-based encoders deliver accurate results.** Knowledge-based encoders support coders' decisions by presenting relevant tools and resources at the point of coding, so that coders can validate that their work is complete and accurate.

## WHAT USERS HAVE TO SAY ABOUT KNOWLEDGE-BASED CODING

The ultimate test of any encoding software is how well it performs for users. Their experiences—how readily they adopt the solution, how fully they take advantage of its features—constitute the most compelling proof of the effectiveness of knowledge-based coding. The following testimonials are drawn from comments by users of knowledge-based encoders:

“I was looking for a coding software system that wouldn't lead a coder down the wrong path. Using a knowledge-based encoder helped us create better coders by creating a better learning and working environment. Coding is a daily learning process. A knowledge-based encoder facilitates that. It either reinforces what the coder already knows or it gives them what they'll need to know in the future. It's also the best way to train entry-level coders and move them up.”

› **Becky Clark**, HIM Director and Privacy Officer,  
Madera Community Hospital, Fresno, California

“You can really see how well it works when we work with student interns. They're trained with the code book. A knowledge-based encoder looks like the book when you choose a diagnosis, so with everything displayed in front of them, along with the research window, they instantly love it. When you're just choosing a diagnosis based on what a logic-based encoder tells you to choose, you lose your coding skills. A knowledge-based encoder lets us learn and be more proactive and investigative.”

› **Jennifer J. Cline**, RHIT, CPPM, HIM  
Regulatory Review Specialist and Team Lead,  
Aultman Hospital, Canton, Ohio

### LEARN MORE

TruCode is the industry's leading knowledge-based encoding software. It has helped hundreds of healthcare organizations, consulting firms, and payers improve coding accuracy, increase coder productivity, and ensure prompt reimbursements. To experience TruCode encoder software for yourself, please visit [here](#) to register for a demonstration.