

# Coding—A Human Endeavor: History Points to the Future's Need for Coding Expertise

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In the Herakleion Museum, Crete, there are inscriptions on fragments of clay tablets that were written by early Cretans. The inscriptions, in "Linear A," have yet to be deciphered. However, there is general agreement that they are encoded information, probably dating back more than 3,600 years.

This encoded information was organized in a system of signs, symbols, and rules-by definition, a language. So for thousands of years, encoding data in accordance with a common structure and semantic have continued.

## The Necessity of Coders

During the ensuing millennia, codes, syntaxes, and meanings have evolved. Today, the medical sciences—all sciences, actually—encode information to enable effective data maintenance, efficient transmission, and common interpretation that transcends the communicators' language and temporal differences. These reasons for encoding data have long-standing validity that will be as true in the future as they were in the past.

However, code structures, codes, and encoding technologies are changing at an increasingly rapid pace. While natural languages tend to evolve slowly, the code structures required for healthcare have evolved more rapidly and in discrete transitions in response to specific requirements.

For example, DRGs did not exist in 1975, but within a decade were required by regulation to implement a prospective payment system. Similarly, while computer-assisted coding has been used in healthcare for more than four decades, it is now transforming clinical coding at an accelerating rate.

Some believe that the change in coding technology will obviate the need for expert human coders. However, history tells us otherwise. Looking back to the Cretans, we see that human experts managing coding, and especially semantics, are a common, time-tested necessity.

This will be especially true as health information is increasingly shared across and beyond institutional boundaries. Coding will ensure that the meaning of data is correctly conveyed in spite of differences in local languages and clinical practices.

Considering these facts, future requirements for professionals well-versed in coding will call for an increasing level of sophistication and expertise. For instance, coding professionals leading the transformation from ICD-9 to ICD-10 will need to be experts not only in both code sets, but also the differences in the codes' translation, semantics and uses, user education, project management, transition and change management, and a host of additional domains related to the effective implementation of reengineered workflows.

## New Roles and Skills

Thus new code-related technologies create new roles and require new skills. In "Ready, Set, Automate," experts Kathleen Peterson and coauthors describe the competencies that help coding professionals survive and thrive in a changing environment. They share insights from AHIMA's computer-assisted coding summit held in April.

Forward-thinking organizations are leveraging automation technologies such as computer-assisted coding to streamline their processes and gain efficiencies. In "Lean Coding Machine," professionals discuss their goals and their experiences.

Producing consistent coding within departments and across enterprises is an ongoing challenge because of the very human aspect of documentation and coding. Automation can improve consistency, but people and processes are equally important. The experts interviewed in "Achieving Coding Consistency" offer wise and practical advice from their own workplaces.

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