

Brief History of ICD-10-PCS

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The International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) was developed as a replacement for the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) volume 3, Procedures. This version of ICD, in use since January 1979, originated in the International Classification of Procedures in Medicine (ICPM). The ICPM was published by the World Health Organization (WHO) in 1978 for trial purposes. The classification consisted of nine chapters, with the first digit of the three- or four-digit code denoting the chapter number. The Health Care Financing Administration (HCFA) is responsible for the maintenance of volume 3.

The ICD-9-CM Coordination and Maintenance Committee (C&M)—which holds public meetings and receives public comments—was established in 1985 by the Department of Health and Human Services (HHS). The first revisions to ICD-9-CM volumes 1, 2, and 3 took place in 1986. Since then, the C&M has made annual additions and deletions. It soon became apparent that with the limitation of a four-digit system, there was little room to make substantive changes. In 1992, HCFA decided a more organized approach was needed and funded a project with 3M Health Information Systems to produce a preliminary design for a replacement of ICD. After studying the problem, 3M concluded that a completely new system would be the best solution. An alphanumeric, multiaxial, seven-digit scheme was adopted and a prototype was developed using the respiratory and cardiovascular chapters. Interested in this approach, HCFA funded the development of several more chapters, at which point the endocrine, lymphatic, hemic, and urinary chapters were revised. However, it quickly became obvious that the project could only be accomplished by changing the entire procedure coding system at the same time. This was important because there was a great deal of overlap between the various chapters. HCFA decided to move ahead with a complete revision and requested competitive bids for a three-year project to replace volume 3, based on the scheme developed in the two trial projects. The new system, to be titled the International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), was to replace ICD-9-CM procedure codes for reporting Medicare inpatient procedures. HCFA awarded the contract to 3M in 1995, with the following timetable:

- year 1—complete first draft of ICD-10-PCS
- year 2—develop training program and informal testing and revise the system
- year 3—formal testing by independent contractor and final revision

Objectives, essential characteristics, and general guidelines were stipulated at the outset.

The objectives were to develop a new procedure coding system, improve accuracy and efficiency of coding, reduce training efforts, and improve communication with physicians. The essential characteristics were:

- completeness
- a unique code for all substantially different procedures
- expandability
- a system structure that allows incorporation of new procedures as unique codes
- standard terminology—the coding system includes definitions of the terminology used. While the meaning of the specific words can vary in common usage, the coding scheme does not include multiple meanings for the same term. Each term is assigned a specific meaning
- multiaxial—the system has a multiaxial structure with each code character possessing the same meaning within the specific procedure section and across procedure sections to the extent possible

General guidelines included:

- not including diagnostic information in the procedure description
- limiting the not otherwise specified (NOS) option

- not allowing a not elsewhere classified option (NEC), except for new devices
- defining all possible procedures

The system is based on a seven-character, alphanumeric code using the digits 0 to 9, and the letters A-H, J-N, P-Z.

The system was completed during the first year, and informal testing was carried out in the second year. Revisions were made based on comments and suggestions from the testing, and a working draft was completed. During phase three, the Clinical Data Abstraction Centers (CDACs)—consisting of FMAS in Columbia, MD, and DYNEKePRO in York, PA—tested the system by coding 5000 records, identifying revisions as needed, and providing feedback on any problematic issues that arose. Additional comparison tests of 100 records coded in both ICD-9-CM and ICD-10-PCS were then made by the CDACs.

The CDACs concluded the system was more complete than ICD-9-CM, contained greater specificity and detail, and was easy to expand. They found that the multiaxial structure made it easier to analyze, and the standardized terminology made it easier to use once the coder had initial training. They felt that the system should lead to improved accuracy and efficiency of coding. They also concluded that while training time will be a factor since it is quite different from ICD-9-CM, having all of the terms defined will make it easier to teach. Of interest is the fact that once basic knowledge is acquired, the coders did not need to use the index. However, several modifications resulted from this testing, including revisions to the training manual and additions to the index.

A final draft of the system was completed and submitted to HCFA in March 1998, and a final report submitted in December 1998. The entire ICD-10-PCS, a complete map of ICD-10-PCS to ICD-9-CM volume 3, mapping file, and a set of speaker's slides are available on the HCFA Web site at www.hcfa.gov/stats/icd10/icd10.htm.

Last year, in coding a sample of ambulatory cases, the CDACs reached the same conclusions as the inpatient record coding study. Participating coders were not involved in the initial round of testing. The second set of coders were able to use the system with ease.

At the December 1998 C&M meeting, participants suggested that a test of obstetrical and pediatric and more non-Medicare cases should be performed. The American Hospital Association (AHA) and the American Health Information Management Association (AHIMA) volunteered to solicit these types of cases for the study. Developments involving ICD-10-PCS can be followed by reading reports of the ICD-9-CM C&M meeting reports on HCFA's homepage at www.hcfa.gov. Click on Events, Meetings and Workgroups, then click on Current Workgroups and Committees.

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