

Where in the World Is ICD-10?

[Save to myBoK](#)

by Kathy Brouch, RHIA, CCS

Where and how is ICD-10 being used? Learn how countries all over the world have adapted to the newest version of this coding system and how coders in the US can prepare for an eventual transition.

Are you ready for ICD-10? If you're a coder in the United States, you don't have to be ready—yet. Though the implementation of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, will not make waves here for a few more years, the new coding system has been in place in some countries since 1994.

How is ICD-10 being used? Is it being modified? What has the transition to a new coding system been like for coders worldwide? In this article, we'll answer these questions.

ICD-10 Basics

ICD-10 is being implemented by World Health Organization (WHO) member states for the coding of national mortality and morbidity statistics. The most recent revision includes not only updated content but an expanded scope—while its original purpose was to classify diseases and injuries, the ICD-10 system allows users to code ambulatory care conditions and risk factors often encountered in primary care.

It's been some time since the last ICD changeover occurred (generally after 1975 when ICD-9 was published), and many elements of the coding landscape have changed. For instance, ICD-10 is the first new diagnosis coding system adopted since the widespread use of computers in healthcare. The implementation of case mix systems such as diagnosis-related groups (DRGs) in the United States and abroad brought the clinical coding profession new recognition. Other worldwide changes in recent years, such as the creation of a centralized coding authority, publication of national coding standards, establishment of a maintenance process, and the certification of clinical coders, all have complicated any transition to the 10th revision.

The Mortality/Morbidity Connection

The ICD system was originally intended to collect mortality data (data on the reason for deaths) from governments worldwide. Accordingly, ICD-10 was first used for the coding of national mortality data. The Czech Republic, Denmark, Romania, Slovakia, and Thailand implemented ICD-10 for mortality coding in 1994, and since that time 33 additional countries have joined them.¹

The United States began using ICD-10 to code and classify mortality data from death certificates in January 1999. The conversion from ICD-9 to ICD-10 had an effect on coders and the mortality data system as a whole, including the revision of instruction manuals and development of new medical software to replace the manual coding process. To that end, the National Center for Health Statistics (NCHS) created special software to automate coding of medical information on the death certificate, according to WHO rules.²

In addition, the states and NCHS developed standard data collection and model procedures for the uniform registration of events (i.e., mortality data) by states. Instructional materials were also made available to make it easier to properly complete a death certificate.

In the sixth revision to ICD, codes were added to allow for the collection of data for morbidity statistics (for non-fatal diseases, injuries, or health-related problems). This extension has continued with subsequent revisions, including ICD-10. But

implementation of ICD-10 for morbidity coding has been slower, with only two countries using it for this purpose in 1994 and 13 coming on board after 1996.³ (See [chart](#) below.)

Currently, an implementation date for morbidity data reporting in the United States has not been scheduled. The uncertainty is partly a result of the Health Insurance Portability and Accountability Act (HIPAA), which mandates a specific process for the designation of coding standards. The initial recommendation for coding standards includes ICD-9-CM, given that a clinical modification to ICD-10 is under development. Once the first set of standards is in place, a new phase of public hearings is required, along with publication of a notice of proposed rulemaking and a final notice for any changes to occur.

The NCHS has stated that once the final notice indicating ICD-10-CM as a coding standard is published, the industry will have 24 months to prepare for the switch.

Making Modifications

What if the system needs to be modified between revisions? For the first time since its initial publication, a process has been developed for ICD to be modified between revisions.

All proposals for changes to ICD-10 must be sponsored by one of the nine Collaborating Centres for Classification of Disease (for the United States, the centre is the NCHS) and submitted based on a timeline tied to the annual meeting of centre heads. If the modification is accepted, both WHO and the nine centres are responsible for distribution. Implementation would coincide with the annual updating cycle established by the centre but would be no later than the beginning of the calendar year commencing 15 months after each centre head meeting.

WHO also has authorized the development of adaptations of ICD-10 under specific requirements. All modifications to the ICD-10 must conform to WHO conventions for the ICD. Authorization to develop an adaptation of ICD-10 for use in the United States for government purposes has been received from WHO.

Since its seventh revision, the United States has clinically modified ICD. Not surprisingly, a clinical modification for ICD-10 for morbidity purposes is in the works in the United States. The revision included recommendations from a technical advisory panel as well as help from physician groups, clinical coders, and others to ensure clinical appropriateness and function. An initial draft of the tabular list of ICD-10-CM and preliminary crosswalk between ICD-10-CM and ICD-9-CM were published for public comment in December 1997. Since that time, comments from various organizations and individuals have been under review. Availability of ICD-10-CM is not expected until late 2001.⁴

Once the tabular list and alphabetic index are complete, educational materials, training programs, and final crosswalks between ICD-9-CM and ICD-10-CM will be finished. The NCHS plans to conduct a comparability study to help users of data distinguish between real changes in utilization by diagnosis and changes that are result of changes to the classification system.

The United States is not the only country that has received permission from WHO to modify ICD-10. After a study by the National Coding Centre (NCC), currently known as the Australian National Centre for Classification in Health (NCCH), the NCC began the development of an adaptation of ICD-10 in July 1995.⁵ It also took on the creation of a procedure classification, because ICD-10 does not include one. In addition, the NCCH also developed a set of Australian coding standards, incorporating those already in place for the Australian edition of ICD-9-CM.

The result of all this effort was the first edition of ICD-10-AM, published as a five-volume set in 1998 and comprising the Australian modifications to the ICD-10, the procedure classification, and the Australian national coding standards. In July 1998, the first edition of ICD-10-AM was implemented in certain states, and the remainder came on board in July 1999. The NCCH has completed a second edition of ICD-10-AM, which was scheduled to be introduced in July 2000.

Ties to Case Mix Systems

In the United States, since the advent of DRGs in 1983, ICD-9-CM codes have determined reimbursement on individual inpatient hospital cases. As a result, US coders have seen these developments:

- a group that has the responsibility for development of coding guidelines, i.e., the cooperating parties

- Coding Clinic for ICD-9-CM, published by the American Hospital Association, the official clinical coding guidelines resource
- the ICD-9-CM Coordination and Maintenance Committee, which is in charge of updating ICD-9-CM
- clinical coder certification

Only one country—Australia—has undergone a similar evolution. Australia's healthcare data has been coded in ICD-9-CM since the mid-1980s. After the adoption of ICD-9-CM, the country implemented a case mix system, the Australian National Diagnosis Related Groups (AN-DRGs). Like the United States, Australia also has a national coding center, published coding standards, a maintenance process for revisions to the classification system, and a certification program for coders.

Making the Transition to ICD-10

For some countries, making the transition from the 9th to the 10th ICD revision has been more complex because of changes (like those outlined above) that have occurred as a result of the ICD link to case mix systems. As Australia found, the transition involved not only developing the modification but creating various crosswalks, revising existing coding guidelines, and designing educational materials for the introduction of ICD-10-AM.

For example, under the guidance of the NCCH, mappings were developed between ICD-9-CM and ICD-10 and vice versa. With the advent of ICD-10-AM, the final maps were used to develop specifications for the fourth version of AN-DRGs, now known as Australian Refined Diagnosis Related Groups (AR-DRGs).⁶ In all probability, the United States will do something similar to create a version of DRGs based on ICD-10-CM and data comparability. It is expected the Health Care Financing Administration will unveil its plans for this process once ICD-10-CM is published in its final form and is recognized as a coding standard under HIPAA.

While most countries have not developed a clinical modification to ICD-10, changes that have taken place since the transition to the 9th ICD revision have still affected the transition to ICD-10. In fact, many countries have created new reporting requirements and put into place national coding policies along with the implementation of ICD-10.⁷

For instance, the United Kingdom (UK) National Health Service's (NHS) established the Centre for Coding and Classification (CCC). In 1990 the CCC became a part of the Loughborough section of the NHS Information Authority and then in 1996, together with the Office for National Statistics (ONS), it became the joint World Health Organization Collaborating Centre for the Classification of Diseases, UK.⁸ In April 1999, the NHS Centre for Coding and Classification was incorporated into the NHS Information Authority.

The accountability for the morbidity classification within the UK lies with the NHS Information Authority (Loughborough) and the mortality classification is found within the ONS. ICD-10 codes are currently mandatory for use across England for the recording of diseases and health-related problems, i.e., the diagnosis or reason for a patient episode of care within the acute sector of the National Health Service.

In addition, national clinical coding standards as agreed by the UK Coding Review Panel were developed to ensure consistent and comparable data. These are published in the NHS Executive Clinical Coding Instruction Manual, ICD-10 and OPCS-4, and the Coding Clinic insert of the Data Quality Review newsletter.⁹

Training Requirements: The Final Step

As one would expect, training for any new system requires a well-thought-out plan. Australia's began with the formation of an ICD-10-AM education working party in November 1995, a little more than 2.5 years before implementation in the first group of states.

In general, to ensure the effectiveness of the training of staff who will be doing the actual coding on the specifics of the 10th revision, training has occurred no sooner than six months prior to the actual implementation date.¹⁰

Training is one of the key elements in a process that is, as we've seen, more involved than previous coding system conversions. As coding and working with healthcare information become increasingly computerized, the processes will become

increasingly complex. As the United States moves closer to making the switch, we would do well to learn from the successes and failures of our counterparts worldwide.

Notes

1. "Implementation of ICD-10 by WHO Member States." World Health Organization home page. Available at www.who.int/whosis/icd10/implemen.htm.
2. "Mortality Data from the National Vital Statistics System." National Center for Health Statistics home page. Available at www.cdc.gov/nchs/about/major/dvs/im.htm.
3. "Implementation of ICD-10 by WHO Member States."
4. "International Classification of Diseases, Tenth Revision, Clinical Modification." National Center for Health Statistics home page. Available at <http://www.cdc.gov/nchs/about/otheract/icd9/abtcd10.htm>.
5. Innes, Kerry, Karen Peasley, and Rosemary Roberts. "Ten Down Under: Implementing ICD-10 in Australia." *Journal of AHIMA* 71, no. 1 (2000): 52-56.
6. *Ibid.*
7. Law, Jeanne. "Implementing ICD-10 Will Require Education, Support and Commitment." *Advance for Health Information Professionals* 5, no. 8 (April 17, 1995): 14-15.
8. "Coding and Classification." NHS Information Authority home page. Available at www.coding.nhs.uk/.
9. *Ibid.*
10. Law, Jeanne. "What's Happening with ICD-10?" Second Annual Conference on Improving Clinical Data Bases for Health Policy Development, 1997.
11. "Copyright Information." World Health Organization home page. Available at www.who.int/whosis/icd10/copy_righ.htm.

actual and proposed implementation dates of ICD-10

Country	Mortality	Morbidity	Country	Mortality	Morbidity
Australia	1998	July 1998	Lithuania	1997	1998
Austria	1998	**	Macedonia	1996	**
Belgium	1998	**	Malta	1995	**
Brazil	1996	1998	Netherlands	1996	1998-2000
Canada	1998	1999	New Zealand	1998	1998
China	2000+	2000+	Norway	1996	1998
Colombia	1996	**	Poland	1997	**
Costa Rica	1996	**	Portugal	before 2000	**
Czech Republic	1994	**	Qatar	1995	**
Denmark	1994	1994	Romania	1994	**
Estonia	1997	1997	Slovakia	1994	**
Finland	1996	1996	Suriname	1996	**
France	1998	1997	Sweden	1997	1997
Germany	1998	2000	Thailand	1994	1994
Iceland	1996	1997	United Kingdom		
Ireland	1998	**	-England and Wales	1999	1995
Jamaica	1995	**	-Scotland	1998	1996
Japan	1995	1996	-Northern Ireland	1998	1996
Kuwait	1995	1996	United States	1999	**
Italy	1998	**	Venezuela	1996	1997
Latvia	1996	1998			

**=unknown

Source: "Implementation of ICD-10 by WHO Member States," World Health Organization.

ICD-10 online

Visit these Web sites to learn more about ICD-10:

AHIMA's Web site—Read other articles about ICD-10. Go to www.ahima.org/hot.topics/

National Center for Health Statistics—This site offers an overview of the system. Go to www.cdc.gov/nchs/about/major/dvs/icd10des.htm

World Health Organization—Get an international view straight from the source. Go to www.who.int/whosis/icd10/index.html

WHO does what with ICD-10?

Use and reproduction of ICD-10 is governed by the following World Health Organization (WHO) guidelines:

- all rights, titles, and interests whatsoever in the data contained in the books and on the diskettes, including all copyrights, are vested in WHO
- use and reproduction of the ICD-10 codes contained in this database are permitted without specific authorization of the copyright holder, provided that they are for noncommercial purposes only and WHO is acknowledged as the source. However, no alteration or change of the ICD-10 codes is permitted
- permission to use or reproduce ICD-10 in a product that is to be sold, and permission to translate part or all of ICD-10, must be obtained from the office of Publications, World Health Organization, 1211 Geneva 27, Switzerland²³

looking for more?

Looking for more about ICD-10? These resources might come in handy:

Articles

All articles are available on AHIMA's Web site at www.ahima.org:

- Johns, Merida. "A Crystal Ball for Coding," *Journal of AHIMA*, January 2000
- Averill, Richard, Robert L. Mullin, Barbara A. Steinbeck, Norbert A. Goldfield, and Thelma M. Grant. "Development of the ICD-10 Procedure Coding System (ICD-10-PCS)," *Journal of AHIMA*, May 1998
- "Practice Brief: Preparing Your Organization for a New Coding System." Prepared by AHIMA's Coding Policy and Strategy Committee. *Journal of AHIMA*, September 1998
- "Coding Crosses into the Future." *AHIMA Advantage*, December 1999
- "Imagine the Future of Coding." *AHIMA Advantage*, June 1999

Audio seminars

Two audio seminars related to ICD-10 from the 1999 series are available for purchase on tape. Ask for product number SC103199 and SC103299. Order online or call (800) 335-5535.

- "ICD-10-CM Implementation: Developing a Plan of Action." Prod. No. SC101498
- "An Essential Progress Report: A Firsthand Update on ICD-10." Prod. No. SC103199

Kathy Brouch is manager of volunteer services at AHIMA. Her e-mail address is kathy.brouch@ahima.org.

Article Citation:

Brouch, Kathy. "Where in the World Is ICD-10?" *Journal of AHIMA* 71, no. 8 (2000): 52-57.

Driving the Power of Knowledge

Copyright 2022 by The American Health Information Management Association. All Rights Reserved.