

Updating Clinical Coding in Ireland - The Journey to 10

Updating the Classification for discharges from 1.1.05 to ICD-10-AM
(The Australian Modification of ICD-10 and the Australian Classification of
Interventions in Health)

Deirdre Murphy

Health Research and Information Division
Economic and social Research Institute (ESRI)
Dublin, Ireland.

Introduction

The Hospital Inpatient Enquiry (HIPE) Scheme is a computer-based health information system designed to collect clinical and administrative data on discharges and deaths from acute public hospitals. HIPE was established in 1971 and is the principal source of national data on discharges from acute general hospitals in Ireland. HIPE collects data on hospital discharges and maintains a national database of morbidity data from acute general hospitals in Ireland.

In 1989 with the introduction of ICD-9-CM and the start of casemix, clinical coding in Ireland has become a key area of interest for all stakeholders in the health policy and research fields along with those working in many other areas in Ireland. Ensuring that the coding scheme in use for data collected on diagnoses and procedures performed is a challenge for all systems collecting hospital discharge abstract data. This challenge is even more acute in a small country like Ireland, with a population of 4 million, which has to depend on the availability of current coding schemes in the international context rather than address the task of developing such schemes locally. Finding an integrated ICD-10 diagnoses and procedure classification was crucial for Ireland to remain a current and important participant in international health activity data collection projects. ICD-9-CM was the classification in use in Ireland since 1989 and was in need of updating both to ICD-10 and also to a more current and extensive procedure classification.

The approach to coding these data has changed five times since the inception of the system and the coding schemes used may be summarised as follows:

- ❑ 1969 - 1980 ICD-8 for Diagnoses & OPCS¹ Procedures classification
- ❑ 1981 - 1989 ICD-9 for Diagnoses & OPCS Procedures classification
- ❑ 1990 - 1994 ICD-9-CM (Oct 88) for both diagnoses and procedures
- ❑ 1995 - 1998 ICD-9-CM (Oct 94) for both diagnoses and procedures
- ❑ 1999 - 2004 ICD-9-CM (Oct 98) for both diagnoses and procedures
- ❑ 2005 – 2008 ICD-10-AM for diagnoses and ACHI (Australian Classification of Health Interventions for procedures (4th Edition)
- ❑ 2009 – present ICD-10-AM for diagnosis and ACHI for procedures (6th Edition)

In the determination of an upgrading of coding schemes for diagnoses and procedures in Ireland, the factors that have been considered important include the availability of an integrated coding scheme for diagnoses and procedures, which is regularly updated, facilitates international comparability and provides for the availability of training and software support as required. Following a review of international systems available and with agreement and support from the Department of Health and Children, it was decided to proceed with a pilot study of the Australian modification of ICD-10 (ICD-10-AM) to assess the issues which might arise with regard to implementation and training if this classification was to be implemented for use in Ireland. The Pilot Study addressed a number of specific objectives, including the appropriateness of the ICD-10-AM classification to the Irish hospital setting and the acceptability of this classification for Clinical Coders in Irish hospitals.

The Pilot raised several issues to be applied to HIPE that needed to be addressed ahead of the update. These included chart documentation and adherence to coding guidelines. With ICD-10-AM there was a need for improvement of clinical coders'

¹ Office of Population Censuses and Surveys (OPCS) Classification of Surgical Operations, Second Edition, 1975. London.

knowledge of medical terminology as there are no medical annotations in the ICD-10-AM coding books or e-book. The issue of self-education and responsibility for developing one's own coding skills is important for coders. The findings of the Pilot Study of ICD-10-AM found that this coding scheme could be used successfully by coders in Irish hospitals and was found to be acceptable to these coders.

Coding in Ireland

There are 60 acute hospitals and about 200 clinical coders in Ireland. A fulltime clinical coder is expected to code about 7,000 to 8,000 discharges per year depending on specialty and complexity etc. The national HIPE office receives over 1.3 million discharges per year which represents about 97% coverage of all public inpatient and daycase activity. These data are exported by each hospital on a monthly basis to the HIPE Unit in the ESRI who maintain the HIPE national file of hospital activity.

Coders are trained by the HIPE unit in the ESRI. They come from the administration staff of the hospital and will usually have no formal medical training. Training for coders involves attendance at 2 modules of Basic training, one for 2 days and the second for 3 day. This training covers all aspects of HIPE including clinical coding, medical terminology and training in the use of the HIPE data entry and reporting software. This course is followed up by a visit to their hospital by one of the data quality team. After three months these coders are invited to attend an Intermediate level coding course. Specialized workshops with expert speakers are held several times a year and are recommended for all coders to continue their coding education.

The HIPE unit in the ESRI produces a quarterly newsletter called 'Coding Notes'. This is the main communication tool for the HIPE Unit with the coders in the hospitals. 'Coding Notes' is an integral and important part of HIPE. It informs Irish coders of new or amended guidelines, new codes, I.T. Information and help and guidance on all aspects of HIPE. It is used to notify coders of developments in HIPE and of upcoming courses. It contains regular features on coding queries or issues that have

arisen from audit or other data quality reviews. It was very important during the update and implementation process to ensure all involved knew what was happening with the classification etc.

ICD-10-AM

An Australian version of ICD-9-CM was produced in July 1995. This was superseded in July 1998 by the development of ICD-10-AM, the Australian Modification of ICD-10 incorporating a procedure classification developed by the Australians. The fourth edition of ICD-10-AM was introduced in Australia in July 2004 and was the edition initially adopted for use in Ireland in January 2005. There is no change in the structure between ICD-10 and ICD-10-AM. The meaning of the three character and four character codes in ICD-10 are not changed in ICD-10-AM and any modifications are consistent with existing ICD-10 codes and conventions. The ability to compare ICD-10-AM data with ICD-10 data over time is not compromised. ICD-10-AM was developed by the National Centre for Classification in Health (NCCH), which is the current centre of expertise for classification in all areas of health in Australia. During the development of ICD-10AM, the NCCH was advised by members of the NCCH Coding Standards Advisory Committee and the Clinical Coding and Classification Groups (CCCGs), consisting of expert clinical coders and clinicians nominated by the Australian Casemix Clinical Committee (ACCC).

Changes for Coding

Extraction of Data from charts remained the same as did the selection of main terms and modifiers. The definition of the principal diagnosis remains the same therefore experienced coders still use the same basic skills while applying these. The ICD-10-AM classification is presented as a five-volume set and/or the e-book. Volumes 1 & 2 contain the diagnoses codes, which now begin with an alpha digit making them easily distinguishable from ICD-9 codes. The procedure codes in Volumes 3 & 4 are 7-digit codes for Procedures presented in blocks. The fifth volume is the Australian coding standards (ACS).

The NCCH is responsible for developing rules and guidelines on how to apply and interpret the ICD-10-AM disease and procedure classifications when coding.

Examples of guidelines are below for additional diagnoses, anaesthetics and procedures not normally coded:

ACS 0002 Secondary/additional diagnoses

NCCH has tightened the definition of additional diagnoses to limit coding of conditions to only those that affect patient management in a significant way. An additional diagnosis should not be routinely coded just because a patient is on ongoing medication for treatment of this condition.

ACS 0031 Anaesthetics

Anaesthetics are coded in ICD-10-AM. This is additional information not coded using ICD-9-CM. These anaesthetic codes require a two-character extension, which represents the patient's ASA (American Society of Anaesthesiologists) score. The first character of the two-character extension of the procedure code is the ASA score representing the patient's status at the time of the procedure. The second character of the extension represents whether a modifier of 'E' is recorded on the anaesthetic form in addition to the ASA score. 'E' signifies a procedure that is being performed as an emergency.

ACS – 0042 Procedures Normally Not Coded

Australian Coding Standard *0042 Procedures normally not coded* lists procedures not coded because they are usually routine in nature performed for most patients and/or can occur multiple times during an episode. The reason given for omitting these codes is that the resources used to perform these procedures are often reflected in the diagnosis or in an associated procedure. For example:

- X-ray and application of plaster is expected with a diagnosis of Colles fracture
- Intravenous antibiotics are expected with a diagnosis of septicaemia.

Ireland's update to ICD-10-AM

The Department of Health and Children in Ireland approved ICD-10-AM as the Irish national standard from January 2005 and this classification superseded ICD-9-CM for morbidity coding in Ireland in HIPE as of 1st January 2005. All HIPE discharges from 1st January 2005 were coded using the 4th Edition of ICD-10-AM. 6th Edition of ICD-10-AM/ACHI/ACS was adopted from 1st January 2008.

Hospitals were notified officially in March 2004 of the decision to change the classification to ICD-10-AM from January 2005. The three members of the HIPE Unit at the ESRI involved in clinical coding travelled to the NCCCH in Australia in May 2004 and attended 'Train the Trainer' courses there. The NCCCH also arranged hospital visits which afforded the Irish team the opportunity to experience ICD-10-AM 'at work'. They also travelled to Brisbane to attend two of the NCCCH 'Updating to 4th Edition' workshops. These workshops are for one day and are held throughout Australia before an update to inform clinical coders of changes in the classification between editions.

During the second six months of 2004 a series of one-day education workshops were held throughout Ireland to inform all relevant personnel on the changeover to ICD-10-AM. At these workshops the Irish team informed attendees of the reason for the change, details of the classification and highlights stages in the implementation process and also issues to be considered in the lead up to the changeover from ICD-9-CM.

Hospitals were advised to prepare for the changeover to make it as smooth as possible. They were encouraged to use this as an opportunity to improve chart documentation. Everyone involved with HIPE, hospital records and documentation, including clinicians needs to be informed and involved in the changeover. ICD-10-AM expects coders to educate themselves through Coding Matters (the newsletter of the NCCCH – available through the E-Book) plus a thorough knowledge of the classification and use of the Australian Coding Standards.

It was also recommended that HIPE Units in Irish hospitals clear coding backlogs to cut down on the dual coding period, when coders will use both classifications depending on the year of discharge of the case being coded. The hospitals are currently expected to return coded cases within 6 weeks of the patient's discharge. It was recommended to hospitals that they stabilize the staffing situation in the coding department as much as possible. It was recommended that each hospital appoint a '10' Team leader. This was a coder who would organize and motivate the coding team through the changeover. Above all the hospitals were being encouraged to talk about ICD-10-AM in the hospital.

As soon as the books became available at least one set was made available to each coding department in the country to enable coders to become familiar with ICD10-AM. The formal training of the coders in Ireland was facilitated by two members of NCCH who travelled to Ireland in January 2005. There was a series of nationwide 3-day workshops held at this time.

This was a good move forward for coding in Ireland, a positive change that succeeded through co-operation and the working together of all stakeholders in HIPE with lots of support, communication and training. We continue to use ICD-10-AM and have developed our own Irish Coding Standards (ICS) which compliment and augment the ACS and address national issues as appropriate. The NCCH continue to support our work but as their contract with the commonwealth currently only runs to the end of 7th edition and it is unsure what the future of ICD-10-AM is after that edition.

With the co-operation of the HIPE Unit, ESRI, the Department of Health and Children, the clinical coders and their HCCs Ireland has a robust and comprehensive hospital activity data collection system.

End.

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Abbreviations

ACHI	Australian Classification of Health Interventions (Procedure classification used with ICD-10-AM)
ACS	Australian Coding Standards
ESRI	Economic and Social Research Institute (Dublin)
HCC	HIPE/Casemix Coordinator (coder supervisor – Ireland)
HIPE	Hospital InPatient Enquiry
HRID	Health Research and Information Division
HSE	Health Services Executive
ICD-9-CM	International Classification of Diseases, 10th Revision, Clinical Modification. Includes a procedure classification (U.S.A.).
ICD-10	International Classification of Diseases
ICD-10-AM	International Classification of Diseases, 10th Revision, Australian Modification
HIMAA	Health Information Management Association of Australian
NCCH	The National Centre for Classification in Health, Australia
WHO	World Health Organisation

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HIMAA	Health Information Management Association of Australian
NCCH	The National Centre for Classification in Health, Australia
WHO	World Health Organisation