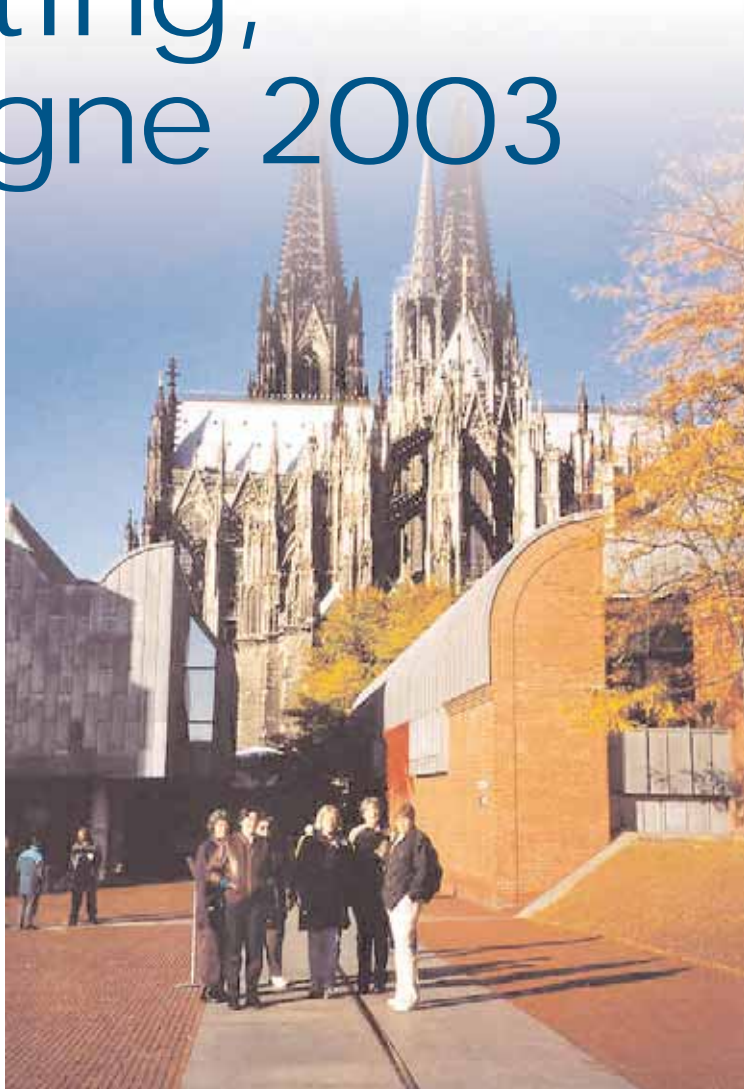


# WHO – FIC Network Annual Meeting, Cologne 2003



Cologne's cathedral, Kölner Dom,  
dominates the city's skyline

The annual meeting of the World Health Organization Network for the Family of International Classifications (WHO-FIC), (formerly called the Heads of Collaborating Centres meeting), was held in Cologne, Germany from 19–25 October 2003. The meeting was co-hosted by the recently appointed German Collaborating Centre, based at the German Institute of Medical Documentation and Information (DIMDI) and the Netherlands Collaborating Centre. Over 90 delegates attended

for a week of plenary sessions, committee meetings, presentations and discussions relating to the Family of Classifications. Representing Australia were Richard Madden, Ros Madden, Catherine Sykes and Nicola Fortune from the Australian Institute of Health and Welfare (AIHW), James Harrison from the Research Centre for Injury Studies and Rosemary Roberts, Sue Walker and Julie Rust from the NCCH.



# WHO-FIC meeting COVER STORY

The plenary session opened on Monday morning with a report back from a meeting of the Planning Committee and WHO staff, held in Geneva on 17 October 2003. This meeting highlighted the importance of the WHO-FIC as the building block for international health information systems in the areas of mortality, morbidity and functioning and disability. The need for development of electronic tools, such as browser versions of various classifications was emphasised, together with the continuing publication and dissemination of books by WHO, to meet the needs of those member states who have yet to implement ICD. The 'information paradox', that is, those areas with the greatest health problems having the least penetration of vital registration systems, was a theme that was raised both in this and later sessions during the week.

The work of the WHO-FIC Network is conducted through various committees and groups, consisting of representatives of the Centres and WHO regional offices and headquarters. These consist of:

- The Family Development Committee
- The Implementation of ICD-10 Committee
- The Subgroup on Training and Credentialing
- The ICD-10 Update Reference Committee
- The Mortality Reference Group
- The Electronic Tools Committee
- The Subgroup for Hospital Discharge Data

## New members of the WHO-FIC

Through the work of the Family Development Committee, a number of new classifications were recommended for acceptance as WHO-FIC related classifications. They include:

- The International Classification for Primary Care (ICPC-2), which was accepted as a related classification for general practice, primary care and reason for encounter coding
- The International Classification of External Causes of Injury (ICECI)
- ISO 9999 Classification of Technical Aids for Disabled Persons
- Anatomical Therapeutic Chemicals (ATC) Classification System with Defined Daily Dose (DDD)

## Update Reference Committee (URC)

The URC is chaired by Rosemary Roberts and is the committee that makes recommendations to the Heads of Centres for updates to ICD-10. There were 100 recommendations for change to ICD-10 in this annual round of updating. Forty-five had been previously agreed via e-mail, 4 were withdrawn, 7 held over and

44 discussed. Of these 44, 25 were accepted for inclusion in ICD-10 (11 minor changes for implementation in 2005, 14 major for implementation in 2006). Fourteen were held over for 2004 and 5 either withdrawn or rejected. Some of the successful proposals were a unique code for SARS, clarification of the terms in relation to sinus bradycardia, clarification of the Volume 2 instructions for vascular dementia, indexing of maternal conditions outside of Chapter XV and a new code for hypoxic ischaemic encephalopathy of the newborn.

In addition to the actual work items progressed by the URC, four papers were presented to the committee. Two related to the World Psychiatric Association updating of the mental health chapter of ICD-10, one was from Japan on improvements to the classification of *Helicobacter pylori* and one from Australia on the relation between the updating and revision process leading to ICD-11.

The URC also discussed the existing terms of reference of the committee and the work plan, following deliberation of the update/revision process during the meeting. As a result, the following recommendations were made:

- One full day face-to-face meeting per year, just prior to WHO-FIC meeting
- The need for some technical meeting sessions during WHO-FIC Network meeting to discuss URC work items
- WHO to disseminate the updates to ICD-10 via the WHO web site and electronic versions of ICD-10
- WHO to convene international clinical advisory groups
- URC to be renamed as Update and Revision Committee

## ICD-11

Rosemary Roberts presented a paper on the role of the Update Reference Committee and the development of ICD 11, which generated much discussion, both at plenary and committee level. While many participants had reservations about moving towards ICD-11, the inevitability of a new revision was accepted, given the World Health Assembly mandate, scientific advances and progress in information technology, maintenance and distribution of the classification and its updates. It was agreed that evaluation of the current updating process, via the URC, is required, to inform decisions on how the current updating mechanism might lead to a revision process. The need for input from international multidisciplinary clinical groups and projects on topics requiring updates was deemed essential. Consequently, a policy meeting to plan the

mechanisms and timeline for ICD-11 is planned for April 2004.

## The International Classification of Health Interventions (ICHI)

This classification, a byproduct of the Australian Classification of Health Interventions (ACHI), had previously been trialed in its alpha version, as a potential classification for countries that do not have, or do not intend to develop, their own procedure classification. During this meeting, ICHI was accepted by the Family Development Committee for distribution as a beta version. The Publications Division of WHO agreed to print and distribute ICHI as a WHO publication and to conduct further field trials through their regional offices.

## Education

The Training and Credentialing subgroup was reconstituted during the Cologne meeting as the WHO-FIC Education Committee. Expanded Terms of Reference were developed to encompass inclusion of ICF issues. This new status is in recognition of the importance the entire WHO-FIC network places on training and education. During the meeting, a full work plan for 2003–2004 was developed to include a mid-year meeting scheduled to take place in Prague in May 2004. This meeting will be to progress work on the International Training and Credentialing Program for Mortality and Morbidity Coders, with input to the process from a needs assessment survey that has been developed and will be translated and distributed in early 2004.

## Mortality

The Mortality Reference Group (MRG) met for two days prior to the WHO-FIC meeting, and on three other occasions during the meeting week. This was necessary to allow sufficient time to work through coding queries and issues raised by cause of death coders and users of mortality data and to clarify submissions for the URC. Papers presented during the MRG meetings included an update of work by NCCH Brisbane on the development of a chronicle to record changes to ICD-10 and also the Mortality Medical Data software (MMDS) which is increasingly used internationally for mortality coding. A further paper from the Brazilian Centre demonstrated how the WHO selection and modification rules for determining an underlying cause of death from a death certificate actually work in practice in making a correct selection.

## The International Classification of Functioning, Disability and Health (ICF)

A plenary session was devoted to presentation of papers and discussion on ICF. The application of ICF in information systems relating to return to work, social disability insurance and educational settings were some of the topics covered. The Australian Collaborating



WHO-FIC delegates, Cologne

Centre presented an interesting paper on the work plan for implementation of the ICF in Australia. Some of the components of this plan have already been achieved with the publication of the Australian ICF User Guide and finalisation of ICF-related data items for the Australian National Health Data Dictionary. Current and planned activities include leadership on ICF implementation in Australia, education, promotion and advisory activities.

A meeting such as this covers a wide range of diverse topics so for those interested in the full agenda and all the papers presented at the meeting, they may be found at: [www.rivm.nl/who-fic/meeting.htm](http://www.rivm.nl/who-fic/meeting.htm). The final report of the meeting will be available at: [www.who.int/whosis/icd10/collabor.htm](http://www.who.int/whosis/icd10/collabor.htm)

Cologne is a beautiful European city, situated on the banks of the Rhine and by Thursday afternoon it was time to have a break and explore the sights. Our hosts had organised a city tour, including a visit to the Kölner Dom, Cologne's famous cathedral and the nearby Museum for Roman and early German history. Here we saw intricate mosaic tile floors, stained glass windows, beautifully coloured and etched glass objects over 2000 years old and heard about the fascinating early Roman history of Cologne. Later that evening, we again experienced the wonderful hospitality of our hosts, with a lovely dinner where delegates were able to relax and socialise, over a glass or two of Kölsch, the local beer. A visit to Cologne is not complete without a trip to the Stollwerck chocolate factory, so Sue Walker and I managed to squeeze this in before we left (and squeeze the accompanying purchases from the gift shop into our luggage)!

This was my first experience of a WHO-FIC meeting, and while it was extremely busy and challenging, the chance to meet my international e-mail pals from the previous year of correspondence was most rewarding. The next meeting of the WHO-FIC will be held in Reykjavik, Iceland from October 24–30, 2004.

► **Julie Rust**  
**Project Officer**

# SNOMED CT® – SUPPORTING THE REAL-TIME ENTERPRISE

*Supporting the Real-Time Enterprise* was the 5th Annual SNOMED® International Users Group meeting held September 14–16, 2003 in sunny San Diego, California. There were nearly 300 participants, mostly excited Americans — excited because of the recent agreement between the College of American Pathologists (CAP) and the National Library of Medicine which makes SNOMED CT® available for use throughout the US.

SNOMED CT (Systematised Nomenclature of Medicine – Clinical Terms) is a comprehensive controlled clinical terminology. SNOMED CT is designed for use in electronic health records with a focus on standardising the information that clinicians enter into patient records. Standardised clinical data facilitates retrieval of meaningful clinical information for decision support, continued patient care and research among other uses.

Introductory and Advanced SNOMED CT Tutorials were programmed for the first day. The speakers introduced SNOMED CT content and structure and discussed ways in which this extensive terminology could (and should!) be tailored, by software developers, to meet the needs of different health care settings. Some software applications, such as the CLUE (Clinical Information Consultancy [CIC] Look Up Engine) Browser and Subset Editor were used to demonstrate conceptual approaches for input and manipulation of SNOMED CT content.

On the second day we heard about applications of SNOMED CT for such purposes as encoding legacy

data, documentation at point of care, reporting and data retrieval. Rosemary Roberts gave a presentation in the session on global adoption of SNOMED CT. Rosemary talked about the NCCH work evaluating SNOMED CT in relation to Australian termsets and NCCH work on terminologies. Other countries represented were Denmark, the UK and the US.

Working group and special interest group break out sessions were conducted on the last day. These groups focussed on pathology, mapping, nursing, compositional grammar and clinical guidelines. I had the opportunity to present the NCCH methodology for mapping between terminologies and classifications during the Mapping CTG (Convergent Terminology Group). Rosemary Roberts is a member of the Mapping CTG which meets regularly by teleconference.

Throughout the meeting some of the practical limitations of SNOMED CT were discussed. The major problem relates to retrieving data. Because CAP wants SNOMED CT to be user friendly and adaptable at the local level, there is no constraint on the terminology selected by users at input. So, while one user might choose a pre-coordinated concept of 'total hysterectomy' another might choose a post-coordinated concept of 'hysterectomy' + 'site = entire uterus'. Getting your retrieval system to understand that these two concepts are equal is the nub of the problem. Pre and post coordination is defined in figure 1 and examples are given in the table below.

## *SNOMED CT examples of pre-coordinated and post-coordinated concepts*

<b>Term to be coded</b>	<b>Pre-coordinated concept</b>	<b>Post-coordinated concept</b>
Total hysterectomy	Total hysterectomy	Procedure = Hysterectomy + Site = Entire uterus
Family history of diabetes mellitus	Family history of diabetes mellitus	Disease = Diabetes mellitus + Qualifier = Family history
Malignant melanoma of skin of upper lip	No exact pre-coordinated concept	Disease = Malignant melanoma of skin of lip + Body structure = skin of upper lip <b>OR</b> Disease = Malignant melanoma + Body structure = skin of upper lip





International speakers (l-r) Arne Kvernland (Denmark), Peter Drury (UK), Rosemary Roberts (Australia), Betsy Humpherys (US) and Sam Brandt (US)

As for *Supporting the Real-Time Enterprise* — meaning use of SNOMED CT at point of patient care, as well as for continued care and for administrative and epidemiology purposes — I suspect it's early days. The full vision and implementation of all functions of SNOMED CT are far from realised but the Users Group members were definitely committed to tackling the challenges and making SNOMED CT work. The CAP measure of success is to have half of all US hospitals using SNOMED CT in five years. It is only with such uptake that implementation and *real-time* problems become evident. Such an uptake will demand that the problems be properly addressed and solved. Only then can the success of SNOMED CT be measured.

► **Patricia Saad**  
**Project Officer**

Figure 1: Pre and post coordination

### Pre-coordinated concept

A concept within a terminology which is a composite of other concepts within that same terminology.

You can remember this by the prefix '**pre**' which means **before** – the composed concept is made up and inserted into the terminology before it's required for reporting. Concepts are often pre-coordinated because they are commonly used expressions. An example from ICD-10-AM would be *abdominal hysterectomy with salpingo-oophorectomy*. Because this is a common procedure, the two components *abdominal hysterectomy* and *salpingo-oophorectomy* are combined within ICD-10-AM.

#### An example from SNOMED CT

Concepts within SNOMED CT which each have a unique identifying number:

1. Breast
2. Cancer
3. Breast cancer – this concept is pre-coordinated because both parts exist in their own right within the terminology. Because this is a common condition it is included in the terminology so that when *breast cancer* is reported it is not necessary to add the two concepts of *breast* and *cancer* together.

### Post-coordinated concept

A concept which is composed by adding together multiple concepts from a terminology.

You can remember this by the prefix '**post**' which means **after** – the composed concept does not already exist in the terminology and is made up afterwards.

#### An example from SNOMED CT

Concepts within SNOMED CT which each have a unique identifying number:

1. Cancer
2. Colon

Because colon cancer does not exist in the terminology the two components colon and cancer are added together.

# Palau CONSULTANCY

NCCH Brisbane team member, Garry Waller, recently completed a five-week consultancy in the Republic of Palau on behalf of the World Health Organization (WHO) Western Pacific Regional Office (WPRO)

## About the Republic of Palau

The Republic of Palau is an archipelago of several hundred volcanic and limestone islands and coral atolls located between the Philippines and Papua New Guinea. Palau's population of 18,000 is dispersed over a few islands.

## Purpose of the consultancy

The consultancy's terms of reference required conducting clinical classification training (for medical records personnel and coders) using the *International Statistical Classification of Diseases and Health Related Problems, Tenth Revision* (ICD-10) and the *International Classification of Functioning* (ICF). (ICF training could not be carried out during this consultancy because of insufficient resources). A needs assessment for further training of medical records technicians was also required, as was an assessment of medical records systems to help the Ministry of Health (MoH) review organisation and management of the Medical Record Department (MRD).

## Palauan health service

Palau is serviced by a major hospital, Belau National Hospital (BNH), and four community health centres, called 'super dispensaries' as well as a number of private medical practices. Every Palauan citizen has a unique medical record number that is quoted on presentation to health facilities. Family, or household, health records are also held at the super dispensaries. The Environmental health unit is currently developing profiles of household environments for all states and simultaneously providing environmental health education to people and households. BNH runs comprehensive outpatient clinics. Most procedures are performed at off-island health facilities.

## Medical record service

Medical record officers manage the work of the medical record department, which operates on a 24/7 basis. Palau's medical record officers do not have formal training in health record or health information management. Clinical coders are members of the medical record department's clerical staff. They generally receive on-the-job training and do not have access to formal educational opportunities. All staff possess an excellent understanding of contemporary medical record practice, the functions and roles of other hospital departments and communicate



Garry Waller providing mortality coding exercises for students from Belau National Hospital

confidently with clinicians and other hospital staff.

A tour and orientation of hospital departments and the Peleliu Island super dispensary provided feedback from users about medical record and hospital information systems. Department heads provided information and feedback about the medical record department, use of information, paper-based forms, general hospital health information and the hospital's computer based information system.

## Medical records

Palau's medical records are quite comprehensive, and typically contain doctors' notes, referrals, operating theatre and anaesthetic reports, consent forms, pathology and radiology reports, nurses' notes and drug treatment sheets. A unit record system is used for each patient. There is a systematic ordering of forms within the medical record, but dividers are not used to separate different admissions to the hospital.

Each admission has an Admission Front Sheet, containing demographic and diagnostic details, filed at the start of the admission notes. The treating clinician records the main diagnosis, any other diagnoses of relevance to the episode of care, procedures and interventions undertaken during the patient's stay in hospital on this form.

Encounters with hospital outpatient departments and clinics are also coded. The recent introduction of an encounter form for outpatient visits provides clear information about the reason for the visit. All outpatient information is filed separately from inpatient admission notes.

### **The medical record department and coding**

There is no dedicated coding area within the department. Coding is conducted at the admission desk on patient discharge and entered directly into the hospital information system. Neither is there a dedicated secondary storage area; inactive records are currently stored in boxes in a spare room located adjacent to the Emergency Department. A formal retention policy has yet to be developed.

The primary filing area is well organised and uses a modified terminal digit filing system. The terminal (2) digits are followed by the remaining four digits. The same identifying number is used for each person's hospital medical record, public health record and 'local' medical record which is held at one of the four super dispensaries. Medical information is copied and shared between the hospital, public health and the patient's local dispensary records ensuring up to date health information wherever the patient presents.

### **Super dispensaries**

The four super dispensaries provide initial contact points with health services for the population that do not live in Palau's capital, Koror. They also provide family, community and environmental based health care and form the base for delivery of public, community and environmental health activities.

As well as individual medical records the super dispensaries also hold family health records which contain a summary of each household member's health. Palau's small population means that health officers and hospital staff are very familiar with everyone in their local areas.

### **Hospital information system**

The BNH health information systems are currently being implemented.



Staff from Belau National Hospital working on mortality coding exercises

### **Death certification and the Medical Certificate of Cause of Death**

The Medical Certificate of Cause of Death is completed by the attending doctor or the duty doctor in cases of the deceased dying outside of the hospital (DOA). The causes of death are clinically audited by the Director of the Bureau of Hospital and Clinical Services, then entered into the hospital information system and coded by staff in the medical record department.

### **ICD-10 Training for clinical coders and other hospital staff**

To facilitate ICD-10 coding training for all nominated staff and to provide adequate coverage within the hospital, it was necessary to divide participants into two groups. Participants included coders, medical records staff and other staff from health statistics, public health, financing, behavioural health services, nursing, cancer register, information systems administration and private practice. Additional mortality coding exercises were provided for a select group who would be directly involved in the coding of death certificates and the processing of mortality statistics in a separate one day session.

The participants in the coder workshops were very enthusiastic and appeared to greatly enjoy the program.

### **Conclusion**

The Republic of Palau will implement ICD-10 in the near future. Whilst much preparation remains to be done, there is a great deal of enthusiasm for the changeover.

The people of Palau are friendly, laid back, possess a laconic sense of humour and are dedicated to making life fun and having a good time. During my time in Palau I was invited to participate in the Pacific Island Health Officers Association meeting as well as other professional and social activities and was made to feel a part of this community where everybody knows your name.

### **Acknowledgments**

The generosity of my hosts from the MoH and BNH is gratefully acknowledged. Particular thanks to the Minister of Health, Ms Sandra Pierantozzi; Mr Nick Ngwal and Ms Julie Tellei; and to Ms Annabelle Lyman and Mr Darren Skilang for organising training equipment.

### **Reference**

<http://travel.state.gov/palau.html>

► **Garry Waller**  
*Senior Classification Officer*

# Patient Classification Systems EUROPE

19th Conference, Washington DC, October 8–11 2003

Despite the European label, this is in fact an international conference on casemix. It is supported by 3M, and provides an opportunity to mix with international players in the casemix arena. It was held in Washington to signify the US origins of DRGs, this being the twentieth anniversary of the conference.

Australian representatives presenting or participating included:

- Dr Terri Jackson (Australia/Asia representative, PCS/E Executive Committee)
- Professor Stephen Duckett
- Professor Beth Reid
- Associate Professor Rosemary Roberts
- Mr Chris Aisbett

During the three-day meeting, papers were presented on casemix experience around the world. Sessions were built around issues of classification and coding, data quality, coder workforce, cost weights, casemix and funding, clinical management, research, benchmarking, international comparisons, risk adjustment, episodes of care, management of outliers, casemix in long term and ambulatory care and the role of information systems.

Many participants were interested in the Australian experience with casemix and coding systems, specifically in AR-DRG and ICD-10-AM. The adoption of ICD-10-AM and/or AR-DRG by Germany, Romania and Slovenia has heightened this interest.

Many countries are still using ICD-9-CM because it forms the basis of the US HCFA, AP- and APR-DRGs, and some countries where ICD-10 has been introduced continue to use the ICD-9-CM procedure classification because of this combination in the 3M IR-DRG.

The lack of an international classification of procedures was a continuing theme, as was the need for a severity or functional measure to accompany the diseases and procedures that usually make up casemix classifications. The United Kingdom Healthcare Resource Groups and the Canadian Case Mix Groups are being linked more closely with funding mechanisms, bringing a new attention in those countries to the need for up to date and standard use of the coding systems that underpin the casemix classifications.

Singapore is still considering its move to ICD-10 and whether it will adopt the Australian or the international DRG system. 3M has released version 2.0 of the IR-DRG. Ireland reported on its evaluation of ICD-10-AM and demonstrated positive results, although the decision to adopt ICD-10-AM and AR-DRG has not yet been officially announced.

This is an extremely useful and stimulating meeting for those involved in casemix development and implementation. The 2005 conference is to be held in Budapest, Hungary, from 21–23 October 2005.

► **Rosemary Roberts**  
*Director*



l-r Rosemary Roberts, Dr Paul Radu, Dr Dana Burduja, Professor Jean Marie Rodrigues and Dr Cassandra Butu



# ICD-10-AM FOURTH EDITION FORECAST



Through the update process, the ICD-10-AM Fourth Edition has been improved with a number of important changes.

## Diagnoses

As we go to press (November) there is still some fine-tuning to do before ICD-10-AM Fourth Edition is finished, so the following list gives nearest approximations to the final count:

**New disease codes – 137**

**Modified disease codes – 59**

**Deleted disease codes – 9**

## Diabetes

Following the ICD-10-AM Third Edition education sessions and subsequent queries received by the NCCH, minor changes have been made to the classification of diabetes mellitus. A few enhancements have also been made in line with recent progress in certain clinical aspect of diabetes and its relationship with other medical conditions.

## Review of mental health codes

A number of fifth character codes have been created for existing ICD-10-AM mental health codes (Chapter V, *Mental and Behavioural Disorders*). This will increase the specificity of the codes and create consistency with *ICD-10 Classification of Mental and Behavioural Disorders – Clinical descriptions and diagnostic guidelines* (WHO).

## Review of Chapter XIII, Diseases of the Musculoskeletal System and Connective Tissue

A review of the ICD-10-AM Chapter XIII *Diseases of the Musculoskeletal System and Connective Tissue* has resulted in the deletion of a number of clinically illogical fifth character codes. New fifth character codes have been created to increase the specificity of present ICD-10-AM codes.

## Birth defects

A public submission was received from the NSW Birth Defects Register (BDR) suggesting an increase in the specificity of a number of codes classifiable to Chapter XVII *Congenital malformations, deformations and chromosomal abnormalities*. The work undertaken in ICD-10-AM Third Edition has continued with further modifications being made to ICD-10-AM Fourth Edition following the changes implemented from The Royal College of Paediatrics and Child Health (formerly The British Paediatric Association) into the parent classification, ICD-10 (WHO).

## Venom immunotherapy

A public submission suggested introducing new codes to identify specific types of allergen sensitivity.

Z51.6 *Desensitisation to allergen* has been expanded to the fifth character to allow specification of the type of allergen to which the patient is being desensitised.

X23.2 *Contact with wasps* has been expanded to the fifth character to allow specification of wasp species.

## Procedures

New procedure codes – 307

Deleted procedure codes – 177

Modified procedure codes – 333

New block codes – 1

Deleted blocks – 6

Modified block titles – 31

### ***Inclusion of the Australian Schedule of Dental Services and Glossary, Seventh Edition***

*The Australian Schedule of Dental Services and Glossary, Seventh Edition* was released in 2002. It contains a number of amended, reinstated, renumbered, deleted and new items. Relevant changes have been incorporated into ICD-10-AM Fourth Edition.

### ***Anaesthesia***

Major changes to the classification of anaesthesia were introduced in ICD-10-AM Third Edition in July 2002. ICD-10-AM Third Edition education activities and coding queries have highlighted a number of areas that require further refinement. This work has been completed for Fourth Edition.

### ***Pain management***

It was noted at the Classification Update Forum (CUF) on Anaesthesia that a review of the procedure codes for pain management would need to be undertaken. It was suggested that this should be done with the assistance of clinicians specialising in pain management rather than anaesthetists.

A public submission and a number of queries regarding pain management procedures were also received. Consequently, a review of pain management procedures has been performed for ICD-10-AM Fourth Edition with the creation of a number of new codes, the modification or deletion of others and improvements to the alphabetic index of procedures.

### ***Standardisation of 'tumour' and 'lesion' in block and code titles***

It had been noted that there was inconsistent use of terminology in the Australian Classification of Health Interventions (ACHI) in relation to tumours and lesions. In order to standardise the terminology, a number of block and code titles have been amended or deleted to substitute, where applicable, the more general term 'lesion' for the more specific term 'tumour'.

### ***Medicare Benefits Schedule (MBS)***

ICD-10-AM Fourth Edition will include modifications to ACHI based on MBS changes from November 2001, May 2002 and November 2002.

## ***Drug administration***

A review of all codes in ACHI related to drug administration (excluding those for anaesthesia, perfusion and pain management procedures) has been undertaken for Fourth Edition. A new block, *Pharmacotherapy*, has been added to the classification with new procedure codes that have a split on route of administration and drug type.

## **Australian Coding Standards (ACS)**

New Australian Coding Standards – 2

Deleted Australian Coding Standards – 3

Modified Australian Coding Standards – 56

A review of all ACS was performed in conjunction with the amendments to the Tabular List of Diseases and Tabular List of Procedures. This has resulted in the addition of new standards, deletion of irrelevant standards and modification of a number of other standards to reflect the changes for Fourth Edition.

## **Publication information**

ICD-10-AM Fourth Edition will be published in February 2004, for implementation from 1 July 2004. ICD-10-AM will be available as

- Five volumes in hard copy, with optional slippcases
- eBook, the electronic version, which can be networked for designated numbers of users, or as stand alone options. The eBook's features include global notes, which allows an administrator to create or edit notes that can be seen by all users, and a personal notes field. Links make looking up Australian Coding Standards and the latest published information from 10-AM Commandments easy and fast
- electronic code list – an ASCII comma delimited file

Ordering information is enclosed with this edition of *Coding Matters* and can be obtained from [www.fhs.usyd.edu.au/ncch](http://www.fhs.usyd.edu.au/ncch)

## **Fourth Edition Education**

The model for delivery for Fourth Edition education will be similar to that used for Third Edition education. This will include on-line education via the web, CD-ROM for those without access to the Internet and optional face-to-face workshops. Details will be available early in 2004. See page 13 for further details.

# How to use ICD-10-AM eBook

The ICD-10-AM eBook is an interactive, electronic application that looks like the printed books on screen but with many additional features. These include fast hyperlinks between volumes, the ability to add your own notes with markers, an additional volume of linked 10-AM Commandments plus search facility and cut-and-paste to other programs.

## Install ICD-10-AM eBook

Before you can start to use the ICD-10-AM eBook you will need an authorisation key to install the software. This is on the back of the printed manual supplied with the disk or sent to you by e-mail if delivered from the web.

Put the CD-ROM, label side up, into the CD drive on your computer. A set-up window will open, that asks for your user name and authorisation key. Follow the instructions in the set-up box to install the software.

## Using the eBook's tools

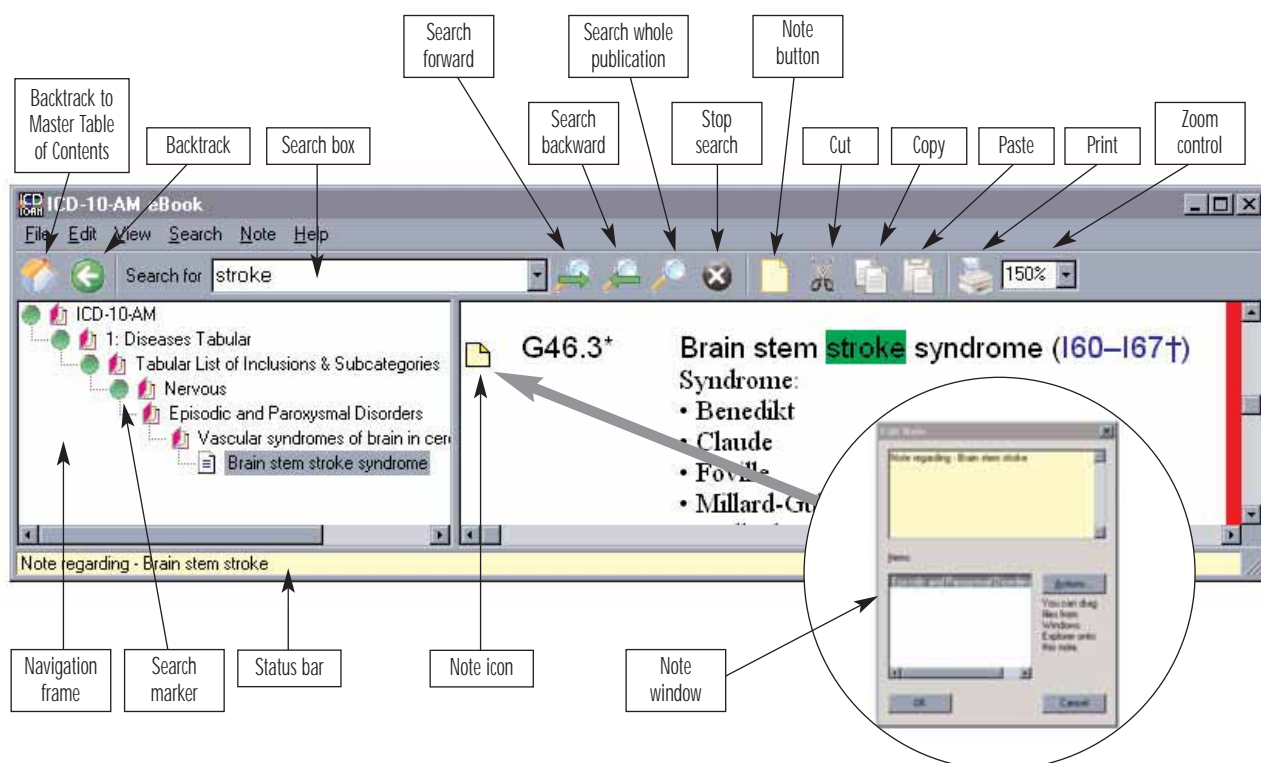
The eBook has 11 enabled functions on its tool bar.

1. Use the **Search** box to type in a word, code, a string of words that you want to find in ICD-10-AM. Alternatively, highlight, click and drag the word or terms from other programs you may be running such as e-mail or word processing and drop into the search box.

**Example:** Click on **1: Diseases Tabular** in the left frame. Type 'stroke' in the Search box and click the **Enter** button. All occurrences of the term 'stroke' are shown in the text of the right frame.

A green marker also appears in the left frame to indicate where a search item can be found within the volumes. Select **Search**, **Clear search**, to clear the markers.

2. The **Search Forward** button. Click this button to search for words in the Search box from this point *forward* until the word is found. If your search doesn't find any matches a message will be displayed in the status bar at the bottom of the screen.
3. The **Search Backward** button does the same job as the **Search Forward** button, but backward from the starting point.
4. The **Search Publication** button has the same features as the **Search Forward** button, however it searches through the entire classification and the 10-AM Commandments volume for any matches.



The number of matches found is displayed on the information bar at the bottom of the screen and a green marker appears in the left frame to indicate where a search item can be found within the volumes. All actual occurrences of the search item are highlighted in green in the text of the right frame.

5. The **Stop Search** button stops any current search. This may be useful when an incorrect term or code has been entered.
6. The **Copy** button. Use the cursor to highlight text as you would in other applications such as MS Word®. Click the copy button to copy the selected text onto the clipboard. Alternatively, highlight, click and drag the selected text to your e-mail or word processing program.

**Example:** You want to distribute Australian Coding Standard (ACS) 0604 *Stroke* prior to a meeting with clinicians. Select 5: *Australian Coding Standards, Specialty Standards*, in the left frame. Type in '0604' (the number of the ACS) in the 'Search String' box and click on the Search Forward button. ACS 0604 *Stroke* appears in the right frame. Highlight the text you need and click on the Copy button on the toolbar. The text is copied to the clipboard with all formatting retained. You can then paste this selection into another application or document.

7. The **Print** button sends the current document or the selected text to the printer.

**Example:** If you only want to print the section ACS 0604 *Stroke*, highlight the required text, click the Print button on the toolbar, select *Selection* and the text, with all formatting, can be printed.

8. The **Backtrack to Master Table of Contents (TOC)** returns you to the Master Table of Contents menu.
9. The **Backtrack** button takes you backwards along the steps you have followed to get to your current location. You can also go backwards along links by pressing the Escape key or by selecting Backtrack from the File menu.

**Example:** Follow the steps to ACS 0604 *Stroke*. Within the text of this standard there is a link to ACS 0002 *Additional diagnoses*. Double clicking on this link will bring ACS 0002 *Additional diagnoses* appears into the right frame. Click on the *Backtrack* button to return to ACS 0604 *Stroke*.

10. The **Zoom Control**. Adjust the zoom setting to reduce or enlarge your view.
11. The **Note** button displays the Note menu.

## New features in the eBook

### Notes

You can now attach personal notes to any text or graphics in the eBook. The note function can be accessed via the main menu (*Note*) or by pressing the *Note menu* button (looks like a dog-eared page).

■ **To attach a note:** Select the code or text where you want the note to appear. Click on the yellow *Note* button in the toolbar and select *New* to create a note. A note window is displayed in which some suggested text for the note is displayed on a yellow background at the top of the window. You can either add to the existing text or replace it entirely. Click OK when you have finished. A note symbol (a yellow dog-eared page) appears in the left margin to indicate that a note is now attached to that section

■ **To copy and paste into a note:** Highlight and copy the text (in any application) that you want to add to the note. Then in the eBook, either create a new note (as above) or open an existing note. Ensure the cursor is in the yellow background at the top of the window and then press Ctrl V on the keyboard to paste the text into the note.

■ **To read the note:** When the cursor is over the note symbol, the first line of the note appears in the status bar at the bottom of the window. Double click the note symbol to reopen the note window and read the rest of the note.

You can also attach files, web addresses and e-mail addresses to notes. The items attached to a note are displayed at the bottom of the note window and are sorted alphabetically.

■ **To attach web and e-mail addresses:** Click the *Note* button and select *New*. Now select *Action* in the note window and select *New*. A text box will appear prompting you to type an e-mail address, web address or a filename.

■ **To attach files:** Click the *Note* button and select *New*. Now select *Action* in the note window and select *Attach file*. The dialog box will appear with the various directories and folders available on your computer, for you to select the relevant file. Click *Open* and the file pathway will appear in the *Items* box. You can attach one or more files as desired.

■ **Drag and drop:** Alternatively, to attach files select the document icon from Windows explorer and drop into the *Items* field of the note panel.

Updates released during the life of the edition allow the user to carry forward or delete existing notes.



### **Coding Matters file**

Edited sections from 10-AM Commandments published in *Coding Matters*, Volumes 5 (1) through to 9 (1) have been included in the eBook as a separate file, called 10-AM Commandments.



When you see this icon in either the tabular list (Volumes 1 and 3) or the Australian Coding Standards it means that there is a hyperlink to information about that disease/procedure in the 10-AM Commandments file. Double click on **CMC** to view the relevant information.

Further information about how to make use of the 10-AM eBook and its tools can be found using the help file accessible by pressing the F1 key. ICD-10-AM Fourth Edition will also be released as a network version featuring global notes that allow network administrators to publish important notes over the entire network.

## ICD-10-AM FOURTH EDITION EDUCATION PROGRAM

An education program that will prepare experienced coders for the implementation of ICD-10-AM Fourth Edition nationally from 1 July 2004 will be offered throughout Australia from March to June 2004.

The successful interactive web-based education program that was developed for Third Edition will be offered for Fourth Edition education. You can register to participate from January 2004.

Three options will be offered initially:

1. Register to learn online (free)
2. Register to download the file (free)
3. Register to receive a CD-ROM (at cost)

### **Web-based learning**

You will receive log on and password information when you register. You can then access the password-protected area at our web site to obtain the Authorware® education material. You will also need to download and install the Authorware® reader. You can choose to work online or to download the file. You can then work through the program at your own pace.

### **Education program on CD-ROM**

Users of the CD-ROM version will need to install the program and reader. Unlike the online and download options, there will be a charge to receive the CD-ROM version.

### **Hard copy education material**

Negotiation is presently under way with state and territory health departments to provide paper-based resources for those who do not have access to computer resources. Dissemination is likely to be via state and territory health departments.

### **Fourth Edition workshops**

Optional face-to-face workshops will be offered between April and June 2004 in all state and territory capital cities, as well as major regional centres.

Completion of the education material is mandatory for those attending workshops. Educators will present solutions to difficult-to-code concepts identified from users' evaluations and feedback.

Attendance at workshops is optional, but it's a great way to consolidate learning and to meet other ICD-10-AM users from your area. There will be a charge for attending workshops.

### **More information...**

Dates, locations and costs will be published at [www.fhs.usyd.edu.au/ncch](http://www.fhs.usyd.edu.au/ncch), via Code-L, in the March edition of *Coding Matters* and by direct mail to previous workshop registrants.



# THE 10-AM COMMANDMENTS

## **ACS 2103 Admission for convalescence/aftercare**

The NCCH has received a number of queries concerning the application of ACS 2103 *Admission for convalescence/aftercare*. The intent of this standard is to provide guidance for clinical coders when specific documentation is written in the clinical record regarding 'convalescence' and 'postoperative convalescence' when the patient may still be receiving treatment. It was not intended for this ACS to be applied to all cases where patients are transferred between hospitals. The term 'transfer' does not imply that all subsequent episodes of care are 'aftercare'.

### **Classification**

Clinical coders should make the most appropriate decision regarding code assignment by:

- applying the clinical coders creed by assessing each case individually
- referring to clinical documentation
- using appropriate coding standards

## **Uncinectomy**

Uncinectomy (also known as Infundibulotomy) involves detachment and removal of the anterior, inferior and superior attachments of the uncinate process. It is performed as part of an intranasal ethmoidectomy in order to gain access to the ethmoid infundibulum, expose the frontal recess and allow visualisation of the frontal recess. Uncinectomy is a fundamental step in functional endoscopic sinus surgery (FESS).

### **Classification**

It is unnecessary to separately code the uncinectomy when performed as a component of FESS.

## **Post transfusion jaundice**

The current indexing of 'Jaundice, post-transfusion — see *Hepatitis, viral, type B*' is a WHO update of ICD-10 that follows the indexing of this condition as per ICD-9-CM.

Clinical advice given to the NCCH suggests that the current indexing for post-transfusion jaundice is misleading and outdated as there may be causes of the jaundice other than hepatitis B. For example, the jaundice may be due to haemolysis from a delayed transfusion reaction.

### **Classification**

Where a definitive causal link has been made between a diagnosis of jaundice and a previous blood transfusion (for example, documentation of jaundice

due to blood transfusion) and there is no documentation of another possible cause of the jaundice (such as, excessive haemolysis or viral hepatitis), the NCCH suggests the use of the following codes:

T80.8 *Other complications following infusion, transfusion and therapeutic injection*

R17 *Unspecified jaundice* (with appropriate external cause and place of occurrence codes).

Where the cause of the jaundice is specifically indicated as being the result of a 'delayed haemolytic transfusion reaction' or transfusion reaction causing haemolysis, the NCCH suggests:

D59.9 *Acquired haemolytic anaemia, unspecified* (with appropriate external cause and place of occurrence codes).

The NCCH will investigate this matter further and consider amendments to the Alphabetic Index of Diseases for a future edition of ICD-10-AM.

## **Chest and breast injuries in male patients**

Any injury documented as occurring in the breast (or nipple) should be classified to a breast site code, regardless of the patient's gender. This action may result in the generation of a warning flag for these records.

Edit checks of morbidity data identify invalid or inconsistent information. 'Warning' flags are generated for potentially incorrect data. For example, 'Code S20.13 is usually associated with the female gender'. Warning flags do not prohibit the use of a code — they only alert the user to the possibility that an error may have been made.

## **Computer-assisted total knee replacement**

Computer-assisted surgery (CAS) describes a range of robotic and image-guided technologies. These include image-guided surgical devices, surgical navigation systems, preoperative planners and surgical simulators.

### **Classification**

ICD-10-AM does not contain a code for computer-assisted surgery. NCCH will investigate the need for a new code to classify this concept for a future edition of ICD-10-AM. In the meantime, assign appropriate imaging services as specified (for example, fluoroscopy, computerised tomography etc) in addition to the code(s) for the orthopaedic (or other specialty) procedure performed.

## **Endoscopic removal of pancreatic stent**

ACHI does not currently contain a specific code for (endoscopic) removal of pancreatic stent.

Where this procedure is documented, the NCCH suggests the following codes:

30484-00 [957] *Endoscopic retrograde cholangiopancreatography [ERCP]*

92085-00 [1896] *Removal of pancreatic tube or drain*

### Sting procedure

Sting procedure is used to treat vesicoureteric reflux. It involves the injection of a non-toxic, non-migrating substance (Deflux) via cystoscope. The clinician locates the refluxing valve and injects the substance to create a crescent-shaped bulge or bolus in the bladder wall at the base of the opening where the ureter enters the bladder. The bolus immediately improves the valve function and stops the back flow of urine.

### Classification

There is currently no procedure code for 'Injection of therapeutic substance into ureteral orifice via cystoscopy' in ICD-10-AM.

Where 'Injection of therapeutic substance (Deflux) to ureteral orifice via cystoscopy' or 'Sting procedure' is documented in the patient's record, code to 36851-00 [1092] *Endoscopic injection into bladder wall*.

### Painbuster

Painbuster is a form of patient-controlled postoperative analgesia whereby an external infusion pump delivers a local anaesthetic directly into the wound (subcutaneously).

### Classification

ICD-10-AM Fourth Edition Tabular List of Procedures (ACHI) will contain a new code for *Subcutaneous postprocedural analgesic infusion (painbuster)*.

In the interim, infusion of painbuster should not be coded.

### Uterosacral plication

Clinical advice received by NCCH confirms that uterosacral plication is inherent in an anterior and posterior repair for a cystocele and rectocele and a uterine prolapse repair.

### Classification

Where 'uterusacral plication' is documented in conjunction with the above procedures, it is not necessary to code the procedure separately.

## Coding queries database

The following correspondence was received by the NCCH:

**Q** "We are currently undergoing an external audit and we have been picked up on some coding practices based on decisions that have been posted on the database. These are in relation to coding of malnutrition which according to the database you can only code when documented by the doctor (not the dietitian) and (non) coding of fat grafts with spinal surgery.

As these decisions have not been published in Coding Matters and are only on the query database then we were not aware that such decisions had been made. Is there an expectation that coders will routinely peruse the database? Is the NCCH's expectation that this database be used for auditing purposes as outlined above?"

**A** The coding queries database is a tool to answer specific coding questions referred to the NCCH by state and territory coding committees. The database is an additional coding resource with options for reviewing or down loading provided via the NCCH web site [www.fhs.usyd.edu.au/ncch](http://www.fhs.usyd.edu.au/ncch). The NCCH provides this database for clinical coders to regularly review coding questions and answers.

The NCCH selects information from the database for publication as *10-AM Commandments*. Coding advice published in *10-AM Commandments* is incorporated into the Australian Coding Standards to become part of ICD-10-AM classification.

It is not the NCCH's expectation that the database be used for auditing purposes because only advice in the Australian Coding Standards and *Coding Matters* are ratified by the Coding Standards Advisory Committee.

# Understanding Mortality Data:

## REAPING THE REWARDS

NCCH Brisbane recently hosted a three day workshop titled *Understanding Mortality Data-Reaping the Rewards* as part of the QUT School of Public Health International Health Summer School. Held from 17–19 November, the workshop provided a forum for the discussion of issues relating to the collection, processing, coding, dissemination and use of mortality data. Presenters spoke about a variety of topics, with the keynote presentation from Dr Chalapati Rao, from the University of Queensland and formerly from WHO in Geneva. Chalapati's paper was titled *Mortality data collection and analysis: the Global Burden of Disease study approach* and described the methods used by the WHO in producing this landmark report regarding international health status. Coded national cause specific mortality data were the primary inputs to this study, however the difficulties of working with data from countries where the vital registration systems are incomplete was noted. Approximately a third of all countries in the world have complete vital registration systems, while another third have either incomplete registration systems or sample registration only. Virtually no information on mortality is available from vital registration systems in the remaining third of all countries. Where vital registrations were incomplete or absent, data sources for the report included population censuses, demographic surveys, community based epidemiological studies, and in certain instances, hospital statistics, police and judicial records.

Other speakers presented a variety of papers with issues relating to the collection and analysis of mortality data both in Australia and internationally, and uses of coded data for various public health and other research projects. They presented initiatives such as the development of electronic death registration processes and an electronic medical certificate of cause of death system in New South Wales. The Queensland Health Chief Forensic Pathologist described the effects of new coronial legislation.



Sue Walker, NCCH Brisbane and Chris Matthews, Queensland Health Information Centre

The final day provided the opportunity for a joint session with another Summer School workshop on issues relating to the identification of indigenous status in statistical data collections.

As part of the mortality workshop, participants were also given the opportunity to discuss the formation of an Australasian Mortality Data Interest Group (AMDIG). This group is being established to provide a network for sharing information relating to the capture and use of mortality data and to advocate for improvements in, and increased utilisation of, data relating to deaths in Australia, New Zealand and potentially the Asia-Pacific region. A meeting of the leadership group for the AMDIG was convened on the day after the workshop. Chaired by Dr Richard Madden, Director of the AIHW, the group agreed terms of reference and proposed a framework for activities relating to mortality data.

Want to keep in touch about the development of AMDIG? Please e-mail [ncch.brisbane@qut.edu.au](mailto:ncch.brisbane@qut.edu.au) or phone Sue Walker, NCCH Associate Director Brisbane, 07 3864 5873

## PICQ 2002

**incorporating PICQ for ICD-10-AM Third Edition  
is available now**

Performance Indicators for Coding Quality (PICQ) is a set of predetermined performance indicators which identify records in data sets that may be incorrectly coded, based on Australian Coding Standards and coding conventions.



See the new NCCH catalogue enclosed with this edition for more information or contact  
NCCH Melbourne  
phone: + 61 3 9479 1811  
e-mail: [qed@latrobe.edu.au](mailto:qed@latrobe.edu.au)



# How it works – SKIN

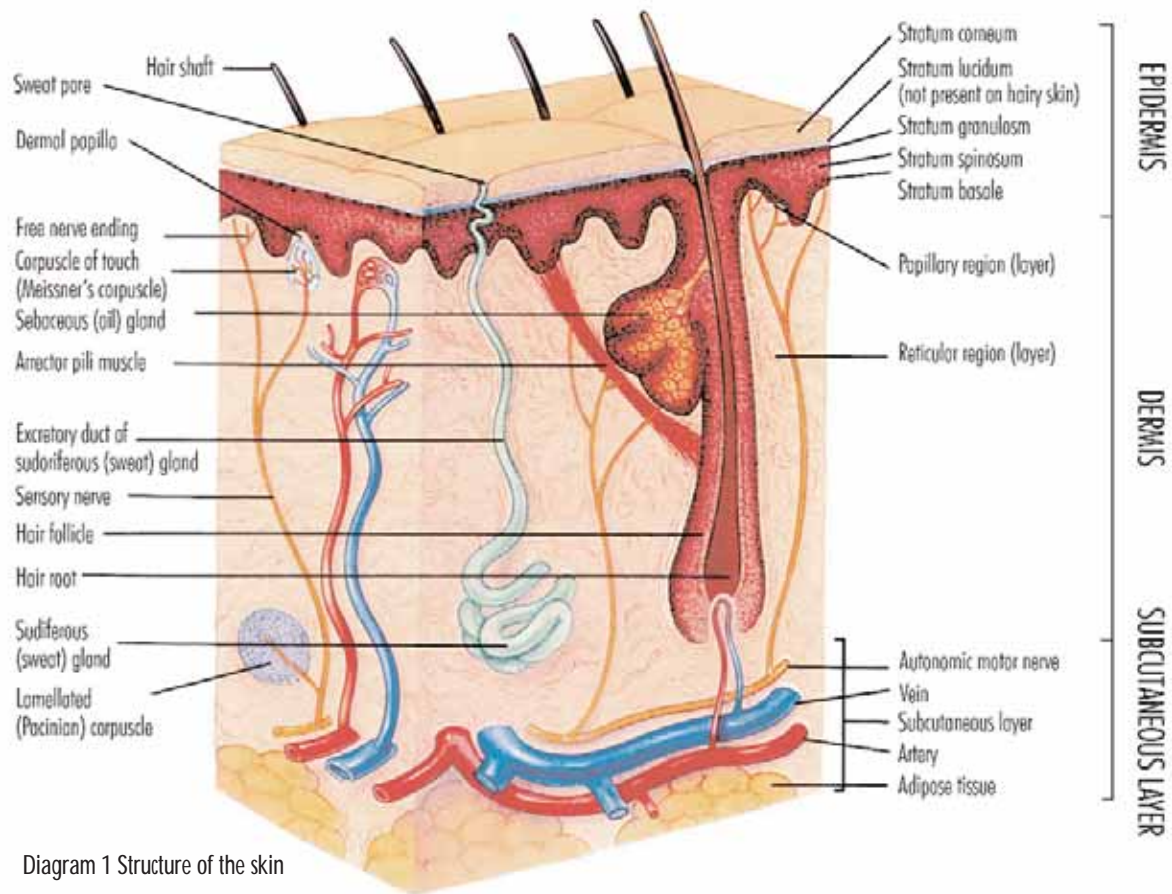


Diagram 1 Structure of the skin

The skin is a functional system of tissues and cells that provides protection from the external environment. The skin is comprised of two main layers – the epidermis and dermis – with subcutaneous tissue beneath.

## Epidermis

The epidermis is the thin outer layer that is composed of stratified squamous epithelium. There are four different types of cells found in the epidermis:

- keratinocytes
- melanocytes
- Langerhans cells
- Merkel cells

The epidermis is organised into four sublayers or strata:

- stratum basale (basal layer)
- stratum spinosum (spinous layer)
- stratum granulosum (granular layer)
- stratum corneum (keratinised or horny layer)

Newly formed cells in the stratum basale move up towards the surface of the skin pushing old cells

upwards. The old cells rise to the surface accumulating keratin as they move. The old cells die, flatten out and overlap to form a tough membrane on the outer surface of the epidermis. Eventually these cells are shed off as calluses or collections of dead skin and are replaced by underlying cells that also become filled with keratin. This process is known as keratinisation and takes between two and four weeks to complete.

## Dermis

The dermis, located beneath the epidermis, is considerably thicker because it is composed of connective tissue containing elastic fibres (elastin) and protein fibres (collagen). The elastin and collagen fibres give the skin pliability but are resistant to stretching. The dermis contains hair follicles, nails, sweat glands, sebaceous glands, blood vessels and nerves.

The two sublayers of the dermis are:

- Papillary layer – a thin layer of loose connective tissue that lies beneath the epidermis. It contains capillaries that nourish the epidermis
- Reticular layer – a dense layer of connective tissue that consists of elastin and collagen fibres

Elastin and collagen fibres give the skin pliability. Ageing, hormones and ultraviolet rays cause degeneration of elastin and collagen fibres, resulting in wrinkles and sagging of the skin.

## Subcutaneous tissue

The subcutaneous tissue, also called the superficial fascia or hypodermis, is found beneath the dermis. Subcutaneous tissue consists of adipose (fat) and connective tissue and accommodates large blood vessels and nerves. Fibres in the dermis extend downwards into the subcutaneous tissue connecting the skin to it. In turn, the subcutaneous tissue connects to underlying muscles, bones and tissue.

## Skin functions

The primary functions of the skin are:

- protection
- regulation of body temperature
- excretion
- detection of stimuli
- synthesis of vitamin D
- blood reservoir

### Protection

The skin, as a physical barrier to the external environment, protects the body from injury, infection, loss or gain of bodily moisture and UV radiation.

The skin's layers of cells provide a protective barrier to underlying body tissues and organs against abrasion and other injuries.

Lipid secretions produced by the sebaceous glands assists in the preventing loss and gain of bodily moisture. Sebaceous glands in the dermis secrete sebum to lubricate the hair and repel water from the skin.

Protection against UV radiation is provided by melanocytes. These pigment-forming cells located at the base of the epidermis produce melanin. Melanin absorbs UV light to protect the epidermis and dermis from the harmful affects of UV light. Exposure to ultraviolet rays stimulates the melanocytes to produce extra melanin resulting in tanned skin.

### Regulation of body temperature

The skin plays a significant role in maintaining body temperature. Sweat glands and blood vessels act as temperature regulators of the skin. Changes in body temperature are detected by receptors in the skin that send nerve impulses to the brain, which respond by sending output nerve impulses back to the sweat glands and the blood vessels.

Perspiration is constantly produced by sweat glands. The amount of perspiration sweat glands release is determined by changes in body temperature.

An increase in body temperature causes sweat glands to produce perspiration more rapidly. A decrease in body temperature causes sweat glands to produce perspiration less rapidly.

Blood vessels in the skin dilate or constrict to assist in maintaining body temperature. When body temperature rises, blood vessels dilate increasing blood flow through the skin, allowing heat to radiate into the external environment. A lowered body temperature causes blood vessels to constrict decreasing blood flow through the skin, minimising radiation of heat into the external environment.

### Excretion

Sweat glands play a small part in the removal of wastes, such as nitrogen, sodium and salt, from the bloodstream. These wastes are present in perspiration

### Skin facts

- The skin of an average adult weighs about 4 kilograms
- Adult skin surface area is approximately 2 square metres
- Skin cells replace themselves every 28 days
- Old skin cells make up the majority of household dust
- About 70% of skin is water

secreted by the sweat glands.

### Detection of stimuli

Nerve endings in the epidermis and dermis are called receptors. Receptors perform an important sensory function as they detect stimuli in the external environment. They are specifically designed to respond to temperature, pressure, pain or touch. Some areas of the body have more receptors than others, for example, the fingertips have a vast number of touch receptors, which makes them extra sensitive. Pain receptors are evenly distributed all over the skin and are crucial in preventing injury. The detection of other sensations such as wetness, softness and sharpness is caused by stimulation of different types of receptors at the same time.

### Synthesis of vitamin D

Vitamin D is an essential precursor to calcitriol, a hormone required for calcium absorption and bone development. While vitamin D may be obtained through diet, ninety percent of vitamin D is produced in the skin. Only a small amount of UV exposure is required for vitamin D production. Most people living in Australia obtain adequate exposure for the production of vitamin D through their daily activities.

### Blood reservoir

Skin serves as a blood reservoir as it contains many blood vessels. The blood vessels supply nutrients to the cells in the basal layer and also remove waste products.

### Accessory structures

Accessory structures of the skin include:

- hair
  - sebaceous glands
  - sweat glands
  - nails
- } exocrine glands

### Healing properties

Skin has exceptional self-healing properties, especially when only the epidermis is damaged. When injury damages the dermis healing can be achieved if the injured area is in a region of the body with a rich blood supply. Deeper wounds that penetrate to underlying tissue heal by scar formation. Scar tissue is deficient in infection resisting and metabolic functions of healthy skin.

**Granulation tissue** – newly growing capillaries and connective tissue form granular projections on the surface of ulcers or healing wounds.

**Scar tissue** – dense fibrous contracted connective tissue that has formed over a healed wound. Scar tissue is also referred to as cicatricial tissue.

**Keloid scar** – raised red or pink fibrous scar tissue that is the result of excessive tissue repair at the edges of a wound or incision. Keloid scars are more common in people with dark pigmented skin compared to fair skin.

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# ICD-10-AM Fourth Edition

ICD-10-AM Fourth Edition will be available for distribution from February 2004. Orders are now being accepted.

### Choose the version that best suits your needs

#### Hard copy

- five volume book set with or without slipcase
- individual volumes

#### Electronic

- eBook can now be networked and is also available as a single user/installation option. eBook's features include:
  - electronic updates – no more cutting-and-pasting errata
  - links to relevant 10-AM Commandments advice

- links to Australian Coding Standards
  - your own notes. Notes can be saved between updates
  - administrator notes (multiple user licenses only). Share important information with all users simultaneously by posting global notes
  - cut-and-paste information in and out of ICD-10-AM
- electronic code list is an ASCII, comma delimited list of codes

### Order form enclosed with this edition

*The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM)* is developed by the National Centre for Classification in Health with the support of the Commonwealth Department of Health and Ageing, the Coding Standards Advisory Committee and Australian clinical coders and clinicians.

# ICD-10 and MMDS

## CODING SOFTWARE CHRONICLE

The Queensland office of the Australian Bureau of Statistics (ABS) undertakes the mortality coding and statistical reporting for all deaths in Australia using ICD-10. This process is undertaken using the Mortality Medical Data System (MMDS). MMDS is a suite of four software programs that accommodate a need for coding and reporting of more than underlying cause of death and assist with the standardisation of the interpretation and coding of all reported causes of death. The software is able to directly interpret text and to classify causes of death to ICD codes using the ICD rules.

End-users of deaths data, while welcoming the development of processes which facilitate the update to the ICD between the major revisions, are concerned that changes to codes, coding rules and the MMDS software have the potential to create a break in a statistical data series over time. Increasing use of the MMDS software internationally means that there is a need to provide information in an easily accessible form to researchers and other coded data users.

At present there is no formal mechanism for recording and reporting the changes made to both the ICD-10 classification and to the MMDS software. Consequently, Australian researchers have sought additional information from the ABS about the changes, when they became effective, which organisation initiated them and why, to ensure that statistical artefacts caused by coding changes can be divorced from real changes in disease incidence.

The ABS requested the NCCH to develop a chronicle of changes to ICD-10 and the MMDS software. This project draws extensively both in terms of design and content on previous NCCH work that developed the *ICD-10-AM Chronicle* – an electronic reference tool that presents changes to ICD-10-AM between editions from the first Australian modification of ICD-10.

The MMDS Chronicle development currently consists of four linked files to track ICD-10 code and index changes:

1. Introduction
2. Historic list of ICD-10 codes including code descriptions
3. Status file
4. Changes file

and four linked files to track changes to ICD Rules and Guidelines:

1. Historical listing of ICD-10 coding rules and guidelines

2. Status of changes to ICD-10 rules and guidelines
3. Chronicle of Changes to ICD-10 rules and guidelines
4. Chronicle of coding and rule changes in the MMDS software

The *historical file* of ICD-10 codes and code descriptions was extracted from the ICD-10-AM Chronicle. This historical file acts as the central navigation point to the ICD-10/MMDS chronicle. Codes that have been added, revised or deactivated (deleted) are highlighted in blue and linked to a *status file*. The status file contains information relevant to the nature of the change, detailing whether the code was created, revised or deactivated and when the change occurred. This information is being sourced from the WHO Cumulative Official Updates to ICD-10 maintained by the Update Reference Committee (URC) secretariat (at NCCH Sydney). Information will be formatted to ensure that changes are clear and comprehensive, avoiding the need for researchers to have access to ICD-10 in hardcopy or the ratified change document released by the URC. A hyperlink will be created from the relevant information on the status file to a *change file*.

The change file will contain information from the URC recommendations for updates to ICD-10 made at annual WHO meetings. This file will provide:

1. Background information on clinical decision making for each change
2. The authoritative body instigating the change
3. The authorised implementation date
4. The first MMDS version released which includes the change
5. The first version of the MMDS which includes the change and which was used to process Australia's mortality data (this may be different from the first MMDS version to include the change)
6. Code mappings for new and deactivated codes

A hyperlink will be created from the MMDS version to the MMDS file. The MMDS file will identify corrections and refinements to the programs for classifying underlying and multiple causes of death, as released by the NCHS' Research Triangle Park technical team at the beginning of each year. As part of the Chronicle development, a process will be instigated to test each MMDS version for compliance with, and inclusion of, the Official WHO recommended updates to disease codes and coding rules and guidelines.



A decision has not yet been made about where the ICD-10/MMDS Chronicle will be located or posted, however, it is hoped that it could become a useful international resource. By customising the *Change file* to include details regarding the MMDS implementation date and version used for coding in an individual country, it is believed that the remainder of the Chronicle will be internationally applicable.

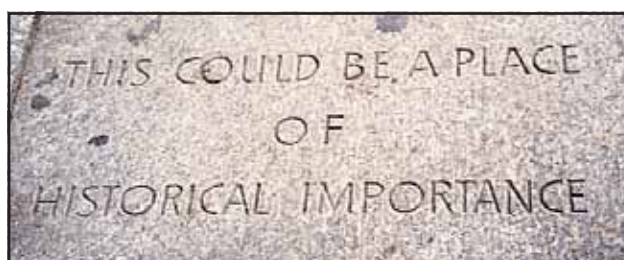
The development of the ICD/MMDS Chronicle is an international collaborative effort to improve the understanding of changes to the ICD-10/MMDS affecting mortality data over time. It will allow for the provision of a readily accessible, up to date and user-friendly electronic reference tool that documents the changes to the ICD-10 classification for users of mortality data.

- ▶ **Margaret Campbell**  
*Senior Classification Officer*
- ▶ **Sue Walker**  
*Associate Director  
NCCH Brisbane*
- ▶ **Ron Casey**  
*Director  
Population and Social Statistics Branch  
Australian Bureau of Statistics (Queensland)*

## Notice for New Zealand customers

A number of increases in trans-Tasman postage costs has meant that a change of policy has had to be introduced. All sales of NCCH resources to New Zealand addresses will now incur postage and packing costs at the prevailing rate. To facilitate this change, New Zealand customers are asked to use the 'international' order form. Orders submitted on 'New Zealand' order forms can no longer be accepted. International sales order forms are available from [www.fhs.usyd.edu.au/ncch](http://www.fhs.usyd.edu.au/ncch) or from the NCCH

To determine postage costs before submitting orders, please contact Catherine Stanhope, Sales and Distribution Officer: + 61 2 9351 9768, [ncchsales@fhs.usyd.edu.au](mailto:ncchsales@fhs.usyd.edu.au)



Can't disagree with this statement – paving stone seen in Cologne

# The Good Clinical Documentation guide

Your guide to the best medical records

The **Good clinical documentation guide** helps clinicians to recognise critical elements they need to document to reflect the patient care process, to communicate, report and provide clear data for research and quality of care monitoring.

The **Good clinical documentation guide** provides general information about the requirements for good documentation, and the relationship between documentation, coding and Diagnosis Related Groups (DRGs). Specific information relevant to 22 clinical specialties helps guide and inform clinicians about important issues in documentation.

The specialty chapters feature:

- a range of clinical topics
- clinical profiles
- the top 5 principal diagnoses, procedures and complications and comorbidities (ICD-10-AM Third Edition) for each relevant specialty
- documentation pointers for each topic
- AR-DRG version 5.0 information where relevant
- examples of the impact documentation has on DRG assignment where DRG variances can be illustrated

The guide is provided as an Adobe® Acrobat® file on CD-ROM and features electronic navigation between topics and concepts. The guide is printer-friendly.

See the enclosed catalogue for purchasing details or contact NCCH Sydney  
phone 02 9351 9461  
e-mail [ncchsales@fhs.usyd.edu.au](mailto:ncchsales@fhs.usyd.edu.au)

Developed by the National Centre for Classification in Health with support from the Clinical Casemix Committee of Australia





The  
University  
of Sydney



The University of Sydney  
National Centre for Classification in Health

# CALL FOR SUBMISSIONS

## Modifications to ICD-10-AM

The National Centre for Classification in Health (NCCH) invites written submissions from interested members of the public and representatives of relevant agencies or organisations for modifications to the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM)*. *ICD-10-AM* is a classification of diseases and procedures based upon the World Health Organization's statistical classification ICD-10.

The main objectives of the public submission process are to ensure that *ICD-10-AM*

- meets users' needs
- continues to be a comprehensive and clinically meaningful classification.

Written guidelines for making modification submissions are published at the NCCH web site [www.fhs.usyd.edu.au/ncch](http://www.fhs.usyd.edu.au/ncch) and are available from NCCH (Sydney):

The University of Sydney, PO Box 170, Lidcombe NSW 1825  
Phone: 02 9351 9461 fax: 02 9351 9603 e-mail: [ncchadmin@fhs.usyd.edu.au](mailto:ncchadmin@fhs.usyd.edu.au)

### Submissions must be lodged between 1 March 2004 and 31 May 2004

The NCCH is an Australian centre of expertise in classifications for morbidity, mortality and health interventions and is responsible for the maintenance of *ICD-10-AM*. *ICD-10-AM* is updated and published biennially. NCCH (Sydney) is funded by the Casemix Program, Commonwealth Department of Health and Ageing.

*ICD-10-AM Fourth Edition* will be published and implemented nationally 1 July 2004

# Killer Coding Workshops REPORT

Early in 2003, the NCCH conference presented an opportunity for participants to attend an ICD-10-AM coding tutorial, that was conducted jointly by the NCCH and the Clinical Coders' Society of Australia (CCSA). Participants' feedback about the tutorial was very positive – people told us they wanted more opportunities like this one. By mid year, a plan to take the tutorial show on the road was prepared. Potential participants were invited to indicate if they would attend. Response was very encouraging and led to providing 18 Killer Coding Workshops for 543 participants in all states and territories.

Material for the workshops was based upon issues that emerged from the ICD-10-AM Third Edition education program and from queries received. Specific topics

covered included abuse, additional diagnosis, anaesthesia, arterial disease, diabetes, drug resistance, external causes, same-day endoscopy, sepsis and ventilation.

The workshops' format was designed to allow participants to complete some exercises before attending. Participants received workbooks presenting 10 case studies and five medical records to be coded before the workshop. This strategy optimised time for discussion and review – elements that were considered to be essential to ensure a positive learning experience.

Participants' feedback indicates that the workshops are very popular, with a strong demand to provide more education opportunities for ICD-10-AM users throughout Australia.

Stand by for information about similar workshops after Fourth Edition implementation in late 2004.



Killer Coding Workshops at Bankstown, NSW

coding  
matters



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National Centre for Classification in Health

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# CONFERENCE DIARY

## Conferences 2004

18-23 January	HL7 Working Group Meeting	San Diego CA USA	meetinginfo@hl7.org
29-30 January	Second HealthGrid Conference	Clermont-Ferrand, France	<a href="http://clermont2004.healthgrid.org/">http://clermont2004.healthgrid.org/</a>
20-22 February	13th Annual Conference on Health Informatics in NSW	Hunter Valley	<a href="http://www.hisnsw.org.au/Conference.asp">http://www.hisnsw.org.au/Conference.asp</a>
22-26 February	HIMSS Annual Conference & Exhibition 2004	Orlando FL USA	<a href="http://conference.himss.org/ASP/index.asp">http://conference.himss.org/ASP/index.asp</a>
26-29 February	Quality... and all that jazz! AGPAL International Conference	Gold Coast	<a href="mailto:conference@agpal.com.au">conference@agpal.com.au</a>
22-24 March	Healthcare Computing 2004 Delivering health informatics at the point of care	Harrogate, UK	<a href="http://healthcare-computing.co.uk/index.html">http://healthcare-computing.co.uk/index.html</a>
24 March	Health e-Nation 2004 Conference and Exhibition	Melbourne	<a href="mailto:sally.glass@chik.com.au">sally.glass@chik.com.au</a>
25-26 March	NSW NGO conference	Wollongong	<a href="mailto:info@mhcc.org.au">info@mhcc.org.au</a>
25-26 March	IT: Achieving efficiencies in clinical management	Melbourne	<a href="http://www.archi.net.au">http://www.archi.net.au</a>
20-24 April	International Conference on the reduction of drug related harm	Melbourne	<a href="http://www.ihra.net/index.php?Itemid=1">http://www.ihra.net/index.php?Itemid=1</a>
21-23 April	Telemedicine and Telecare International Trade Fair	Luxembourg	<a href="http://www.telemedicine.lu">http://www.telemedicine.lu</a>
26-30 April	18th World Conference on Health Promotion and Health Education	Melbourne	<a href="http://www.Health2004.com.au">www.Health2004.com.au</a>
2-7 May	HL7 Working Group Meeting	San Antonio TX USA	meetinginfo@hl7.org
8-11 May	e-Health 2004 Conference	Victoria BC Canada	<a href="http://www.e-healthconference.com">www.e-healthconference.com</a>
12-14 May	9th European Forum on Quality Improvement in Health Care	Copenhagen, Denmark	<a href="http://www.quality.bmjpg.com">www.quality.bmjpg.com</a>
17-21 May	TEPR 2004	Fort Lauderdale, FL USA	<a href="http://www.medrecinst.com/conferences/tepr/index.asp">http://www.medrecinst.com/conferences/tepr/index.asp</a>
20-22 May	Health e Conference	Washington DC USA	<a href="http://www.medrecinst.com/conferences/tepr/index.asp">http://www.medrecinst.com/conferences/tepr/index.asp</a>
2-4 June	International Congress on Medical and Care Compunetics	The Hague, The Netherlands	<a href="http://www.icmcc.com/">http://www.icmcc.com/</a>
6-9 June	7th World Conference on Injury Prevention and Safety Promotion	Vienna, Austria	<a href="http://www.safety2004.info">www.safety2004.info</a>
20-22 July	2004 ACHSE National Congress	Darwin	<a href="http://www.achse.org.au">http://www.achse.org.au</a>
9-11 August	AAQHC Quality in Healthcare Conference	Canberra	<a href="http://www.aaqhc.org.au/">http://www.aaqhc.org.au/</a>
29 August - 1 Sept	Health Care in Focus 15 <sup>th</sup> Casemix Conference in Australia	Canberra	<a href="mailto:casemix_conf@health.gov.au">casemix_conf@health.gov.au</a>
7-11 September	MedInfo 2004	San Francisco, CA USA	<a href="http://www.medinfo2004.org/">http://www.medinfo2004.org/</a>
22-24 September	SNOMED International Users Group Meeting	Phoenix AZ USA	<a href="http://www.snomed.org/">http://www.snomed.org/</a>
26 September - 1 Oct	HL7 18th Plenary and Annual Working Group Meeting	Atlanta GA USA	meetinginfo@hl7.org
3-6 October	Aged Care and Community Services Australia (ACSA) Conference & Trade Exhibition	Hobart	
9-14 October	International Federation of Health Records Organizations Congress: Sharing Solutions in the Global Community	Washington DC USA	<a href="http://cop.ahima.org/COP/Public/Events/">http://cop.ahima.org/COP/Public/Events/</a>
11-12 October	Australian Private Hospitals Association National Congress 2004	Gold Coast	<a href="mailto:apha@consec.com.au">apha@consec.com.au</a>
13-17 October	WONCA 2004	Orlando FL USA	<a href="http://www.wonca2004.org/">http://www.wonca2004.org/</a>
21-23 October	PCS/E – Patient Classification Systems – Europe 2004	Budapest Hungary	<a href="http://www.pcse.org/content.asp">http://www.pcse.org/content.asp</a>
13-15 December	International Conference on Knowledge Management	Singapore	<a href="http://www.icKM2004.org/">http://www.icKM2004.org/</a>

Stand by for more information as other conferences for 2004 are announced. Conference information is also published at the NCCH web site [www.fhs.usyd.edu.au](http://www.fhs.usyd.edu.au)

## Next edition: March 2004

Clinical update: Complex regional pain syndrome  
How it works: Central nervous system  
All about ICD-10-AM Fourth Edition and education program

