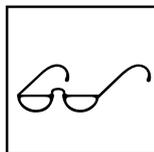




Coding *Matters*

Newsletter of the
National Centre for Classification in Health

Volume 5 Number 3
January 1999



FROM THE DESK OF THE DIRECTOR

It has been five years since NCCH began operation as the National Coding Centre at the University of Sydney, and even longer since the National Reference Centre for Classification in Health commenced at QUT. To reflect the achievements of those years, and to mark the first full year as the NCCH, the Centre has produced its first annual report, which also documents its predecessors and history before NCCH was created in 1997. Assembling the report was a major exercise, but a salutary one in that it provided a discipline to bring together the outcomes of the hard work of the NCCH team and our network of educators, advisers and clinical coders. The efforts of individuals working for a worthwhile goal has generated an amazing amount of energy and allowed NCCH to create Australian products for Australian health services. Talking of efforts, congratulations to Chantel Garrett and Christine Erratt for their input to the first NCCH 'Annual' Report! The new 'voice of NCCH' belongs to Tina Stanhope, administrative assistant replacing Linda Maleszka during her secondment to the Professional Relativities Study.

Coding Services

The Australian Modification of ICD-10 has been introduced in four states and is getting a thorough workout as a result. Despite some pain in changing mindset from ICD-9-CM to ICD-10-AM, clinical coders have responded extremely well and those states which have changed have confirmed the benefits for them in implementing in 1998. Present indications are that coding throughput is improving although it has not yet returned to ICD-9-CM levels. But the initial hurdle has been overcome, both for users of ICD-10-AM and for the NCCH, which is now coping with queries which help us to improve the classification for its second edition. For the first time, NCCH is seeking public submissions for changes to be included in the second edition, due for introduction in July 2000. A public notice was placed in the *Australian* on 28 November 1998, and press releases sent to relevant journals and newsletters. Submissions received through this process in February 1999 will receive the same scrutiny as changes proposed

as a result of queries. The NCCH team developing the Year 2000 Australian Coding Standards includes Katrina Chisholm, Jennifer Mitchell, Julie Rust and Megan Cumerlato, not to mention the indomitable Kerry Innes. Members of the new Clinical Coding and Classification Groups will be consulted before changes are generated and recommended for implementation to the Coding Standards Advisory Committee.

Meetings and Conferences

NCCH has been represented at meetings of its Executive and Management Advisory Committees, Coding Standards Advisory Committee, ICD-10-AM Implementation Committee, Australian Casemix Clinical Committee (ACCC) and at a Canberra workshop on Integration of Clinical Coding. This last workshop considered a proposal from NCCH Brisbane for an Australian Clinical Thesaurus. Other proposals were also considered and recommendations made to the Health Services Quality and Outcomes Branch, Department of Health and Aged Care (Health) on how the proposals might be reconciled to provide classifications that meet the needs of a range of health services and that map to internationally accepted concepts and terms. ▶

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In October, I represented NCCH at the Patient Classification Systems Europe Conference in Manchester and at the meeting of the WHO Heads of Collaborating Centres shortly afterwards in Paris. The meetings were relevant and stimulating for anyone involved in health classifications, and Australian delegates were prominent at both. Common themes which have appeared also in recent Australian conferences related to electronic patient records, record linkage using unique patient identifiers, development of nomenclatures and thesauri as well as statistical classification, casemix classifications in ambulatory care and person based rather than episode based casemix measures. Australia has agreed to co-chair with WHO the Update Reference Committee which recommends changes to WHO ICD-10 for both mortality and morbidity reporting purposes. WHO representatives at the Paris meeting placed new emphasis on the use of coded data to reflect global burden of disease and measures of that burden in Disability Adjusted Life Years. In between meetings I made a brief detour to Dublin at the invitation of Dr Miriam Wiley of the Economic and Social Research Institute to talk to

clinical coding educators about the NCCH. I was most warmly welcomed by staff of the Health Policy Research Centre and regretted not having longer to exchange experiences.

Publications

NCCH has a new Publications and Technology Manager, Mr Rodney Bernard, who commenced on 14 December 1998. One of his first tasks will be to market ICD-10-AM in countries outside Australia, as NCCH has received from WHO via the Commonwealth the approval to distribute ICD-10-AM outside Australia and New Zealand.



Rodney Bernard
Publications &
Technology Manager

Chantel Garrett has been holding the fort while the chair of Publications and Technology Manager has been vacant. Chantel is working with Kerry Innes and Judith Hooper in liaising with Essential Software on the ICD-10-AM electronic developments and has been updating the NCCH website – a great boon to NCCH in dissemination of information and educational material.

Production of the specialty booklet series has taken off with Monica Komaravaralli at the helm – and those published from now on will be devoted to ICD-10-AM!

At the invitation of the ACCC, NCCH contributed an article *Introducing ICD-10-AM in Australian hospitals* to the Medical Journal of Australia Casemix Supplement, Volume 169, 19 October 1998.



Chris Harasty (left) and Tam Ha of
Essential Software

Coding Matters

January 1999
Volume 5 Number 3



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Editor: Rosemary Roberts
Typesetting: Chantel Garrett ISSN 1322-1922

Coding Matters is the quarterly newsletter of the National Centre for Classification in Health (NCCH). NCCH (Sydney) is funded by the Casemix Program, Commonwealth Department of Health and Aged Care (DHAC). NCCH (Brisbane) is funded by the Casemix Program DHFS, the Australian Institute of Health and Welfare, the Australian Bureau of Statistics and the Queensland University of Technology.

Education

Another new staff member improving the NCCH gender balance is Mr Simon Clarke, Information Systems Officer, NCCH Sydney. Although he is part of the Education Division for management purposes, his role is a broad one in supporting all staff at the NCCH, the network server and communications with the School of Health Information Management. Simon is a welcome addition to our staff and also to the University of Sydney carpark (his transport was formerly for horizontal as well as vertical passengers – and is not an ambulance)!



Simon Clarke
Information Systems
Officer

Karen Peasley has completed *Essentials of ICD-10-AM: An information package for clinicians and users of coded data*, now available on the NCCH website. Karen has also been meeting with Sue Walker, NCCH Brisbane, on plans for educating clinical coders in states implementing ICD-10-AM in 1999.



Tina Stanhope
Administrative
Assistant

Quality Division

NCCH is seeking support from a number of sources for continuation in 1999 of the Quality Division at La Trobe University. Dianne Williamson and her team have made major advances in 1998, and work of the Quality Division on ACBA and PICQ is extremely important to the role of NCCH. Both measures of quality received a great deal of international interest at the recent meeting of WHO Heads of Collaborating Centres for Classification of Disease.

Research

NCCH Sydney has appointed a Research Officer, Donna Truran – welcome Donna! Donna has a background in

Psychology and a wealth of research experience. Her presence will be a great asset to NCCH in helping to prepare research proposals and discipline our thinking about assessing the impact of introducing ICD-10-AM (See Donna's 'Research Reports' column on page 23).

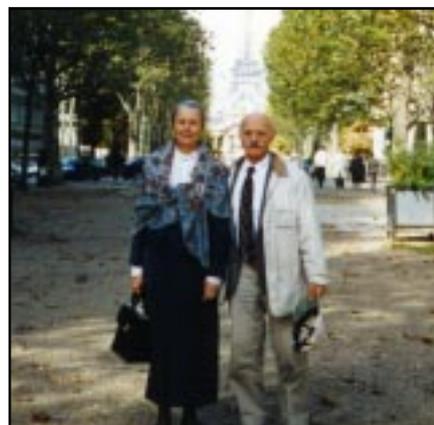


Donna Truran
Research Officer

NCCH is expanding not only in size but in its range of functions – as demonstrated in this new research function, which complements the research function at NCCH Brisbane. We are old enough now to be taking stock. Although we still concentrate on the classification, standards, education and presentation of publications in hard copy and electronically, it is essential that we review where all this activity has lead us, and that we ask questions about the process and outcomes. We hear so much now about evidence based medicine, and more lately about evidence based management. NCCH is seeking evidence that we are on the right track. Our future direction in classification and code creation as well as in clinical coder education depends on our ability to do research that provides that evidence and to develop tools that measure coding and data quality.

Best wishes to all *Coding Matters* readers for 1999!

❖ Rosemary Roberts Director



NCCH Director, A/Prof Rosemary Roberts with Dr Harry Rosenberg, Chief of the Mortality Statistics Branch, US National Center for Health Statistics, at the meeting of the WHO Heads of Collaborating Centres in Paris



Training for WHO SEARO

Further to the WHO SEARO project reported in the last edition of *Coding Matters*, Sue Walker, Jenny Nicol and Joy Smith have recently been involved in presenting a four-week program in Myanmar entitled the 'Inter-Country Training Course on Basic Medical Record Practice and Health Information Management'.



WHO SEARO Inter-Country Training Course on Basic Medical Record Practice and Health Information Management

In an effort by WHO to improve health data collection systems in the region, twenty-six representatives from hospitals in five south-east asian countries (Myanmar, Sri Lanka, Maldives, Nepal and Bhutan) met in Yangon (Rangoon) for training in basic medical record theory and practice. The program was officially opened by His Excellency Major-General Khet Sein, Minister for Health in Myanmar at a ceremony attended by eighty-five people, including the Medical Superintendents of all Yangon hospitals and the WHO Representative in Myanmar, Dr Klaus Wagner.

The program was well-received and will hopefully provide a model on which future training programs may be built and offered locally in those countries involved. As well as being valuable for all concerned (including the presenters!), the program was an enjoyable experience for all participants and hopefully will go some way to achieving another WHO objective – the development of cooperation and collaboration between SEARO countries as they all work towards developing effective health information management systems.

ICD-10 for Mortality Coding

In anticipation of the introduction of ICD-10, Maryann Wood is currently completing a comprehensive

instruction manual for cause of death coding for cause of death coding. The ABS has recently received the ICD-10 version of the automated cause of death software from the United States, allowing ABS to use the software for processing of deaths registered from 1 January 1999. Incorporated in the manual are the underlying cause, multiple cause and perinatal cause of death rules, in addition to the processing procedures for the automated software in the ABS environment. The intention is that the instruction manual will form the basis for the ICD-10 training to take place in the first half of 1999. Training and education of staff will include those involved in the cause of death coding, as well as overview sessions for output and management staff.

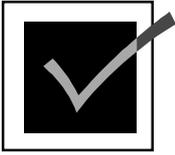
In addition to training and education, the ABS plans to back code in ICD-10 a couple of years previous data using the ACOD system. This will provide several years of data coded in ICD-9-and ICD-10 with which to assess changing trends due to the new classification. A similar process has been undertaken in the past twelve months for the change from manual coding to automated coding.

Australian Clinical Thesaurus

Dr Erich Schulz has been continuing the quest for the creation of the Australian Clinical Thesaurus (ACT). The ACT is presently an experimental electronic resource, aiming to help manage, unify and distribute different health coding systems within Australia. It provides a flexible repository for coding systems and mapping tables implemented within a relational database and viewable on the WWW. The proposal was discussed at a recent workshop organised by the Health Services Outcomes branch of the Commonwealth Department of Health and Aged Care. The workshop included wide representation from health professional groups, developers of coding systems, data analysts and software developers. The Commonwealth is now considering the ACT proposal in light of the workshop recommendations. If you would like more information on the ACT please contact Dr Erich Schulz at NCCH Brisbane.

❖ Sue Walker

Associate Director, NCCH Brisbane



QUALITY CONCERNS

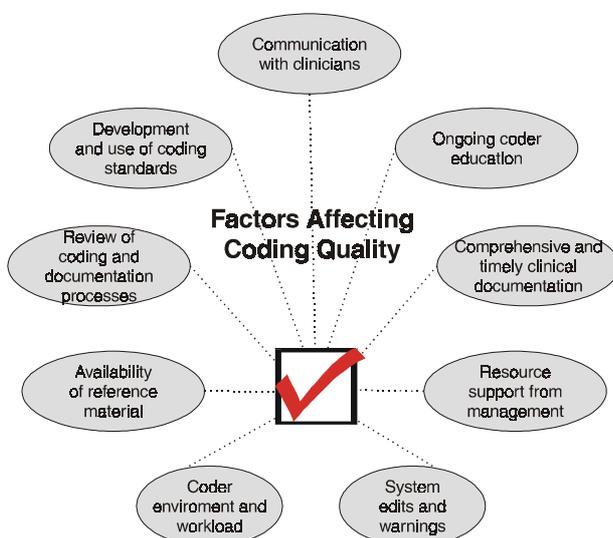
What affects the quality of your coding?

Reproduced below is a model prepared by the Quality Division of NCCCH, displaying the major influences on coding quality. Identifying these influences is only the start. Coders and their supervisors then need to take action. Sometimes a problem can seem too large and too difficult to tackle. However, there is always somewhere to start, some action that is possible, a small aim that is achievable. We offer the following ideas and invite readers to send their own suggestions or, even better, their own successful strategies. We can then publish your contributions in a future edition of *Coding Matters*. Please see contact details on the inside front cover.

Ongoing coder education

Identify your education needs and make time each week for one of the following:

- Undertake regular internal audits using the ACBA method (*Australian Coding Benchmark Audit* available from NCCCH, Sydney) and act on the findings.
- Make maximum educational use of the outcome of any audit.
- Read a medical journal.
- Attend any clinical update sessions such as grand rounds in your hospital or nearby hospitals.
- Make arrangements for one of your hospital's clinicians to speak with coders on a specific topic which is causing coding difficulties.
- Organise a tour of your hospital's specialist clinical areas (e.g. radiology, coronary care unit, operating theatre), and ask lots of questions.



- Look for appropriate educational activities organised by NCCCH, CCSA and HIMAA local branches.
- Watch a television program illustrating clinical advances (e.g. *Quantum*, *RPA*, *Good Medicine*).
- Lobby your local HIMAA branch for a program of clinical updates.
- Consider undertaking distance education programs offered by HIMAA (e.g. Intermediate coding course).
- Use training materials developed by NCCCH (e.g. *Mastering Ten*) or other organisations (e.g. universities).
- Ensure you are on mailing lists for notice of activities (e.g. the nearest university offering a HIM course).
- Read the various newsletters on coding. Subscribe to Code-L if you have email.
- Consider studying for and sitting the Coder Accreditation examination.

Resource support from management

- Review the NCCCH *Australian Standards for Coding Service* (ICD-10-AM, Vol 5) to identify additional resources which would enhance your coding.
- Take maximum advantage from any recommendations or comments made in reports of evaluations of your coding or coding service (e.g. EQuIP, coding audits): such comments are not criticisms but constructive suggestions. Use them when lobbying for resources.
- Find out if there are any deadlines for submitting applications for funds (for education, equipment, etc).
- Prepare supporting documentation in advance so that you are ready to take advantage of any unscheduled opportunity.
- Lose no opportunity to promote the clinical coding process so that management cannot overlook it (e.g. some statistics in the annual report on numbers of research requests handled).
- Review your Job Description with your supervisor. Do your responsibilities include coding quality activities?
- When providing material to researchers, include a form of words that should be included in any publications (e.g. 'Data extracted for 1998-99 by Health Information Service').

System edits and warnings

- Ensure your software supplier installs your local health authority's edits. If your authority does not issue more rigorous edits, use the National Minimum Edits (age and sex).

- When you notice codes which could be edited (or more strongly edited), send your suggestions to the Quality Division (contact details on inside front cover).
- Review your data entry process. Does this provide you with a code descriptor so that you can avoid transcription errors?
- Do you regularly audit data entry to identify transcription errors?

Coder environment and workload

Does your work environment enhance your ability to concentrate?

- Review the department's layout to try to separate the coding function from more noisy and congested areas.
- In a small department, use a freestanding office screen as a buffer.
- Make arrangements to set aside 'coding times' when other staff know not to disturb you.
- Orient coders' desks to avoid distraction.
- If inbuilt lighting is insufficient, purchase a desk lamp.
- Have some simple wooden supports made for the coding books.
- Review texts on ergonomics to ensure coders' desks and chairs are correctly adjusted and PCs are correctly aligned.
- Review your workload with your supervisor. Do you have time for ongoing education, quality activities, liaison with clinicians?
- Nurture new coders, and don't automatically think that they are wrong if they code differently. Use coding discussions as an opportunity to review existing coding practice and habits.

Availability of reference material

- Ensure you obtain and file securely copies of all authoritative material (e.g. from NCCH, your local health authority).
- Ensure copies of *Coding Matters*, your local health authority's coding newsletter and other such publications are retained for reference after circulation among relevant staff.
- Label all departmental reference material as belonging to the department to help retain precious resources.
- If coders keep personal copies of reference material, label with the owner's name.
- If you do not have a budget for all departmental resource material, see if your hospital library could purchase more general items.
- Identify useful internet sites such as NCCH Query Database.
- Identify useful listservers such as Code-L.

- Make sure one of the doctors passes on copies of MIMS on a regular basis.
- Help NCCH Quality Division to compile a list of 'the basics'. Send your suggestions for the 'must haves' of a coder's reference shelf. If NCCH publishes such a list, you could use this to help obtain the funds to purchase what you do not have. Please see contact details on inside front cover.

Review of coding and documentation processes

- If your organisation is involved with EQUiP surveys document all of these activities and your resulting actions to overcome any identified weaknesses.
- Document/chart your current coding and documentation processes then review, seeking efficiency opportunities (e.g. use flow charts, fishbone charts).
- Arrange regular team meetings to involve all staff in this process and seek their ideas.
- Benchmark. Compare your coding practice and audit results with other healthcare facilities of similar size and casemix (ACBA is a useful tool).
- Use your network. Talk to people in other health care facilities and people in other industries who might have solved similar problems.

Comprehensive and timely clinical documentation

- Using the findings of your ACBA audits, point out to clinicians the outcome of inadequate documentation.
- Seek the clinicians' comments on the record stationery or screens currently used.
- If you purchase record stationery 'off the shelf', send your suggestions for enhancements to the producers.
- Develop a procedure to ensure that coding is not performed until all relevant documentation, including test results, is available.

Communication with clinicians

- Participate in appropriate committees, rounds, etc.
- Pass on compliments as well as any criticisms of the documentation.
- Seek ways to make it as easy as possible for clinicians to complete documentation.
- Develop training materials for clinicians.
- Refer clinicians to the NCCH product *Essentials of ICD-10-AM: An information package for clinicians and users of coded data* (<http://www.cchs.usyd.edu.au/ncch/>).
- Arrange to speak with each new group of resident medical officers so that you can explain documentation requirements and arrangements for completion of discharge summaries and operation reports.

- Take opportunities to present clinical staff with information resulting from the coding process (e.g. top 20 diagnoses/procedures/DRGs, clinical research projects, comparison of your organisation's casemix with others, outlier records for checking).
- Establish communication links so that clinicians advise you of new procedures so that you can discuss coding issues

Development and use of coding standards

- Ensure that your coding books are updated regularly with errata.
- Start a folder of coding information to enable you to access coding tips (e.g. as published in *Coding Matters*, articles from your local health authority, items from coding newsletters, answers to queries published in *Coding Matters*, NCCH Query Database).
- Identify where a standard would help to achieve consistency and send suggestions to NCCH.
- If you have any problems with existing standards or coding instructions, send comments to NCCH, your local health authority, etc, as appropriate. Such feedback will help improve future editions.

Send your suggestions on how to achieve coding quality to the NCCH Quality Division. Contact details on the inside front cover.

ACBA

ACBA has received lots of exposure lately! Papers on ACBA were presented at the 10th Casemix Conference in Melbourne, the NCCH Conference in Alice Springs and the HIMAA Conference in Brisbane, all in the last few months. It also generated interest at the Patient Classification Systems/Europe (PCS/E) Conference in the UK from registrants from Canada, Ireland, USA, Sri Lanka and the Nordic countries.

If you have not yet bought a copy of the ACBA Kit, it is available by completing the Order Form in this issue of *Coding Matters*. The cost is only \$25. It is highly recommended that you purchase the kit prior to starting an ACBA Audit.

Minor changes have been made to our updated disk that was available from July 1998. Any purchasers of the kit since December 1998, or those requesting the updated disk as of December 1998 will receive the corrected disk. A letter will be sent to all previous purchasers explaining the changes required

The revised disk (July or December version) also contains a document of notes with further advice to auditors. It is recommended that auditors read these notes before commencing an ACBA audit.

Once again the ACBA hints and tips column, 'On the ACBA Audit Trail', appears in this issue of *Coding Matters*. You'll find it starting on page 8.

Standards for Ethical Coding and Standards for the Coding Service

Questionnaires regarding the use and applicability of these standards were distributed to 300 clinical coders around Australia during November. Thank you to those who responded. A formal report of the responses will be published in the future. In the meantime, the responses have provided a fantastic array of information which is being put to good use in the updating of the two standards.

PICQ

PICQ has also been doing the rounds of conferences with ACBA, and is also generating a lot of interest. The number of indicators is currently around 1,200. The level of development ranges from having all elements (including codes) complete to some still being only titles; however most are near completion, with approximately one third having the codes abstracted.

Work is now focused on finalising all aspects of the indicators to enable testing of the indicators as soon as we have the facility to do so.

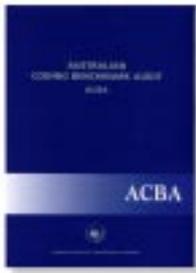
Literature Database

A database of published material is being compiled: to be eligible for inclusion, the material has to meet two criteria: to have a clinical coding element (or a coding derivative, such as casemix) and to have a quality element (which would also include ethics, etc).

The database currently contains details of 122 articles; an additional 80 articles have been identified as relevant but copies have not yet been obtained. Entries will be indexed according to code system, ICD chapter number, grouper system, country, coding keywords, clinical keywords, quality keywords, grouper keywords and general keywords.

If you have any articles that are eligible for inclusion, please send us a photocopy so we can include them in our database, especially if you think they would be hard to obtain. Once the database is in a 'useable' form, we hope to make it available on the NCCH website, with periodic updates.

❖ **Dianne Williamson**
 Manager, NCCH Quality Division
Andrea Groom
Irene Kearsey
Catherine Perry



ON THE ACBA AUDIT TRAIL

From external auditors to typographical errors,
more hints and tips as you traverse the ACBA Audit Trail

What do I have to do to prepare the records for an ACBA audit?

A The audit process requires the auditor to code 'blind', i.e. it is important that the auditor does not see the original codes until after re-coding is completed to avoid any influence on the choice of codes, for example on the selection of principal diagnosis. The form in the clinical record that contains the ICD codes (e.g. the 'Front Sheet' or 'Coding and Casemix Form') is removed from the record and replaced with a copy of the same form, with the original codes omitted. Alternatively, the codes are covered in some way and the auditor supplied with blank coding forms.

As the auditor (Person B), I coded a laceration of the scalp caused by a fall from bed during the patient's hospital stay. The original coder had not coded the condition or cause at all. How do I record this?

A Where it is necessary to have two codes to explain a condition this is counted as two codes and potentially two errors. In your example, this is counted as two category 4a 'Missing code caused by omission error' errors as neither the injury nor the external cause were coded. This would also apply to other 'multiple coding' situations, such as dagger and asterisk codes, and neoplasm and morphology (in states where morphology is collected).

Do we have to use an external auditor?

A No. The only criteria for an auditor is that they should be an experienced clinical coder. They may be an Accredited Clinical Coder or one who is recognised to be competent in coding all specialties relevant to the healthcare facility they are auditing.

The auditor may already be employed by your healthcare facility, or you may wish to 'swap' auditors with another facility or to contract the services of an external auditor. Off-site auditing may also be considered because of the facility's location. This would require much more record preparation, as relevant sections of records would need to be photocopied, de-identified and security procedures put in place for the care and disposal of the audit records.

In the future, NCCH Quality Division will be conducting workshops for auditors, to ensure that the tool is applied in a uniform manner and to provide advice in the reporting functions of ACBA, including formulation of strategies to address issues identified. The Quality Division will also be offering a coding audit and consultancy service.

How should typographical errors be recorded?

A The second version of ACBA (scheduled for late 1999) will provide a category for this type of error. Until then, they must be counted as incorrect codes. If the incorrect code was the principal diagnosis, assign category 2 'Incorrect principal diagnosis code'. Otherwise assign category 3 'Incorrect additional diagnosis or procedure code'.

What should I write in the 'Comments' column on the Scoring Tool Form?

A The comments column is vitally important to enable your healthcare facility to take action on causes of coding problems. It should be used to provide feedback to coders and management and to plan relevant CQI activities. The comments will also enable NCCH to identify and take action to reduce particular errors, eg. target coder education, amend or make new Australian Coding Standards, add includes or excludes notes.

A sample Scoring Tool Form has been included in this issue of *Coding Matters*. The sample helps to highlight the type of information that should be recorded in the comments column.

Two helpful hints are:

1. The comments need to be meaningful without reference to the clinical record. For example, gastroscopy with biopsy coded, but no biopsy was done - cause - OR report not checked.
2. The amount of text required may be reduced by making reference to the reporting category number. For example, '4a. smoker' means the same as 'missing smoker code', as category 4a means 'missing code'.

❖ **Andrea Groom**
Quality Officer, NCCH Quality Division

Hospital name: Quality Hospital

Audit period: March, 1998

The program will automatically fill in all columns/rows between double lines, and complete the Summary sheet (apart from "Hospital name" and Enter name of hospital plus month/year of audit above, also on Summary Data sheet

If printing this form, specify the page range, not "all".

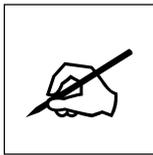
For each category 7, also enter under another appropriate column. The formulas do not double-count category 7s.

The Check column "?" should = zero. It checks the difference in number of codes by Persons A and B balances with "Extra" and "Missing" codes:

Total "Extras" (4a+4b+5b) minus "Missings" (5a+6) minus (Person B minus A). If the check column "?" not = zero, make corrections (perhaps you have fig

MRN	No. codes (Person A)	No. codes (Person B)	1a [C]	1b [S]	2 [C]	3 [C]	4a [C]	4b [S]	5a [S]	5b [S]	6 [C]	7 [S]	Total	?	Comments
106265	6	6				2							2	0	3. dementia coded as senile (not docu. as senile - unaw; errata), gastroscopy with bx but no bx done (OR report r
56444	9	9				1	1				1		3	0	3. drain ov.cyst coded as excision (misread OR report); . summary); 6. hysteroscopy consented for but not done
106345	3	4					1						1	0	4a. smoker (unaware of ACS)
154865	2	2			1								1	0	2. breast milk jaundice coded as unspecified (did not loo
155900	4	8				2	4					3	6	0	3. OA spine coded as 715.89 (missed excludes) , aspira (missed excludes/index entry); 4a. smoker (unaware of / urethral congestion, bl.neck anomaly (could not read but
154903	3	2									1		1	0	6. arthritis (no evidence in record)
154690	2	4					2						2	0	4a. pernicious anaemia (current condition on Rx), smoke
149967	4	5								1			1	0	5b. PHx ca colon
72431	3	3				1							1	0	3. Sacroiliac joint injection coded as epidural (lack of unc
17861	3	4					1						1	0	4a. D&C (did not check OR report)
177712	5	5		1									1	0	1b. unclear docu whether HI with/without LOC
Total C			0		1	6	9				2		18		
Total S				1				0	0	1		3	2		
TOTAL	44	52	1	1	6	9		1		2	3		20		

No. codes in MRNs w/out error	124	124
Total codes	168	176
Total records with error	11	
Total records in audit	40	



EDUCATIONAL MATTERS

After six months of use of ICD-10-AM in NSW, Victoria, NT and ACT, the Education Services Division has commenced planning for the education of the remaining clinical coders within Australia in 1999.

Essentials of ICD-10-AM

The long awaited release of the educational material for clinicians occurred on the 6th November 1998. The package entitled *Essentials of ICD-10-AM: An information package for clinicians and users of coded data* is now available from the NCCH homepage.

The material is presented in a PowerPoint 95 version and it is recommended that the set of introductory slides be viewed prior to commencement of the entire information package. This is extremely important for those individuals with little or no background knowledge of ICD-10-AM. The information covered includes a history of the development process of ICD-10-AM, the structure of the disease and procedure classification and relevant coding conventions. The material is then divided into specialty areas, which can be viewed on screen prior to downloading onto a floppy disk or an individual PC.

The material is to be utilised by clinicians and other health professionals by viewing the material on screen as a self learning text and can also be presented at regular face-to-face meetings by clinical coders and health information managers.

I have already had a few enquiries from people about an alternative to access the material rather than via the internet. At the present time the NCCH website will be the preferred avenue for access to the material however, if the need arises, the NCCH may consider releasing the material on a floppy disk or CD, at a cost.

As I write this column more than 300 people have viewed the material and I would greatly appreciate feedback on the educational package and how you have been utilising its content.

ICD-10-AM Education Workshops

Planning has commenced for the 1999 educational workshops following consultation with the ICD-10-AM Implementation coordinators from Queensland, Tasmania, SA and WA. As most of the clinical coders and health information managers (HIMs) from these states will have had a longer lead time to the introduction

of the classification and will have already been exposed to some training in ICD-10-AM, the workshops are to be modified to take into account this different level of knowledge and skill.

A refresher course for members of the Coding Educators Network (CEN) from these states is to be held during February 1999 and the educational workshops are due to commence in mid April 1999. Registrations forms should be available in early February 1999.

A review of surveys sent out to clinical coders and HIM's in those states who implemented in 1998 has indicated that there is a marked need for some additional education in ICD-10-AM. It is envisaged that these refresher workshops will be held during March 1999, subject to funding availability. Further information will be supplied direct to all registrants from the 1998 workshops.

6th Annual NCCH Conference 1999

The 6th annual NCCH conference is to be held at the Hotel Grand Chancellor, Hobart, Tasmania from the 22nd to 24th September 1999. The conference will again be in conjunction with the Clinical Coders' Society of Australia (CCSA) which will be focusing its energies on organising a pre-conference educational workshop.

More information on the conference will be available in the next edition of *Coding Matters* when a call for papers will be made available.

And a big thank you to Julie Best from Mt Alexander Hospital in Castlemaine, Victoria who sent through her thoughts on the 1998 conference:

"Thank you so much for all the hard work and effort which made the Alice Springs conference such a success. I am one very excited conference attendee who thoroughly enjoyed the range of speakers and events throughout the 3 days."

Feedback (positive and negative) is always welcome to ensure that the Education Services Division is meeting the needs of the clinical coders and health information managers across Australia.

❖ **Karen Peasley**
Education Manager

Profiles of Coding Educators Network (CEN) members

Filippa Pretty (New South Wales)

In 1995 I graduated from the University of Sydney with my B. App. Sci (HIM) firmly in one hand and little did I know where I'd end up.

I started my working career as a clinical coder at Prince of Wales/POW Children's/Prince Henry Hospital group (Sydney). I was there for about 18 months, which gave me a good basis in almost every coding situation (with the exception of obstetrics).



In mid 1996 I left POW and went to Prime Care Pty Ltd where I have been ever since. In my position as 'roving' HIM I have worked as a coder, HIM, coding auditor and educator. I have worked in many different hospitals throughout Australia and New Zealand, including Hobart, Port Hedland, Charters Towers, and various Sydney hospitals; Wellington, Hutt Valley, Dunedin and Auckland in NZ (I am actually writing this in Nowra, NSW as I am currently on assignment!). I have found my work to be extremely interesting as I find it fascinating to find out how different medical record departments work and new ideas for time old problems.

I joined Coding Educators Network (CEN) in 1997 in the run up to ICD-10-AM. This has definitely cured my fear of public speaking!! I also found the work we do for the CEN lectures a great way for me to learn ICD-10-AM in preparation for 1 July, 1998.

So, that's it. Where to now? Only time will tell.

Sharon Wiseman (Queensland)

I started out in the health industry as a nurse. Most of my nursing career was spent in small western Queensland hospitals and it was here that I realised there was a genuine need for more clinical coders in Queensland. In 1995 I started work as a full time Clinical Coder at Toowoomba Base Hospital. My position involves a large diversity of responsibility, including travelling to smaller regional hospitals for relief coding and education, working with clinical indicators, data



extraction and producing reports for clinicians and management.

I joined CEN in May 1997. At that stage, with the definite move towards introducing ICD-10-AM into Australia, I felt that involvement with education surrounding ICD-10-AM would be very rewarding, and not to mention a great career move!

Being a member of the CEN, I have had the opportunity to participate in Train the Trainer, the Dual Coding Study and the ICD-10-AM Refresher Course in Sydney.

I am also a member of the ICD-10-AM Implementation Education Working Party in Queensland and we are currently working on an education strategy for the introduction of ICD-10-AM on 1 July, 1999.

In the future I am hoping to return to University and study for my degree and to further my position in Health Information Services. I am looking forward to the introduction of ICD-10-AM into Queensland and the challenge of working with a more precise and up-to-date coding system.

RENAL MEDICINE CLINICAL UPDATE

This is a report by Janine Cassidy on the Renal Medicine Clinical Update presented at the 5th Annual NCCH Conference. Dr Meshach Kirubakaran (Director of Medicine and Nephrologist at Alice Springs Hospital) first described the major functions of the kidney, and then gave a rural/remote hospital perspective on how patients present with renal disease and how they are investigated. This information was used to clarify how renal disease is classified in ICD-10-AM.

MAJOR FUNCTIONS OF THE KIDNEY

1. Excretory function

This involves the filtration of all soluble substances from the blood through the glomerulus of the kidney, followed by the selective reabsorption of what is necessary for the body, through the tubules.

FILTRATION by GLOMERULUS followed by
REABSORPTION by TUBULES

2. Hormonal functions

- a) ERYTHROPOIETIN - for red blood cell production
- b) VITAMIN D ACTIVATION - for bone metabolism
- c) RENIN - for control of blood pressure and water balance
- d) PROSTAGLANDINS - for maintenance of endothelial integrity
- e) KININS - part of the kinin-kallikrein system
- f) MEDULLOLIPIN

CLINICAL PRESENTATION OF RENAL DISEASE

A patient may present to a clinician with any of the following, which indicate the possibility of renal disease:

1. Asymptomatic urinary and/or blood abnormalities

The patient may have one or a combination of the following:

- urine - haematuria/proteinuria/crystalluria/bacteruria
- raised blood urea, creatinine
- sodium and potassium electrolyte abnormalities
- acid/base derangements
- calcium/phosphate abnormalities
- anaemia

2. Symptoms and signs of renal disease

The patient may have one or a combination of the following:

- a) oedema/puffiness of face due to:
 - hypoalbuminaemia
 - fluid retention
- b) haematuria:
 - microscopic OR
 - macroscopic/gross
- c) abnormalities of urine output:
 - polyuria, nocturia
 - reduced urine output, oliguria
- d) micturition difficulties:

- dysuria
- frequency
- urgency, precipitancy
- hesitancy

e) pain:

- loin pain
- renal colic
- suprapubic pain
- low back pain

f) hypertension

g) anaemia

3. Patient has a systemic disease which is known to be associated with renal involvement

The best examples of such a systemic disease are diabetes mellitus and systemic lupus erythematosus.

INVESTIGATION OF RENAL DISEASE

When a patient is suspected of having renal disease the following investigations may be done to make a definitive diagnosis:

1. Urinalysis

- proteinuria
 - 24 hour urine protein
 - albumin/creatinine ratio (ACR)
- haematuria
- ↑ white blood cells in urine
- casts in urine (RBC casts)
- bacteria in urine
- crystals in urine
- urine culture for pathogens

2. Blood chemistry

- S. creatinine
 - Increased in renal failure (acute & chronic)
- B. urea
- S. sodium, potassium, bicarbonate and chloride
- calcium, phosphate and magnesium
- S. albumin

3. Radiology (imaging)

- ultrasound of kidneys
- intravenous pyelogram

4. Renal biopsy

- light microscopy
- immunofluorescence
- electron microscopy

CLASSIFICATION IN ICD-10-AM

Doctor Kirubakaran then looked at parts of the renal section of ICD-10-AM as follows:

- 1) Glomerular diseases
- 2) Chronic renal failure mechanism and treatment

1) Glomerular diseases

The classification for these diseases is structured so that the first 3 characters describe the condition that is indicated by certain signs/symptoms and investigations, and the 4th character describes what is found on renal biopsy.

3 Character Condition**4th Character Lesion (on biopsy)****N00.~ Acute nephritic syndrome**

- sudden onset
- oedema, puffiness of face
- oliguria
- haematuria
- hypertension
- renal failure
- often preceded by strep. infection

- .0 Minor glomerular abnormality
- .1 Focal and segmental glomerular lesions
- .2 Diffuse membranous glomerulonephritis
- .3 Diffuse mesangial proliferative glomerulonephritis
- .4 Diffuse endocapillary proliferative glomerulonephritis
- .5 Diffuse mesangiocapillary glomerulonephritis
- .6 Dense deposit disease
- .7 Diffuse crescentic glomerulonephritis
- .8 Other

N04.~ Nephrotic syndrome

- insidious onset
- oedema, puffiness of face
- proteinuria +++
- haematuria +
- hypertension +
- renal failure +
- hyperlipidaemia

N02.~ Recurrent and persistent haematuria

- asymptomatic
- recurrent/persistent

N06.~ Isolated proteinuria with specified morphological lesion

- asymptomatic
- persistent
- isolated with lesion on biopsy

EXAMPLE

A patient presents to hospital with symptoms of oedema, oliguria, haematuria, and hypertension of gradual onset. The clinician diagnoses nephrotic syndrome, and orders a closed renal biopsy. The biopsy result states 'diffuse membranous glomerulonephritis'.

Principal diagnosis: N04.2 *Nephrotic syndrome, diffuse membranous glomerulonephritis*

Procedure code: 36561-00 [1046] *Closed biopsy of kidney*

2) Chronic renal failure

Renal failure is the loss of normal function in the kidneys. People can live normally with only 30% of the nephrons in the kidney functioning. However, as renal disease progresses, and more kidney function is lost, the patient progresses into chronic renal failure. The following table shows the progressive diagnoses as kidney function is lost:

CODE	DIAGNOSIS	% KIDNEY FUNCTION
no need to code	Loss of renal reserve	30-99%
N18.91 <i>Chronic renal impairment</i>	Chronic renal insufficiency (CRI)	15-30%
N18.90 <i>Unspecified chronic renal failure</i>	Chronic renal failure (uraemia) (CRF)	5-15%
N18.0 <i>End-stage renal disease</i>	End stage renal disease (ESRF)	<5%

EXAMPLE

A patient presents with end-stage renal failure due to nephrotic syndrome with diffuse membranous glomerulonephritis.

Principal diagnosis: N18.0 *End-stage renal disease*

Additional diagnosis: N04.2 *Nephrotic syndrome, diffuse membranous glomerulonephritis*

The above example shows the renal failure code being sequenced as the principal diagnosis. There are however situations where renal failure may not be the principal diagnosis.

EXAMPLE

A patient is admitted with a diagnosis of 'CRF due to NIDDM'.

Principal diagnosis: E11.20† *Non-insulin-dependent diabetes mellitus, with renal complications, not stated as uncontrolled* OR

N18.90 *Unspecified chronic renal failure*

Additional diagnosis: N08.3* *Glomerular disorders in diabetes mellitus*

Selection of the principal diagnosis code should be made in reference to the documentation and ACS 0001 PRINCIPAL DIAGNOSIS

Treatment of CRF/ESRF may be conservative or by renal replacement therapy i.e. dialysis and renal transplantation. Types of dialysis include:

- Haemodialysis - Intermittent
- Continuous
- Peritoneal dialysis - Continuous ambulatory peritoneal dialysis (CAPD)
- Intermittent

An excellent explanation of dialysis procedures can be found on pages 19 and 20 of *Coding Matters* (October 1998, Vol 5, No 2).

EXAMPLE

A patient with end-stage renal failure due to nephrotic syndrome with diffuse membranous glomerulonephritis is admitted to have an A-V fistula created to commence haemodialysis in a few weeks time.

Principal diagnosis: Z49.0 *Preparatory care for dialysis*

Additional diagnosis: N18.0 *End-stage renal disease*

Additional diagnosis: N04.2 *Nephrotic syndrome, diffuse membranous glomerulonephritis*

Procedure code: 34509-01 [765] *Arteriovenous anastomosis of upper limb*

There have been many debates about what should be coded for a patient attending hospital for a haemodialysis session (there was a discussion on the Code-L listserver in November/December 1997 and another in October/November this year). At the very minimum, for a haemodialysis session admission, codes Z49.1 *Extracorporeal dialysis* (as principal diagnosis) and 13100-00 [1059] *Haemodialysis* (procedure code) should be used. A code from N18.~ *Chronic renal failure* may be assigned as an additional diagnosis code. The cause of the end-stage renal disease may also be coded as an additional diagnosis.

The final coding example presented at the NCCH Conference Clinical Update on Renal Medicine, dealt with a patient's admission for 'missed dialysis'.

EXAMPLE

A patient is admitted to hospital with fluid overload due to missed dialysis (haemodialysis performed in hospital):

Principal diagnosis: E87.7 *Fluid overload*

Additional diagnosis: N18.0 *End-stage renal disease*

Additional diagnosis: N04.2 *Nephrotic syndrome, diffuse membranous glomerulonephritis*

‘To code, or not to code – is that the question?’

HYPOTHETICAL

A discussion using hypothetical scenarios based around coding issues, especially ethics as it relates to clinical coding, was facilitated by Dianne Williamson at the 5th Annual NCCH/CCSA Conference in Alice Springs. Questions were directed at a panel, each of whom was playing the role of the various stakeholders associated with coding quality and ethics. Stakeholders included the clinical coder, coding services manager, coding educator, health authority, Chief Executive Officer, Clinical Coders’ Society of Australia, Health Information Managers Association of Australia and NCCH.

SCENARIO 1 – Funding for education

The hypothetical scenarios started with the clinical coder asking the hospital for leave and expenses to attend a coding update workshop – will the coder be funded or have to pay for themselves? If the coder does not attend, how do they keep up to date? Whose responsibility is it to keep the coder up to date?

Is there trouble ahead for the coder who arrives home from a hard days coding and settles down to watch RPA? The clinician is explaining to the patient exactly what this new procedure is and how it’s going to be performed. The coder suddenly realises they have been coding this procedure incorrectly. What action should they take? Discussion continued around whether the records should be recoded, if the facility had funded the coder for the coding update workshops would the errors have been made, will there be financial implications, would anyone know if the record has been coded wrongly, etc?

SCENARIO 2 – Coder accreditation

Should coders be accredited, should an accredited coder be paid more, does passing the exam ensure that the coding is going to be of a high standard? This led into a discussion on participation in ongoing education in order to maintain and improve coder competence.

SCENARIO 3 – Deadlines and coding backlogs

How do you deal with deadlines and coding backlogs? The changeover to ICD-10-AM has slowed coders down and one coder is off sick and another is on maternity leave. Is harder work the only answer? Luckily a proposal to management has met with increased funding, and a coder has been employed to work from home – she’s got a 3 month old baby, and 3 and 5 year old children. Do we need policies for hospitals to follow in regards to coding from home? Is this a hospital or health authority policy? The clinician wants the records of patients to stay on site so they’re accessible when needed. This was met with a quick response from the CEO, ‘What about the ones in your car boot?’ This obviously struck a chord with the audience as cheering and much laughter followed! What about the confidentiality issues of coding from home and transporting the records? What happens when a friend comes over and the records are spread all over the kitchen table? Is the coder too isolated at home?

Further on the confidentiality issue was raised with discussion on coding records of relatives and other people known to the coder. Does your confidentiality policy cover these coding issues?

SCENARIO 4 – ‘Maximising’ versus ‘optimising’ the coding in casemix funded hospitals

The panel discussed what is ethical? Can a coder be directed to code condition ‘x’ as though the patient had complication ‘y’? What sorts of pressures are placed on coders to code against convention, standards, etc? Would anyone find out if you didn’t code according to the standards?

SCENARIO 5 – Clinician documentation

The panel discussed the difficulties with ‘clarify diagnoses with clinicians’. Is phone advice sufficient? What documentation problems do we have? Are coders here to do the clinicians’ job of documenting diagnoses and procedures in the medical record? Why do clinicians document in the medical record anyway – is it for the coders’ benefit?

SCENARIO 6 – Staff selection

And what a nice surprise to finish off with. The coder has won tattsлото and resigns! But the issues go on. Are there issues in terms of selecting new staff, how are you going to assess their coding ability, will you require membership of the CCSA, or accreditation status?

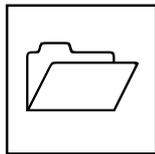
The discussion didn’t solve any problems, but highlighted many ethical issues associated with coding, and the views and concerns of a variety of stakeholders. There is obviously a need for future discussion regarding education for clinicians, for coders, for the development of guidelines for confidentiality, and coder practice.

Dianne concluded the session by acknowledging how far we’ve come in the last few years. Not long ago, we didn’t have a professional association for clinical coders, we didn’t have a national organisation that was involved in the development of standards and we now need to recognise the value of CCSA and NCCH. We have coder and clinician involvement in the development of classification systems adapted for Australian use. We have a coder accreditation process, education programs and more opportunities for clinical coders, such as an annual national conference. We have Code-L and a national coding newsletter so that coders and stakeholders can keep up to date and communicate with each other, in addition to state coding committees.

Thank you to Barbara Arundell, Jennifer Mitchell, Suzanne Stevens, Pauline Strauch and Shannon Watts who made up the panel.



The full transcript of this session is available upon request.



Additional diagnoses – ACS 0002

The Coding Services Division has drafted a revision of this standard, the first draft of which has been approved by the Coding Standards Advisory Committee. The revision simplifies the standard and emphasises the importance of coding only those conditions which reflect **the morbidity** of the patient. The final Additional Diagnoses standard will be included in the April 1999 edition of *Coding Matters* for implementation from 1 July 1999.

Complications of surgical and medical care – ACS 1904

A working party of coding ‘brains’ gathered at the NCCH on 1 December 1998 to further discuss coding of complications of surgical and medical care. Coding services provided a draft revision of the standard expanding on the interim guidelines published in *Coding Matters* (July 1998, Vol 5, No 1). This revised standard will be published in the April 1999 edition of *Coding Matters* for implementation from 1 July 1999.

Development of ICD-10-AM second edition

Development of the second edition of ICD-10-AM (effective 1 July 2000) is underway in earnest with a completion date of June 1999. During the next few months coding services staff will be consulting with the CCCGs on issues such as:

- Continuous ventilatory support
- Laparoscopic gynaecological procedures
- Allied health procedure review
- Nerve blocks
- Anaesthesia
- Chemotherapy/cytotoxic and related procedures
- Injection/infusion procedures
- Cleft palate/lip diagnoses and procedures
- Chronic renal failure in diabetes
- Drug and alcohol coding
- Excision of skin lesion indexing
- Drug resistance coding

3M Encoder Queries

Queries **unique** to the 3M Encoder should be sent directly to 3M, not to the NCCH.

Queries which relate to ICD-10-AM **and** the 3M Encoder should be forwarded to the NCCH with a reference to the 3M Encoder in the body of the query. These measures will assist 3M and NCCH to streamline the processing of your queries.

Mappings for AN-DRG v3 and AR-DRG v4

The implementation of ICD-10-AM in NSW, Victoria, Northern Territory and the ACT has generated some queries about why the mapping tables for v4.0 published by the NCCH in May 1998 do not always result in an appropriate DRG in AN-DRG v3.0 or v3.1. This explanation of the mapping process may help clinical coders to understand why this occurs and how it is remedied:

Forward and backward mapping

The NCCH created the mapping tables by choosing the best match from ICD-10-AM for each code in ICD-9-CM and similarly choosing the best match from ICD-9-CM for each code in ICD-10-AM. These are called the forward and backward mapping tables, respectively. Once the best match code was selected, other secondary codes were included where these were required to ‘equal’ the meaning of the code being mapped.

Forward mapping table example 1:

ICD-9-CM	Best match	Secondary matches
003.21 <i>Salmonella meningitis</i>	A02.2+	G01*

In this example, *Salmonella meningitis* in ICD-9-CM is represented in ICD-10-AM by the codes A02.2+ *Localised salmonella infections* and G01* *Meningitis in bacterial disease classified elsewhere*.

Forward mapping table example 2:

ICD-9-CM	Best match	Secondary matches
135 <i>Sarcoidosis</i>	D86.9	D86.0, D86.1, D86.2, D86.3, D86.8

In this example, there are many codes in ICD-10-AM which ‘equal’ the one code for *Sarcoidosis* in ICD-9-CM. The codes D86.0–D86.8 describe the different sites of *Sarcoidosis*, such as lung and lymph nodes. In these one-to-many maps the unspecified code (e.g. D86.9) is always selected as the best match because currently we have no evidence indicating which of the ICD-10-AM codes would better represent the use of the ICD-9-CM code. That is, we don’t know the answer to the question, ‘Which site was 135 used to represent?’. The ability to make this distinction is known as the

concordance of the classifications and may be the subject of a large scale study in the future.

Backward mapping table example:

ICD-10-AM	Best match	Secondary matches
H61.3 <i>Acquired stenosis of external ear canal</i>	380.50	380.51, 380.52, 380.53

In this example, the unspecified map, 380.50 *Acquired stenosis of external ear canal, unspecified as to cause* is the best match, followed by the secondary matches which are not included in ICD-10-AM.

Historical and logical mapping

The mappings detailed above are called historical mapping because the maps are based on coding practice – the DRG effect is not considered during the mapping process.

While the NCCH was undertaking these mappings in 1996, the then Department of Health and Family Services' (DHFS) Classification and Payments Branch was working with the Australian Casemix Clinical Committee (ACCC) in developing AR-DRG v4. The decisions about AR-DRG v4 were based on ICD-9-CM coding. Once the mappings were completed by the NCCH, the effect of the historical maps was tested by the DHFS against the decisions made by the ACCC for AR-DRG v4. The DHFS tested that all codes in the mapping table were valid and that, where many ICD-9-CM codes mapped to a single ICD-10-AM code, these ICD-9-CM codes belonged to the same DRG in AR-DRG v4. Where the AR-DRG effect was not consistent using the historical code 'best match' map, the NCCH was asked to review the map creating a logical map in some instances. A logical map was a code different from the historical mapping code, used to achieve consistent DRGs in AR-DRG v4.

An example of a logical map that results in the correct DRG in both the AR-DRG v4 and AN-DRG v3 classifications is:

ICD-10-AM	Logic map	Best match	Secondary matches
Z38.4 <i>Twin born outside hospital</i>	V31.1	V31.2	V32.2, V33.2

V31.2 *Twin, mate liveborn, born outside hospital and not hospitalised* groups to DRG 956 and 961Z *Unacceptable principal diagnosis* in both AN-DRG v3.1 and AR-DRG v4.0 respectively but V31.1 *Twin, mate liveborn, born before admission to hospital* and Z38.4 *Twin born outside hospital* are acceptable principal diagnosis for neonates.

The *born in hospital, born before admission to hospital* and *born outside hospital and not hospitalised* distinctions in ICD-9-CM have been replaced by *born in hospital, born outside hospital* and *unspecified as to place of birth* in ICD-10-AM.

An example of a logical map which results in the correct DRG in AR-DRG v4 but an incorrect DRG in AN-DRG v3 is:

ICD-10-AM	Best match	Secondary matches
I22.9 <i>Subsequent myocardial infarction of unspecified site</i>	410.90	410.91, 410.92

In AR-DRG v4 this map results in the appropriate classification to adjacent AR-DRG F41 *Circulatory disorder + AMI* because all myocardial infarction codes (fifth digits for unspecified episode of care, initial episode of care and subsequent episode of care) are included in this DRG.

In AN-DRG v3 this map results in the inappropriate classification to adjacent AN-DRGs 255-256 *Coronary atherosclerosis* because ICD-9-CM codes 410.90 (*AMI, unspecified episode of care*) and 410.92 (*AMI, subsequent episode of care*) are classified here rather than AN-DRG 245 *Circulatory disorders with AMI*.

This problem has been rectified in a change to the map for AN-DRG v3 as follows:

ICD-10-AM	Best match
I22.9 <i>Subsequent myocardial infarction of unspecified site</i>	410.91

'Fixes' such as this one have been developed by the Victorian Department of Human Services and the Commonwealth Department of Health and Aged Care (Health) and are available on the Health website for those wishing to group ICD-10-AM codes in AN-DRG v3. The mapping tables created by the NCCH in May 1998 are available on the NCCH website.

Note:

- The mapping tables on the Health website provide one-to-one mappings for a simplistic method of conversion between ICD-10-AM and ICD-9-CM. Also, in October 1998 the Health website provided more complex mapping tables and software which are recommended for use when mapping ICD-10-AM to ICD-9-CM for grouping in AN-DRG v3. Alternatively, the NCCH mappings provide the principal map and secondary maps as detailed above but are unchanged from when they were originally published in May 1998.



- AR-DRG v4.0 uses ICD-9-CM codes and is based on the earlier Australian DRG classifications. The modifications include clinical recommendations accepted by the Commonwealth and changes necessary to overcome known differences between the ICD-9-CM and ICD-10-AM disease classifications.
- AR-DRG v4.1 uses ICD-10-AM codes and is based on AR-DRG v4.0 classification. For the AR-DRG v4.1 classification the ICD-9-CM codes in the tables in AR-DRG v4.0 were replaced with ICD-10-AM codes using the May 1998 one-to-one mapping tables. The logic and tables in AR-DRG v4.1 were reviewed to accommodate the differences in the ICD-9-CM and ICD-10-AM coding structures and modified accordingly to maintain the integrity of the AR-DRG v4 classification.

Coding tips

This regular section is intended to provide ongoing feedback to coders on commonly asked questions and aims to address those areas of coding which require immediate attention by coders. Any major changes in practice (such as change of principal diagnosis sequencing for certain conditions) which may affect the integrity of state data collections will be flagged and should only be introduced from the July following publication. If you find that any tips published in this section significantly change your current practice, you should seek advice from your state/territory health authority regarding a suitable date for implementation.

Removal of external fixation devices

External fixation devices may be pins, wires, screws or other appliances to immobilise bones. These devices are termed 'invasive' as they are inserted into the bone or under the skin. 'Non-invasive' external fixation devices include bandaging, braces, casts, calipers and splints. There is no incision through the skin and/or into the bone.

Removal of external fixation devices are coded to block [1554] *Other application, insertion or removal procedures on other musculoskeletal sites*. If the procedure involves removal of a device that has been inserted into the bone or under the skin, then assign code 47927-00 [1554] *Removal of pin, screw or wire, not elsewhere classified* or 47930-00 [1554] *Removal of plate, rod or nail*, as appropriate. Note that if a pin, screw or wire is removed with a plate, rod or nail, assign only 47930-00 [1554]. Refer to exclusion note for codes relating to maxilla, mandible or zygoma.

It is not necessary to code the removal of non-invasive external fixation devices, unless performed under general anaesthesia. See ACS 0031 GENERAL ANAESTHESIA

Please note: The list of internal and external fixation devices on p181 of Volume 3, ICD-10-AM, is not exhaustive. There may also be instances where devices listed as 'internal' such as wires and screws, are used as invasive external fixators.

Trial of void

Some patients are discharged with a catheter in situ, generally postoperatively following a bladder or prostate procedure. Patients are then re-admitted for trial of void, to see if they can void without a catheter. The catheter is removed and the patient tries to void. If the trial of void is unsuccessful, the patient is re-catheterised, and a further trial will take place at a later date. Code trial of void as follows:

Admission for trial of void-postop-successful

Principal diagnosis: Z46.6 *Fitting and adjustment of urinary device*

Additional diagnosis: Z48.8 *Other specified surgical follow-up care*

*Procedure: 36800-03 [1089] *Removal of indwelling urinary catheter*

Admission for trial of void-postop-unsuccessful

Principal diagnosis: Z46.6 *Fitting and adjustment of urinary device*

Additional diagnosis: N99.8 *Other postprocedural disorders of genitourinary system*

R33 *Retention of urine*

Y83.~ *Surgical operation and other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure*

*Procedure: 36800-01 [1089] *Replacement of indwelling urinary catheter*

Admission for trial of void-non postop-successful

Principal diagnosis: Z46.6 *Fitting and adjustment of urinary device*

*Procedure: 36800-03 [1089] *Removal of indwelling urinary catheter*

Admission for trial of void-non postop-unsuccessful

Principal diagnosis: Z46.6 *Fitting and adjustment of urinary device*

Additional diagnosis: R33 *Retention of urine*

*Procedure: 36800-01 [1089] *Replacement of indwelling urinary catheter*

*These procedures would not normally be coded (see 'Guidelines for procedures not to code', *Coding Matters* (July 1998, Vol 5, No 1)) but they are relevant in these circumstances and are therefore included.

Note that following a number of unsuccessful admissions for trial of void, a patient may then be referred on for bladder retraining in which case ACS 1433 BLADDER RETRAINING applies.

Helicobacter pylori

Helicobacter pylori affects more than 50% of the world's population. About 30% of Australians are infected by *H. pylori* but most have no symptoms. *H. pylori* infection is associated with active chronic gastritis (now reclassified as *H. pylori*-associated chronic gastritis) and occurs in more than 90% of duodenal ulcers, 95% of MALT lymphoma and 80% of gastric ulcers. *H. pylori* should be coded when it is found in the presence of the above conditions or is associated with another condition.

Example

Patient admitted for gastroscopy following one month of dyspepsia. No abnormality detected on gastroscopy, *Helicobacter pylori* detected on CLO test.

Codes:

K30 *Dyspepsia*
30473-01[1008] *Panendoscopy with biopsy*

B96.81 *Helicobacter pylori* is not assigned in this case because there is no documented association between the *H. pylori* infection and the dyspepsia.

Example

Patient admitted for panendoscopy. A biopsy was taken of the duodenal cap. Findings: chronic duodenal ulcer. Pathology result: positive CLO test.

Codes:

K26.7 *Duodenal ulcer, chronic without haemorrhage or perforation*
B96.81 *Helicobacter pylori* [*H. pylori*]
30473-01[1008] *Panendoscopy with biopsy*

B96.81 *Helicobacter pylori* is assigned in this case because it was found in the presence of a duodenal ulcer to which it is generally associated.

Admission for in vitro fertilisation (IVF)

In the last edition of *Coding Matters* it was advised that 'admission for IVF' should be assigned Z31.2 *In vitro fertilization* as the principal diagnosis. We have received queries about this from coders because Z31.2 (with accompanying IVF procedure codes) does not group correctly according to AN-DRG v3.1. The decision to assign Z31.2 was made because:

1. After consultation with coders, the Acute and Coordinated Care Branch, Department of Health and

Aged Care and the Coding Standards Advisory Committee it was agreed that this is the best **national** coding solution (and consistent with ICD-9-CM long term coding practice prior to July 1997 which was V26.8 *Other specified procreative management*).

2. Z31.2 groups correctly in AR-DRG v4. Because more than one grouper version is being used nationally, the NCCCH develops standards which are compatible with the latest DRG grouper, namely AR-DRG v4.

If you are currently coding 628.9 *Female infertility of unspecified origin* (N97.9 *Female infertility, unspecified* in ICD-10-AM) as the principal diagnosis **and** your data is grouped using AN-DRG v3.1, continue assigning 628.9/N97.9 until further notice or until your morbidity data is grouped with AR-DRG v4.1. This will maintain consistency in your 1998/99 financial year morbidity data.

Duration of pregnancy

The duration of pregnancy codes O09.~ *Duration of pregnancy* and ACS 1518 DURATION OF PREGNANCY were developed by the Obstetrics & Gynaecology CCCG specifically to identify, through the codes, the duration of pregnancy for a **specific** group of high risk pregnancies (these are stated in the standard). By defining the population, the data will be used to make policy decisions and possibly modifications to the AR-DRG groupings. Therefore, it is important that coders assign the duration of pregnancy codes **only** in the cases defined in the standard so that meaningful information can be obtained from the national morbidity data.

Note that O09.~ is only assigned when the relevant condition occurs up to 36 completed weeks. For example, if premature rupture of membranes occurs at 39 weeks, O09.~ is **not** assigned.

Hypoglycaemia in diabetes mellitus

Hypoglycaemia in diabetes typically occurs as a result of treatment, more commonly, insulin. It can also occur as a result of the patient not eating properly. Hypoglycaemia should be assigned as an additional diagnosis code to the diabetes code (E1~.90).

If hypoglycaemia is due to insulin (e.g. too much insulin, but not incorrectly prescribed or improperly administered) assign E16.0 *Drug-induced hypoglycaemia without coma* and Y42.3 *Insulin and oral hypoglycaemic [antidiabetic] drugs, causing adverse effects in therapeutic use*.

If the hypoglycaemia is **not** due to insulin, e.g. due to the patient skipping meals, assign E16.2 *Hypoglycaemia, unspecified*.

Coding of hypoglycaemia due to incorrectly prescribed or improperly administered insulin is covered on p75 of ICD-10-AM, Volume 5. Note that hypoglycaemia should not be interpreted as ‘uncontrolled’ diabetes without clinician documentation to that effect.

Procedure code for spontaneous vaginal delivery

In *Coding Matters* (October 1998, Vol 5, No 2, p 23, question 22), coders were advised to assign code 90467-00 [1336] *Spontaneous vertex delivery* ‘if applicable’ when the principal diagnosis was other than O80 *Single spontaneous delivery*. The Coding Standards Advisory Committee has reviewed this advice because of the potential confusion for creating a significant change in practice in some states where this procedure has never been coded routinely. Therefore it is recommended that 90467-00 [1336] *Spontaneous vertex delivery*, not be coded because:

1. The delivery can be assumed to be normal when there is an absence of procedure codes for interventions such as caesarean, forceps delivery, etc.
2. Spontaneous vaginal delivery is very common, and assignment of this code in all cases would considerably add to the coding workload without substantial benefit, particularly when the absence of the code provides the same information as its inclusion.

The NCCH will consider putting the *Spontaneous vertex delivery* on the list of ‘procedures not to code’ so that coders can code this if it is deemed necessary in their facility (see note at the beginning of ‘Guidelines for procedures not to code’, *Coding Matters* (July 1998, Vol 5, No 1)).

Continuous ventilatory support (CVS) via ETT

The exclusion notes for codes in block [568] *Airway management* have been amended in Errata 4 (enclosed in this edition of *Coding Matters*) to allow intubation with CVS to be coded if the patient is <16 years of age.

Any artificial respiratory support provided via ETT (e.g. IPPV, IPPB, CPAP, BiPAP) is included in block [569] *Continuous ventilatory support*. The inclusion terms in block [569] will be amended in the future.

Examples of when endotracheal intubation (ETT) should be coded are:

1. Neonate on 26 hours of CVS via ETT in a specialised respiratory unit
Codes:
 13882-01[569] *Management of continous ventilatory support, > 24 and < 96 hours*
 13857-00[569] *Continuous ventilatory support, initiation outside of intensive care unit*
 90179-00[568] *Endotracheal intubation, single lumen*

2. 12 year old on 12 hours of CVS via ETT in intensive care
Codes:
 90179-00[568] *Endotracheal intubation, single lumen*

Example of when endotracheal intubation (ETT) should NOT be coded:

- 60 year old patient on 30 hours of CVS via ETT in intensive care
Codes:
 13882-01[569] *Management of continous ventilatory support, > 24 and < 96 hours*
 13879-00[569] *Continuous ventilatory support, initiation in intensive care unit*

Age	CVS <25 hrs via ETT	CVS >24 hrs via ETT
<16 yrs	code ETT only don't code period of CVS (i.e. one code)	code period of CVS place of initiation ETT (i.e. 3 codes)
>15 yrs	don't code ETT or CVS (i.e. no codes)	code period of CVS place of initiation (i.e. 2 codes)

Mask or nasal artificial respiration

Nasal or mask artificial respiration (e.g. nasal CPAP) is currently excluded from block [569] *Continuous ventilatory support* however this classification is under review for the second edition of ICD-10-AM.

Example of how mask CPAP is coded:

- Child with sleep apnoea on 20 hours of nasal CPAP in a specialised respiratory unit.
Codes:
 92038-00 [1849] *Continuous positive airway pressure [CPAP]*

❖ **Kerry Innes**
 Associate Director (Sydney)

Questions and Answers from the Coding Query Database

Q¹ *Do we have some guidelines on how to code meconium stained liquor? Should it be coded at all? Or only when fetal distress is documented as being due to this? Note that the includes for P20 includes meconium in liquor.*

A Meconium staining at birth is not always indicative of fetal distress. 'Meconium stained liquor' in the absence of documented fetal distress should not be coded. The NCCH will review the includes note at P20 *Intrauterine hypoxia*.

Q² *The chest x-ray did not confirm bronchopneumonia. The clinical diagnosis is bronchopneumonia. According to the standards, bronchopneumonia cannot be coded!! However, when I discuss the standard with the medical staff, they find its direction ridiculous! i.e. patient may have been treated with antibiotics prior to x-ray, discrepancies on opinions provided on x-ray results versus the visual film. Is this standard to be reviewed by Respiratory CCCG? If the doctor stands behind his diagnosis, can we code according to diagnosis rather than to the x-ray result?*

A This is a contentious issue amongst clinicians. The standard describes the best possible circumstances under which pneumonia should be diagnosed, i.e. with the benefit of a positive x-ray result. However, if the clinician indicates that the diagnosis stands, then assign a code for bronchopneumonia.

Q³ *Glaucoma - left needle sweep + 5FU. Had trabeculectomy in past? Procedure code 90075-00 [191]? corresponding MBS item number 42749. Do these two numbers have to be the same? i.e. procedure code and MBS item number.*

A A trabeculectomy is a scleral fistulisation procedure performed to control intraocular pressure in glaucoma by increasing the outflow of aqueous humor from the eye. A 'needle sweep' procedure is a revision of the trabeculectomy, where the needle is placed under the conjunctiva and a sweeping motion is used to break the wall of the bleb and allow the fluid to again filter through. The correct code assignment for needle sweep procedure is 42749-00 [191] *Revision of scleral fistulisation procedure*. Generally, the MBS item number will relate to the MBS-Extended code (ICD-10-AM, Vol 3), however there will be instances where this will not be the case due to the different developmental processes involved in the MBS and ICD-10-AM. In such cases, the MBS-Extended code must be used. .

Q⁴ *Principal diagnosis is periodontal disease (K05.6). Principal procedure is 'full dental clearance' lower 11 teeth. No such code in the ICD-10-AM procedure book. After consultation with the NCCH I have coded 97311-00 [457] and 97316-00 [457], please discuss appropriate coding for this situation .*

A The same concept that applies to excision of multiple skin lesions can also apply to extraction of multiple teeth (ACS 0020 MULTIPLE/BILATERAL PROCEDURES). In the case cited assign 97311-00 [457] *Removal of permanent tooth* and 97316-00 [457] *Removal of additional tooth adjacent or regionally located to tooth previously removed*. Even though 10 adjacent teeth were removed it is only necessary to assign 97316-00 [457] once.

Q⁵ *Dental Clearance - removal of remaining 11 teeth for caries. Previously in ICD-9-CM we had 1 code for removal 1 tooth, another for removal 2 or more teeth. Now the codes in [458] refer to single teeth e.g. 97323-00 [458] removal of impacted molar NOS. So, for removal of up to 4 teeth I have been repeating the code up to 4 times. Removal of many teeth as above calls this into question as I do not suppose I should use the code 11 times. Would NCCH consider a code for removal multiple teeth?*

A The same concept that applies to excision of multiple skin lesions can also apply to extraction of multiple teeth (ACS 0020 MULTIPLE/BILATERAL PROCEDURES). Assign an appropriate code from blocks [457] *Non surgical removal of tooth* or [458] *Surgical removal of tooth*, once only noting all the instructions within these blocks. For example, 'Removal of impacted molars x 4', assign (once only) 97323-00 [458] *Surgical removal of unerupted or partly erupted tooth, with removal of bone or tooth division*.

Q⁶ *Workshop exercises No. 5, page 68. A 39 year old male admitted for total splenectomy for his worsening hereditary spherocytosis. A full blood workup had revealed elevated liver function tests and he will require further investigations following discharge. For the coding of abnormal liver function tests (elevated) answer given is R94.5 or R74.8 as specific for abnormal blood test result. R94.5 refers to imaging, please clarify.*



A In the clinical vignette provided in the workshop exercise, R94.5 *Abnormal results of liver function studies* is the best code choice as the specific biochemical or serological abnormality is not stated. If the specific biochemical or serological abnormality is documented, a more specific code can be assigned. For example, liver function test revealed an abnormal level of alkaline phosphatase, assign R74.8 *Abnormal levels of other serum enzymes*. In reference to R94.5 referring to imaging, block R90-R94 refers to abnormal findings on diagnostic imaging **and** in function studies. Category R94 relates to abnormal results of function studies performed using various methods, including those performed by diagnostic imaging.

Q⁷ *Please clarify whether partial meniscectomy is the same as marginal meniscectomy.*

A A marginal meniscectomy refers to trimming or excision of the meniscal margin most often through an arthroscopic approach whereas a partial meniscectomy is a more extensive procedure.

Q⁸ *In ICD-9-CM under the lead term 'weakness' right and left sided, the coder is directed to Hemiplegia, but this is not in ICD-10-AM.*

A When describing one of the many deficits that a patient may suffer as a result of a stroke, the terms 'left sided weakness' and 'right sided weakness' are now more commonly used by clinicians, rather than the term 'hemiparesis'. However, ICD-10-AM includes hemiparesis synonymously with hemiplegia. Until further advice, clinical coders should follow the index entry: Hemiparesis (*see also* Hemiplegia) and assign G81.9 *Hemiplegia, unspecified*.

Attention

All Medical Record Managers

Coding Matters contains information that is important to all coders. Therefore, could you please ensure that this newsletter is circulated to coders in your section so that they may also keep up to date with national coding issues. ❖

Using Code-L

CODE-L is an Internet forum for Clinical Coders and HIMs to help each other with coding problems. About 300 people currently use this free service.

Here's how to subscribe:

Send an e-mail message to majordomo@listserv.cchs.usyd.edu.au

- Leave the subject blank, remove e-mail signature if you use one.
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You'll then be sent confirmation, and will receive all discussion thereafter. To remove yourself from the list, do as above with the message text: unsubscribe code-l.

The full Conditions of Use will be automatically sent on subscription, all participants are encouraged to read them thoroughly.

Here is a synopsis:

- It is taken on good faith that you will use the list only in the intended manner. Specifically: discussion of coding applications using ICD-10-AM and the Australian version of ICD-9-CM; educational activities for clinical coders; casemix & coding; coder accreditation; peer support; coding & data quality; coding in ambulatory & specialty areas; and other contemporary coding issues.
- No advertising is permitted, with the exception of coding position vacancies which must include a contact point for responses away from the list.
- If your e-mail software generates 'auto-reply' messages, either disable them or unsubscribe from Code-L while on leave.

Feel free to e-mail the List Administrator with any questions: Simon Clarke, NCCH Information Systems Officer, email: owner-code-l@listserv.cchs.usyd.edu.au



RESEARCH REPORTS

In this issue of Coding Matters, we welcome the addition of a column devoted to research. Donna Truran, NCCH Research Officer and Eric Schulz, Research Fellow will be the main contributors.

The role of NCCH includes research relating to disease and procedure classifications, casemix, data quality, coding of adverse events, electronic patient records, record linkage and other areas relating to the development and use of health statistics derived from coded data.

Since arriving at NCCH in September I have been planning a research project that will assess the impact of introducing ICD-10-AM. The focus of this research will be on coding quality and concordance and comparability of the two classification systems (ICD-9-CM and ICD-10-AM). It is an opportune time to begin as 'real world' comparisons can be made while clinical coders in different states are using different coding systems. Research design details and protocols have not yet been decided and data collection strategies are yet to be explored. The proposed research was discussed briefly at the recent CSAC and ICD-10-AM Implementation Committee meetings in Melbourne and this proved very helpful in defining and refining the research proposal.

The need for this research is evidenced by the other studies already initiated elsewhere in the country. The Royal Darwin Hospital is considering a dual coding study and the Royal Children's Hospital in Melbourne is undertaking a similar exercise. Queensland Health has also developed a study methodology. Western Australia has already begun to look at the likely impact of implementing ICD-10-AM and have dual coded 400 cases so far. The information gained from these and similar studies will make a significant contribution to the larger national study over the next 18-24 months.

Part of this research is concerned with finding out how clinical coders have found the transition to ICD-10-AM: Have they found it difficult? What problems are the most worrying? How has their work been affected? Do they find the new system easier? A questionnaire for clinical coders who are currently using ICD-10-AM is included in this issue of *Coding Matters* or go to the NCCH website at <http://www.cchs.usyd.edu.au/nccch/> and fill out the questionnaire online. Completing this questionnaire and sending it back to me will help to improve the implementation process for other states, and will also indicate where problems are being experienced and how we might solve them. The survey is designed to obtain your own (personal) opinions and all the results will be aggregated and treated confidentially.

Also on the research agenda are issues relating to the National Health Priority Areas of Cardiovascular Health, Cancer Control, Injury Prevention and Control, Mental Health and Diabetes Mellitus. The efficacy of classification systems and coding quality in these areas will be examined and we hope to improve coding and coding standards in these priority areas.

You may be aware of particular issues that require some research attention. You also might be interested in contributing to, or commenting on some of the proposed research briefly outlined above. In either case, I would be happy to discuss this with you, and would welcome your involvement.

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❖ **Donna Truran**
Research Officer

ANNOUNCEMENT OF A NEW PUBLICATION

from the Commonwealth Department of Health & Aged Care

Australian Refined Diagnosis Related Groups Version 4.1, Definitions Manual

AR-DRG v4.1 is Australia's first DRG classification to use ICD-10-AM rather than ICD-9-CM codes. It was released in December 1998, and is to replace AN-DRGs.

The AR-DRG v4.1 Definitions Manual is an essential reference for anyone involved with measuring, monitoring, purchasing and/or funding hospital services. Consisting of three hard copy volumes and a CD-ROM, it may be purchased for \$150 per set from the National Centre for Classification in Health (see enclosed Order Form) or AusInfo Shops in capital cities throughout Australia.



The 6th Annual National Centre for Classification in Health Conference

will be held from the 22nd to 24th September 1999 at the Hotel Grand Chancellor, Hobart, Tasmania.



Mark your diaries now!

The conference will again be jointly managed by the NCCH and the Clinical Coders' Society of Australia (CCSA).

Features of the conference will include a pre-conference workshop conducted by members of CCSA, recognised guest speakers and a fun filled social programme.

Suggested topics of interest for papers will be made available in the April edition of *Coding Matters* so start thinking now about interesting work being undertaken in the coding arena that you wish to share with the nation.

Commence planning now for your attendance at one of the most informative and enjoyable educational experiences for 1999.

Further information is available from Karen Peasley, Education Manager, NCCH on (02) 9351 9461 or email k.peasley@cchs.usyd.edu.au



Late Breaking News

Late Breaking News

Late Breaking News

NEW on the NCCH website

Essentials of ICD-10-AM: An information package for clinicians and users of coded data

Download MS Powerpoint presentations and notes in the speciality you require or download them all!

Internet Query Form

Now you can make your ICD-10-AM queries online

Query Index and Table

Visit the ICD-10-AM Query Index and click to go to the full query and response

Research & Consultancies Page

Check out the latest in coding and National Priority Areas as well as an update on the Professional Relativities Study

Public Submission

Have your say about the next edition of ICD-10-AM. Read the guidelines on the website and submit your Request for Modification Form on the internet.

Our address has changed!

<http://www.cchs.usyd.edu.au/ncch/>

NCCH goes global!

The NCCH is proud to announce that ICD-10-AM is now available outside of Australia and New Zealand.

ICD-10-AM, based on the World Health Organization's (WHO) publication ICD-10, is the definitive disease and procedure classification for Australian hospitals and day surgeries. ICD-10-AM remains current and relevant to clinical practice through a regular updating process. ICD-10-AM is the basis of the casemix classification AR-DRG v4.1.

The complete range of NCCH publications supporting ICD-10-AM are now on sale to the world. Available in conjunction with the hard copy ICD-10-AM are the ASCII code lists.

Also available is forward and backward mapping between ICD-10-AM and ICD-9-CM.

The master files are being developed in a database format to facilitate future electronic coding product development.

Education and support for ICD-10-AM is available starting with the *Implementation Kit*, *Mastering Ten* and associated training booklets.

See the International Order Form on our website for more information.