

coding matters



Newsletter of the **National Centre for Classification in Health**

Volume 6 Number 4 March 2000



from the desk of the director

This is my first message for 2000. For all of us, and particularly for clinical coders and health information managers, I believe this year will bring massive changes in the way we work and view the coding world. One has only to read Health Online¹ to appreciate what lies in store for health classifications and their place in electronic health record developments.

ICD-10-AM 2nd edition

The technological changes brought about by the conversion of ICD-10-AM to a database, the use of this database to produce and maintain the second edition, and the products that emanate from that database are designed to help coders to work more efficiently and effectively. NCCH is preparing a CD version of ICD-10-AM which will be a boon to coders and other users of the classification. The CD is expected to be available before mid-2000.



PICQ

A prototype of the Performance Indicators of Coding Quality (PICQ) software was launched at La Trobe University in Melbourne on 23 February 2000. Dr Heather Buchan, Assistant Director Quality, Acute Health Branch, Department of Human Services, Melbourne, launched the product at the end of a seminar to introduce the prototype to potential users and to report on trial site evaluations. Reactions to date have been extremely positive and we look forward to refining and developing the product to allow users to compare coded data against indicators which reflect Australian Coding Standards and conventions. The seminar and launch was the culmination of devoted energy ►

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and hard work on the part of the PICQ team, especially Gay Lysenko, Irene Kearsley, Nicole Schmidt, Donna Truran and Andrea Groom, as well as from our subcontractors, OR Systems in Melbourne. (See special report and photos page 9).

ACBA

Lai-Mun Balnave from Laeta in Sydney has been contracted to NCCH for a few months early in 2000 to work on the next refinement of the Australian Coding Benchmark Audit (ACBA). In conjunction with ACBA users, Lai-Mun is reviewing definitions of error categories, redesigning input and output formats and preparing ACBA material for the NCCH website so that ACBA users can enter results and obtain reports electronically as well as submit queries and comments to NCCH.

NCCH Strategic Plan

The NCCH Strategic Plan 2000-2005 was completed 'just in time' at the end of 1999. The process certainly helped shape and discipline our thinking for what lies ahead for the centre and for our customers. Future opportunities in relation to electronic products dominate the plan, along with the need to review our scope and establish collaborative links with other centres responsible for creating and using health classifications both nationally and internationally.

The NCCH wishes to thank the Department of Health and Aged Care for its support in developing the Strategic Plan, which is now being used to negotiate contracts for operation of the NCCH beyond June 2000.

The plan can be viewed on the NCCH website at www.cchs.usyd.edu.au/ncch/

Education

Preceding the PICQ launch, NCCH went to Melbourne this year for its Train-the-Trainer session for the Coding Educators Network. As usual, Karen Peasley and the NCCH team did a magnificent job in bringing together the essence of changes in ICD-10-AM 2nd edition to prepare those who will be involved in the national workshops to take place before introduction of the 2nd edition in July 2000. See Karen's report on page 7.

Committees

In this first quarter of 2000, meetings have already been held of the **NCCH Executive** and the Coding Standards Advisory Committee. Dr Margaret Dean, chair of NCCH Executive, is leaving the chair and her position at the Department of Health and Aged Care. I wish to thank Margaret for her unflagging support of the NCCH during her term, especially during preparation of the NCCH Strategic Plan which will be so important in our future direction.

The Coding Standards Advisory Committee also met in Melbourne during PICQ launch week. NCCH is indebted to members of this committee for their input to and support of the centre's work through NCCH Associate Director, Kerry Innes, who is also manager of Classification Support and Development Division (formerly Coding Services).

NCCH continues its representation on the **Australian Casemix Clinical Committee**. The

coding matters



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current term of this committee is due to conclude in April 2000, although its terms of reference and composition are being reviewed for consideration of its future role.

Conclusion

NCCH itself is reviewing its future through the Strategic Plan and through contract negotiation for its next funding period (2000-2003 for NCCH Sydney). This is a salutary process for us all. The Health Information Management Association of Australia is planning the next issue of its Journal to reflect past, present and future. In preparing a paper for that issue on the future of coding in Australia, I found the articles in a recent issue of the Journal of the American Health Information Management Association (AHIMA)^{2,3} to be particularly helpful. It also contains an excellent article on the coding of complications⁴ which is particularly relevant given the NCCH work on postprocedural complications for ICD-10-AM 2nd edition Australian Coding Standards⁵. In the same issue of the Journal of AHIMA you will find an article on ICD-10-AM⁶!

▶ Rosemary Roberts Director

- 1 Health Online: A Health Information Action Plan for Australia. National Health Information Management Advisory Council. November 1999.
- 2 Johns M (2000). A crystal ball for coding. Journal of AHIMA (The future of coding); January 71(1):26-30.
- 3 Kloss L (2000). Expanding our vision of clinical coding. Journal of AHIMA; January 71(1):25.
- 4 Noller JR (2000). Coders join forces with physicians to improve clinical outcomes. Journal of AHIMA; January 71(1):43-49.
- 5 Australian Coding Standards for ICD-10-AM 2nd edition. Volume 5 of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification. Standard 1904. Procedural complications :217-222. 1 July 2000. National Centre for Classification in Health.
- 6 Innes K, Peasley K, Roberts R (2000). Ten down under: implementing ICD-10 in Australia. Journal of AHIMA; January 71(1):52-56.

NCCH visitors

Dr Theodore Wee of the Casemix Project Office, Singapore Ministry of Health visited the NCCH offices in Brisbane and Sydney in December. Dr Wee's objective was to study the functions and responsibilities of the NCCH. His study included education programs, coding quality review and an accreditation system for clinical coders.



Theodore Wee with Rosemary Roberts and Donna Truran

Dr Yadollah Mehrabi from the Department of Health and Community Medicine, Shahid Beheshti University of Medical Sciences in Iran visited with staff of the NCCH in February. Dr Mehrabi is a statistician who has been awarded a WHO fellowship to evaluate inpatient and outpatient data collection systems and implement a system in Iran.

The NCCH recently provided clinical placements for two HIM students from the University of Sydney, Natalie Tawfik and Kim Dowling. Kim, who was a post graduate student assisted Classification Support and Development Division in query linkages and also worked with Donna Truran on the UMLS project.



Kim Dowling



Natalie Tawfik

Natalie, a third year student assisted in the development of educational workshop material and specialty books.

Order of Australia – Rosemary honoured

Readers of *Coding Matters* would have noted a name well known to them in the Honours list of this years Australia Day. Rosemary Roberts was made a member of the Order of Australia for *'service to medical records administration, particularly in the development of national coding standards, and as a contributor for the introduction of casemix classifications in health care.'*

That service started in 1962 when Rosemary, with a new Certificate in Medical Record Librarianship, joined the AW Morrow Department of Gastroenterology at Royal Prince Alfred Hospital in Sydney. She was already undertaking a part-time Bachelor of Arts degree at the University of Sydney, and she added that degree to her credentials in 1965. Over the next 38 years, a wide range of positions that could not be detailed here through lack of space marked Rosemary's career. Some of the early highlights included Assistant Medical Record Librarian at Massachusetts General Hospital Boston in 1965, and several research assistant and project officer positions at the Repatriation Department and the Commonwealth Department of Health in Canberra in the 1970s. Rosemary has worked in medical record administrator positions, with various titles, at several hospitals including Royal Prince Alfred and Prince of Wales Hospitals in Sydney, and Woden Valley and Canberra Hospitals in the ACT.

Anyone who knows Rosemary soon realises that she has a lively and inquiring mind and so it will not surprise you to know that she has held many positions in academe. Her contribution to the education of health information managers, to use the most recent title, dates back to 1964 and, as well as the all important task of teaching, includes positions as Head of School in 1979 to mid 1980. Most likely many of you reading this will have been taught and inspired by Rosemary. Part of her ability to inspire comes from the example she sets in attending to her



own education. She holds two Masters degrees, one in public health and one in business administration. Rosemary has generously shared her ideas through numerous informative papers and she is eagerly sought after as a conference speaker.

As her experience grew Rosemary became intensely interested in the quality of care delivered in hospitals and how the smooth running of a hospital can contribute to good quality care. This interest led her to serve as quality assurance coordinator at Westmead hospital in Sydney, St Vincent's Hospital in Melbourne and as an Administrative Officer in Medical Administration at The Royal Melbourne Hospital. The Royal lost Rosemary when she took up her present position as Director of the National Centre for Classification in Health. Given the excellent work of the Centre and Rosemary's contribution at the helm, I would rate this period as one of the major highlights of her career.

However, gentle reader do not assume this is the end of her service as noted in the AM citation. Rosemary has been an active member of her professional association serving on countless committees including leadership positions as Convenor of the Education Committee, President of the NSW Branch from

1974-75, member of the Council and Honorary Secretary/Treasurer of the national organisation for a period spanning 1963 to 1974. Not content to contribute within her profession, Rosemary has been a tireless and skilled advocate for her profession through over 40 memberships of other professional organisations

and committees. In particular, her abiding interest in informatics culminated in a period as President of Health Informatics Association of NSW. Rosemary often speaks of the importance of bringing the informatics and health information management organisations closer to achieve the vast amount of work that remains to be done before health information contributes fully to better patient care.

Clearly, membership of the Order of Australia was well deserved. Congratulations Rosemary.



► **Professor Beth Reid**



vital signs

Happy New Year to all our readers from the NCCH in Brisbane! It has been relatively quiet for us over the past month or so, but we are now back-into-gear and working busily.

ICD-10 short courses in Sri Lanka

In November/December last year, Jenny Nicol (HIM lecturer from the School of Public Health at QUT and ex-NCCH staff member) and I travelled to Sri Lanka for another consultancy on behalf of WHO/SEARO. Our assignment this time was to lead two international assessment teams to critically review the teaching skills of the staff of the National Institute of Health Sciences as they taught two short courses – the first in Basic Medical Record Practice and Health Information Management and the second in ICD-10 – to a group of international students. The Institute is the major training centre for the discipline of public health in Sri Lanka, with students training to become public health inspectors, public health midwives, public health nursing sisters, school dental therapists, food and drugs inspectors, medical laboratory technicians, pharmacists, Ministry of Health and community health personnel and health education officers. It is located in Kalutara, which is a beachside town around 50 km south-west of the capital, Colombo.



***Dr Sunil Senanayake, Director ,
Health Information, Ministry of Health and
Dr (Mrs) Dulcie Da Silva, Director, National
Institute of Health Sciences with Sue Walker***



***Dr Nandalal Wijesekera, lecturer for
HIM/ICD-10 courses with students Kamanie,
Iranti and Anoma (all from Sri Lanka)***

The two courses were taught by Dr Saman Gamage and Dr Nandalal Wijesekera, both former students of NCCH short courses, with assistance from several other guest lecturers. A number of tutors were also utilised to assist students with exercises and small group work. Teaching materials developed by the NCCH for courses we have run ourselves were utilised, with some personal modifications made by the teaching staff. Each course was taught in English.

The Institute's director, Dr (Mrs) Dulcie Da Silva, and the Director of Health Information from the Ministry of Health, Dr Sunil Senanayake, have been extremely supportive of the development and provision of such courses and have provided great encouragement to Saman and Nandalal over the past twelve months. The ultimate aim of our visit was to recommend to WHO/SEARO whether the National Institute of Health Sciences should be nominated as the regional training institute for future WHO-sponsored short courses in medical records and ICD-10. Although a formal decision in this regard is still pending from WHO, the reports provided by Jenny and I were overwhelmingly positive. The lecturing staff were extremely capable and the facilities available at the Institute were definitely suitable for the conduct of such courses. We would like to congratulate Saman and Nandalal and their teaching teams on the fine work that they displayed. ►



Candy Longmire from WHO/SEARO and Sue Walker in front of a ceremonial oil-burning lamp at opening ceremony of ICD-10 course. Note flags from all countries represented by participating students.

What this actually means is that we have closed a loop. When NCCH Brisbane first began teaching in South East Asia, we aimed not only to teach individuals but also to develop the capacity for self-sustainability in the region in relation to further education for coders and health information management personnel. Should WHO designate the Institute responsible for future courses, we will have achieved both of these aims – and it is a very satisfying feeling. We, of course, hope that it will not be the end of our work in the region – in fact we are currently negotiating for a contract to undertake a coding quality assurance project for WHO!



Dr Saman Gamage, lecturer for the 2 courses with his son, Janeth.

NCCH Brisbane news

Back in Brisbane, Tahnee Maker and Peng Bi have been keeping the office busy. Tahnee, as our Senior Classification Officer, has taken over from Maryann Wood in providing coding expertise to the ABS Causes of Death Unit. In addition, she has been assisting Karen Peasley in the development of materials for the next round of NCCH training workshops in the lead up to the second edition of ICD-10-AM. Tahnee has also been working on several of the specialty books, which has been challenging!

Peng was delighted in December for two reasons – firstly, when he was awarded his PhD from the University of Queensland, and secondly, when he was granted permanent Australian residency. Congratulations Peng, on both these achievements! Peng is currently industriously writing up research grant proposals for various granting bodies and we hope that we will be able to bring you good news about them at some later stage. He is primarily interested in the development of a project in the area of mortality data quality, in collaboration with the ABS.

Our other news is that Erich Schulz has most unfortunately resigned from the NCCH, effective from the end of 1999. Erich worked for us for two and a half years and provided us with lots of creative energy over that time. His knowledge of informatics certainly stretched us and it is very sad to see him go. Erich tells us that, although he is now busier than ever undertaking his medical administration residency, completing his Masters of Business Administration and working part-time in a medical centre, he would be happy to assist us should we need his unique blend of technical and innovative skills – and sense of humour. We hope we'll see him around the traps in the future.

Sue Walker

Associate Director, NCCH Brisbane



educational matters

The travelling roadshow is underway once again, visiting all major Australian cities and regional towns...

In preparation for this mammoth task, members of the Coding Educators Network (CEN) attended a two day Train-the-Trainer session in Melbourne in February. The CEN incorporates recycled (or original) CEN and new members. There were representatives from all states and territories as well as New Zealand. An assessment of the six new CEN was undertaken, which involved the applicants preparing a short presentation on a selected ACS topic and presenting this in front of their colleagues. All the new CEN performed excellently and showed that they were able to research a topic well and overcome nerves to ably disseminate their message. The Train the Trainer workshop was a lively affair with much discussion on those tasty topics such as anaesthetics and diabetes. The CEN are now all in earnest preparation for their workshop presentations.

Members of the 2000 Coding Educators Network (CEN)

*New members of the CEN are indicated by an asterisk **

NSW/ACT

Megan Cumerlato	NCCH/Westmead Hospital
Linda Best	NCCH/Westmead Hospital
Julie Rust	NCCH/Private consultant
Filippa Pretty	Primecare
Vicki Bennett	John James Hospital
*Marlene Garriock	Tweed Heads Hospital
*Sandra Fletcher	Royal North Shore Hospital
*Nerida Stevens	Wagga Wagga Base Hospital

Victoria

Jennie Shephard	Private Consultant
Kylie Holcombe	St Vincent's Hospital/ Donvale Rehabilitation Hospital
Andrea Groom	Monash Medical Centre

Nicolle Parrent	Australian Health Service Alliance
Catherine Perry	Goulburn Valley Health
Pauline Basilio	St Vincent's Hospital

Tasmania

Gayle Smith	The Hobart Private Hospital
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Northern Territory

*Jillian Burgoyne	Alice Springs Hospital
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South Australia

Lesley Ward	Royal Adelaide Hospital
*Christopher Robey	Calvary Hospital, Adelaide

Western Australia

Joan Knights	St John of God Healthcare
*Sheree Gray	King Edward and Princess Margaret Hospitals

Queensland

Debbie Abbott	Private consultant
Sharon Wiseman	Toowoomba Base Hospital
Kerri Chalmers	Calvary Hospital, Cairns

New Zealand

Barbara Arundell	Private consultant
Sallyanne Wissman	Auckland Healthcare
Terry Dymmott	Healthcare Hawkes Bay



***New CEN members – Chris Robey SA, Nerida Stevens NSW, Marlene Garriock NSW, Sandra Fletcher NSW, and Jill Burgoyne NT
Absent: Sheree Gray WA***



2000 ICD-10-AM 2nd Edition workshops

The 2000 ICD-10-AM 2nd Edition workshops commence in Sydney on the 20th March and continue for a further 39 workshops until the 20th June. Approximately 1,000 plus coders will be trained and many more kilometres traversed. Registration brochures were distributed in mid February and if anyone has yet to receive a brochure please download one from the NCCH website or contact the NCCH by phone or email.

As a trial, the NCCH will be videotaping one of the Sydney-based workshops. This video package will then be available for purchase at the conclusion of the workshops, particularly for those far flung rural-based coders who perhaps were unable to attend the face-to-face workshops.



CEN members – Kerri Chalmers QLD, Sharon Wiseman QLD and Gayle Smith TAS



Attendees at Train-the-Trainer 2000 workshop



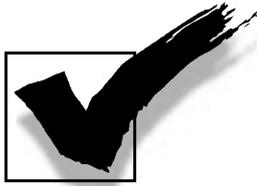
New Zealand representatives at Train-the-Trainer 2000 workshop

The workshops are an essential educational experience for all clinical coders to ensure that they are kept up to speed with the revisions between the two editions of ICD-10-AM. There is a wide variety of topics covered in the two day session with some of the major areas being anaesthetics, post-procedural complications, place of occurrence and activity codes, allied health and diabetes.

‘Diabetes Update’ video

To be better prepared for the revised classification of diabetes and assist in improving your understanding of the clinical aspects of diabetes, the NCCH has prepared a video presentation ‘Diabetes Update’. This video of approximately one hour duration features Dr Gordon Senator, Consultant Endocrinologist from Queensland who has had a major contribution to the development of the revised Diabetes Australian Coding Standard. Dr Senator provides information on insulin resistance, ‘controlled’ and ‘uncontrolled’ diabetes, obesity and the features of microvascular, macrovascular and multiple complications. Kerry Innes, Associate Director of NCCH (Sydney) highlights the use of the disease index, additional code assignment and the use of the new multiple complication codes. The viewing of this video prior to your attendance at the workshops will ensure that you have a distinct advantage in understanding the diabetes classification changes. The video can be purchased at a cost of A\$28 within Australia and for A\$38 for New Zealand customers.

▶ **Karen Peasley**
Education Manager



quality concerns

PICQ Seminar and Product Launch

On Wednesday 23 February, the John Scott Meeting House at La Trobe University in Melbourne provided a welcoming ambience for seventy delegates from diverse backgrounds – hospitals, departments, insurers and software vendors. PICQ is Performance Indicators for Coding Quality, a computer software program that allows the verification of the coded morbidity data by using predetermined performance indicators.

Rosemary Roberts welcomed delegates to the launch of the PICQ prototype and looked forward to ongoing participation in the development of PICQ Version 1, with an anticipated release during mid year. The price has not yet been determined due to ongoing development of the product.

Anthea James, Irene Kearsey and Catherine Perry shared their experiences during *Genesis of PICQ*, detailing the conceptual development.

During the *PICQ Demonstration* Donna Truran showed the practical application of PICQ with commentary by Irene Kearsey, Andrea Groom and Gay Lysenko. Summary and Numerator Reports were produced and some lively discussion followed regarding the use of the reports.

Representatives of trial sites volunteered candid evaluations of their *First Encounter with PICQ* trials recently conducted in a broad variety of venues. It was obvious that further technological developments will facilitate the preparation of morbidity data for PICQ. Anthea James,



First Encounters – Anthea James, Denise Crowe, Catherine Perry, Jenny Kok, Andrew Coshan, Maryanne Liddell and Erich Schulz



Official launch – Mark Gill, Heather Buchan, Stephen Duckett and Rosemary Roberts



IT issues – Erich Schulz, Nicole Schmidt, Andrew Brion and George Rennie

Denise Crowe, Jenny Kok, Andrew Coshan, Maryanne Liddell and Erich Schulz each commented on the usefulness of PICQ.

Nicole Schmidt outlined the IT requirements, stressing the need to understand the data of your facility. Andrew Brion, George Rennie and Erich Schulz assisted Nicole to explain the relevant issues.

Dr Heather Buchan, Acting Director, Acute Health, Department of Human Services Victoria, summarised the benefits of validating health data and used her particular interest, epidemiology, as an example.

In closing, Rosemary Roberts thanked Dr Buchan and reiterated the collaborative effort involved in PICQ and expressed gratitude to the the Department of Human Services, Victoria, PICQ team, the participants and delegates.

► **Gay Lysenko**
PICQ Project Coordinator



classification support & development

A change of name in 2000

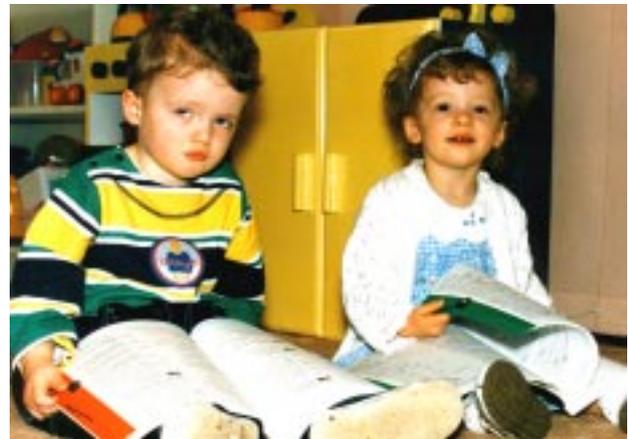
As you may have noticed, the coding services division has had a change of name to reflect the range of functions undertaken by the staff of this part of the NCCH.

The Classification Support and Development Division (CSDD) has two main focus areas. Firstly to support the current classification in place in Australian hospitals (ICD-10-AM) through enhancements to the classification itself and by answering queries. Secondly, the division is involved in developmental work in classifications which are designed for use in health care sectors such as community health, outpatient departments of hospitals and primary care.

Developmental work also encompasses electronic product development such as the CD-ROM of ICD-10-AM and the database of ICD-10-AM. The latter will greatly assist in the future development of electronic coding and clinical support systems. The database will also allow the NCCH to proceed in producing a clinical vocabulary which will provide a common language for coded data to be electronically transmitted across health sectors. Such a tool will provide more consistent coded data by standardising the terminology across health sectors. Consistency of data will lead to better health information which ultimately benefits users of the health system.

Staff changes in CSDD

You may recall that Nicole Boyens had twins when the first edition of ICD-10-AM was released. It's often said that pregnancy has something to do with the chair you sit in. However, it appears that at the NCCH, pregnancy has a direct correlation with the release of new editions of ICD-10-AM because Tiffany and Judith are expecting their first babies in July 2000. To continue Nicole's theme, Judith is having twins.



Matthew and Sarah Boyens, aged two, liked the first edition but wish mum would lash out on a couple of picture books



Tiffany Chan and Judith Hooper with ICD-10-AM second edition

Our warmest congratulations go to Tiffany Chan and husband Robert and to Judith Hooper and husband Graham.

Who will have the third edition twins?

We are also delighted to welcome Julie Rust back to the fold after a short break away.

Our newest recruit Merrilyn Morris (*pictured left*) comes to us after working as a HIM in a Sydney hospital and also doing ▶

some research for a colleague of ours, Dr. Michael Price from Westmead Hospital. Marilyn will be organising a series of workshops with clinicians, epidemiologists, public health experts and clinical coders designed to assist the NCCH in developing improved standards on some of the national health priority areas (mental health, diabetes, asthma, cardiovascular disease, injury and cancer). These workshops will be run during 2000 – 2001 to ensure that the most current knowledge is included in the third edition of ICD-10-AM. These standards once applied by clinical coders should significantly improve the quality of the national morbidity database.

This important work is funded by the Department of Health & Aged Care.

Coding of anaesthetic interventions – July 2000

Australian anaesthetists have been at the forefront of work to establish procedures to evaluate quality in anaesthetic practice worldwide. However, their work is severely hampered by the lack of information about the numbers and types of anaesthetic administered in the acute care setting. Indeed, the Australian and New Zealand College of Anaesthetists data collection has been criticised because of the lack of coded data linking anaesthetics given to the operations performed.

Up until now, anaesthetic administration has been regarded by coders as a 'routine part' of invasive interventions. Because of that, it can be easy to overlook the enormous impact anaesthetics have on the human body. Anaesthetic interventions range from a local anaesthetic which causes loss of pain and sensation for minor surgery to a general anaesthetic which acts on the brain and renders the entire body insensitive to pain and surgical stimulation. Considering this, it is obvious that better information about types of anaesthetic is critical to improving the safety of patients.

From July 2000, coding of anaesthetic interventions will be introduced with ICD-10-AM second edition. The existing anaesthesia codes will remain unchanged from the 1st edition except for one new code (92502-03 [1910] *General anaesthesia combined with major regional anaesthesia* for a combination anaesthetic. A new standard (ACS 0031 *Anaesthesia*, p.35) has been introduced to provide guidance on the assignment of anaesthesia codes.

The NCCH will be working on further education in the new requirements for both coders and anaesthetists over the next few months. We will also be reviewing the use of the codes and new standard (and any queries arising from them) from July, with a view to making any necessary improvements in the third edition of ICD-10-AM (to be released in 2002).

Results of the 1999 public submission process

In 1998, the NCCH sought suggestions for modifications to ICD-10-AM through our first public submission process. A public notice was placed in the *Australian* on 28 November 1998, and interested individuals and organisations were advised.

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

- Meets the needs of various users throughout the healthcare system.
- Continues to be a comprehensive and clinically meaningful classification.

It is important to note that the public submission process is not intended to replace the standard procedure for addressing routine coding queries.

The NCCH received 20 proposals from our first call. Table 1 outlines the status of the 1999 public submissions.

Table 1: Status of the 1999 public submissions

Status	No. of public submissions
Submission supported and included in 2 nd edition of ICD-10-AM	10*
Submission to be further investigated in 2000	6*
Submission not supported	5

* One proposal had several components: some of which were included in the 2nd edition, the other components warranted further investigation.



Some examples of the submissions that were supported and included in the 2nd edition are:

- External cause codes – new codes relating to firearms.
- Infantile cerebral palsy – updating of terminology, new codes.
- Improved definitions for flap and free flap repairs – a number of changes to the terminology in the tabular list and the ACS relating to flaps (0043).
- Burkholderia genus – updating of terminology.

Some examples of submissions requiring further investigation are:

- Early parenting centres – new codes to reflect the role and services undertaken by these centres.
- Primary repair of nerve/nerve trunk – definitions/clarification of existing codes.
- History of premature birth – new codes to reflect the number of weeks premature.

The Year 2000 public submission period (1 February – 29 February 2000) was advertised in the *Weekend Australian* on December 18-19 1999, and in the last issue of *Coding Matters* (see Volume 6 No. 3 page 24).

In the next edition of *Coding Matters* we will include an example of a public submission which was submitted according to the guidelines available from the NCCH. Compliance with the guidelines ensures a speedy response to your submission.

The next public submission period will be from 1 February 2001. For more information, check out our website or telephone Julie Rust at the NCCH.

▶ **Kerry Innes**
Associate Director

ICD-10-AM

Second Edition

now available

ICD-10-AM second edition, effective from July 2000, includes:

- ▲ standards for coding anaesthesia
- ▲ modifications to incorporate changes in the Medicare Benefits Schedule
- ▲ improved codes for allied health procedure codes, cerebral palsy, sleep apnoea, firearm injuries and sporting injuries
- ▲ diabetes mellitus has been brought up to date with improved codes and a comprehensive standard for their application
- ▲ improved standards for coding postoperative complications

See order form for details. Special student prices available.



the 10-AM commandments

This regular section (previously 'Coding Tips') is intended to provide ongoing guidance 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 and national morbidity data collections will be flagged and should be introduced from the July following publication. If you find that any advice published in this section significantly changes your current practice, you should not change practice until a suitable time in the collection year (January or July). You may feel it necessary in such circumstances to also seek advice from your state/territory health authority regarding a suitable date for implementation.

* Thanks to Kim Dowling (postgraduate student, Health Information Management, The University of Sydney) for her contribution in preparing the following 10-AM commandments while on placement at the NCCH. It is nice to see a family 'tradition' continuing, Kim is the daughter of Gillian Dowling (Clinical coder, Nowra Community Hospital, NSW).

1. Pregnancy-induced hypertension, pre-eclampsia and eclampsia

Generally, if sustained elevated blood pressure exists without proteinuria and/or oedema, the term 'PIH' is used. If hypertension exists with proteinuria and/or oedema, the term 'pre-eclampsia' is generally applied. However, the term 'pregnancy-induced hypertension' (PIH) may be used interchangeably with 'pre-eclampsia'.

PIH commonly arises in the second half of pregnancy or in the first 24 hours post-partum. Blood pressure usually returns to normal by 10 days post-partum.

Pre-eclampsia is characterised by the onset of acute hypertension with albuminuria and/or oedema. Complications of pre-eclampsia may include abruptio placentae, ophthalmic damage and pulmonary oedema. If untreated, pre-eclampsia will progress to eclampsia.

Eclampsia is the most life-threatening form of pregnancy-induced hypertension. It is characterised by grand mal seizures, hypertension, proteinuria, oedema and may progress to coma. Before a seizure, a patient may experience a body temperature of over 40°C, anxiety, epigastric pain, severe headache and blurred vision. Complications of eclampsia

may include cerebral haemorrhage, pulmonary oedema, renal failure, abruptio placentae and temporary blindness.

Classification

Pregnancy-induced hypertension without proteinuria is assigned O13 *Gestational [pregnancy-induced] hypertension without significant proteinuria*. Pregnancy-induced hypertension with proteinuria is assigned a code from category O14 *Gestational [pregnancy-induced] hypertension with significant proteinuria*, based on the documented level of severity. Category O14 should not be assigned on the basis of laboratory diagnostic results indicating proteinuria. **Rather, the clinical significance of the proteinuria must be documented by the treating clinician.**

Pre-eclampsia is divided into three codes based on its degree of severity: mild (O13 *Gestational [pregnancy-induced] hypertension without significant proteinuria*), moderate (O14.0 *Moderate pre-eclampsia*) and severe (O14.1 *Severe pre-eclampsia*). If the documentation in the clinical record does not indicate the degree of pre-eclampsia, and if a clinician cannot be consulted, assign the default in the index (O14.9 *Pre-eclampsia, unspecified*).

Classify eclampsia according to when the eclampsia began. That is, either during the pregnancy (O15.0 *Eclampsia in pregnancy*), during labour (O15.1 *Eclampsia in labour*) or during the puerperium (O15.2 *Eclampsia in the puerperium*). For example, if a patient is admitted at 30 weeks gestation after having an eclamptic fit and proceeds to an emergency lower segment caesarean section, O15.0 *Eclampsia in pregnancy* is assigned to reflect ►

that the patient was not in labour when the eclampsia commenced.

ACS 1526 *Hypertension in pregnancy* highlights the importance of clinical documentation regarding pre-eclampsia and eclampsia.

2. Postmenopausal bleeding while on hormone replacement therapy

Postmenopausal bleeding may occur as a result of:

- Gynaecological malignancy
- Benign neoplasms (fibroids, polyps)
- Atrophic vaginitis
- Endometrial hyperplasia

Postmenopausal bleeding may also occur while a person is on hormone replacement therapy (HRT).

Query 1146 posed the following question: is it correct to assign an external cause code of Y42.0 *Glucocorticoids and synthetic analogues causing adverse effects in therapeutic use* when there is no pathology found or should there be documentation demonstrating the relationship between the postmenopausal bleeding and HRT?

HRT with a progestogen component is **expected** to cause bleeding just after ceasing the progestogen. Bleeding should only occur during the days when the progestogen is ceased. This bleeding is not considered irregular or a complication of HRT. **Irregular** bleeding while on HRT may occur during the first year of continuous HRT (the adjustment phase), but the bleeding should eventually cease. The continuation of irregular bleeding after twelve months generally warrants investigation.

Classification

When postmenopausal bleeding occurs in a patient on hormone replacement therapy, the HRT cannot be assumed to be the cause of the bleeding. Even in instances where no pathology is found, an external cause code (e.g. Y42.0 *Glucocorticoids and synthetic analogues causing adverse effects in therapeutic use*) cannot be assigned unless the clinician has **documented** the HRT **as the cause** of the postmenopausal bleeding.

3. Minimally invasive coronary artery bypass (MICAB) grafts

MICAB describes a group of cardiac

revascularisation procedures that do not require median sternotomy or the use of a cardiopulmonary bypass (CPB) machine. MICAB is a modification of conventional coronary artery bypass grafts performed via a small, limited access incision.

In Australia, many MICAB procedures use a heart tissue stabilisation device called an 'Octopus'. The 'Octopus' uses suction to immobilise local heart muscle. It is placed on either side of the recipient coronary artery and fixed to the operating table through an arm construction. This restricts motion at the anastomotic site allowing precise surgery to be performed.

Classification

MICAB procedures are identified in morbidity datasets by the absence of a cardiopulmonary bypass code. There is, however, no satisfactory way to easily identify a failed MICAB graft which is converted to the standard open procedure. The NCCH will discuss the classification of MICAB grafts with the cardiovascular CCG.

4. Haemaccel infusions

Haemaccel is a gelatin solution used as a plasma substitute. It can be used in cases of haemorrhage or burns to maintain blood volume and pressure. It is not a blood product and does not require the same careful, time consuming procedures as blood transfusions. Therefore, haemaccel infusions are normally not coded (see 2nd edition ACS 0042 *Procedures normally not coded*).

5. Obstetric labial grazes and perineal lacerations

Obstetric labial grazes are superficial wounds which may cause little or no bleeding and do not usually require suturing.

Obstetric perineal lacerations are more severe and are divided into four categories – first degree, second degree, third degree and fourth degree. All four degrees usually require suturing. Third and fourth degree lacerations require additional care because involvement of the anal sphincter may lead to faecal incontinence.

Classification

Lacerations that are not sutured are not coded. Similarly, it is not necessary to code labial grazes that are not sutured, as it is inherent in the delivery process that some degree of labial

grazing is expected. If the labial graze has been **documented** and **has been sutured**, assign O70.0 *First degree perineal laceration during delivery*.

6. Use of Z75.3 (query database references: 1090, 1098)

The NCCH has received a number of queries asking for clarification of the assignment of Z75.3 *Unavailability and inaccessibility of health-care facilities* in light of ACS 0012 *Suspected conditions*.

One query questioned whether Z75.3 should be assigned if a patient is transferred to another hospital for reasons other than a suspected condition.

Z75.3 should be used as a 'flag' only to identify patients transferred because of a **suspected condition**. It is not necessary to assign Z75.3 for **ALL** transferred patients (the discharge status provides this information).

ACS 0012 *Suspected conditions* applies to cases when a patient is **transferred with a suspected condition**.

7. Renal dialysis – ACS 1404

ACS 1404 *Admission for renal dialysis* is relevant to both extracorporeal and peritoneal dialysis, even though only extracorporeal is discussed.

For **same day and overnight episodes of care**, the principal diagnosis is assigned a Z code dependent on the type of dialysis performed. A code for the renal failure and the cause of the renal failure may be assigned as additional diagnoses. For extracorporeal dialysis, assign Z49.1 *Extracorporeal dialysis* and for peritoneal dialysis assign Z49.2 *Other dialysis*.

For **multi day episodes of care** where the intent for admission was not same day, code the condition necessitating the admission as the principal diagnosis. These circumstances do not require a Z code as the procedure code indicates the dialysis performed.

An errata for this standard will be considered.

8. Includes vs Inclusion

In the procedures volume of ICD-10-AM (Volume 3), there is a difference between an 'Inclusion' term and an 'Includes' instructional note.

Inclusion terms are listed directly under a block heading or code description and they describe **some** of the other procedures that are classified to the code or block. The alphabetic index contains **all** the procedural terms classified to a particular code.

Example 1:

90047-01 [111] *Incision of thyroid*
Drainage of haematoma by incision
Exploration of thyroid by incision
Removal of foreign body
Thyroidotomy NOS

An '**Includes**' note further describes the concepts (e.g. equipment used, sites involved or procedural component) included in a chapter, site, procedure type, block or code.

The concepts in the 'Includes' note are not coded separately.

Example 2:

35507-01 [1289] *Destruction of vulval wart*
Diathermy of vulval wart
Includes: that by laser

In this example, the 'Includes' note is describing equipment that may be used to destroy a vulval wart.

Example 3:

30314-00 [116] *Radical excision of thyroglossal cyst or fistula*
Includes: excision of:
. hyoid bone
. thyroglossal duct

In this example, the 'Includes' note is describing procedural components that may be performed in a radical excision of a thyroglossal cyst or fistula.

Example 4:

PELVIS, HIP

Includes: femur, proximal and shaft
sacro-iliac joint
thigh

In this example, the 'Includes' note is further defining sites included in the Pelvis, Hip anatomical site axis of the Musculoskeletal chapter (XV).

9. Dental procedures

Chapter six (VI) of Volume 3 of ICD-10-AM is based on the Australian Dental Association's (ADA) publication 'An Australian Schedule of Dental Services and Glossary' (the Schedule). The Schedule is widely accepted as the reference for concise descriptions and coding of dental treatment. Its inclusion in ICD-10-AM has greatly increased the number of codes available to classify dental treatment compared to ICD-9-CM. The procedural descriptions are also more current. The 2nd edition of ICD-10-AM (effective 1 July 2000) aligns with the 6th edition of the Schedule (effective 1 January 2000).

Recent queries about dental procedures relate to the lack of a description of substances used in restorations, whether the teeth removed or restored were permanent or deciduous, etc. An

important step in resolving documentation problems is to make the clinician aware of the requirements of ICD-10-AM.

The Schedule is an excellent resource in the interpretation of Chapter VI Dental Services. Each procedure is described in detail in the schedule. There are notes for guidance which describe the dental materials used, a listing of old and new terminology and illustrated definitions for the terminology used by dental professionals. Why not have your copy of the Schedule with you when you discuss coding and documentation with the clinician?

The Schedule can be purchased from ADA, PO Box 520, St. Leonards NSW 1590 for \$25-00. For telephone enquiries: (02) 9906-4412.

CLINICAL UPDATES

Diabetes mellitus

This is the second of the two-part-series on diabetes mellitus. The first part appeared in *Coding Matters* Vol 6 No.3. It is intended to clarify changes in coding standards and codes in the second edition of ICD-10-AM.

A. Type 1 and Type 2 diabetes mellitus

Type 1 (insulin-dependent) and Type 2 (non-insulin-dependent) diabetes are classified in the second edition of ICD-10-AM in a similar way to the first edition (see Table 1).

Table 1: Change in terminology for E10 and E11

	First edition	Second edition
E10	Insulin-dependent diabetes mellitus	Type 1 diabetes mellitus
E11	Non-insulin-dependent diabetes mellitus	Type 2 diabetes mellitus

B. Overview of the new diabetes mellitus code structure

Significant differences in the second edition are the inclusion of **five character codes** and the **removal of the aetiology/manifestation** (dagger/asterisk) convention for all codes from E10 – E14. Some examples are shown in Table 2.

Table 2: Examples of five character codes replacing dagger/asterisk convention

E10.21	Type 1 diabetes mellitus with incipient diabetic nephropathy
E11.23	Type 2 diabetes mellitus with end-stage renal disease [ESRD]
E13.31	Other specified diabetes mellitus with background retinopathy
E14.52	Unspecified diabetes mellitus with peripheral angiopathy, with gangrene
Note that E12 no longer exists	

Although there are many new codes in diabetes mellitus there is a systematic pattern of concepts represented throughout the block E10 – E14 (see Table 3).

Table 3: Concepts represented by the same 4th and 5th character codes in E10 –E14

Third character level:		Type of diabetes	
Type 1		E10	
Type 2		E11	
Other specified		E13	
Unspecified		E14	
Fourth character level: <i>Complication grouping</i>		Fifth character level: <i>Specific complication</i>	
Acidosis	E1-.1	Ketoacidosis, without coma Ketoacidosis, with coma Lactic acidosis without coma Lactic acidosis, with coma Ketoacidosis, with lactic acidosis without coma Ketoacidosis, with lactic acidosis with coma	E1-.11 E1-.12 E1-.13 E1-.14 E1-.15 E1-.16
Renal	E1-.2	Renal complication, unspecified Incipient diabetic nephropathy Established diabetic nephropathy End-stage renal disease Other specified renal complication	E1-.20 E1-.21 E1-.22 E1-.23 E1-.29
Ophthalmic	E1-.3	Ophthalmic complication, unspecified Background retinopathy Proliferative retinopathy Proliferative retinopathy Other retinopathy Advanced ophthalmic disease Diabetic cataract Other specified ophthalmic complication	E1-.30 E1-.31 E1-.32 E1-.33 E1-.34 E1-.35 E1-.36 E1-.39
Neurological	E1-.4	Neuropathy, unspecified Diabetic mononeuropathy Diabetic polyneuropathy Diabetic autonomic neuropathy Other specified neurological complication	E1-.40 E1-.41 E1-.42 E1-.43 E1-.49
Circulatory	E1-.5	Circulatory complication, unspecified Peripheral angiopathy without gangrene Peripheral angiopathy with gangrene Other specified circulatory complication	E1-.50 E1-.51 E1-.52 E1-.59
Other specified	E1-.6	Diabetic musculoskeletal & connective tissue complication Skin & subcutaneous tissue complication Periodontal complication Hypoglycaemia Other specified complication	E1-.61 E1-.62 E1-.63 E1-.64 E1-.69
Multiple	E1-.7	Multiple microvascular complications Foot ulcer due to multiple causes	E1-.71 E1-.73
Unspecified	E1-.8	No fifth characters	
W/o mention of complication	E1-.9	No fifth characters	

From Table 3 it can be seen that a concept (e.g. *foot ulcer due to multiple causes*) is represented by the same characters (.73) for all codes E10, E11, E13 and E14.

C. Important coding principles in diabetes mellitus

How to assign a code correctly in diabetes mellitus is largely dependent on one basic principle:

The new codes in diabetes reflect a **with** relationship between diabetes and its recognised complications rather than, exclusively, a **cause** and **effect** relationship.

Because diabetes mellitus is regarded as a complex of conditions rather than one single disease entity, the ICD-10-AM classification is designed to capture this complexity by classifying complications which occur commonly **with** diabetes mellitus. This 'with' relationship does not exclude cause and effect but rather relieves the coder of the need to establish if the complication is caused by diabetes in order to assign a code.

Example 1

Record documentation:	Type 1 diabetes mellitus, retinopathy.
Index lookup:	Diabetes, diabetic - with - - retinopathy E1-.31
Code:	E10.31 <i>Type 1 diabetes mellitus with background retinopathy</i>

In this example it is not necessary to know whether the diabetes **caused** the retinopathy. The fact that diabetes probably does cause retinopathy is irrelevant in the coding process. The index entry 'Diabetes, with' is critical to the correct code assignment and should be used routinely when coding diabetes and associated complications.

Although there are probably complications of diabetes which are not listed under the main term 'Diabetes' in the index, **it is not the clinical coders role to assign conditions to the various 'other' or 'unspecified' categories unless:**

- the condition is indexed to one of those codes
- OR
- the clinician indicates an association between diabetes and the condition.

Example 2

A patient has both Type 2 diabetes mellitus and myocardial infarction during the one admission. There is no documentation to indicate that these conditions are associated.

Codes: E11.9 *Type 2 diabetes mellitus without complication*
I21.9 *Acute myocardial infarction, unspecified*

Sequencing dependent on documentation.

If there was an index entry for myocardial infarction under 'Diabetes, with' or the documentation indicates an association between diabetes and myocardial infarction, E11.59 *Type 2 diabetes mellitus with other specified circulatory complication* would be assigned.

'Unspecified' (E1-.8 and E1-.-0) codes should be avoided.

D. Coding multiple complications of diabetes mellitus

There are three important 'multiple' codes in diabetes:

1. E1-.71 **Diabetes mellitus with multiple microvascular complications*
2. E1-.72 **Diabetes mellitus with features of insulin resistance*
3. E1-.73 **Diabetes mellitus with foot ulcer due to multiple causes*

Multiple microvascular complications – E1-.71

E1-.71 bundles together four complications of diabetes mellitus which can commonly occur (in any combination) in the one patient:

- Renal complications
- Ophthalmic complications
- Neurological complications
- Specific skin or subcutaneous tissue complications

In such cases, E1-.71 is used in combination with codes from other chapters which describe the specific complications.

E1-.71 is assigned when the patient has conditions classifiable to two or more of the categories (see ACS 0401 Diabetes mellitus, Volume 5, page 90 for further coding advice).

Diabetes mellitus with features of insulin resistance – E1-.72

Insulin resistance (.72) appears in E11, E13 and E14 but not in E10. This is because features of insulin resistance are not characteristic of Type 1 diabetes mellitus and are most commonly associated with Type 2 diabetes mellitus. As mentioned in *Coding Matters*, Volume 6, No. 3, page 16:

The pathogenetic mechanisms of Type 2 diabetes are not fully understood. However, it appears to be a two-stage process; resistance to insulin action that often is exacerbated by obesity and reduced physical activity, followed by inability of the insulin producing cells in the pancreas to produce adequate amounts of insulin in response to meals.

Because of the complexity of the process of insulin resistance and its associated conditions, E1-.72 is assigned according to a number of criteria (with additional diagnoses for the specific conditions):

1. Insulin resistance is documented,
OR
2. Increased visceral fat deposition is documented,
OR
3. One or more of the following conditions is documented WITH diabetes mellitus:
acanthosis nigricans
dyslipidaemia
hyperinsulinism
obesity when documented with BMI >30kg/m²,
OR
4. Essential hypertension is documented in addition to any of the conditions in point 3,
OR
5. Essential hypertension is documented with unqualified 'obesity'.

See ACS 0401 **Diabetes mellitus**, Volume 5, page 82 for further detail about insulin resistance.

Diabetes mellitus with foot ulcer due to multiple causes – E1-.73

E1-.73 is assigned when:

1. 'Diabetic foot' is documented
OR

2. When the patient has an ulcer and/or infection of the lower extremity and at least one other condition classifiable to the following categories:

- Peripheral vascular disease
- Peripheral neuropathy
- Conditions causing deformity and excessive 'loading'
- Previous amputation(s)

*The four categories above have specific codes listed in the coding standard and are similar, but not identical with, those used in ICD-10-AM, first edition. See ACS 0401 **Diabetes mellitus**, Volume 5, page 88 for further details.*

Colorectal surgery

Following is a summary of a presentation at the 6th NCCH Conference by Mr. Tony Evers (Colorectal surgeon, Royal Prince Alfred Hospital/Concord Hospital, Sydney) and Michelle Bramley, NCCH.

This is the second of a two-part-series. The first part appeared in *Coding Matters*, Volume 6 No. 3.

Methods of restoration following large bowel resection

The method of restoration is independent of the resection. In the past, resection of some large bowel cancers (such as rectal cancers) meant a permanent stoma. Improvements in procedural techniques has allowed restorative anastomosis or ileo-anal reservoir (pouch) to be an option for some patients.

Anastomoses

In most cases, the resected ends of the large bowel can be anastomosed (rejoined) in the same operative episode without the need for a stoma. The method of anastomosis will depend on the site of the anastomosis and the diameter of the ends to be joined.

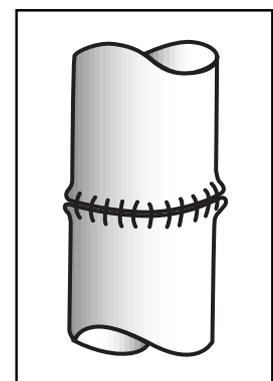


Figure 1

End-to-end

anastomosis is performed when the ends of the large bowel are similar in diameter. This is the preferred method of anastomosis and performed whenever possible, unless there is a technical need to perform another method of anastomosis. (see figure 1) ▶

End-to-side anastomosis is performed when the proximal end of the large bowel is greater in diameter than the distal end. This technique is not often performed these days. (see figure 2)

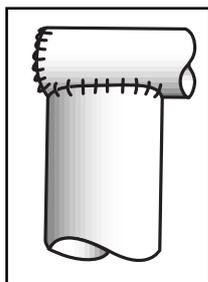
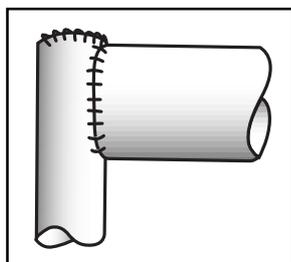


Figure 2



Side-to-end anastomosis is performed when the proximal end of the large bowel is less in diameter than the distal end. This technique is not often performed these days. (see figure 3)

Figure 3

Side-to-side anastomosis is a bypass technique, performed to allow two loops of bowel to communicate. Side-to-side anastomosis is sometimes indicated where an unresectable obstruction blocks the bowel.

Functional end-to-end anastomosis is a technique generally performed with a stapling device. Two loops of bowel are anastomosed side-to-side and the open ends are then closed. (see figure 4)

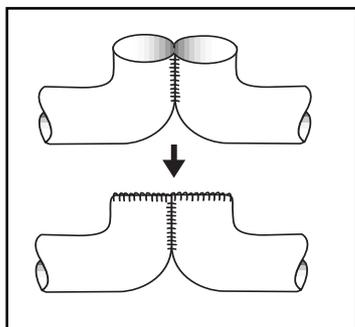


Figure 4

Anastomosis is generally performed with sutures, however, stapling devices are now being used. End-to-end anastomosis using a circular stapler is useful for low pelvic

anastomoses. Figure 5 depicts the use of a circular stapler in a restorative proctocolectomy (ileal (pouch) – anal anastomosis).

‘Dysfunctioning’ an anastomosis means that a temporary stoma is performed (see also *Stomas*). An anastomosis may be dysfunctioned for a number of reasons:

- to allow an anastomosis to heal following surgery.
- the anastomosis is at risk of leakage or breakdown (e.g. an anastomosis performed low in the pelvic cavity or anastomosis performed after resection of an obstructing lesion).
- there has been postprocedural leakage or breakdown of an anastomosis.

Classification notes:

The code descriptions for large bowel resection include the anastomosis and an additional code is not assigned. These codes do not indicate the type of anastomosis.

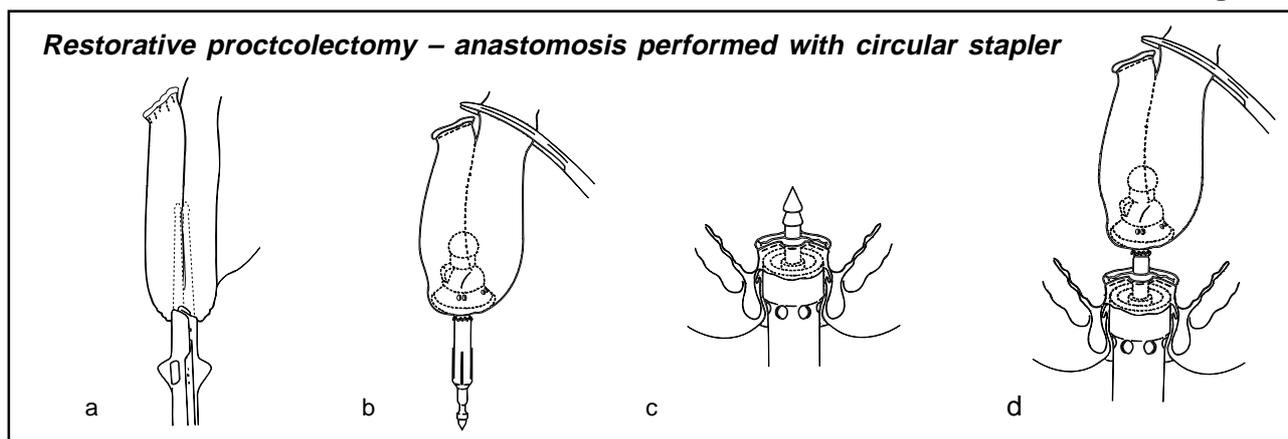
Stomas

Stomas are named according to the part of the bowel opening onto the abdominal wall, i.e. ileostomy, colostomy, caecostomy. They can be permanent or temporary. (see figure 6)

Colostomies are usually fashioned with the bowel mucosa lying flush with the skin. They generally open onto the lower left hand side of the abdomen. Ileostomies are usually fashioned with a protruding ‘spout’ of bowel to ensure that the irritant contents of the small bowel enter the ileostomy appliance (bag) directly, rather than flowing onto the skin. They generally open onto the lower right hand side of the abdomen.

Permanent stomas are performed when there is no distal bowel segment remaining after the resection or there is some other reason that

Figure 5



the large bowel cannot be anastomosed (usually irreversible pathology). Brooke ileostomy (the name implies a 'spouted' ileostomy), performed with total proctocolectomy, is an example of a permanent stoma. Permanent stomas are not designed to be taken down. They may be described as an 'end' stoma, however end stomas may also be temporary (see below).

Temporary stomas are performed to temporarily divert the faecal stream away from the area of resection/anastomosis. When the pathology has settled, or the patient's situation improved, the stoma may be closed or intestinal continuity restored.

Temporary stomas may be performed in emergency situations to relieve bowel obstruction. The obstructing lesion may be removed in the same operative episode or at a later date. They may also be performed in cases where the patient, debilitated by disease, requires time to recover before further surgery is contemplated.

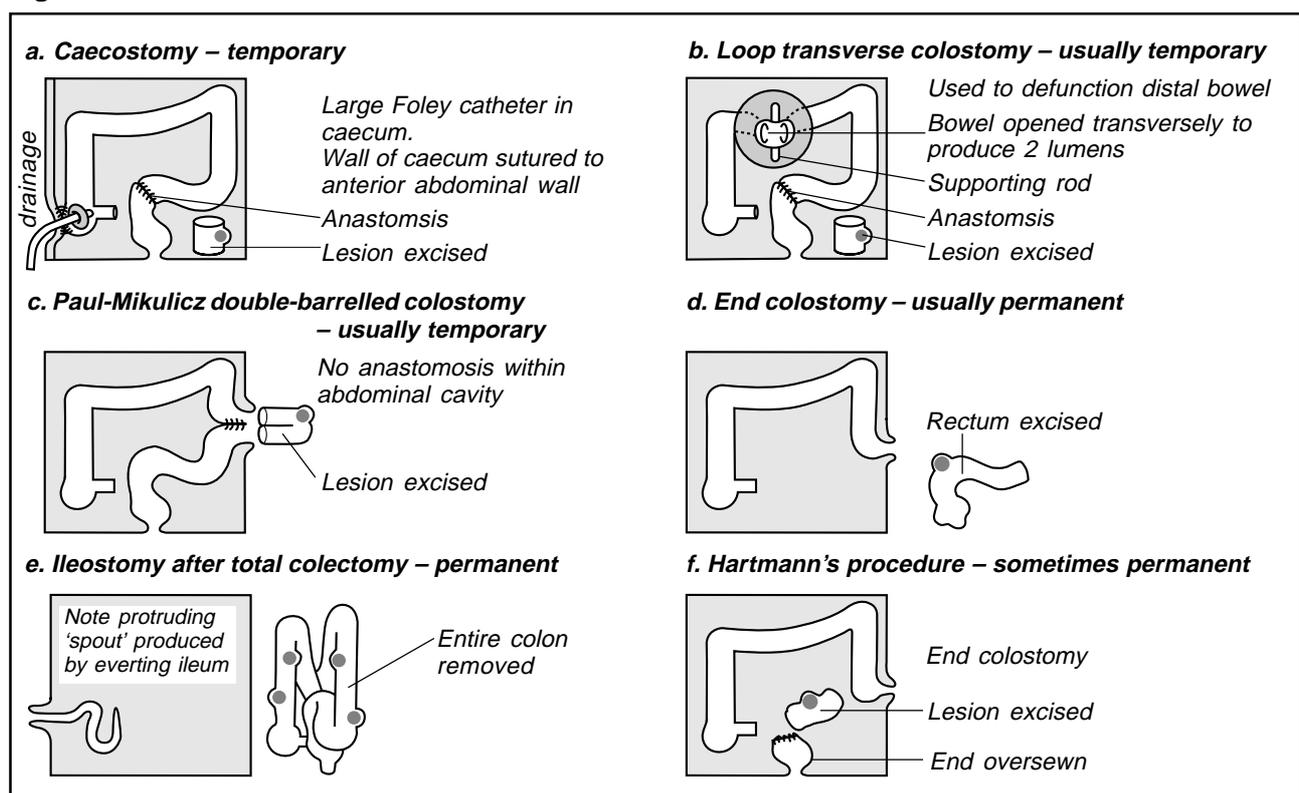
They may be described as 'loop' 'end-loop' (Abcarian), 'defunctioning' or 'covering'. Stomas formed during exteriorising resections or Hartmann's operation are also types of temporary stoma. Loop stomas are the most common form of temporary stoma and are fashioned so that both the proximal and distal

segments of the colon drain onto the skin surface (i.e. two lumens). This means that the stoma can later be closed without the need for a full laparotomy. The proximal colon is functional and diverts the faecal stream. The distal colon is not functional but does excrete small amounts of mucous. This is why it is termed a 'mucous fistula'.

Temporary stomas are designed to be subsequently 'closed' or 'taken down'. An end stoma (usually a permanent stoma) can be temporary – for example, following an 'exteriorising resection'. When a loop stoma is closed, the procedure is called 'closure of ileostomy/colostomy'. The operation to reverse the stomas made following an exteriorising resection is usually termed 'restoration of bowel continuity'.

The term 'exteriorising resection' applies when bowel has been resected and no anastomosis attempted. Instead, the two open ends of bowel are brought to the surface as stomas. The afferent (up-stream) end becomes an end ileostomy or colostomy. The efferent (down-stream) end is termed a 'mucous fistula'. A common variant of this is Hartmann's operation where the sigmoid colon is removed and end colostomy made. Because the rectal 'stump' is too short to come to the surface it is closed over and left in the pelvis.

Figure 6



Classification notes:

The code descriptions for large bowel resection include the stoma and an additional code is not assigned. These codes do not differentiate between the type of stoma (permanent or temporary) or the fashioning method (loop transverse, loop ileostomy etc.).

The codes in blocks 897 *Stomas of small intestine* and 915 *Other stomas of large intestine* would rarely be used. Indeed, the only exception is abdominoperineal proctectomy (32039-00 [932]) which does not include the stoma, therefore, an additional code from block 915 is assigned.

When a stoma is revised or refashioned, assign:

30563-00 [902] *Revision of stoma of small intestine*
or

30563-01 [918] *Revision of stoma of large intestine.*

The codes for closures of stomas of the small intestine are in block 899 *Closure of stoma of small intestine*. The codes for closure of colostomies are in block 917 *Other repair of large intestine*. These codes **do** differentiate between temporary and permanent stomas.

Restoration of bowel continuity following Hartmann's procedure (closure of Hartmann's) is assigned:

32033-00 [917] *Restoration of bowel continuity after Hartmann's procedure.*

Intra-operative colonic lavage

32186-00 [906] *Intra-operative colonic lavage*

In some patients with obstruction or perforation, it is impossible to prepare the bowel for surgery pre-operatively. Colonic lavage (on-table lavage or washout) is performed intra-operatively, following resection. The procedure may also be performed in cases of elective resection where the colon has not been adequately prepared pre-operatively.

The procedure involves inserting a Foley catheter through the wall of the caecum or the distal ileum, and irrigating the colon with warm saline. The effluent is drained via a large-bore tube connected to the resected end of the colon and placing the distal end into a large bucket. The primary benefit of this procedure is that it enables a primary anastomosis to be performed in some cases.

Procedures for the management of colitis

Ulcerative colitis is a relapsing and remitting chronic inflammatory disorder of the colonic and rectal mucosa. Surgical treatment may be required for patients with ulcerative colitis because of toxic dilatation (acute colonic dilatation) and colonic perforation, massive haemorrhage or risk of cancer.

Proctocolectomy with Brooke ileostomy

This procedure requires removal of the entire large bowel (including the rectum) and formation of a permanent ileostomy. This procedure has a number of advantages in that all diseased tissue is removed in the one operative episode, the risk of cancer is removed, the procedure is tried and tested and generally uncomplicated.

In recent years, however, sphincter-preserving operations have been developed which offer some patients a choice of restorative surgery thereby avoiding a permanent ileostomy.

Colectomy with the formation of a Koch (Kock) continent ileostomy (pouch)

This procedure has the advantages of a total proctocolectomy and replaces the ileostomy with a flush, continent stoma and an intra-abdominal reservoir constructed of ileum. No external appliance (bag) is needed as the reservoir is emptied by inserting a drainage catheter. The Koch (Kock) pouch is an alternative procedure for patients who have had a previous proctocolectomy and wish to be rid of the ileostomy or for those patients who have poor results following a restorative proctocolectomy.

This procedure is now rarely performed since the advent of restorative proctocolectomy.

Sub-total colectomy with ileosigmoid anastomosis***Total colectomy with ileorectal anastomosis***

These procedures are sometimes performed for inflammatory bowel disease when the rectum is relatively spared from disease; for familial adenomatous polyposis coli (FAP); and some other circumstances where the whole colon must be removed. In ulcerative colitis and FAP the risk of cancer remains in the preserved rectum and the patient must undergo regular monitoring.

Sub-total colectomy with formation of stoma (and mucous fistula)

Total colectomy with ileostomy (and mucous fistula)

These procedures are generally performed in emergency situations for severe acute colitis, as an initial procedure.

Restorative proctectomy

When the patient recovers sufficiently, further surgery is usually performed. This can take the form of an ileorectal anastomosis (if the rectum is favourable), or permanent removal of the rectum ('completion proctectomy') resulting in a permanent ileostomy. A more recent alternative, and now the most common procedure, is to restore normal anal function by 'restorative proctectomy' (also called 'mucosal proctectomy') which involves removal of the rectum with the formation of a small bowel pouch as a neorectum. These operations are normally protected by a defunctioning ileostomy.

Restorative proctocolectomy

This term describes the operation when the total colectomy and the restorative proctectomy are performed together. This can be indicated in either ulcerative colitis or FAP.

In recent years the pouch procedures have become the procedure of choice in ulcerative colitis and FAP. The anal sphincter is preserved, a pelvic ileal reservoir (pouch) is formed and ileo-anal anastomosis performed. The reservoir is used as a substitute for the rectum. The four most common reservoir designs are the J, W, S or lateral (see figure 7).

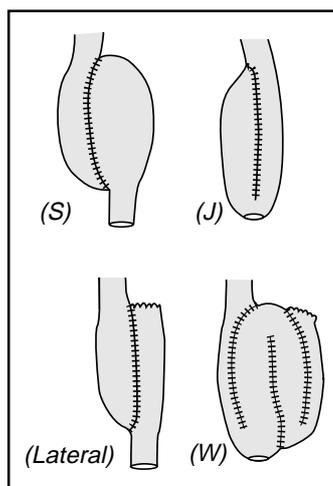


Figure 7

Classification notes:

Total proctocolectomy/ileostomy, assign:
32015-00 [934] *Total proctocolectomy with ileostomy*

Colectomy with formation of Koch (Kock) pouch, assign:
32069-00 [897] *Formation of ileostomy reservoir*

Subtotal colectomy, assign:
32005-00 [913] *Sub-total colectomy with ileosigmoid anastomosis*
32004-00 [913] *Sub-total colectomy with formation of stoma*

Total colectomy, assign:
32012-00 [913] *Total colectomy with ileorectal anastomosis*
32009-00 [913] *Total colectomy with ileostomy*

Restorative (mucosal) proctectomy, assign:
32060-00 [899] *Closure of ileostomy with restoration of bowel continuity, with resection*

Restorative proctocolectomy, assign:
32051-00 [934] *Total proctocolectomy with ileo-anal anastomosis*
32051-01 [934] *Total proctocolectomy with ileo-anal anastomosis and formation of temporary ileostomy*

Completion proctectomy, assign:
32039-00 [932] *Abdomino-perineal proctectomy **

** a code should also be assigned for formation of stoma*

Creation of a mucous fistula is inherent in bowel resections with loop (end-loop) stomas and is not coded separately.

Be cautious when coding a procedure termed 'completion'. A restorative proctocolectomy may also be termed a 'completion proctocolectomy'. Similarly, a restorative proctectomy may also be termed a 'completion proctectomy'.

Cardiovascular update

A summary of the presentation at the 6th NCCH Conference by Dr Leanne Grigg, Director of Cardiology, Royal Melbourne Hospital and Michelle Dixon, Health Information Manager, Royal Melbourne Hospital on cardiovascular coding will appear in the next edition of *Coding Matters*.



publication issues

The first edition of *Coding Matters* for the year 2000 brings our largest issue to date. I'm sure you will find it full of news and useful information.

Thank you to all of our contributors for this issue including Emily Ridgway on her timely Code-L article.

ICD-10-AM second edition – it's here!

The second edition of ICD-10-AM has been published and is now available. The second edition is effective from July 2000.

The second edition is something of a publishing milestone for the NCCH. It is the first ICD-10-AM to be published using the ICD-10-AM database as its source. NCCH Publications division worked closely with the newly-titled NCCH Classification and Support Development division in producing the second edition.

I would specially like to thank Chantel Garrett, publications officer, Elizabeth Azel, desktop publisher and Cath Stanhope, orders and distribution for their effort.

The second edition is available as individual volumes or as a set. The set of volumes is also available with a slipcase. The order form distributed with *Coding Matters* has details on how to purchase it.

Electronic version of ICD-10-AM

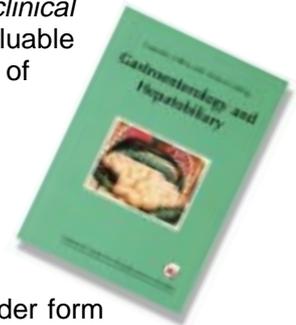
Publications and Technology Division is currently working on an electronic browser version of ICD-10-AM second edition. The test version raised a lot of interest with the speed of its search facility and simplicity of design. We will keep you informed of its completion and availability as the project nears completion.

New release specialty book

Gastroenterology/Hepatobiliary the latest in the specialty book series of *Casemix, DRG and clinical coding*, is now available.

The *Casemix, DRGs and clinical coding* books provide a valuable resource in understanding of coding in the casemix environment.

Copies of *Gastroenterology/Hepatobiliary* and other titles in this series can be purchased by using the order form distributed with *Coding Matters*.



Further titles in this series are currently in production – look out for news on them in the next edition of *Coding Matters*.

▶ **Rodney Bernard**
Publications and Technology Manager

Revisiting Code-L

Code-L is a free service, operating for almost two years and now has approximately 600 subscribers. We have listed a number of frequently asked questions which will benefit both new and old subscribers.

What is Code-L?

Code-L is an electronic based discussion group. Discussion groups are based on a mailing list consisting of email addresses of people who are interested in a particular topic, who then communicate via email.

Code-L was established by the NCCH with the aim of bringing clinical coders in touch with one another for the provision of peer support.

Code-L itself is a site designed primarily to enable clinical coders using ICD-10-AM to communicate in an electronic forum.

Suggested topic areas for Code-L include: coding applications using ICD-10-AM; additional clinical information; research topics; educational activities for clinical coders; casemix & coding; coder accreditation; peer support; coding & data quality; coding in ambulatory & specialty areas;

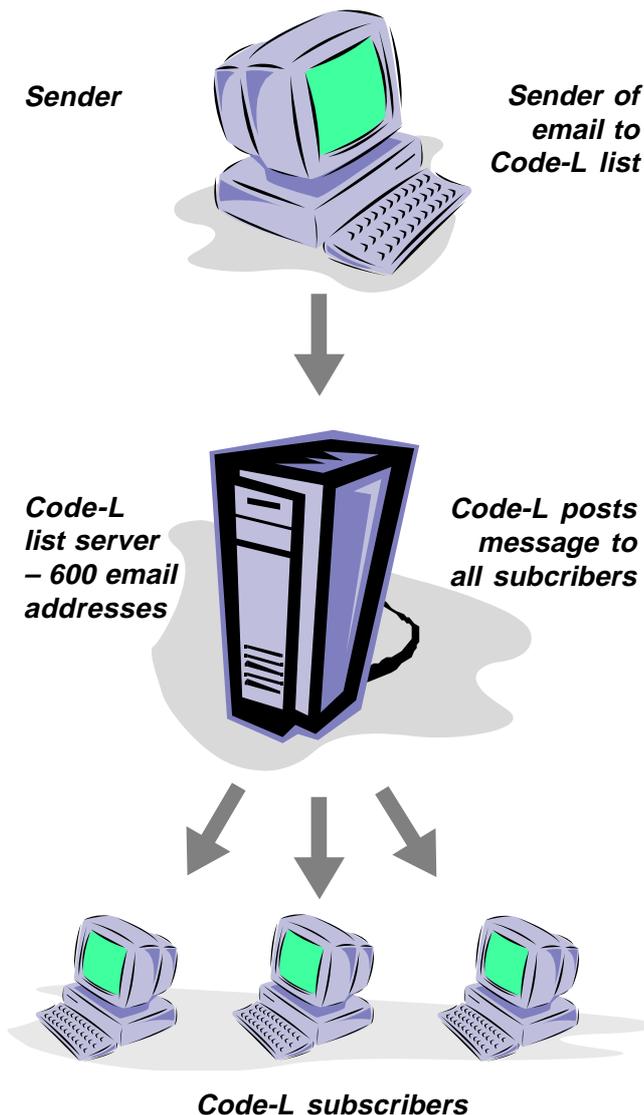
advertising coding/HIM positions, and other contemporary coding issues.

Please be aware that Code-L is *not* a coding query line to the NCCH. Coding queries must be directed through your State/Territory Coding Committee (see *NCCH Homepage for addresses: <http://www.cchs.usyd.edu.au/NCCH/ssc.html>*)

Please also note, Code-L is an unmoderated list. This means that the NCCH does not screen messages before they are posted on the list. Hence, the NCCH does not necessarily endorse the views expressed by list subscribers.

What is a List Server?

Code-L is maintained by a 'List Server'. A List server is a mailing list management program. Code-L uses a program called 'Majordomo' for this purpose. Majordomo controls the list of email addresses and posts Emails to the Code-L list.



While Majordomo performs the routine posting of emails for the list, administration is also performed by the 'List Owner'. If you have any queries or problems regarding Code-L please contact the list owner at the following:

Owner-Code-L@listserv.cchs.usyd.edu.au

How do I subscribe/unsubscribe to Code-L?

To post messages to Code-L (i.e. the 600 subscribers) you must subscribe to the list.

To subscribe to Code-L

1. Send an email to:
Majordomo@listserv.cchs.usyd.edu.au
2. Leave the subject of the message blank and in the body of the email type:
subscribe code-l

When you subscribe to Code-L you will receive the Code-L welcome message. Please read this carefully and keep for further reference.

To unsubscribe

1. Simply replace the word **SUBSCRIBE** with **UNSUBSCRIBE**.
(Note: Do not include a signature in the email message as Majordomo doesn't recognise it as such, and will send an error message)

Subscription problems should be directed privately to the List Owner as above.

How do I post a message to Code-L?

If you want to send a message to Code-L for **ALL** subscribers to see, use the following address:

Code-L@listserv.cchs.usyd.edu.au

When you post a message to Code-L the message is sent to the Code-L list server which then posts the message to all subscribers.

If you want to reply to a particular individual, you must cut and paste their individual address from the email use rather than hitting reply, as this means your email will be posted to **ALL** Code-L subscribers.

Please note, emails posted to Code-L have a restriction of 40,000 characters (including attachments). Please keep this in mind in particular when posting employment advertisements. Post a short description of the position and ask subscribers to email you for the full description. ▶

What is a bouncing message?

Some longer term subscribers to Code-L may have experienced bouncing messages i.e. repetitive messages from the same subscriber.

Bouncing messages are caused by the auto-reply function set up on a subscribers email program. (e.g. Michelle Coder leaves her position and sets up her email program to auto-reply to any incoming email. She is also a subscriber to Code-L. A message is posted to Code-L and is sent to Michelle's email program as she is a member of the list. Her mail program automatically replies to Code-L and posts a message to all subscribers. As Michelle is a subscriber to Code-L she effectively posts a

message to herself [and everyone else on Code-L] with the auto-generated message, which then replies again. This loop continues until the subscriber is unsubscribed).

Therefore, it is important to unsubscribe yourself from Code-L (and any other list server) when you set up auto-reply on your email program.

In conclusion, the NCCCH hopes that people will continue to utilise Code-L in its promotion of peer support among coders and we are happy to answer any queries you may have.

▶ **Emily Ridgway**
Code-L Administrator

Truran's Teaser No.3

Brain teaser

1. There are five beds in five different colours
2. The patient in each bed has a different doctor
3. The patient in each bed has a different nurse
4. Each patient has a different diagnosis
5. Each patient is a different age

The question is:

What is the diagnosis of Dr. Truran's patient?

Hints:

1. The patient with appendicitis is in the red bed
2. Doctor Bramley is treating the asthma patient
3. The heart attack patient is being cared for by nurse Lawer

4. The green bed is on the left of the white bed
5. The patient in the green bed is looked after by nurse Jones
6. Dr. Peasley's patient is 10 years old
7. The patient in the yellow bed is 60 years old
8. Nurse Stanhope looks after the patient in the middle bed
9. The diabetes patient is in the first bed
10. The 45 year old is next to Dr. Schmidt's patient
11. Dr. Chan cares for the patient next to the 60 year old
12. The 35 year old is cared for by nurse Hooper
13. The stroke patient is 70 years old
14. Nurse Garrett's patient is next to the blue bed
15. The 45 year old is next to Nurse Garrett's patient

The solution to the brain teaser will be printed next issue.

Bed					
Diagnosis					
Nurse			<i>Stanhope</i>		
Age					
Doctor					

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