

NCCH Strategies and Work Program

Mission Statement

We improve health through developing and supporting classifications and terminologies and undertaking related research

Values

We value

- integrity
- transparency
- innovation
- professionalism and
- our people

Strategies

- a) Encourage expertise in classification of diseases and interventions
- b) Promote use of best classifications for purpose
- c) Support the user workforce through education and tools
- d) Promote understanding of strengths, limitations and interpretation of coded health data
- e) Understand and promote synergy between classifications and casemix systems
- f) Understand and promote synergy between classifications and terminology systems
- g) Build expertise in modelling and maintenance of terminologies
- h) Promote use of best terminology for purpose
- i) Be an active participant in health information developments in Australia
- j) Conduct high quality health services research to inform classifications and terminology development
- k) Build research capacity through attracting students and staff and by collaborating with experts in related fields

NCCH Work Program

The NCCH work program is designed to implement the strategies described above, and at the same time ensuring the delivery of its contracted outputs. The aim is to develop NCCH within the University of Sydney and QUT as an acknowledged leader in the development and use of health information in Australia, as a world leader in disease and interventions classification, and as a centre for health services research related to NCCH functions.

The work program is premised on renewal of the DOHA contract with the University of Sydney from 1 July 2008 and the AIHW/ ABS contract with QUT, at the same real level of funding.

1 Morbidity

1.1 Ongoing Development of ICD-10-AM

The current contract with the Department of Health and Ageing (in place until 30 June 2008) requires development and implementation of the sixth edition on 1 July 2008. Material for this edition needs to be decided by 31 May 2007. ICD-10 updates to 2006 will be included in this edition (2006 is a major update year for ICD-10). Work on the seventh edition will commence under the current DOHA contract.

The existing two yearly timetable for ICD-10-AM editions is proposed to continue. This balances the need for keeping the classification as current as possible and the cost of implementing new editions, and maintains alignment with new editions of ACHI (see below).

During the ICD revision process, it is important that ICD-10-AM is kept up to date. Later editions should include as far as possible any material that will certainly be included in ICD-11. The current constraint that changes to ICD-10-AM should not affect the third or fourth digit would need to be relaxed to allow this.

1.2 Australian Classification of Health Interventions (ACHI)

The contract with the Department of Health and Ageing also requires development of the sixth edition for implementation on 1 July 2008.

At the international level, there is no current classification of interventions. During WHO-FIC Network meetings, material has been presented comparing various national classifications of interventions. A preference for the multi-axial French classification CCAM (Classifications des Actes Medicaux) has emerged. It is likely that international comparisons of use of Interventions will be based on the framework of CCAM. There will be substantial debate on how to achieve

greater alignment of national classifications at the 2006 WHO-FIC Network meeting.

Early NCCH work has shown reasonable alignment between ACHI and CCAM. NCCH will participate actively in these discussions with a view to ensuring the Australian classification is adapted to international best practice as that emerges.

NCCH has now been contracted to develop a specific Classification of Mental Health Interventions as part of the national program to improve national mental health statistics and related casemix developments.

1.3 NCCH participation in ICD Revision

The WHO is now launching the ICD revision process. Current planning is that a draft of the new classification will be available for comment in 2011 and testing in 2012, prior to approval by the World Health Assembly in 2014.

While still under discussion, it is possible that ICD-11 will be produced in two versions, one for morbidity and one for mortality. The two versions would need to be consistent, recognising that both the morbidity and mortality versions would contain codes that are only relevant for their particular purpose.

It is likely that some countries will still wish to modify the morbidity version for their own needs, although it is hoped that less modification will be undertaken than has been the case for ICD-10. This Plan is premised on an Australian modification (ICD-11-AM) being required, for implementation around 2016.

NCCH is well placed to argue for content from ICD-10-AM to be included in ICD-11. ICD-10-AM has been well tested in the field, and is in use in several countries. The more Australian content that is included in ICD-11, the less the modification task required to produce ICD-11-AM, and the switch will be easier for users. Therefore, it is important for Australia to have a significant role in the revision of ICD-10 and the development of ICD-11. The work program aims to provide capacity for this within existing resources, assuming renewal of the DOHA contract on current terms.

The WHO will have very limited resources to fund the ICD revision process, and will be looking to WHO-FIC collaborating centres for substantial assistance. Development of a contemporary revision of ICD will be of great value to Australia, for both mortality and morbidity purposes (and will benefit greatly from a morbidity version, especially if it is influenced by the content of ICD-10-AM). Therefore it is imperative to include work on the ICD revision within the NCCH work program. The revision process will absorb many issues that might otherwise be handled through the two yearly modification ICD-10-AM process and/or the ICD-10 updating process. So it should be possible to work within

existing resources to work on the revision process, as well as maintaining the two yearly ICD-10-AM schedule.

The ICD revision process work program is not yet complete. NCCH should aim to:

- Provide information on Australian modifications to ICD-10 to WHO and participants in the revision process
- Lead some expert working groups
- Contribute to, and coordinate Australian contributions to, expert groups
- Assist with technical drafting of ICD-11

1.4 Coding Quality

NCCH has developed PICQ (*Performance Indicators for Coding Quality*) to assist users to assist users in reviewing and measuring the quality of the ICD-10-AM/ACHI coded data. The contract with DOHA does not include this activity. Victoria and Queensland now purchase State-wide licences and Tasmania has been a consistent supporter. There has been interest in PICQ from Ireland, Germany and Turkey.

To NCCH, PICQ is an integral part of the classifications system, helping to ensure the quality of code assignment which is fundamental to the accurate description of hospital activity across Australia (and to the integrity of the casemix funding system). But at present PICQ does not cover its costs, although the gap is narrowing as the customer base widens. NCCH would prefer to withdraw from the support of the PICQ software, and focus on the development of appropriate performance indicators for good coding practice. However, to continue support to existing PICQ users, migration path needs to be provided.

1.5 NCCH Conference

NCCH conferences have been much appreciated by the clinical coding community, have been well attended and have generally operated at a small surplus.

It is planned to hold the next NCCH conference in Brisbane in late July 2007. Organisation will be outsourced, but development of the program will continue to be a substantial NCCH task. While prospects for combining with other conferences in 2009 and later years will be examined, the audience for NCCH

conferences is heavily drawn from Australian coding staff, who are unlikely to be well served by a broader based conference.

2 Mortality

NCCH Brisbane's core work in the use of ICD-10 for mortality coding will continue. The relationship with the ABS has changed from provision of training and direct support to a more project oriented basis. NCCH Brisbane now provides the secretariat for the Australian Mortality Data Interest Group (AMDIG) and hosts a successful annual one day workshop each year on mortality data and analysis.

NCCH Brisbane too will contribute to the ICD-10 revision process, through the international mortality discussion processes, and advice on the implementation of ICD-11 for mortality purposes in Australia and the region.

NCCH Brisbane now has a well developed education and training role for ICD-10 implementation in the Asia-Pacific region. Opportunities exist not only to continue this, but to move further afield to other English speaking countries. This work is funded by WHO, other international agencies and the countries themselves.

3 Terminologies

NCCH has undertaken a range of projects on health terminologies. These include CATCH for community health and development of an emergency department termset.

NCCH had taken an interest and become familiar with SNOMED well before the establishment of NeHTA. It has held research licences since 2004. Through a NeHTA sub-contract, NCCH developed the early draft of the business case that led to the adoption of SNOMED-CT as the basis for the future Australian health reference terminology in 2005.

COAG agreed in early 2006 to the provision of \$130 million to develop and implement standards for electronic health records in Australia, and the 2006 federal Budget included the Commonwealth half of that money. Key initiatives are unique patient and provider identifiers and a reference terminology based on SNOMED-CT. \$30 million has been earmarked for SNOMED adaptation and implementation.

There clearly should be opportunities here for NCCH. NCCH has invested in staff development to learn about the structure of SNOMED-CT and the tools for its ongoing development. NeHTA will need to ensure that SNOMED-CT is fit for

its planned uses in Australia and that existing terminologies in Australia interoperate with SNOMED-CT. NEHTA are currently investing in drug and devices terminology developments as priority projects.

A particular application central to NCCH work is the development of mapping arrangements between SNOMED-CT and WHO classifications (WHO-FIC). As described elsewhere in these papers, a Harmonisation Board is to be established between the SNOMED SDO and WHO. The aims of harmonization will need to be determined, as mappings need to be designed to fit the proposed uses of the maps. Australian maps should be compatible with other national maps. It is not yet known if maps between SNOMED-CT and ICD will be developed on an international basis (which would seem to be a logical step to precede national mapping exercises)

In recent months, there has been growing interaction with the School of Information Technology at the University of Sydney and the Faculty of Information Technology at QUT. There is good potential for bringing together linguistics, IT and health terminology skills to develop a clear understanding of how health practitioners communicate in practice, and how communication uncertainty can be minimised.

4 NCCH Information Infrastructure

NCCH requires IT resources and expertise to fulfill its work program. The following areas are projects requiring the IT resources and expertise:

- **ICD-10-AM Database Application:** NCCH uses the ICD-10-AM Database application to manage and produce ICD-10-AM books and eBooks. Enhancements are required to minimise laborious work and stream-line the processes to manage the ICD-10-AM database and produce its by-products (i.e. ASCII list, Addenda list, Errata, etc.). Furthermore, re-engineering will be required to conform to WHO-FIC arrangements to support interoperability between ICD-10 and ICD-10 national modifications.
- **SNOMED CT Research and Development:** In regard to SNOMED CT adoption, IT resources and expertise are essential to setup infrastructure and produce tools to explore, understand and contribute to its development and maintenance.
- **NCCH Information System (NIS):** There is ongoing development of a comprehensive NCCH Information System. NIS is specifically designed to support NCCH activities which include terminology development and maintenance, classification development and maintenance, customer relationship management and innovation delivery.

A detailed options paper which addresses infrastructure renewal and growth is being prepared. There is a view that NCCH should, where possible, adopt

terminology and classification tools that are (a) based on standard specifications for functionality and performance (b) interact and communicate with other tool suites used by national and international collaborators (NeHTA, SDO, WHO) so that imports, exports and exchanges of content developments are viable and (c) that tooling is available under open-source licences to minimize being locked into vendor provided services, architectures, operating platforms or being at the mercy of commercial market forces.

5 International Work

5.1 Collaboration with WHO and other international agencies

NCCH has several streams of international work:

- As part of the Australian WHO-FIC collaborating centre, participate in developing and updating and revising the WHO's family of classifications
- Implementation of ICD in the Asia/Pacific region through education and training

5.2 Export of ICD-10-AM and ACHI

The Australian classifications have been used for many years in New Zealand. NZ Health Information Services supports these activities and there is no direct role for NCCH.

While NCCH may sell copies of ICD-10-AM and ACHI for information and research purposes, it can only provide copies of the classifications for evaluation or implementation in countries which have appropriate licences from both the Australian Government and WHO (for ICD). Any licence revenue flows to the Commonwealth. NCCH has provided expertise for education in other countries (Ireland, Turkey). WHO are not involved in export sales. Costs have been fully met and the staff involved have enjoyed the experience. But there is a substantial opportunity cost in having key staff tied up in this sort of work.

Neither NCCH nor DOHA have actively promoted export sales, although NCCH presence in international forums provides a source of contact for interested potential users.

The export market potential remains substantial. The lack of implementation of ICD-10-CM (the US modification of ICD-10) leaves many existing users of ICD-9-CM with an increasingly obsolete morbidity product, and few countries have the resources to develop interventions classifications themselves. Yet servicing additional overseas users threatens to divert NCCH from its core business, and skilled personnel are in limited supply.

It is therefore proposed that NCCH continue to support countries that wish to adopt or adapt ICD-10-AM and ACHI for national use. Support would be limited

to education and training of key users of the classifications in the countries concerned; implementation would be a national responsibility. Charges will reflect the lost opportunity cost for NCCH as well as direct costs.

Export sales would be best handled in conjunction with other commercial partners. Partners could provide casemix training and broader assistance associated with updating health delivery or financing systems. Potential partners should be sought out, but exclusive relationships should not be pursued.

To date, export sales have not involved cooperation with the WHO. ICD is a WHO product, and WHO is keen to see the widest possible implementation of ICD and other WHO-FIC classifications across the world. NCCH will work to strengthen its links with WHO at central and regional levels so that WHO is aware of interest in the Australian classifications and to maximize potential for information sharing with neighboring countries and within regions.

NCCH is implementing policies to ensure that the versions of the Australian classifications used in other countries maintain NCCH's high standards. Users such as NZ and Ireland are not implementing each two yearly Australian edition, but are wanting to include key changes in existing versions. Sub-standard modification of an Australian branded product would be harmful to our reputation and lead to sub-optimal use in the relevant country. All work done for other countries will be on a user pays basis.

6 Research

A strong research program is essential for NCCH as a University based self funded centre. The work program outlined above presents many opportunities for research work, working as opportunities arise with appropriate collaborators. A future focus for NCCH must be to capitalise on these opportunities.

It is important for NCCH to understand the value of the data collected using its classifications, and to provide expert advice on the use of the classifications. Much of this knowledge comes from direct feedback from users and structured consultations.

In particular, there is great potential to analyse data collected using the classifications, notably the hospital morbidity data set. The NCCH's position as an AIHW collaborating centre makes this data set relatively accessible. Contractual agreements with other organisations and groups, such as the Queensland Trauma Registry, the Queensland Commission for Children Young People and Child Guardian and the South Australian Child Death and Serious Injury Review Committee also provide opportunities for research and evaluation projects using specific health information.

Some research of this type is already underway in NCCH Brisbane. For example, NCCH Brisbane's ARC Linkage grant focuses on the application of ICD-10-AM external cause codes in the hospital morbidity data collection. The Universities possess a wealth of potential collaborators, and there are opportunities for engagement of postgraduate students and post-doctoral fellows.

There are also opportunities for collaboration with researchers who need expertise in health classifications, not necessarily limited to ICD, ICD-10-AM and ACHI.

Development of new or revised classifications is another fruitful area. The developing international work on interventions has been described above. The revision of ICD also offers opportunities. Moving further from NCCH's traditional base, the health system abounds with classification opportunities, both large and small.

The University of Sydney Faculty of Health Sciences is now moving to a new structure to promote research across the faculty. A Health Information and Statistics Research group is being established. NCCH should play a significant role in this Group.

7 NCCH People and Resources

The NCCH work program described above is complex and challenging. Its delivery requires the acquisition, development and retention of dedicated, skilled people in a field where demand generally outstrips supply.

NCCH must recruit health information managers, IT professionals, statisticians and a range of staff with broader health information skills. It is in competition with the health services delivery sector, and many staff are not specifically interested in an academically focused career. To date, there has been a strong NCCH esprit de corps developed, along with a flexible work environment in both universities which has helped to attract and retain excellent staff. Staff development opportunities and international engagement and work have helped make working with NCCH more attractive.

NCCH at QUT has been developed from small beginnings within the School of Public Health. It is now well integrated into the School. At Sydney, NCCH has had a more separate existence. The Faculty of Health Sciences is now restructuring, both to promote research activity within the Faculty and to streamline administrative support and service. NCCH will need to build its research capacity to achieve its potential within the University. It will also need to configure itself to work efficiently with the new Faculty administrative arrangements.

Staff development needs continuing emphasis within NCCH. The health information scene in Australia and internationally is changing rapidly, and formal development opportunities are limited. Hence attendance at key meetings, workshops and conferences both in Australia and overseas is essential to maintain and develop skills. This needs specific funding as part of NCCH budgets.

A further complication in the past has been delay in renewal of the NCCH's core contract with the Department of Health and Ageing (DOHA). As the contract follows from renewal of the Australian Health Care Agreements each five years, some delay is inevitable. It is essential that this process does not unnecessarily destabilise NCCH staff, with obvious adverse consequences for the individuals concerned and the NCCH itself.

A reserve account has now been established within the Faculty of Health Sciences so that normal NCCH activity can be continued for up to a year while new contractual arrangements are concluded with DOHA after 1 July 2008. Nonetheless, it will be important for the Department and the University of Sydney to finalise new arrangements as soon as possible after 1 July 2008.