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This is the author's version of a work that was submitted/accepted for publication in the following source:

[Walker, Sue M.](#) & [Waller, Garry S.](#) (2010) Experiences in training ICD-10 trainers. In Jakob, Robert (Ed.) *Proceedings of the WHO-FIC Annual Meeting, Toronto 2010*, World Health Organization, Marriott Downtown Eaton Centre Hotel, Toronto.

This file was downloaded from: <http://eprints.qut.edu.au/46664/>

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Experiences in training ICD-10 trainers

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Abstract

The National Centre for Health Information Research & Training (formerly NCCH Brisbane) has been conducting an annual introductory ICD-10 coding program in Brisbane for seven years. In 2008, the Centre introduced a new initiative, inviting potential trainers to participate in a one week train the trainer workshop prior to the regular coder training. The new trainers are provided with the opportunity to practice their new skills with the support and assistance of the NCHIRT trainers during the subsequent introductory program.

This paper will report on the results of a survey of participants of these programs about their experiences conducting training courses in their own countries. The train the trainer program as a means to create a cadre of trainers to support the implementation of ICD-11 will be explored.

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The Australian National Centre for Health Information Research and Training, and its predecessor organisation, the Brisbane office of the National Centre for Classification in Health, has been conducting annual introductory morbidity and mortality coding training courses in Brisbane for seven years. In that time, approximately 140 participants have been taught. In 2008, the Centre introduced a Train the Trainer (TTT) component to the program, encompassing a week of tuition covering :

- Principles of adult learning including the experiential learning cycle<sup>i</sup>,
- Planning a training program, including setting objectives and learner outcomes,
- Planning, preparing, structuring and delivering oral presentations, and preparing visual aids,
- Lesson plans, assessments and evaluations,
- Developing content for morbidity and mortality coding education,
- Effective training techniques including Gardener's concept of multiple intelligences<sup>ii</sup>..

The TTT component runs over a five day period and includes didactic sessions, classroom-based exercises and student participation. The theory sessions during the week were initially taught by Queensland University of Technology's teaching and learning instructional designers with content input from the NCHIRT staff. Over time, Centre staff have taken over teaching the theory and ensure that there is sufficient ICD content as well, to make the week practical and meaningful. Plans and materials for future training are developed by the participants.

After their week's TTT classes, the participants are invited to subsequently assist in teaching the NCHIRT introductory morbidity and mortality course that immediately follows. To be accepted into the trainer program, applicants must demonstrate current coding experience and will have preferably learned to code in a previous ICD training course. It is stressed that the train the trainer week will not teach participants anything about how to code for morbidity or mortality purposes. In general, this approach has worked well, although there have been occasions where a TTT participant has not demonstrated sufficient coding knowledge to be invited to teach the introductory students. In these instances, they have participated in the classroom as a student, rather than as a trainer.

To date, 27 individuals have participated in the Trainer program, representing the following countries : Botswana, Indonesia, Malaysia, Marshall Islands, Nauru, New Zealand, Papua New Guinea, the Philippines, Samoa, Solomon Islands, South Africa, Sultanate of Oman. Twenty-one of the previous participants who attended in 2008, 2009 or 2010 agreed to complete a survey about their training experiences prior to, and after the NCHIRT train the trainer program.

### **Previous experiences**

Before attending the training in Brisbane, 50% of the potential trainers indicated they had previous coding training experiences. Of these, 6 had conducted only morbidity coding training, 1 had conducted only mortality coding training and 4 had conducted both morbidity and mortality training. These latter trainers were from the Philippines (3) and Malaysia (1).

Previous training was conducted for a variety of audiences, principally clinicians, coders and nursing staff in both public and private sectors. Past coding courses had been supported by Ministries of Health, National Statistical Agencies, local universities, AusAID health sector support programs, health insurers and by WHO. One experienced trainer had conducted training in another country (Cambodia) and the remainder had local experience. The respondents from Malaysia and the Philippines had the most significant experience prior to attending the train the trainer program in Brisbane.

The main reasons given for attending the NCHIRT training program were to improve training skills, to ensure local training met best practice standards, find out the 'latest and greatest' news about coding and specifically, to learn more about teaching mortality coding.

### **Experiences after the Brisbane training**

Nearly forty-three per cent of respondents reported that they had not undertaken any morbidity or mortality coding training since their attendance at the Train the Trainer program. Reasons for this were:

- A change in job on return home
- Requirement to focus on another part of job so could not participate in training course
- Time constraints
- No local request for training and no opportunity to conduct a course
- Decision to use international trainer, rather than local trainer, for national course
- Lack of confidence in coding and/or training ability
- Subsequent courses conducted by other national colleagues who participated in the train the trainer program.

Of those who had conducted training in their own countries, three participants had conducted 16 morbidity training programs between them, covering approximately 137 participants. For one of the trainers, this was their first training opportunity. All the courses were run for local country participants in Botswana, Papua New Guinea and Samoa and were sponsored by the local WHO regional office, USAID, AusAID or the Ministry of Health.

Two participants had conducted mortality training, one of whom had experience with this prior to the Brisbane course. Approximately 35 students have participated in their training programs which have been conducted in university settings in Oman and in the South African national statistics office.

The remainder of the trainer participants, representing Botswana, Malaysia, Papua New Guinea and the Philippines, had conducted both morbidity and mortality training with some incorporating their own train the trainer sessions. Eight of these courses were focussed only on morbidity coding, four only on mortality coding, around sixty were a combination of both morbidity and mortality instruction and three incorporated a train the trainer element. Participant numbers in these courses totalled approximately 2046 students in the countries represented. One respondent reported having taught medical record officers from 'nearly every hospital in Malaysia' and

another had participants from 'all hospitals in Papua New Guinea'. In general, the training was sponsored by Ministries of Health, insurance companies, NGOs such as the Philippines Medical Record Association, and the regional or country offices of WHO.

Therefore, in total, 2374 students have been taught by the 21 respondents who had participated in the NCHIRT train the trainer programs in the period since 2008. The students in these courses were from the WHO Western Pacific, Eastern Mediterranean and African regions. In the WHO-FIC Education Committee survey of coders reported at the Reykjavik meeting in 2004, these were the regions which had the most difficulty in maintaining a suitable coding workforce<sup>iii</sup>.

### **Training resources**

The majority of the trainers who have conducted courses after participating in the NCHIRT courses used the workbooks and PowerPoint slides provided as part of the Brisbane training, sometimes with local modifications. Only two participants reported developing their own materials from scratch. This indicates that production of standard materials is seen as useful. Being able to use these for teaching with the addition of local modifications was recommended.

Respondents were asked what specific aspects of the Brisbane train the trainer program assisted them in conducting training in their own situations and whether they recommended any additions to the materials provided. A number of the participants commented on the openness of the NCHIRT educators and their willingness to address questions from the audience and encourage discussions amongst the training participants. The participants appreciated the NCHIRT method of teaching mortality coding using the US Mortality Medical Data System (MMDS) decision tables in hard copy, reporting previous difficulties in both coding mortality data and in teaching others to do so. It was also recommended by several respondents that more time be spent on basic mortality coding training, despite the fact that train the trainer participants had to demonstrate coding experience prior to acceptance into the Brisbane program.

### **Future needs**

Requirements for additional training were explored and the following new courses and additions to existing courses were suggested:

- Medical terminology
- Anatomy and physiology
- Practical experience sessions to practice coding in hospitals and statistical agencies
- Coding procedures and operations
- Abstracting clinical details from source documents
- ICD updating process.

Respondents were asked about their preferences for delivery of future training. Nearly 100% of the respondents indicated a preference for face to face training, either in their own country led by an experienced trainer, or in another country with participation from other countries in the region. A further 18% reported that they would like internet based learning and 9% wanted a coding textbook.

Finally, respondents were asked if they were aware of any training courses conducted by their own former students (ie the ‘grandchildren’ of the NCHIRT train the trainer program). Respondents from the Philippines and Malaysia reported that some of their former students now conduct their own courses.

### **Moving towards ICD-11**

This survey was only sent to former NCHIRT students who had participated in train the trainer sessions in Brisbane since 2008. We have been made aware that there are also participants in our introductory morbidity and mortality courses conducted both in Brisbane and in other countries that also now train others.

The NCHIRT educators believe that future training for ICD-11 could be accomplished using the model of training experienced coders as trainers, and then selecting the most skilled of those to be resource persons and trainers in their own country or potentially in their region. All of the respondents who reported that they now conduct their own training courses in coding are interested in being part of a network of trainers to support the implementation of ICD-11.

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<sup>i</sup> Kolb DA (1984) *Experiential Learning: experience as the source of learning and development* New Jersey: Prentice-Hall

<sup>ii</sup> Gardner, H (1993) *Frames of Mind: The Theory of Multiple Intelligences (10th Anniversary Edition)*. NY: Basic Books

<sup>iii</sup> Walker S & McKenzie K (2004) *Report on findings of the ICD-10 Coder Needs Assessment Surveys* WHOFIC/04/027, Proceedings of the World Health Organisation, WHO-FIC annual meeting, Reykjavik, Iceland