

DHBs launch e-learning for clinical coders.

Auckland and Waikato DHBs have tackled the shortage of experienced clinical coders by creating New Zealand's first on-line training course for clinical coders. The ACE (Accelerated Coding Education) course is customised for the New Zealand coding environment, delivering an accelerated training pathway through on-line training and support tools.

An early goal of the National Health IT Plan is to ensure the benefits from the smart use of IT are spread across the health sector. The ACE course represents a sustainable way of using IT to support and develop clinical coders, through a scalable, electronically delivered and potentially national solution.

Background

Finding experienced clinical coders is always difficult for DHBs. Recruitment often comes from other DHBs, which leaves vacancies that need to be replaced with new trainees, leading to expensive and time consuming in-house training. DHBs also report that non-standardised training has wider risk implications for coding quality and data comparability.

As well as a serious shortage of qualified and experienced clinical coders, there was no New Zealand-based course to bring new recruits into the coding workforce. To address this, the Auckland and Waikato District Health Boards decided to pool their experience and knowledge to create New Zealand's first on-line training course for clinical coders.

What is Accelerated Coding Education?

The ACE course is customised for the New Zealand coding environment, features an accelerated training pathway and is provided through the use of a dynamic suite of on-line training and support tools.

Clinical coding is the translation of medical information documented by clinicians in a patient's file relating to their condition, diagnosis and treatment. Information is recorded in a coded format which is nationally and internationally recognised. To code successfully clinical coders must have considerable clinical knowledge on a multitude of medical conditions and current modes of treatment. The use of codes ensures that information is standardised and comparable.

New Zealand hospitals use the clinical coding classification developed by the World Health Organization and modified by the National Centre for Classification in Health (NCCH), Australia called the International Statistical Classification of Diseases and Related Health Problems Tenth Revision, Australian Modification (ICD-10-AM)¹.

Clinical coding is an essential health service. The information generated is used throughout New Zealand for a variety of purposes including; clinical research, statistically analysis (e.g. morbidity and mortality analysis, elective procedures volume measurements), benchmarking, resource allocation, contract monitoring and payment. Internationally the output of clinical coding is reported to the World Health Organisation for use in epidemiological research.

How does it work?

The ACE course supports new trainees to enter the clinical coding workforce and to reach Level 1 coding competency. It is a cost-effective way to access qualified and experienced trainers who delivery a high quality programme aligned to national and international standards. The programme is available to trainees from DHBs across New Zealand.

The course has been designed to provide accelerated training (eight weeks) supported through the use of a suite of on-line teaching tools. Students meet for four days and then return to their respective DHBs to undertake self-directed, distance learning.

¹ Ref: <http://www.nzhis.govt.nz/moh.nsf/pagesns/546>

Ongoing support is provided through SMS for real time chatting, linking students with each other and with their trainers. On-line forums using anonymised patient-files replicate the classroom discussion environment allowing students to develop logic and reasoning skills associated with interpreting clinical notes. The ACE course is a modular course with the following elements:

- face-to-face classroom-based learning (four days mandatory plus two days optional),
- eBooks (ICD 10AM, MIMS or New Ethicals),
- on-line discussion forums,
- on-line real-world case studies to replicate the work environment,
- on-line assessments and examinations,
- SMS between students and between students and trainers,
- on-line self directed learning.

The on-line sections of the course are delivered using *MOODLE*, an internet based course management system which provides a free, open source software package designed using sound educational principles, to help educators create effective online learning communities. The ADHB hosts the *MOODLE* site and students are provided with a remote log-on enabling access to the course from either from their DHB or home.

The course has not been designed to replace the clinical coding training courses already offered by the HIMMA. Instead, it provides an adjunct to the intermediate, advanced and certification levels provided by HIMMA. Graduates of the ACE course will be able to enrol in the HIMAA intermediate course.

ACE tutors Andrew Wooding (Auckland DHB) and Nicky Williams (Waikato DHB) are HIMMA certified, have worked extensively in a tertiary DHB coding environment and have previous experience in developing and delivering clinical coding education.

Benefits

The availability of the ACE course provides a number of tangible benefits including:

- course sustainability,
- cost effective access to training,
- a career path for people wishing to enter into the clinical coding profession,
- consistency in application, measurable standard of learning,
- alignment to the New Zealand coding environment,²
- reducing loss of productivity in the workplace with staff gaining required skills and expertise in a shorter timeframe,
- national applicability and scalability,
- equity of access to suitable trained coders by all DHBs, regardless of DHB location, size, or clinical training infrastructure and capability³,
- ability to progress skills gained into advanced training in qualification based training courses.

Alignment with the National Health IT Plan

The National Health IT Plan recognises that the health sector is characterised by workforce scarcity and an ever-increasing demand for health services. It considers that a whole-of-sector approach with innovation in IT delivery is essential for supporting the workforce and

² There are a number of core coding differences between New Zealand and Australia. The HIMMA courses offered in Australia are based on the coding requirements for the Australian coding environment and NZ staff are required to not only qualify under the Australian requirements but also learn and apply the NZ variances.

³ A survey undertaken in 2007 indicated that some 27% of managers, team leaders, senior coders had no formal qualification.

making advancements in health care delivery. An early goal of the IT Plan is to ensure the benefits from the smart use of IT are spread across the health sector.

The provision of a training programme which is not only open to all DHBs but utilises smart on-line tools and is taught by qualified and highly experience trainers aligns with the principles underlying a number of the workstreams⁴ in the IT Plan. By providing standardised course content and through supporting trainees to achieve quality and consistency in the interpretation of clinical information the training programme aligns with the *Continuum of Care* workstream. The patients continuum of care is improved through the increased reliability of clinical information communicated, the reduction in transcription and clinical interpretation errors and the standardisation of patient information.

These benefits also link into the *Safe Sharing Foundations* workstream, with emphasis on robust and reliable data capture, and supports the direction of the *Shared Care Programme* through enabling accurate and relevant clinical information to be available as part of the patient vitals and decision support elements.

The course also supports the IT Health Board's aim to encourage consolidation and co-operation. As well as representing two DHBs reaching across regional borders to meet a pressing need; this presents a potential national solution that uses ICT to support clinical best practice in the coding arena and the building of workforce capacity.

Next steps

The favourable evaluation by course participants has supported the medium term plan to offer the course, nationally, twice-yearly. The DHBs will publish an annual schedule to support plans for recruitment and training. The course will also look to develop the role of assistant tutors to provide additional student instruction, participate in forums and provide feedback and support to students. The long-term goal of the course is to attain NZQA training organisation accreditation status. The course will also be developed to enable handover to a third part training organisation in the future, should this be desirable and or appropriate.

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⁴ For more information on the NHIT Plan workstreams see http://www.ithealthboard.health.nz/sites/all/files/National%20Health%20IT%20Plan%20v11_1.pdf