

QUT Digital Repository:  
<http://eprints.qut.edu.au/>



McKenzie, Kirsten and Walker, Sue and Spallek, Melanie (2003) *Australian Coder Workforce Survey 2002-Managers' Responses*. *Coding matters*, 9(4). pp. 1-6.

© Copyright 2003 National Centre for Classification in Health

# coding matters



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

Volume 9 Number 4 March 2003

## **Australian coder workforce survey 2002 – managers' responses**

In 1994–5, the Health Information Management Association of Australia (HIMAA) Ltd conducted a nation-wide survey of clinical coders working in Australian hospitals. The survey (National Coder Workforce Issues Project (NCWIP) funded by the then Commonwealth Department of Human Services and Health) provided baseline data about the coder workforce in terms of its size, the educational backgrounds of coders, circumstances relating to their employment and their needs in terms of continuing support and training. Importantly, the survey was conducted before casemix-based classification and funding had been implemented by all states and territories. It has now been nearly eight years since the original survey was conducted and casemix is in use in some form in all states and territories. Anecdotally, it is reported that the roles and responsibilities of clinical coders have changed significantly over this time period and that the workforce has grown in size and stature.



*Vicki Andreopoulos coding at Royal North Shore Hospital*

In 2002, the National Centre for Classification in Health, in collaboration with the HIMAA and the Clinical Coders' Society of Australia (CCSA), initiated a follow up survey to quantify these changes. By using some of the original questions from the 1994–5 survey, variations in the clinical coder workforce were measurable. Additional questions relating to anticipated changes in the health environment as a result of initiatives, such as electronic health records, facilitated the identification of on-going educational requirements for clinical coders. A parallel survey of the managers of clinical coding services elucidated strategic issues relating to clinical coder workforce.

This article is the first in a series that will report the major findings of the 2002 Australian Clinical Coder Survey. This report focuses on the manager survey and will highlight the significant findings from this survey. ▶

### **In this edition**

- **Advanced Breast Biopsy Instrumentation (ABBI) ..... 9**
- **Functional endoscopic sinus surgery .... 10**
- **Education program in Vietnam ..... 12**
- **WHO Collaborating Centre for the Family of International Classifications for North America ..... 14**

## Characteristics of respondents

Over one thousand two hundred (n=1277) facilities across Australia were contacted to participate in the survey and a total of 424 managers responded, representing a 33.2% response rate. Of these, 345 managers responded from hospitals, 61 from free standing day care facilities, 15 from multipurpose facilities, and 3 from early parenting clinics. The majority of the facilities (55.4%) were public. Metropolitan areas submitted the most responses (56.3%), 38% of responses were from rural areas and 5.7% of responses were from remote areas<sup>1</sup>. The average number of beds per facility was 130 and the average number of separations for the 2001–2002 financial year was 11,468.

## Coding workforce

Managers were asked whether they had any vacant positions for coders in their facilities at the time of the survey. No vacant positions for coders were reported in 383 (90.5%), and 40 (9.5%) responded that there were vacant positions available for coders. Managers were then asked how many full time equivalent (FTE) positions were available. Calculations from the data received showed there were 38.1 FTE coder positions available across Australia, with 25 of these vacant positions located in public metropolitan facilities, and nearly half of these 25 positions being located in New South Wales.

Managers also indicated if they were planning to create new coder positions in 2002. Again, the majority of managers (348 or 83.3%) stated that no new positions would be created for coders, 31 (7.4%) stated that new coder positions would be created, and 39 (9.3%) were not sure if they would create new coder positions. Managers were asked to specify how many new positions they were planning to create and the total number of hours per week for these positions. Calculations from the data received showed there were the 33 new coder positions to be created in 2002 across Australia, with a total number of hours of 944, being the equivalent of 23.6 new full time coder positions. The largest number of new coder positions to be created is in Victoria with a total of nine new full time positions.

## Coding service responsibility

Managers were asked whether coding was part of the health information service/medical record department (HIS/MRD) in their facility.

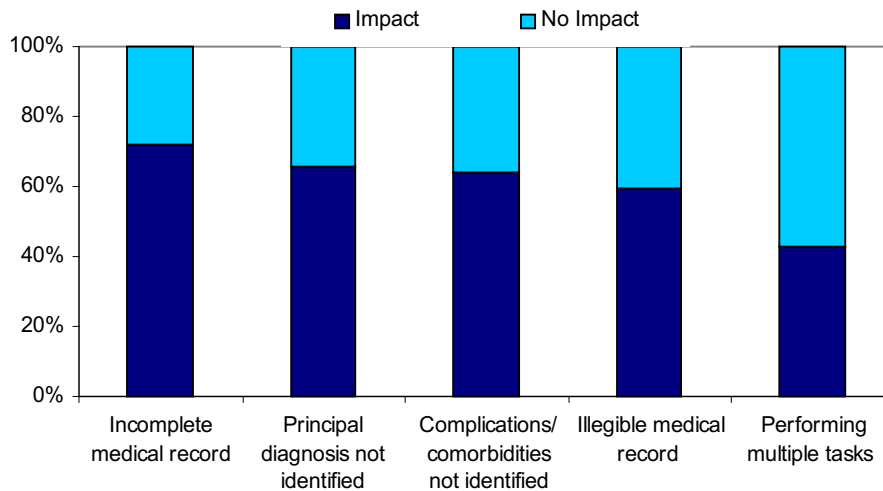
In 337 (87.1%) facilities, coding was part of the health information service/medical record department, whereas in 50 (12.9%) facilities, coding was part of other sections. South Australia is the state least likely to code within HIS/MRD with 25% of South Australian managers stating that coding was undertaken in other sections. If coding was not part of HIS/MRD, coding was most likely to be performed by coders external to the hospital (eg contractors or coders in nearby hospitals) or within the financial/administration sections.

## Coding quality

Managers were asked whether there were any activities used to assess coding quality in their facility. Coding quality was assessed in 270 (69.6%) facilities, while 118 (30.4%) stated that they did not assess coding quality in their facility. Approximately 75% of managers from public facilities and approximately 65% of managers from private facilities in metropolitan and rural locations stated that there were activities to assess coding quality. However, only half of the managers in public facilities in remote locations stated that they formally assessed coding quality. The quality activities described varied, but generally fell into the following six categories:

1. use of Australian Coding Benchmark Audit (ACBA) and/or Performance Indicators for Coding Quality (PICQ)
2. health department audits
3. error Diagnosis Related Group (DRG) audits
4. other internal audits and/or external audits
5. clinician-coder meetings
6. peer review.

Managers were then asked to consider a list of factors that have an impact on the accuracy, completeness, and timeliness of coding, and to indicate severity of each factor on a scale from no impact to an extreme impact. The factor most likely to affect coding quality according to managers was incomplete medical record content, with 72.2% of managers stating that this factor had an impact. This was closely followed by principal diagnosis not identified (65.8%), complications/comorbidities not identified (64.0%), illegible medical record entries (59.5% impact), performing multiple tasks (43.1%) (Figure 1). These top five reasons were similar across most subgroups (that is, public/private, locality and state/territory divisions).



**Figure 1: Impact of factors affecting coding quality**

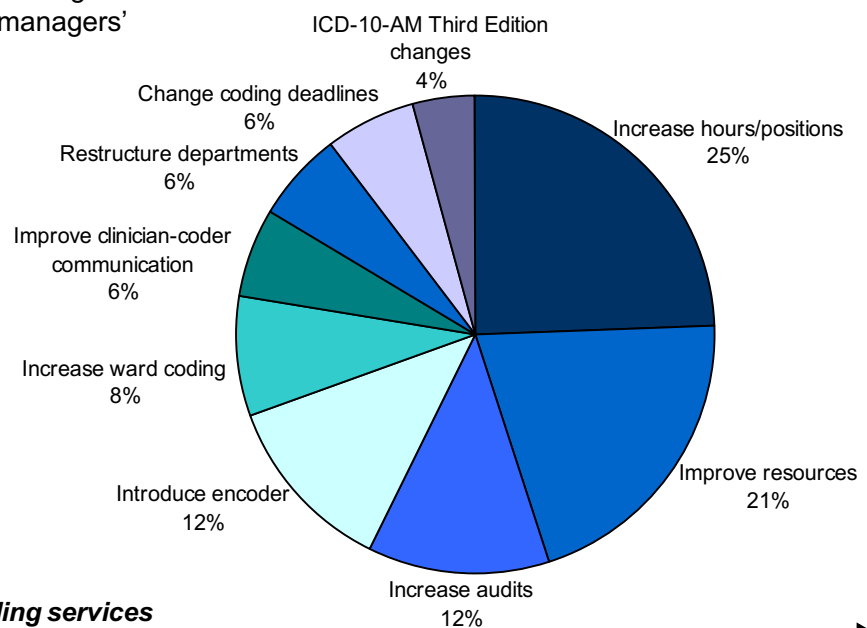
However, for some subgroups, other factors were also evident in the top five reasons for coding inaccuracy. These were:

- a lack of continuing education to update skills had an equal impact on coding quality as performing multiple tasks in remote areas and Queensland
- a distracting work environment and lack of training available for coders were rated equally as the fifth most important factors affecting coding quality in Western Australia.

1. introducing or increasing the number of audits
2. introducing 3M Encoder software
3. increasing the number of hours of employment for coders and/or the number of coder positions
4. improving communication between coders and clinicians
5. introducing or increasing coding done at ward level
6. improving resources for coders (such as software/computers)
7. restructuring departments
8. changing coding deadlines
9. introducing ICD-10-AM Third Edition changes.

### Planned changes to coding services

Managers were asked whether they were planning to introduce any major changes to the way coding is carried out in 2002. No major changes were planned in 271 (69.1%), 64 (16.3%) were unsure of whether they were going to introduce any changes, and 57 (14.5%) stated that they were planning to introduce major changes. Distinct categories of change were identified from the managers' responses (Figure 2):



**Figure 2: Planned changes to coding services**

## Coder education

Managers were asked about the educational opportunities for coders in their facility. The first question relating to education asked managers what in-house educational opportunities were available to coders in their facility.

Managers were asked to tick all the relevant categories from a list and to specify any additional in-house educational opportunities that were not part of the list provided.

Managers were able to specify as many educational opportunities as were available at their hospitals. In 38.7% of facilities, managers stated that coders are able to attend area coding meetings, in 33.7% of facilities coders are able to attend departmental coding meetings, in 26.4% of facilities coders are able to attend clinician-coder meetings. Medical science updates are available to coders in 11.3% of facilities, and library sessions can be attended by 1.9% of coders (Figure 3).

Sixty-seven (67) managers listed other in-house educational opportunities that were available to coders in their facility. These educational opportunities could be categorised into:

- feedback from audits
- attendance at ward rounds
- self education (including use of the internet, *Coding Matters*, Code-L etc)
- other external updates/workshops.

Managers were asked whether they were involved in organising and/or conducting continuing education for coders in their facility, and if so, what percentage of their work time they spent doing this. In over 50% of cases (n=215, 55.8%), managers stated that they

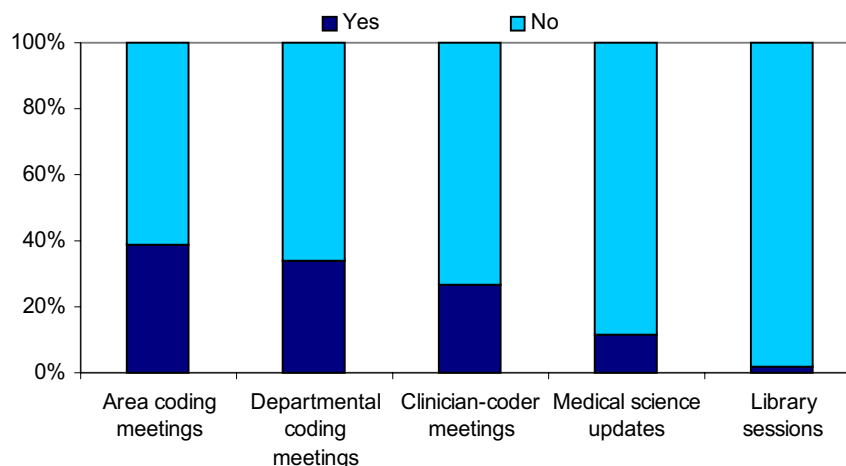
were not involved in organising and/or conducting continuing education, while 170 (44.2%) were active in these duties. Metropolitan public facilities had the highest level of manager involvement in continuing education with over 60% of managers stating their involvement in continuing education. A smaller number of managers (45%) in metropolitan private facilities stated that they were involved in continuing education. Nearly 40% of managers in both public and private rural facilities reported involvement with educational activities, however less than 20% of managers from remote public facilities were involved in continuing education.

The majority of managers (n=120, 69.4%) spend less than 5% of their work time organising and/or conducting continuing education for coders, 41 (23.7%) spend 5–10% of their work time on continuing education for coders, and less than 10% of managers (n=12, 6.9%) spend greater than 10% of their work time on organising and/or conducting continuing education for coders.

## Managers' comments

Managers were invited to provide free text responses in two parts of the survey. They were asked:

1. What do you see as the role of the clinical coder in the future, and do you feel the profession is prepared for any changes you envisage?
2. What do you see as the impact of electronic health records on coding practices in the future?



**Figure 3 : Educational opportunities available to coders**

## Role of clinical coders in the future

There were six major themes to emerge from the managers' comments in relation to the role of clinical coders in the future, with 218 managers (51.4% response rate) providing comments on the future role of the clinical coder. In order of importance, these themes were categorised as:

1. involvement in financial issues/funding/casemix
2. involvement in quality assurance activities
3. use of electronic health records
4. increased involvement in computing/IT
5. interaction with clinicians/medical staff
6. specialisation of coders.

Approximately 30% of managers who commented on the role of clinical coders in the future stated that the role of the clinical coder will be more important as hospitals are increasingly funded through casemix.

These managers stated that clinical coders will be vitally important in revenue raising and more involved in the financial and/or management sections of the hospital. It was suggested that clinical coders will become casemix experts/advisors and will be involved in the interpretation of data and ramifications of data for hospital funding.

According to managers the second most important role of clinical coders in the future is in the data quality area. Twenty-two percent of managers who commented on the future role of clinical coders stated that the analysis and assurance of data quality is becoming an increasingly important task for clinical coders. Managers believed that clinical coders will become data managers and data auditors, and that these roles will comprise more of their time than would clinical coding in the future. These managers suggested that clinical coders will also have a greater role in the education of clinicians to ensure data accuracy.

Closely related to the previous point was the discussion of electronic health records (EHR), with 13.8% of managers who responded to this question stating the EHRs will change the role of clinical coders from a coding role to a data managing/auditing role.

The influence of technology on the role of the clinical coder was raised by 12.4% of managers in response to this question. These managers indicated that it will become increasingly

important for clinical coders to possess information technology skills and to be computer literate, with a move towards greater automation in the coding process.

Over one in ten managers believed that there will be a stronger liaison between clinical coders and clinicians/medical staff in the future. With casemix-based funding, these managers stated that clinicians are becoming increasingly aware of the importance of coding and the role of the clinical coder. As a result, there is a move toward a greater involvement of coders in the education of clinicians/medical staff on coding issues.

Finally, a small number of managers (6.4%) believed that the role of the clinical coder will become more specialised in the future. With a need for greater specificity in coding, there will be a growing need for clinical coders to become specialists in particular areas and continually update their education in their area of speciality.

## Impact of electronic health records (EHRs)

Seven distinct themes are identifiable in the managers' responses to the impact of electronic health records, with 278 managers (65.5% response rate) providing comments on the impact of electronic health records. In order of importance, these themes have been categorised as:

1. easier and faster access to data/greater availability of information
2. data quality issues
3. increased need for computing/IT skills
4. greater legibility of records
5. need for training/education in EHR
6. greater involvement of clinicians in medical record documentation
7. greater flexibility in the location of coding (that is, off-site/work from home/centralised coding office).

A large number of manager responses to the impact of electronic health records referred to easier access to information and a greater availability of information, with 38.1% of managers raising these as benefits of EHRs. These managers believed that the easier access to off-site information and greater availability of information would result in coding using EHRs being less time consuming than using paper-based records.

Nearly 18% of managers raised data quality issues in their comments about EHRs, with the majority of these comments (82%) stating the EHRs will improve data quality. Reasons for improved data quality included more readily available information and greater legibility of records. Reasons given for poorer data quality related to the increased involvement of clinicians in the coding process and the automation of coding.

Technology concerns were an issue for 14.7% of managers commenting on the impact of EHRs. These managers stated that there would be a need for coders and clinicians to possess IT skills and to be computer literate. They also suggested that computing and IT infrastructure and support would be necessary to ensure the efficiency of EHRs.

On a positive note, 12.9% of managers believed EHRs would be beneficial in improving the issues associated with the legibility of medical records.

The increased need for training and education in relation to EHRs was raised by 12.9% of managers who commented on this question. These managers stated that training and education would be a twofold process, with both clinicians and coders needing training on the EHR, and with clinicians needing education on the process of coding.

Related to the previous point, 12.2% of managers who responded to this question stated that there would be an increasing involvement of clinicians in the coding process with the introduction of EHRs. These managers stated that clinicians would be increasingly involved in medical documentation and coding.

Finally, a small number of managers (5.7%) stated that EHRs would enable greater flexibility in the locality of coding, with coders able to complete their coding off-site either in centralised coding sections or working from home.

#### Reference

- <sup>1</sup> Classification of the Rural, Remote and Metropolitan Area (RRMA) was based on information available from the Australian Institute of Health and Welfare website [www.aihw.gov.au](http://www.aihw.gov.au).

#### Further information

Please contact Kirsten McKenzie (07 3864 5809, [k.mckenzie@qut.edu.au](mailto:k.mckenzie@qut.edu.au)) or Sue Walker (07 3864 5873, [s.walker@qut.edu.au](mailto:s.walker@qut.edu.au)) for further information on any aspect of this report.

► **Kirsten McKenzie**  
**Sue Walker**  
**Melanie Spallek**

#### About the authors

**Dr Kirsten McKenzie** is a research fellow at NCCH (Brisbane) and was responsible for the collection, collation and statistical analysis of the coder workforce survey.

**Sue Walker** is Associate Director, NCCH (Brisbane) and was the project manager of the coder workforce survey.

**Melanie Spallek** is completing a professional placement at NCCH (Brisbane) and is a student completing a degree in Medical Documentation and Information Systems at the University of Applied Science of Ulm, Germany.

Part 2 featuring responses from clinical coders will be published in the June 2003 edition of *Coding Matters*.

A comprehensive report summarising all findings will be published as part of the NCCH monographs series in September 2003.



#### Goodbye volume 9... hello volume 10

Are you one of the thousands of satisfied *Coding Matters* collectors who purchased the stunning state-of-the-art *Coding Matters* binder?

It's time for a new binder!

Purchase yours today.

*See the order form for details.*