‘Messages Home’. A HIM perspective on the HWA’s Health Information Workforce Report: significant issues for our profession

Richard Lawrance

Health Workforce Australia’s (HWA) Health Information Workforce Report (Health Workforce Australia 2013) was released in December last year, after two years involving a literature search, key informant interviews, stakeholder consultation, three case studies and a workforce survey (sampled from case study populations). An Expert Reference Group oversaw the process and provided feedback on report drafts.

The Health Information Workforce (HIW) study was the result of requests from the NEHTA and the Australian Health Informatics Education Council (AHIEC). Human Capital Alliance (HCA) was engaged to carry out the initial study. Its stated objectives were to:

- define the health information workforce, including its composition
- provide an analysis of the workforce.

The report makes six recommendations:

1 **Delineate the workforce** – develop consensus among key professional associations and peak bodies on occupations included, functions and competencies required, and standardised role descriptions.

2 **Improve data collection** – in consultation with and through the ABS, Australian Workforce and Productivity Agency, the Department of Immigration and Border Protection, Department of Health, and the AIHW.

3 **Form strategic relationships** – develop a single body to represent and advocate for all health information stakeholders on HIW issues, and work with:
   - employers, NeHTA, and the education sector to ensure workforce fit for industry
   - the ABS to better align classifications in the Australian and New Zealand Standard Classification of Occupations (ANZSCO) list with agreed HIW.

4 **Consider future configuration of workforce** - focus future workforce investment in the clinical informatics workforce to support the design, content development and implementation of workflow e-health tools; and ensure clinical educator/trainers are incorporated to support required workforce through workplace-based training and external continuing education programs.

5 **Address known health information workforce shortfalls** – increase the national supply of Clinical Coders and HIMs by:
   - For coders, adding workplace-based training to existing vocational education and training (VET) level coursework and improve remuneration
   - For HIMs, by addressing degree enrolments and improving the appeal of the profession.

6 **Promote health information training and careers** - raise the profile and status of the health informatics discipline and develop the three different types of education in health informatics identified in the study:
   - training specialists in biomedical informatics through postgraduate programs such as masters, PhDs and residencies
   - training clinicians in knowledge of biomedical informatics needs to spread and be included in medical and other health careers undergraduate curricula
   - continuing education of all professionals, for example, by adapting the American Medical Informatics Association (AMIA) 10x10 program model, or similar.

The report adopts the AHIEC framework for HIW (Health Workforce Australia 2013:13, Figure 2), which divides the workforce into three levels:

- Level 1: Workers who identify as part of the health information workforce and work full-time with health information systems
- Level 2: Healthcare professionals and administrators/managers who develop or help develop health information systems and use these systems heavily in their work
- Level 3: All healthcare professionals who must be able to properly input data and to extract information from health information systems.

Narrowing its focus to Level 1, the report’s first findings reflect the extent to which challenges for HIMs exist:

- Level 1: Workers who identify as part of the health information workforce and work full-time with health information systems
- Level 2: Healthcare professionals and administrators/managers who develop or help develop health information systems and use these systems heavily in their work
- Level 3: All healthcare professionals who must be able to properly input data and to extract information from health information systems.

An analysis of the HIMAA’s national competency standards for health information management professionals would indicate that this profession is also drawn from the healthcare, information science and computer science disciplines, as well
as from organisational and management theory and practice (Health Information Management Association of Australia 2013). From its own HCA survey, the report identifies five key roles as comprising the Level 1 specialist HIW based on an analysis of the 14 separate ANZSCO titles from case study site consultations and survey results:

1. Health Information Managers
2. Clinical Coders
3. Data Analysts
4. Costing Experts
5. Health IT Specialists.

The prevalence of these roles from the 14 occupations is summarised in Table 1. It clearly places the two occupations largely comprising the health information management profession – Health Information Manager and Clinical Coder – as constituting 64% of the HIW. Data analysts are also acknowledged as including HIMs.

Table 1: HWA 2013 Employee Survey

<table>
<thead>
<tr>
<th>Role</th>
<th>%</th>
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<tbody>
<tr>
<td>Health information directors, managers and officers</td>
<td>50%</td>
</tr>
<tr>
<td>Clinical coders (including educators)</td>
<td>14%</td>
</tr>
<tr>
<td>Data analysts</td>
<td>X/36%</td>
</tr>
<tr>
<td>Costing experts</td>
<td>Y/36%</td>
</tr>
<tr>
<td>Health IT specialists</td>
<td>Z/36%</td>
</tr>
</tbody>
</table>

Note: HWA Employee Survey (2013: 14)

This far into the report, it would not be unreasonable to expect the positioning of these two health information management occupations, then, as the main building block for the future development of the HIW. But this is not how the report develops.

Education and training in HIW

The premise that there is no single recognised means of entry into the workforce is problematic from the report’s outset. In reality, degree courses in health information management have been emerging from the medical records librarianship tradition in Australia since 1949 (Watson 2012). HIMAA accredited its first university course in health information management in 1992, based on national competency standards developed by the profession, and has continued to be the sole national authority for accrediting such courses since then (Watson 2012). Six of the fifteen degree courses and 82% of enrolments in HIW at Australian universities between 2006 and 2010 identified by the report were health information management (Health Workforce Australia 2013).

In addition, HIMAA has been delivering vocational and educational training (VET) level training in clinical coding for over 20 years (Watson 2012). HIMAA distance learning modules developed from its 1996 clinical coding competency standards formed the basis for the Australian Health Training Package Units of Competency noted by the report. As the report shows in its chapter on Workforce Supply, health information graduate output ‘nose dives’ between 2006 and 2010 from 600 enrolments nationally to just under 300. By contrast, it shows HIMAA Clinical Coder course enrolments increasing from 140 in 2007 to 250 in 2011 (Health Workforce Australia 2013). In 2014 HIMAA can confidently report enrolments approaching 600 a year.

While health information management in both HIM and Clinical Coder occupations does not represent a single entry point, it does represent a single curriculum under the auspices of the one professional association, with its own credentials at VET and tertiary levels, and ongoing credentialing through Association certification and professional development programs.

The report acknowledges and documents aspects of health information management education and training as elements of HIW development. Recommendation 5 proposes building on the existing HIW occupations of health information management; but HIMs are only included because of their involvement in clinical coding, not because of the value of information management itself to the healthcare system.

Why the report ignores such a substantial knowledge, education and training platform as the logical and major starting point for HIW development is unclear. What is clear, from Finding 1 onwards, is the report’s dependence on conflicting stakeholder perceptions and literature for its assessment of HIW. In addition, Level 1 as outlined in Finding 1 disappears.

Stakeholder perceptions

The report’s stakeholders are variously referred to as ‘many’, ‘most’, ‘a number’ or simply ‘stakeholders’ (Health Workforce Australia 2013: 10, 35; 16; 24; 11, 26, 30, 45 resp.). There are 17 of them acknowledged on page 51 of the report as key informants in the report, some notable health information management professionals among them, along with respected academics and a respectable range of employers at an executive level in the Australian healthcare system. Others have been drawn from the three case study sites.

One thing these stakeholders seem to have in common, however, is that they rarely in this report advocate health information management as part of the solution to the HIW challenge in Australia. In analysing the Level 1 skill set identified above, for instance, ‘stakeholder feedback suggests’ senior data analysts with skills in policy development, evaluation and strategy as ‘highly valuable’ but ‘scarce’ (Health Workforce Australia 2013: 7). These skills are easily found in the health information management competency standards, but these stakeholders are not recommending building on the health information management curriculum.

In fact, in stakeholder discussion of Level 1 skills, health information management seems to disappear altogether. The report notes, for instance, that ‘many stakeholders have recognised for several years that the absence of higher order health information skills in both the information technology and clinical workforce are likely to be a significant constraint on the capability to adopt EMRs and EHRs’ (Health Workforce Australia 2013: 11).

The skill set identified by ‘stakeholders’ for one of the four Level 1 roles to provide such EMR leadership, the Chief Information Officer (CIO) may align strongly with that of the
HIM as detailed in HIMAA’s Competency Standards, but the stakeholders cited see this role as ‘working with computer systems to facilitate clear communication between software, applications and hardware over a variety of networks, allowing for systems interoperability (between internal systems and external healthcare providers)’ (Health Workforce Australia 2013: 26). In other words, the role is in ensuring data transfer by technology and software. The informational content is the domain of three other clinical CIO roles at the same level: Chief Medical Officer, Chief Nursing Officer, and Chief Clinical Officer.

In the report’s Finding 4, ‘stakeholders’ identify this Level 1 arrangement as ‘an ideal future health informatics leadership structure’ (Health Workforce Australia 2013: 6). There seems no role in it, however, for a health information management understanding that different functions within a health system – IT engineer, ABF finance manager, health administrator, patient – have different information needs from clinicians and healthcare providers. Communication is between ‘software applications and hardware’ rather than between people. No system seems needed for the management of a dynamic relationship between data, information and knowledge.

**Opinion vs fact**

The report also finds stakeholders at odds with established HIM:

A number of stakeholders suggested that demand for the health information workforce may not be large, but that demand will exist for critical competencies that are difficult (and time-consuming) to develop, for example a high-order informatician (engineering/technological base with 10–15 years of health background) compared with coders, who can be created along clear pathways in 12 months (Health Workforce Australia 2013: 24).

Here a narrow understanding of the actual education and training standards required for quality clinical coding places more value on technological hardware (with a health background) for ‘high-order’ HIM solution. Again, no need for information expertise is stipulated. In addition, little heed is paid to readily available research cited elsewhere in the report, such as that by the Australian Institute of Health and Welfare (AIHW) into health information management workforce shortage, which forecasts a 50% increase in general workforce demand in the profession between 2010-14, and a need to double the total population of Clinical Coders (Australian Institute of Health and Welfare 2010).

In a similar example it is claimed that ‘[m]ost stakeholders believed clinical coders could be developed to competent levels in an average 12-month timeframe. The more complex elements of coding (advanced practice) were believed possible after a few years on-the-job’ (Health Workforce Australia 2013:16):

The report reveals here a worrying ignorance of the actual education and training required to produce a Certified Clinical Coder. At the VET level, HIMAA standards require some 760 hours of study over a four year period, including four major exams. Often this is in the context of on-the-job training, although HIMAA is neither funded nor supported by jurisdictions in providing workplace experience.

**Overseas literature**

In a further example of stakeholder opinion, the report notes ‘many stakeholders’ perceiving ‘a disconnect between an assessed need for the health information workforce and the employment decisions of individual employers. They noted that employers are not necessarily creating the roles/positions that the literature suggests are needed’ (Health Workforce Australia 2013: 35).

The literature to which the report turns to model the ‘needed’ workforce roles is from overseas. For instance, it looks to the clinician-driven, US-based HIMSS Asia-Pacific EMR Adoption Model – an adaptation of their Global EMR Adoption Model - to forecast HIM composition requirements. This model is hospital focused.

For career pathway development, the report refers to the National Health Service Health Informatics Career Framework (HICF) from the United Kingdom. This is a country with little tradition of national health information management tertiary education, yet the framework’s seven domains could so easily have been drawn from the Australian health information management competency standards.

By contrast, the Canadian Health Informatics Association (COACH)’s adaptation of Dreyfus’ Model of Skills Acquisition (Dreyfus & Dreyfus 1980), also cited by the report as an alternative career framework, reduces information management to just privacy, data integrity and standards; a far narrower definition than found in Australian health information management competency standards.

While there is value in looking to models and frameworks of significance, wherever they may come from, their fit with the actual knowledge and skills sets already available to build upon in the Australian context is not explicit in the HWA report. The report’s focus on hospital-based electronic information management solutions, while understandable, also misses an opportunity to explore the vital linkage between the primary and tertiary health sectors so essential for the improvement of care and cost in Australia.

**Clarity from conceptual confusion**

In summary, the HWA HIM Report is actually replete with examples of required skills sets and competencies that could have been straight out of the HIMAA suite of competency standards, particularly in research conducted in Australian healthcare settings by the report’s consultant, HCA (see for example Health Workforce Australia 2013: 31).
The report reveals here a worrying ignorance of the actual education and training required to produce a Certified Clinical Coder

But the report does not identify them as a coherent skills base from which to build an HIW suitable for the Australian healthcare system. Instead, the report assembles a showroom of overseas models from the literature, conceptually at odds with each other, and a palette of local stakeholder opinion, often insouciant to home-grown solutions such as evidence-based HIW research and a local health information management profession.

It is no wonder Australian health system employers seem confused as to what skills sets to place in which positions. The report’s calls for clarity of role definition in its first recommendation, and for some standardisation in the workforce research data set implied in the second, are well made.

The report notes on page 21 the challenge of differing information sources, and works hard to bring a range of meaningful options together. But from a HIM perspective, a foundation resource like the health information management profession seems lost in the mix.

A little emphasised strength of the report, however, is its acknowledgement of the emergence of the collaboration between the Health Informatics Society of Australia (HISA), HIMAA and the Australian College of Health Informatics (ACHI) to develop a Certified Health Informatician Australia (CHIA) credential, launched in July 2013 and now in operation.

Another strength to emerge since the report is Memorandum of Understanding work between HISA and HIMAA. Workforce strategy and a comparison of Health Informatics and HIM competency sets are on the agenda. So there are the beginnings, at least between the two professions of health information management and health informatics, of the unitary leadership the report seeks in its third recommendation.

The message from the report for HIMAA, however, and for health information management in Australia, is more of a ‘Ginsbergian Howl’\(^2\) than simply ‘clear’: we need to get the message out that HIMs are part of the solution - to industry, to employers, to ‘stakeholders’, and to our peers in our particular corner of the Australian healthcare system, if our actual value to the future of HIW is to be realised.

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\(^2\) Read Ginsberg’s poem ‘Howl’ at: http://www.poets.org/viewmedia.php/prmMID/15308

References
Watson, P.J. (2012). The first fifty years 1949-1999 – Medical Record Librarian to Health Information Manager. Kingswood NSW, Health Information Management Association of Australia.