Summary

In 2013, Health Workforce Australia recognised the need to delineate the health information workforce (HIW), and improve data collection processes for this workforce. Existing workforce estimates from sources such as the Australian Bureau of Statistics (ABS) census data and the Australian Institute of Health and Welfare (AIHW) are unreliable and do not examine all occupations within this workforce. A focus group was held at the 2015 Health Information Workforce Summit to examine the need for a minimum dataset to allow data collection and monitoring on this workforce. Nine participants unanimously agreed upon the need to formally monitor and evaluate the HIW by collecting current workforce data. A national census of the HIW would capture the data to provide evidence for increased funding and support for workforce supply and configuration. The scope for the census should be to quantify and qualify the HIW in order to build a capabilities-driven HIW development framework. Participants suggested the census should be administered by an independent body to ensure the workforce data collection system, and individual census data elements, are not influenced by individual agendas. However, while the data would be owned by this independent body, access to de-identifiable data from the program should be available to relevant stakeholders. A minimum dataset needs to be developed as the basis for the ongoing census, so trends in the standardised data items can be evaluated over time. The group concluded that support from government, employers, and relevant stakeholders, is essential for the success of an ongoing workforce monitoring and evaluation program. The development of this program should be an immediate priority for government strategy in order to prevent any further exacerbation of the HIW shortage, and to ensure sustainability and growth of this workforce heading into the future.

Introduction

In October 2013 Health Workforce Australia (HWA) released the Health Information Workforce Report (Health Workforce Australia, 2013). The report identified that the health information workforce (HIW) consisted of a number of different occupations with little consensus on its boundaries, and a lack of definition for some of these occupations. The report identified the HIW was comprised of: (i) Health Information Managers, (ii) Clinical Coders, (iii) Data Analysts, (iv) costing experts, and (v) health information technology specialists. The report made six recommendations, including: Recommendation 1 – undertake further work to delineate the HIW; and Recommendation 2 - improve data collection processes for this workforce.

Since the release of this report, three stakeholder groups, the Health Information Management Association of Australia (HIMAA), the Australasian College of Health Informatics (ACHI), and the Health Informatics Society of Australia (HISA), have been working to strengthen their relationship with each other and with industry and academic providers to meet the HWA recommendations. The Health Workforce Principal Committee (HWPC), part of the National Health Workforce Taskforce reporting to the Australian Health Ministers’ Advisory Council (AHMAC), has formed a Health Information Workforce Working Group (HIWWG) to progress the recommendations from the HWA report.

In the context of rapidly progressing e-health reform in Australia, the future HIW configuration needs to be clearly identified for employers and governments as well as for the HIW professions if workforce supply is going to meet demand. However, this cannot be achieved until the existing workforce has been quantified and qualified. The Australian Bureau of Statistics (ABS) currently only monitors the Health Information Manager and Clinical Coder occupations through the Australian and New Zealand Standard Classification of Occupations (ANZSCO) codes. Further research is required for Recommendations 1 and 2 before the industry can start addressing the other recommendations from HWA, particularly Recommendation 4 (HIW configuration).

The Summit

HIMAA identified a need to engage industry in a discussion about this workforce across the spectrum of recommendations by HWA. Inviting ACHI and HISA to participate, HIMAA facilitated the Health Information Workforce Summit in Sydney, Australia in October 2015. The Summit was attended by key stakeholders from government, the health industry, and members of the three stakeholder groups. At the Summit, Chair of the HIWWG Dean Raven (2015) informed the group of a work program to address the six HWA report recommendations, beginning with Recommendation 1, the development of a shared understanding of HIW delineation, which had been approved by the HWPC. The HIWWG has commenced development of the “shared understanding” document, in strong

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Kerryn Butler-Henderson, Richard Lawrance, Sarah Low, Natasha Donnolley and Jenn Lee
consultation with HIMAA, HISA, ACHI and other stakeholders. Work on HWA Recommendation 2 relating to improvement of HIW data collection is yet to begin, and will commence with an investigation to inform the case for any changes needed to existing data collections.

In relation to HWA Recommendation 4, consideration of the future configuration of the HIW, the HIWWG finds there is no clear evidence to support any new national initiatives at present but the working group will work with jurisdictions to identify any emerging issues. There is thus no sense of urgency from governments on the issues of workforce shortage and workforce configuration identified at the Summit (Health Information Management Association of Australia, 2016).

**The focus group**
As part of this Summit delegates were invited to participate in a focus group discussion about the need for a minimum dataset to allow data collection and monitoring of this workforce. The focus group study aimed to formally capture this discussion for analysis and dissemination to the health information industry, and to inform future research in this area. The objectives of the focus group study were to: (i) identify the objectives, scope, and purpose for the data collection and monitoring of the HIW; (ii) determine the data elements required in such a system; (iii) establish if there is an ongoing need for such a data collection and what is required for its administration; and (iv) ascertain the stages required in defining, quantifying, and qualifying this workforce. This paper discusses the topics raised in the focus group and makes recommendations to inform future research in this field.

**Participants of the focus group**
Participants who joined the small group discussion ‘Workforce configuration – data gathering and monitoring’ were provided with a participant information sheet and informed consent form and the facilitator (Author 1) discussed the purpose of the session and the study. A rapporteur, who had received prior training to prepare for their duties on the day, was allocated to document the discussion, which was voice recorded. Participants were assured that if they did not provide consent to the study, they could still participate in the discussion but their comments would not be included in the study.

Nine of the ten participants of the small group discussion consented to participate in the focus group, and as such only their comments are included in the below discussion. The five HIW occupations were represented, with participants from Australia and New Zealand, who worked in federal and state health organisations, or non-health organisations, and varied in age. Only four (44%) of the participants had experience in health research (range 0 – 30 years, mean 6.67 years), only one participant had experience in HIW research (5 years).

**The issue**
Existing workforce estimates from sources such as the ABS census data and the AIHW are unreliable. An evaluation of the Clinical Coder workforce by the AIHW (2010) reported substantial variation to the ABS data. While there are some data available from the ABS about health information management and clinical coding workforces, there are few data about the other three occupations of the HIW, particularly as the health information technology specialists (e.g. Health Informaticians) currently do not have an ANZSCO code allocation, and thus does not appear in ABS data. Workforce forecasting and planning is difficult without a credible source of information.

**The need for a census**
Participants of the focus group unanimously agreed upon the need to formally monitor and evaluate the HIW by capturing up-to-date data on the current workforce. A national census of the HIW would capture the data to provide evidence for increased funding and support for workforce supply and configuration. The group agreed that a regular census should be held every three to five years, as this was considered a manageable timeframe between censuses, and will allow for trend analysis over time. There was agreement that the census be conducted across Australia and New Zealand and include all five occupations identified by the HWA report. The group also agreed on the need for an ongoing research and evaluation program with industry and training providers on supply and demand in the HIW.

**Who is to conduct the census?**
Participants suggested the census should be administered by an independent body, such as a government organisation or university, to ensure impartiality. Administration by an independent body ensures the workforce data collection system, and individual census data elements, are not influenced by individual agendas. However, while the data would be owned by this independent body, access to de-identifiable data from the program should be available to relevant stakeholders, such as HIMAA, ACHI, HISA, government bodies, and employers, to facilitate planning and forecasting.
The scope for the census should be to quantify and qualify the HIW to build a capabilities-driven HIW development framework to understand the workforce composition and future configuration.

Scope of the census
The scope for the census should be to quantify and qualify the HIW to build a capabilities-driven HIW development framework to understand the workforce composition and future configuration. Participants stated that this will enable employers, government and stakeholders (such as HIMAA, ACHI and HISA) to identify trends in the industry and negotiate future workforce configuration requirements. Trends may indicate areas for role diversification and specialisation. However, participants stated that identifying those to survey will be difficult due to the diversity of roles in the HIW and complexities in targeting those who are not members of the stakeholder groups.

Data to be collected in the census and what it will be used for
Census data should be incorporated into a reliable workforce data collection system. Participants stated a minimum dataset needs to be identified and agreed upon, to be used as the basis for the ongoing census, so trends in the standardised data items can be evaluated over time. Each census may include additional data elements that may be collected for short periods of time in areas of interest, similar to the Medicine in Australia: Balancing Employment and Life (MABEL) study (Joyce et al. 2010). For example, understanding what attracts people to the workforce and the types of graduate entry roles were identified as an immediate need. Data elements in the initial censuses about graduate competencies would assist in informing the education sector and industry on the changes needed in graduate positions and accreditation competencies. However, over time, once a workforce data collection system is established with longitudinal data that enables forecasting, it may no longer be necessary to capture these data. Participants stated that graduate competencies and roles were essential elements to be captured from the start and analysed over time.

The group identified the need to monitor and evaluate occupational competencies and standards over time. Professional titles vary by organisation, making this an unsuitable data element, whereas monitoring the evolution of competencies and standards over time will provide better evidence to government and employers.

Data from the census should be used to examine the existing workforce, forecast the future workforce configuration, identify workforce shortfalls and demand, guide national priorities for workforce development, and map roles and functions, competencies, and qualifications.

Setting up the census
Participants identified a number of requirements before the first census can be conducted. An independent body needs to be selected to coordinate the development of the workforce data system and minimum dataset for the census in cooperation with relevant stakeholders. Financial support for the ongoing deployment of the census, data management, and reporting is required, and therefore a funding source needs to be identified. An appropriate framework needs to be developed and agreed upon by the independent body and relevant stakeholders, along with relevant memorandums of understanding for data use by such bodies, and how this body of work will feed back into the HWA recommendations.

Support for the census
The group concluded that support from government, employers, and relevant stakeholders is essential for the success of an ongoing workforce monitoring and evaluation program, including as representative on an advisory committee for the independent body managing the program. This includes advocating for funding to support the program, and cooperation for the dissemination of the census to gain maximum coverage. These stakeholders will benefit from the program through its ongoing data collection and reporting, as well as access to de-identified data. Development of this program should be an immediate priority for government strategy at ministerial levels in order to immediately staunch any further exacerbation of the HIW shortage, and to ensure sustainability and growth of this workforce heading into the future.

Conclusion
Reliable and accurate workforce data are essential to identify trends in the HIW and forecast future workforce configuration and requirements. A national census of the HIW would capture the data to guide national priorities for workforce development, and map roles, functions, competencies, and qualifications. This focus study identified the need to develop a national census as part of an ongoing data collection and evaluation program. Participants suggested the census should be administered by an independent body to ensure the workforce data collection system, and individual census data elements, are not influenced by individual agendas. However, while the data would be owned by this independent body, access to de-identifiable data from the program should be available to relevant stakeholders. A minimum dataset needs to be developed as the basis for the ongoing census, so trends in the standardised data items can be evaluated over time.

The group concluded that support from relevant stakeholders...
is essential. The development of this program should be an immediate priority for the development of government strategy to prevent any further exacerbation of the HIW shortage, and to ensure future sustainability and growth of this workforce. HIMAA has committed to relaying the findings and recommendations of the focus group to the HIWWG of the HWPA of AHMAC, asking them to consider these as an industry-driven solution to HWA Recommendation 2.

References

Corresponding author:
Kerryn Butler-Henderson, BSc(HIM), GCTT, MPH, PhD, CHIM, CHIA, FACHI
Australian Institute of Health Service Management
Tasmanian School of Business & Economics
University of Tasmania,
Locked Bag 1317
Launceston TAS 7250
Tel: +61 3 63243329
Email: Kerryn.Butlerhenderson@utas.edu.au

Richard Lawrance, MEd(Hons), BEd, GAICD
Chief Executive Officer
Health Information Management Association of Australia
North Ryde NSW 2113

Sarah Low, BHSc(HIM), MHM
Australian Institute of Health Service Management
Tasmanian School of Business & Economics
University of Tasmania
Launceston TAS 7250

Natasha Donnolley, BSc(HIM), CHIM
National Perinatal Epidemiology & Statistics Unit (NPESU)
Centre for Big Data Research in Health and School of Women’s and Children’s Health
University of New South Wales
Sydney NSW 2052

Jenn Lee, BN, GDAppSc(HIM), MAdEd
Health Information Service
Royal North Shore Hospital
St Leonards NSW 2065