The role of HIMs in clinical quality registries and data linkage

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I entered my final year in the Master of Health Information Management course presuming that on the completion of my studies I would be working in a hospital as a Health Information Manager (HIM) or HIM-Clinical Coder (CC). My final year professional practice placement, at Monash University, provided the perfect way to see how HIMs can be involved in non-traditional areas of professional health information management work.

Research in stroke and ageing

I completed a 20-day placement with the Translational Public Health and Evaluation Division (Stroke and Ageing Research) in the School of Clinical Sciences at Monash Health, Monash University. At first, I was doubtful about what this placement would have to offer in relation to providing experience within the health information management skill set. In addition to this, I already had significant experience working in clinical research at a university, which meant the academic-research environment was not new to me. I am very happy to say that my time at Monash University offered a great opportunity to put much of my newly acquired health information management theory into practice.

My placement supervisor was Dr Monique Kilkenny, who is a HIM and an epidemiologist. This was definitely an advantage because it meant that I did not need to spend time educating my supervisor on the breadth of knowledge that a final year Master of Health Information Management student has acquired. I entered this placement immediately after studying epidemiology in the previous semester so it was exciting to be spending time with an accomplished epidemiologist.

The placement at Monash University provided experience in a range of interesting research-related tasks:
- developing an archive and disposal schedule for a recently completed study
- creating tools (e.g. pivot tables and lookup lists in Excel) for reporting purposes
- learning about the use of Teleforms for data collection
- applying statistical software for checking, cleaning, and reporting data
- attending research presentations
- participating in user assessment testing for a new stroke registry data collection platform

Along with those experiences, I was also introduced to two exciting but relatively non-traditional areas of work in which I see the health information management skill set being of great value. These were clinical quality registries and data linkage.

A taste of Clinical Quality Registries

I was fortunate to spend one of my days with the Australian Stroke Clinical Registry (AuSCR) team at the Florey Institute of Mental Health and Neuroscience. The AuSCR is a Clinical Quality Registry (CQR) established in 2009. Cadilhac et al. (2010) described the overarching aim of AuSCR as providing “national, prospective, systematic data on processes and outcomes for stroke” with the purpose to “monitor, promote and improve the quality of acute stroke care”. The Translational Public Health and Evaluation Division (Stroke and Ageing Research) team at Monash University performs the analyses of the data from the AuSCR.

This was my introduction to the world of CQRs. Since this time, my knowledge and experience with CQRs have continued to grow as I have had the opportunity to work on the AuSCR and, more recently, on a newly-formed Upper Gastrointestinal Cancer Registry at Monash University. The clinical registry space and, more specifically, CQRs, is an exciting and growing area of health data collection. CQRs, according to the Australian Commission on Safety and Quality in Health Care (2014), are established to measure both the appropriateness and effectiveness of health care for specific diseases or areas of health care. I expect the rising popularity of CQRs is not likely to be news to the many hospital HIMs who are probably fielding an increasing number of requests from registries for patient data.

From the perspective of a HIM, I can see immense value in the addition of HIMs to CQR teams because the health information management skill set is applicable in many areas of registry operation. These include: data management; ethics and privacy oversight and management; project management; and informatics knowledge applied in the development of registry data collection platforms.

A taste of data linkage

Data linkage is also referred to as data integration or record matching. It involves linking person level information across one or more datasets, relating to an individual, from different sources (Australian Institute of Health and Welfare, 2016). A key element of data linkage is that a two-stage separation principle is used so that the privacy of the individual is maintained throughout the process. During the placement, I was involved in the data mapping tasks for a complex data linkage project being coordinated through the Stroke and Ageing Group at Monash University. Cadilhac et al. (2013) reported that this funded project involves linking AuSCR data with hospital data collections in multiple states of Australia. This linkage will allow for a subsequent, wider analysis of
the health of patients with stroke by greatly increasing the number or breadth of variables available for analysis than are available through the AuSCR alone. For example, this involves the inclusion of key factors such as the number of stroke readmissions, number of emergency department contacts, and co-morbidities.

This data linkage project piqued my interest from the moment it was introduced to me, and so I gained a tiny taste of the challenging world of cross-jurisdictional health data linkage. Andrew et al. (2016) explained the challenges presented in the stroke data linkage project. At the time of my involvement, this project was nearing the end of its third year and was yet to receive much of the linked data that had been applied for, and which would give some insight into the scale and complexities of undertaking a large cross-jurisdictional data linkage project of this type.

This project was an example of how administrative data, including coded diagnosis and procedure data, could be applied in health research. It highlighted the importance of utilising a health information management skill set in data linkage studies. A HIM has the knowledge of Australian Coding Standards and of changes in standards over time, which will directly affect and guide the interpretation of coded data. A HIM’s core knowledge and experience with state and national health data collections is, therefore, invaluable for health data linkage projects.

I later found data linkage to be a particularly hot topic in the area of health research. This is seen in the growing interest in linking research data to state and/or national health data collections. This is reflected, according to Tew et al. (2016), in a marked increase in publications using linked hospital data over the last 15 years. I may never have identified my own interest in health data linkage had I not been exposed to it during my placement.

Discussion
The health information management skill set can be valuable in a range of health contexts. While at Monash University, I was lucky to be introduced to the two growing areas of CQRs and data linkage in health data collection and health research. These “non-traditional” or non-hospital areas of health information management work involve the types of projects where HIMs are well-placed to add considerable value to the project teams. The potential value added is not limited to knowledge of medical records, health data, and clinical coding. It extends well beyond these to: health informatics; project management; quality management; research methods including epidemiology; health ethics and privacy; and working and collaborating within an interdisciplinary team. One of the future challenges for our health information management profession is to ensure our inclusion in these types of projects. This may require active seeking out of opportunities or roles, and promoting the value of our professional skills and knowledge.

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References


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