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Discussion paper

Resourcing hospital infection prevention and control units in Australia: A discussion paper

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Abstract *Background:* Infection control professionals (ICPs) are critical in maintaining high standards of quality patient care. Until recently, little was known about the scope of practice, structures, resources and priorities for ICPs and infection control units more generally. Over the past three years we have undertaken a program of work to explore these issues. The purpose of this discussion paper is to synthesise these results and outline implications for the Australian infection control community.
Methods: We undertook a survey of individual ICPs in Australian and New Zealand and a survey of hospital infection control units within Australia. To understand how our research program could be used to inform and be of value, we also convened a stakeholder workshop to discuss how data from our studies could be translated into meaningfully constructed findings. A synthesis of the findings from the two surveys and the workshop was undertaken and this formed the basis of this discussion paper.
Results: We were able for the first time, to comprehensively report on infection control staffing levels, priorities and barriers within Australia. We identified considerable variability in the scope, experience and expertise of ICPs and the potential value that credentialing has with respect to effective infection control programs. We were however, unable to develop recommendations with respect to staffing.

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Conclusion: The findings of our work may be used in designing and justifying business cases for infection prevention and control resources. There is also a need to undertake a similar study in settings other than hospitals.

Highlights

- We comprehensively report on infection control staffing levels, priorities and barriers within Australia.
- Variability in the scope, experience and expertise of ICPs was identified programs.
- Our work may be used in designing and justifying business cases for infection prevention and control resources.

Introduction

The design, implementation and evaluation of infection control programs in hospitals, largely rests with infection control professionals (ICPs). Infection prevention and control is a critical element of improving and maintaining high standards of quality patient care, and its vital role is recognised in health standards and hospital accreditation processes internationally. Understanding the scope of practice, structures, resources and priorities for ICPs and infection control units in hospitals is imperative in order to plan for and enhance future healthcare associated infection (HAI) initiatives. Further, an understanding of these issues provides a platform from which professional associations and academic institutions can undertake planning around workforce development. Over the past three years we have undertaken a significant study of these issues in the Australian hospital context. The purpose of this discussion paper is to synthesise these results and outline implications for the Australian infection control community.

Synthesis of a program of research

We undertook a survey of individual ICPs, and a survey of hospital infection control units, and have outlined the methods in previous publications [3,4]. Both surveys used validated questions from the international literature — the individual ICP survey focussed on demographics, workplace characteristics, and roles and responsibilities undertaken [8—12], and the unit survey participants were asked demographic information about their hospital, service profile; current staffing levels, grades, and contract hours; details about information technology systems used to support practice; and hours spent undertaking various infection control activities [3,4]. Barriers and enablers to evidence-based practice were also explored, and participants were also asked to provide details on specific infection control related outputs and patient outcomes in the previous 12 months.

Data from the two surveys were analysed separately and results were presented in various publications, each addressing specific questions. A brief summary of findings from each publication is presented in Table 1 while an overview of the program of research and associated research papers is described in Fig. 1.

We were able for the first time, to comprehensively report on infection control staffing levels, priorities and barriers within Australia. Broadly, we identified a wide scope of practice for ICPs, with mean staffing of 0.66 FTE ICPs per 100 overnight beds [3,4]. Using data collected from our surveys and extrapolated this to all Australian hospitals, we estimated $76 million is spent on the nursing component of ICP unit staffing in Australia each year [3]. We also determined that approximately 36% of ICP time is spent undertaking surveillance related work [5]. There was diversity of staffing levels, dependent on whether the hospital was public or privately funded and whether the infection control team was led by a credentialed ICP. Credentialing was also associated with better outcomes in accreditation and higher ICP staffing levels [1,7]. The most important priority identified by infection control teams was access to improved information technology solutions. Finally, the most serious set of perceived challenges to good clinical governance related to a lack of leadership or active resistance to infection control within the organisation [6].

Stakeholder workshop

To understand how our research program could be used to inform and be of value to ICPs, health managers and policy makers, we also convened a stakeholder workshop. The aim of the workshop was to provide advice to the research team on how data from our studies could be translated into meaningfully constructed findings. Participants provided input into how findings could be worked to enhance usability rather than what the specific recommendations should be.

Participants representing the diversity of those involved in infection prevention and control were invited to participate. Participants were invited due to their own expertise rather than representing a particular organisation. Participants included infection control professionals (a mix of nurse and medical practitioners) working in public hospitals, private hospitals and those working in an independent or private capacity. Other participants included those responsible for infection prevention and control policy at a state and national level as well as academia. All participants were very experienced in their own field. Those

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