Major Article

Exploring the context for effective clinical governance in infection control

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Background: Effective clinical governance is necessary to support improvements in infection control. Historically, the focus has been on ensuring that infection control practice and policy is based on evidence, and that there is use of surveillance and auditing for self-regulation and performance feedback. There has been less exploration of how contextual and organizational factors mediate an infection preventionists (IP's) ability to engage with evidence-based practice and enact good clinical governance.

Methods: A cross sectional Web-based survey of IPs in Australia and New Zealand was undertaken. Questions focused on engagement in evidence-based practice and perceptions about the context, culture, and leadership within the infection control team and organization. Responses were mapped against dimensions of Scally and Donaldson's clinical governance framework.

Results: Three hundred surveys were returned. IPs appear well equipped at an individual level to undertake evidence-based practice. 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 organization. Additional challenges included lack of information technology solutions and poor access to specialist expertise and financial resources.

Conclusions: Focusing on strengthening contextual factors at the organizational level that otherwise undermine capacity to implement evidence-based practice is key to sustaining current infection control successes and promoting further practice improvements.

Internationally, infection control is at the forefront of safety and quality initiatives within health services. It is among the International Patient Safety Goals identified by Joint Commission International,[1] and its importance is highlighted by the World Health Organization and the Centers for Disease Control and Prevention. Previous work has demonstrated the correlation between improvements in the general patient safety climate and standard precaution adherence (a key component of health care-associated infection prevention).[2] The past decade has seen improvements in hospital-based infection control practice as a response to both heightened awareness of the burden of disease associated with health care-associated infection and policy incentives to reduce the incidence of these complications. Key to this success has been the willingness of infection preventionists (IPs) to undertake evidence-based practice (EBP) and to use surveillance data for self-regulation and feedback as well as generating,[3] applying, and disseminating high-quality evidence to promote better patient care.[4]

Simply creating and allowing the passive diffusion of evidence seldom leads to sustained clinical change.[5] Underpinning successful application of EBP and improvements in safety and quality is an effective system of clinical governance. The Australian Council on Healthcare Standards[6] defines clinical governance as: "The system by which the governing body, managers, clinicians and staff share responsibility and accountability for the quality of care, continuously improving, minimising risks, and fostering an environment of excellence in care for consumers."

Clinical governance policies and practices have been enacted internationally as part of reforms to deliver safer, higher-quality health services.[7] Many different frameworks have been used, but most have

Table 1

Dimensions and subdimensions of clinical governance, from Scally and Donaldson[8]

Dimension	Subdimension
Quality methods	Good practice spread; clinical policies evidence based; lessons learned from failure; improvement processes integrated
Performance	Early recognition; decisive intervention; effective self-regulation; feedback on performance
Coherence	Goals of individuals, team and organization aligned; excellent communications; external partnerships forged
Infrastructure	Access to evidence; time allowed to plan; training and development strategies; information technology supports practice
Culture	Open and participative; good leadership; education and research valued; patient partnership; ethos of teamwork
Risk avoidance	Well-trained staff; clear procedures; safe environment

their roots in the original model laid out by Scally and Donaldson[8] in their seminal article for the UK National Health Service. Under this model, excellence in clinical governance is achieved through organization-wide commitment and investment across 6 multifaceted dimensions (Table 1). The focus is on the systematic integration of dimensions, so that quality improvement initiatives do not operate in isolation and organizations have opportunities to learn how to optimize delivery of quality care. The end goal is "a no blame, questioning, learning culture, excellent leadership, and an ethos where staff are valued and supported as they form partnerships with patients."[9]

The dimensions of clinical governance are strongly aligned with the core competencies outlined in the Association for Professionals in Infection Control and Epidemiology (APIC) Competency model for IPs.[10] APIC emphasizes the importance of team and consensus-building skills in their Leadership Domain, which align with the Coherence and Culture dimensions of clinical governance. Likewise, critical thinking and program management skills are highlighted, along with the ability of an IP to align his or her program's goals with organizational priorities. APIC also recognizes the importance of EBP and research skills, noting that an IP "must be able to critically evaluate research and apply the findings to their practice setting." Where the models differ is that the APIC model focuses on the role of an IP as a skilled individual able to identify, negotiate, and overcome barriers to successful implementation of practices. In contrast, clinical governance also considers broader cultural and system issues at a higher level, aiming to improve the organizational context in which clinicians and patients interact.

Much of the focus within the infection control literature has been on the dimensions of quality methods and performance, ensuring clinical practice and policy is evidence-based, and that surveillance and auditing is used for self-regulation and performance feedback. This may be due to overlap between these dimensions and core activities within the IP role such as surveillance, auditing, and education around issues such as contact precautions,[10] or difficulties in defining and/or measuring processes and outcomes within the other dimensions. However, considering their interrelated nature, it is problematic that there has been less exploration of other dimensions, and lies in contrast to the growing field of implementation science, which recognizes the important role contextual factors play in bridging the divide between evidence and practice.[11] Without a clear understanding of how contextual factors in all dimensions mediate an IP's ability to engage with EBP and enact good clinical governance, it is harder to drive practice improvements in this area and sustain current successes.

These additional dimensions of clinical governance were explored in a series of questions asked as part of a wider survey of the roles, responsibilities, and context in which hospital-based IPs operate.[12,13] A better understanding of the context in which IPs operate will enable hospitals and professional societies to develop and maintain EBP, good clinical governance, and excellent standards of infection control. Findings will be useful for IPs internationally, as we move toward a more nuanced examination of the interaction between competency and context in infection prevention.

METHODS

Between November 2013 and April 2014 we conducted an anonymous Web-based cross-sectional study of self-identified IPs currently working in Australian and New Zealand public and private hospitals. The true number of IPs in Australia and New Zealand is not known, so we used a snowball sampling approach and offered a range of small incentives (book vouchers and an iPad) to maximize participation. The survey was promoted to members of the Australasian College for Infection Prevention and Control (ACIPC), the main IP organization for the region, via their online listserv forum. Flyers were distributed at the 2013 ACIPC Annual National Conference and the survey was promoted at the Annual General Meeting. New Zealand IPs were also e-mailed by the Infection Prevention and Control Nurses College of the New Zealand Nursing Organization. Each IP was eligible to complete 1 survey (monitored using Internet protocol address and demographic data).

The survey was based on instruments used in previous studies[14-18] and pilot tested by 3 IPs before use, resulting in minor wording amendments. All consenting participants were asked a series of questions about their demographic characteristics, IP roles and responsibilities, and engagement in professional development activities and EBP.[15] A final set of questions asked about key elements required to support EBP,[5] namely the context, culture, and leadership of the team and organization. Questions around context were framed in terms of the IP's ability to access resources. Questions relating to culture and leadership were framed in terms of the extent to which they represented a challenge to EBP for the IP. Responses were then mapped against dimensions of clinical governance to provide a holistic picture of clinical governance as perceived by IPs in Australian and New Zealand hospitals.

Data were analyzed using SPSS version 21.0 (IBM-SPSS Inc, Armonk, NY). Logic and consistency checks were performed to ensure data quality, and descriptive statistics were run. To identify associations between responses and demographic variables, χ^2 tests were used. Based on existing literature we hypothesized that sources of evidence accessed by IPs would be associated with possession of an additional IP qualification and years of IP experience; perceived access to resources would be associated with employment in a private hospital facility and within a larger (>3 full-time equivalent employees [FTEs]) IP team; and that perceived challenges to practice would be associated with qualifications, facility type, and team size.[13,14,16,17,19] A Bonferroni correction was applied to adjust for multiple testing. Ethical approval was obtained from Avondale College of Higher Education Human Research Ethics Committee (No. 2013:37).

RESULTS

Responses were received from 300 IPs (290 from Australia and 10 from New Zealand). Amongst respondents, 53% were older than age 50 years, 94% were women, and 44% had worked in infection control for more than 10 years. The majority (75%) worked in a public (ie, government owned and funded) facility. In addition, 53% worked as a sole practitioner (≤1 FTE), with 28% working in a team of 1.1-3.0 FTEs and 15% working it a team of more than 3.0 FTEs.