Improving quality in health care: our perspective

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Introduction

Our Association's commitment to and pursuit of total quality management can be demonstrated through the AICA strategic plan and publications that support this concept. In the context of surveillance of health care associated infection, which is common to all infection control programmes, the need for measurable performance indicators within the constraints of limited infection control resources drove AICA to review surveillance methodology. In order to promote a nationally consistent approach, a multi-disciplinary National Advisory Board (NAB) was established.

The NAB operates in accordance with, and in support of, AICA's mission, vision, core values and beliefs. It is empowered through the following Terms of Reference (TOR) to lead the surveillance of health care associated infection of the Association:

- To develop and coordinate a national surveillance strategy which embraces AICA values such as:
  - voluntary participation;
  - de-identification of aggregated data;
  - establishment of the socio-economic burden of health care related infection;
  - focus on infection control outcomes;
  - evaluation of infection control practices; and
  - clinician empowerment.
- To maintain a multi-disciplinary national advisory network to enable AICA to develop national consensus on infection control standards that minimise adverse events.
- To provide expert advice regarding the management and prevention of health care related infection(s).
- To develop process and outcome measures suitable for a variety of health care settings.
- To foster research that explores the prevention and control of health care related infection.

The initial activities of the NAB have focussed on the development of consensus definitions in areas such as surgical site and blood stream infection (SSI and BSI). Other clinical indicators are being developed and will be published for comment by members, governments and relevant stakeholders. All definitions will continue to be refined in accordance with user feedback to enhance and support their utilisation nationally.

The collection of BSI line days as a reliable denominator has proven to be challenging. Members of the NAB will research this aspect of surveillance methodology in order to simplify the process and promote utilisation and compliance. In the interim, alternative processes are articulated within the systems and analysis section of this perspective.

To meet the continuous quality improvement needs of smaller health care facilities, the NAB introduced a process of 'signal infection' surveillance, which was articulated to members in June 2001 edition (6:2) of *Australian Infection Control*. Future NAB projects will work towards enhancing surveillance activities within the important context of smaller facilities both in metropolitan as well as rural and remote regions.

Important aspects of quality improvement include; leadership, systems and analysis, surveillance and quality management, total quality management utilising statistical process control, a learning environment, and economic deliberation. The NAB has striven to apply these aspects to the surveillance of health care related infection for the purpose of promoting national cultural change towards minimising preventable infection control adverse outcomes.

Cultural change and leadership

The nature and delivery of health care is constantly changing. To maintain our identity and relevance within this dynamic environment, the voluntary organisation of Australian infection control practitioners (ICPs) needs a clear framework against which to align itself. In response to this need, a

strategic plan was developed by the partnership of executive members and presented to the membership in June 2001. Whilst the strategic framework provides the direction and clearly establishes the agenda for progressing change through action, influencing the culture of the organisation also requires strong and effective leadership. Each participant state or territory nominates an executive member to the AICA partnership. These members are your voice on a national platform and hence require your strong support.

AICA representatives and opinion leaders influence our Association's ability to pursue organisational change. Ideally, opinion leaders such as national and state executives promote a positive environment – one that enables members and non-members to be valued and nurtured by mentors. There are a number of these individuals within our Association, past executive members, editors and committee representatives. Their success can be attributed to their ability to be self-effacing and motivated by their passion to 'make a difference' by improving health care outcomes.

The multi-disciplinary NAB includes recognised opinion leaders, individuals who have assisted our Association in its quest for professional identity, credibility and professionalism. The achievements to date have provided AICA, and the State and Federal governments, with an overview of both national and international surveillance activities through the Scoping Study publication. Additionally, the move towards consistent surveillance methodology has been promoted by the formulation and utilisation of minimum standard definitions for the surveillance of health care associated infection, provision of 'signal infection' surveillance process for small health care facilities and, finally, numerous publications within various journals.

Systems and analysis

To promote national consistency, AICA recommends the application of minimum standard definitions for BSI and SSI utilising appropriate surveillance methodology based on the size of a facility. For example, the process of 'signal infection' surveillance enables smaller facilities where both procedure and infection rates are low to investigate each event, thereby appropriately demonstrating their responsibility to the organisation and members of the public in settings where infection events are unusual or rare.

Benchmarking relies on the collection of information and appropriate statistical analysis. The collection of BSI line days has proven to be problematic due to issues associated with tracking of devices. Most ICPs suggest that BSI line days can only be collected in an intensive care setting. Until research can be undertaken, the NAB has determined BSI line day information is *only* to be collected for patients residing in an intensive care unit (ICU). Whereas in non-ICU settings, BSI surveillance should implement the 'signal infection' methodology. Alternatively, health care facilities may choose to use proxy line days as a denominator. Information such as the number of intravenous lines in situ on a given day, the number of separations or occupied bed days is easier to collect.

Any surveillance data collected should be analysed using process control charts to enable prospective surveillance of clinical indicators such as SSI and BSI The use of control charts is essential to monitor trends, identify variations and provide feedback of surveillance data within real time so that clinical staff are aware of infection rates.

Surveillance and quality management

Primarily, the surveillance of health care associated infection is undertaken to enable internal benchmarking. This type of review is both meaningful and valid in terms of methodology and performance review.

Importantly, each facility should document surveillance objectives. The minimum standard clinical indicator definitions and signal infection process provide the criteria upon which to measure performance. However, it remains the responsibility of each organisation to utilise any outcomes to steer future organisational activities and actions as a consequence of surveillance activities.

In the future, if AICA is able to promote and participate in a national network, national thresholds may be feasible. Non-government organisations such as the Australian Council on Healthcare Standards (ACHS) have in the past endeavoured to provide health care agencies with national benchmarks/thresholds. However, ACHS is committed to a charter of change. In terms of infection control, ACHS is taking AICA's lead by working in collaboration with AICA on relevant projects.

Our Association, in accordance with our core values and beliefs, supports the principle of surveillance of health care associated infection being driven by AICA members. Ultimately, it is the clinicians at the clinical 'coalface' that have intimate knowledge of their organisation, who collect and manage surveillance data and who will be deemed accountable in part for preventable adverse outcomes such as infection. This responsibility cements the necessity for strong and cohesive collaboration through the national peak body of

AICA and utilising the collective expertise and commitment of the membership of the NAB.

Total quality management and statistical process control

Implementing total quality management means the organisation has internalised the philosophy and applied key concepts and processes such as continuous quality improvement, corporate and clinical governance and tactical controls within a risk management framework. The ability of an infection control programme to influence outcomes are dependant on several factors such as:

- Clear direction.
- The presence of a strategic/business/operational plan that guides the programme.
- Appropriate managerial skills that motivate and empower staff and patients to achieve the programme's aims, goals and objectives.
- Timely, valid and meaningful data that strengthens the commitment to practice review and change.

Learning environment

The ability to share approaches and understanding is another fundamental cornerstone to successful quality improvement in health care. The achievement of national consistency is supported through collaborating with significant groups in the health milieu. These groups should be reflective of those organisations that monitor and regulate health care.

AICA has respected this central requirement and has sought to maintain and develop strong working relationships with bodies such the National Health & Medical Research Council (NH&MRC) and, more recently, the Communicable Diseases Network of Australia (CDNA) in the review of guidelines and in targeted collaborations with ACHS on clinical indicator definitions and approaches to infection control through the ACHS fundamentals document.

Economic considerations

In the 21st century the cost of health care continues to increase, matched by the expectation of consumers in terms of quality and transparency in health services. The National Safety and Quality Council (NSQC) are being empowered by the Commonwealth to work with relevant others in health care to develop strategies to both improve patient safety whilst not additionally burdening the health care system.

The concept of cost effectiveness is not new; what is new is the increasing demand to be more publicly accountable for our outcomes. Further, there is a strong imperative for these outcomes to be measured across the Australian health care boundaries regardless of state and territory borders.

Thus the work of AICA through bodies such as the NAB provide us with a unique opportunity to be drivers rather than driven. The opportunity to work on behalf of those engaged in infection control across Australia is one that must continue to be pursued with vigour and determination. The development of outcome of care frameworks that are both economically achievable as well as meaningful to both health care providers and the public alike will be the test in the next few years.

Conclusion

The work of AICA and other associated bodies is in its infancy. The need for a collaborative approach to the strategic direction of infection control has never been more critical. Only through national consensus will AICA achieve its vision of being recognised as the national peak body which sets the agenda for infection control in the political arena.

AICA

Mission

AICA provides ICPs with a professional profile, identifies and promotes professional standards and lobbies with 'one voice' on behalf of ICPs.

Vision

AICA, as a partnership of state and territory associations, is the national peak body for management strategies to minimise health care associated infection.

Core values and beliefs

- Principles of voluntary participation and consensus.
- Equitable representation interests of ICPs and other related disciples.
- Promotes membership accountability and empowerment through clinical and corporate governance. The AICA Executive provides corporate governance of AICA.
- Application of ethical strategies to minimise adverse events to improve health outcomes in all health care facilities.