



Position Statement

Infection Prevention and Control Workforce Guidance

Infection Prevention and Control (IPC) programs must be a priority in every organisation. Systems need to be in place to maintain a commitment to strengthen the governance process, ensuring the safety of all healthcare workers (HCW), patients/residents, and consumers. (1,2) Patient safety shortfalls were exacerbated by the pandemic, and highlighted insufficient capacity to prevent the harmful impact of healthcare-associated infections.

Purpose

To provide considerations for decision makers tasked with resourcing and staffing infection prevention and control programs.

Background / Context

The COVID-19 pandemic has provided an opportunity to review and reflect on the role of Infection Prevention and Control Professionals (IPCP) within all healthcare settings, inclusive of but not limited to public, private, acute, rehabilitation, mental health, remote, primary care, residential aged care (RACF), disability and independent services.

There is a deficiency of evidence-based research in this area and subsequent challenges to set a minimum standard regarding full-time equivalent (FTE) IPCP per health service. Further work needs to be developed in this space. Evidence to date supports that current IPCP staffing ratios cannot be based on hospital bed numbers alone and do not adequately address the requirement of IPC in various settings, or varying program demands. IPCP staffing should be planned for and reflect the health services scope of work, work demands and responsibilities undertaken at each site. (4) Previous studies have concluded:

- The SENIC Study in 1985 recommended 1.0 FTE for every 250 occupied beds in acute care facilities (7,8)
- The National Nosocomial Infections Surveillance, CDC in 1999 recommended 1.0 (FTE) for the first 100 occupied beds and 1.0 (FTE) IPCP for every additional 250 beds (5,7)
- A Delphi project in 2002 recommended a ratio of 0.8 to 1.0 (FTE) IPCP for every 100 occupied acute care beds (8)
- The Public Health Agency of Canada recommended 1.0 (FTE) per 100 beds in areas of higher acuity and 1.0 (FTE) per 133 beds in areas of lesser acuity in hospitals. In long-term care, the recommended ratio was 1.0 (FTE) per 250 beds (9,10)
- The World Health Organization recommended in 2023 1.0 (FTE) IPCP per 250 beds (11)
- Mitchell et al, 2017, recommended 1.0 (FTE) IPCP for 100 overnight acute care beds (4)



The recommendations from these studies do not recognise staffing levels with reference to complex acuity in varying health settings. It is imperative to ensure that the number of admissions per facility, acuity/chronicity/complexity of the patient/service, and the associated time required to deliver a comprehensive IPC program are considered when allocating FTE.

ACIPC recognises that these recommendations are no longer sufficient to manage the expanding and variable role of an IPCP in all settings. The scope of the IPCP has grown significantly with the requirements in: antimicrobial stewardship, outbreak management, pandemic preparedness, staff health, immunisations, healthcare associated infection surveillance policy and guideline development, implementation and evaluation of; data collection, review, reporting, and interventions to ensure the best outcomes for consumers, patients, healthcare staff, and our communities to ensure best clinical practice. IPCP teams need to utilise management and leadership strategies to ensure IPC programs achieve their required objectives. (3)

Future IPCP FTE is required to be balanced to reflect the scope of the program required at each facility and the demographics of the patient population. (6,9,12) The World Health Organization (WHO) Workload Indicators of Staffing Need (WISN) demonstrates that core IPC activities consumed 78% of IPCP time, additional support and administrative activities the remaining 22%, active surveillance consumed 44% and further education 32%, in acute care settings. (12) International studies have shown that IPCPs in acute care settings spend the most time conducting and completing surveillance, inclusive of central line-associated bloodstream infections, with a range of 44% to 55% of IPCP time dedicated solely to surveillance⁹ and in Australia 36%. (4)

Position Statement

Many IPCP personnel, teams, and/or departments are under-resourced and may also be required to cover other portfolios within their employment. In recognition of these challenges, the Australasian College for Infection Prevention and Control (ACIPC) supports a review of existing inequity in IPC programs across all jurisdictions to ensure sustainable and comprehensive IPC program delivery as a minimum standard for future pandemic preparedness.

ACIPC recommends:

- Investment in IPC resourcing is cost-effective and essential to ensure patient/resident and healthcare worker safety and reduce preventable adverse patient outcomes. (3)
- A commitment from Health Service executive leadership teams to support strengthening IPC programs aligning with relevant jurisdictional requirements.
- All IPC programs be resourced adequately with standardised tools and an investment in the appropriate digital technology to support surveillance programs which is imperative to build strong sustainable IPC programs.
- All IPC programs must be led and managed by qualified IPC with additional administrative support.



- IPC programs should be inclusive of appropriately trained specialist physicians, microbiological support with a multi-disciplinary team to be able to effectively manage the increasing number and complexity of invasive and high acuity and severity of patients' needs. (3)

There is a need to demonstrate that IPC programs are implemented across health services at a national, jurisdictional and facility level to ensure existing gaps in IPC programs are urgently addressed, including;

- Acknowledge and demonstrate the importance of maintaining current operational readiness ensuring an ability to upscale surge capacity and the ongoing sustainability of IPC programs to address future threats of emerging novel infections.
- Acknowledge and demonstrate the importance of reducing the economic burden of healthcare associated infections, antimicrobial resistance and ensuring resilient healthcare systems are in place to support IPC.
- Highlight the importance of all IPC programs being managed by suitably qualified IPC personnel with the allocation of adequate resources required to support sustainable programs. (4)
- Strengthen existing IPC programs and further build preparedness by investing in IPC programs to address current gaps, and promote quality competency levels of multi-disciplinary HCW in IPC education. (5,6)

ACIPC recognises there is a deficiency of evidence-based research in this area and therefore the challenge to then set a minimum standard regarding full-time equivalent (FTE) IPCP per health service

Rationale

IPC staff resourcing should be planned for and needs to reflect the health services scope of work, work demands and responsibilities undertaken at each site.

Surveillance

Australasian acute care facilities who undertake surveillance activities and reporting, require additional services to ensure the relevant site, state, territory, and national reporting requirements are met in line with the ACSQHC Preventing and Controlling Infections Standard.¹ These surveillance activities are inclusive of but not limited to:

- *Staphylococcus aureus* bloodstream infections (SABSI)
- Central line associated blood stream infections (CLABSI)
- Surgical site infections (SSI)
- *Clostridioides difficile* (CDI)
- Multi-resistant organisms (MRO)
- Catheter-associated urinary tract infections (CAUTI)



With additional surveillance and compliance monitoring required for hand hygiene, transmission-based precautions, implementing evidence-based best practice bundles, standards for reprocessing reusable medical devices, and antimicrobial stewardship. (1,9)

Staff Health

A staff health program is often included within an IPCs role, and this should be factored into the allocated FTE, inclusive of appropriate administrative support and digital technology programs required to support the safe and secure storage of staff health immunisation and legal requirements. (4) A staff health program will be inclusive of both an immunisation program and the management of occupational exposures to all staff, including contractors. Some facilities will extend this service additionally to other external providers, for example, ambulance, police, and correctional services. In Australian Residential Aged Care Facilities (RACF), it has been acknowledged that the relationship between staffing and quality in residential aged care is behind that in other healthcare sectors. (13)

IPC experience and Credentialing

All IPC programs should have a suitably qualified lead with relevant qualifications specific to their area of employment. (4) The ACIPC Credentialing framework provides a pathway for all professionals to become Credentialed and provides a clear three-tiered system that combines the requirements for experience, appropriate formal education and training, along with evidence of reflective practice (as required by AHPRA), and a peer-reviewed process. ACIPC provides support to all IPC who are undergoing the Credentialing process. All healthcare professionals who lead an IPC program should have at a minimum:

- Completed or working towards the ACIPC Foundations Course and/or further specialised postgraduate qualifications in IPC from appropriately accredited Universities.
- Be currently credentialed or working towards credentialing.

ACIPC supports and values:

- IPC experience and expertise in their specified healthcare environment.
- All IPC to be encouraged to be Credentialed appropriate to their level of expertise. (4)
- Mentoring programs to support IPC at all levels and will strive to develop and ensure a clear pathway for Credentialed experienced ACIPC members to support all ACIPC members.
- Implementation of building strong, sustainable career pathways into IPC.
- Adequately resourcing and supporting IPCs and the IPC program.
- IPC health and well-being.

Governance and Leadership

IPC must be a priority in every health service and all organisations must have systems in place to ensure a commitment to an ongoing governance process to ensure the safety of all HCW, patients/residents, partners, and consumers.^{1,2} Acute Healthcare facilities, Disability, Mental Health, and Residential Aged Care facilities (RACF) are required to comply with their relevant ACSQHC National Standards to ensure they are fully accredited, based on jurisdiction, in Australasia. They should have systems in place to further strengthen the governance and leadership for key preparedness and



response capabilities of their current IPC programs. These programs need to be supported by a dedicated budget for increasing IPC FTE to support ongoing expertise inclusive of ongoing education and training programs for all IPC as required to ensure compliance with all actions in the ACSQHC Preventing and Controlling Infections Standards. (1)

Resources

The allocation of adequate and sustainable IPC resources needs to be considered as imperative to improve patient/resident and consumer safety and to reduce preventable harm. (4) Adequate and sustainable staff levels with suitable qualifications to both lead and be part of an IPC program with a distribution of multidisciplinary HCW in all facilities must be secured. This is to ensure prompt preparation and response to novel and emerging infectious diseases whilst maintaining an ability to deliver IPC services that are core to the ongoing program requirements. (5,6) Existing resources and weaknesses should be identified in the health service current capacity to determine areas of propriety to be addressed which will serve to strengthen capacity to provide an improved service and quality outcomes to patients, staff, and the health service.

Health services need to ensure there is strong focus on sufficient resources available to review and further develop IPC policies, procedures, and guidelines in line with legislative requirements. This includes those required to support emergency preparedness, response, recovery, and surge capacity, inclusive of a business-as-usual capability whilst ensuring the ongoing ability to build capacity for future threats, thereby ensuring resilient IPC programs are in place. (5) IPC capacities inclusive of protocols, guidelines, and availability of personal protective equipment (PPE), that manage additional staff health services inclusive of occupational exposure management, immunisation and vaccination programs, and support for programs including respiratory protection should be additionally resourced. Further research is required to inform future directions to determine adequate FTE of IPC staff across health and aged care settings.

Scope of Applicability

This position statement applies to all healthcare settings including community settings.



Supporting Evidence / References

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3. World Health Organisation. Core competencies for infection prevention and control professionals, 17 September 2020. <https://www.who.int/publications/i/item/9789240011656>
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13. Centre for health service development. How Australian residential aged care staffing levels compare with international and national benchmarks. A research study commissioned by the Royal Commission into Aged Quality and Safety, September 2019. <https://agedcare.royalcommission.gov.au/system/files/2020-06/AHS.0001.0001.0001.pdf>
Version Date Additions/Amendments Author



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Australasian College
for Infection Prevention and Control

Endorsement / Approval

Version	Date	Addition/Amendments	Author	Review by
1.0	May 2023	New position statement	N. Isles ACIPC Practice Guidance Committee Chair	ACIPC Board
2.0	May 2024	Review and updated references	Infection Prevention CNC.	Adv IPC Committee ACIPC Board
3.0	Nov 2025	Reformatted	Infection Prevention CNC	Adv IPC Committee

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