



ACIPC

Australasian College
for Infection Prevention and Control

ACIPC IPC Workforce Guidance Document

Executive Summary

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

ACIPC acknowledges the challenges and variations in staffing infection prevention and control programs across Australasia.

ACIPC recognises the lack of strong evidence and recommendations in this area and therefore the challenge to set a minimum standard regarding full time equivalent (FTE) IPC personnel per healthcare facility (HCF) or service. Further work and recommendations are required in this area.

ACIPC is urging the decision makers tasked with resourcing and staffing of infection prevention and control programs to consider:

- IPC staffing needs to reflect the scope of work, work demands, and responsibilities undertaken at each site
- Staffing levels that should consider complex and varying acuity in HCF settings and take into account the number of admissions per facility, acuity/chronicity/complexity of the patient/service, and the associated time required to deliver a comprehensive IPC program when allocating FTE.
- The scope of an IPC practitioner with the requirements in antimicrobial stewardship, outbreak management and pandemic preparedness, staff health, immunisations, healthcare associated infection surveillance policy and guideline development, implementation and evaluation; data collection, review, reporting and interventions to ensure best outcomes for consumers, patients, healthcare staff and our communities to ensure best clinical practice. ⁽³⁾
- Appropriate FTE to ensure the relevant sites, state, territory, and national reporting requirements are met in line with the ACSQHC National Standard 3 Preventing and Controlling Infections Standard and Aged Care Standards
- A staff health program is often included within an IPC's 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⁾

ACIPC Recommends

- Investment in IPC resourcing as cost effective and essential to ensure patient and healthcare worker safety and reduce preventable adverse patient outcomes. ⁽²⁾
- A commitment from HCF 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 to be led and managed by qualified IPC with additional administrative support
- IPC programs to be inclusive of appropriately trained specialists including; nurses, 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⁾.

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Introduction

The COVID-19 pandemic has provided an opportunity to:

- Review and reflect on the role of an Infection Prevention and Control (IPC) Professional within healthcare regardless of any region or type of healthcare facility (HCF) inclusive, but not limited to public, private, acute, rehabilitation, mental health, remote, primary care, residential aged care (RACF), disability service, and independent services
- Acknowledge and demonstrate the importance of ensuring IPC programs are implemented at a; national, jurisdictional and individual facility level to ensure existing gaps in IPC programs are urgently addressed
- Acknowledge and demonstrate the importance of maintaining current operational readiness ensuring an ability to upscale surge capacity and importantly the ongoing sustainability of IPC programs to address the 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)

Many IPC 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 recognises the deficiency of evidence-based research in this area and therefore the challenge to then set a minimum standard regarding full-time equivalent (FTE) IPC personnel per HCF or service. Further work needs to be developed in this space.

Evidence to date supports that current IPC 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. IPC

staffing should be planned for and reflect the actual scope of work, work demands and responsibilities undertaken at each site ⁽⁴⁾.

Previous studies have concluded:

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

These studies recommendations do not recognise staffing levels with reference to further complex acuity in varying HCF 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 is considered when allocating FTE.

ACIPC recognises that these recommendations are no longer sufficient to manage the expanding and variable role of an IPC professional in all HCFs.

The scope of an IPC practitioner has grown significantly with the requirements in: antimicrobial stewardship, outbreak management, and pandemic preparedness, staff health, immunisations, healthcare associated infection surveillance policy and guideline development, implementation and evaluation; data collection, review, reporting, and interventions to ensure the best outcomes for consumers, patients, healthcare staff, and our communities to ensure best clinical practice. IPC teams need to utilise management and leadership strategies to ensure IPC programs achieve their required objectives. ⁽³⁾

Future IPC FTE is required to be balanced at HCF to reflect the scope of the program required at each HCF 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 IPC professional's time, additional support and administrative activities the remaining 22%, active surveillance consumed 44% and further education 32% of IPC time in acute care settings. ⁽¹²⁾

International studies have shown, IPC 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 IPC time dedicated solely to surveillance ⁽⁹⁾ and in Australia 36%. ⁽⁴⁾

Australian acute care facilities, who undertake surveillance activities and reporting require additional services to ensure the relevant sites, state, territory, and national reporting requirements are met in line with the ACSQHC National Standard 3 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)
- vancomycin resistant *Enterococci* (VRE)
- multi-resistant organisms (MRO)
- multi-resistant Gram negative bacilli (MRGN)
- catheter associated urinary tract infections (CAUTI)

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

A staff health program is often included within an IPC's 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, contractors, and medical staff. Some facilities will extend this service additionally to other external providers, for example, but not limited to; 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 Credentialling

All IPC programs at all HCF should have a suitably qualified lead with relevant qualifications specific to their area of employment ⁽⁴⁾

The ACIPC Credentialling framework provides a clear pathway for all professionals to become Credentialled 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 Credentialling 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 post-graduate qualifications in IPC from appropriately accredited Universities,
- Be currently credentialled or working towards credentialling.

ACIPC supports and values:

- IPC experience and expertise in their specified healthcare environment and healthcare sector inclusive of Residential Aged Care, Disability Services, Independent Services, Acute Healthcare Facilities, Mental Health, Day Procedure Units
- all IPC to be encouraged to be Credentialled appropriate to their level of expertise ⁽⁴⁾
- mentoring programs to support IPC at all levels and will strive to develop and ensure there is a clear ongoing process for Credentialled experienced ACIPC members to support all ACIPC members
- implementation of building strong sustainable career pathways into IPC
- Adequately resourcing and supporting ICPs and the IPC program
- ICP health and wellbeing

Governance and Leadership

IPC must be a priority in every HCF and all organisations must have systems in place to ensure a commitment to an ongoing strong governance process to ensure the safety of all HCW, patients, 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 National Standard 3, Preventing and Controlling Infections Standards. ⁽¹⁾

Resources

The allocation of adequate and sustainable IPC resources needs to be considered as imperative to improve patients' safety and reduce patient 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 and essential to the ongoing program requirements inclusive but not limited to surveillance programs ^(5,6)

Existing resources and weaknesses should be identified in HCF 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 HCF.

HCF 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) who 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 in a variety of settings across health and aged care.

ACIPC recommends:

- Investment in IPC resourcing as cost effective and essential to ensure patient and healthcare worker safety and reduce preventable adverse patient outcomes. ⁽³⁾
- A commitment from HCF 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⁾.

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1.0	May 2023		N. Isles ACIPC Practice Guidance Committee Chair	