Guiding Principles for Healthcare Associated Infections in New Zealand

2020

He Kaupare. He Manaaki.
He Whakaora.
prevention. care. recovery.

INTRODUCTION

The Guiding Principles for Healthcare Associated Infections in New Zealand provides New Zealand healthcare organisations with a high-level framework and a set of key underlying principles that align with best practice care to support decision making around the prevention and management of Healthcare Associated Infections (HAIs).

There are a range of terms used to describe HAIs, and definitions vary based on context. For the purpose of this document the following definition has been used:

A HAI is an infection occurring in a patient receiving a health service, which was not present or incubating before contact with the heath service.

HAIs can occur in any healthcare setting, including general practice and other community care, hospitals and long-term care facilities. They are the result of when interactions with the healthcare system cause harm. They are a potentially preventable adverse event rather than an unpredictable complication and it is possible to significantly reduce the rate of HAIs through effective infection prevention and control (IPC). As well as causing unnecessary pain and suffering for patients, carers and whānau, these adverse events are costly to the health system.

Approximately 2,700 Accident Compensation Corporation (ACC) treatment injury claims are accepted for HAIs, costing nearly $22 million each year. The majority of these occur in District Health Board (DHB) hospitals and have consequences for the entire health system. It is the responsibility of all healthcare workers to prevent, recognise and appropriately manage HAIs.

Decreasing HAIs can decrease hospital acquired harm, length of stay in acute care, antimicrobial resistance, avoidable morbidity, avoidable mortality, avoidable hospital admissions, accident and emergency department attendance and improve, patient experience.

THE GUIDING PRINCIPLES:

Three areas of effective partnership

This document outlines the three Guiding Principles as partnerships to reduce health system harm. Each Guiding Principle has three key levers:

- Leadership and resources
- Surveillance, monitoring and research
- Workforce and clinical care

These are underpinned by communication with a focus on equity with reference to Te Tiriti o Waitangi. Cultural safety not only plays an important role toward achieving health equity, but also focuses on patient experience to define and improve quality of care.

Each lever has a number of actions for change, with best practice, evidence-based examples that support implementation to achieve equitable outcomes. These are applicable across a range of contexts within the health system and support the achievement of the Guiding Principles.

It is important to note that Guiding Principles provide a best practice framework for healthcare delivery and decision making, and work in partnership with mandated IPC standards and policies. They are designed to interact and improve existing policies and procedures without creating the need for new ones.

GLOSSARY AND ABBREVIATIONS

Hapū	kinship group, clan, tribe, subtribe - section of a large kinship group and the primary political unit in traditional Māori society.
Iwi	extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory.
Karakia	prayer
Koha	gift, present, offering, donation
Kotahitanga	a movement for self-government and national unity
Mana motuhake	autonomy through self-determination
Māori	indigenous person of Aotearoa New Zealand
Manaakitanga	hospitality and kindness
Mihimihi	greet, pay tribute, thank
Tangata whenua	local people of the land
Te Tiriti o Waitangi	The Treaty of Waitangi
Tino rangatiratanga	autonomy
Whānau	extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society.
Whānaungatanga	relationship, kinship, sense of family connection

AMR	Antimicrobial Resistance	**ARC**	Aged Residential Care
ACC	Accident Compensation Corporation	**CPD**	Continuing Professional Development
DHB	District Health Board	**GP**	General Practitioner
HAI	Healthcare Associated Infection	**HDC**	Health and Disability Commissioner
HDS	Health and Disability Services	**HQSC**	Health Quality and Safety Commission
IPC	Infection Prevention and Controls	**MCNZ**	Medical Council of New Zealand
PHO	Primary Health Organisation	**PHU**	Public Health Unit
SSII	Surgical Site Infection Improvement		

PRINCIPLE 1

Establish patients as partners in health

Te Tiriti o Waitangi: Principle of Partnership.

Patients and their whānau are partners, with recognition of a patients journey by all levels of organisations providing healthcare. This is underpinned by collaboration and communication with patients, whānau, hapu, iwi and their communities; to provide equitable representation, deliver equitable quality of care and achieve equitable outcomes.

1. Leadership and resourcing in partnership with patients.

1.1 Transformative leadership includes understanding the journey and stories of how patients, carers, and whānau are impacted.

- Someone within the clinical governance team has been assigned to work in partnership with the patient, their whānau and the public in IPC
- All those in leadership understand each part of the whole patients' journey (pre-care, during care and post-care) which influence HAI including:
  - » Demographics (especially ethnicity), socioeconomic status, HAI type and procedure
  - » How HAIs affect patients' health and wellbeing
  - » How HAIs affect patients' ability to engage with whānau, hapu and iwi
  - » Influencing factors on developing HAIs at a patient and organisational level
  - » Factors that lead to poorer outcomes from HAI
  - » Organisational activities that can improve outcomes for people with HAI
- Examples of ways to collect information:
  - » Regular meetings between organisation leaders, patient, whānau and tangata whenua representatives to discuss IPC and HAI.
  - » Patient surveys, focus groups and feedback forms that relate to IPC/HAIs and are available to all board members

1.2 Mechanisms are in place to include patients and their whānau in the design and delivery of IPC activities to encourage shared ownership, demonstrate reciprocity and promote the patients' voice.

- Good relationships and partnerships exist that promote mutually explicit goals, agreement around processes, and acknowledgement of power imbalances
- Opportunities are available for patients to identify who they would like present during care and how much information they would like shared with others
- Mechanisms to include patients relate to the organisations' own patient-centred care (and patient experience) definitions and work e.g., consumer advisory boards
- The organisation's IPC planning processes include recognising effects on patients from a range of sources (e.g., patient, carers, friends and whānau)
- The organisation recognises that patient stories belong to the patient, and they are shared with permission
- Patient experience information is used to design and deliver IPC activities and include personal stories from patients from a range of different demographic backgrounds

1.3 Patient, carer and whānau advocacy roles are embedded within IPC systems.

- Functional IPC systems are in place that incorporate patient, carer and whānau advocacy roles
- There are opportunities for patients, carers, and whānau to be included in key committees (patient safety, cultural safety, facility design, quality improvement, patient/family education) or there are specific IPC committees/advisory councils which are regularly consulted with
- Advocacy roles contribute to decision making, design and delivery of health services in line with Te Tiriti o Waitangi and the New Zealand Public Health and Disability Act 2000
- Formal opportunities for patient, carer and whānau involvement in IPC activities are available in consultation with tāngata whenua as appropriate
- Those involved in patient, carer and whānau advocacy roles represent a range of experiences e.g., those from different ethnicities, with different access to resources and those who have had significant events, will be used with a strengths based-development focus rather than a deprivation focus
- Advocacy roles are combined with meaningful relationships with Māori and other ethnicities in the population the organisation provides services for
- There is dedicated funding for patient and whānau experience committees that include koha and travel time

1.4 Organisational policies are equity-focused and recognise that many HAIs are preventable adverse events and there is public reporting with open disclosure when an HAI has occurred.

- Appropriate surveillance systems are in place to capture and manage data and enable reporting of HAIs to key national monitoring organisations or in public facing documents
- Open disclosure policy exists in line with Health and Disability Commissioner (HDC) and Medical Council of New Zealand (MCNZ) guidance, which is careful, considered and timely with equity improvements made transparent
- Regular reporting has a clear vision for equity with accountability that improves performance for priority populations
- There is a clear policy for explaining HAIs to patients, carers and whānau, including a clear explanation of contributing factors and any compensatory measures and entitlements
- Organisational annual reports include HAI information, which is available in writing and digitally as well as translated into lay-person language

1.5 Organisational policies include guidance on how staff establish a connection with patients, carers and whānau, to work together to recognise HAIs as part of patient-centred care (whakawhānaungatanga).

- Efforts are made to enable the use of tikanga (Māori cultural practices and principles) such as karakia (prayer) and mihimihi (introductions), when this is appropriate
- Patients are asked what their preferences are, whether they want whānau to be present and how much information is shared. Other opportunities for connection are utilised and may include:
  - When collecting demographic data from patients, carers and whānau with mechanisms in place to protect Māori data
  - Support for staff to build manaakitanga (hospitality), whānaungatanga (connection) and kotahitanga (togetherness) when working together
  - When handing over care to other staff

1.6 Adequate staff time and resourcing is in place to engage with patients and whānau and collect feedback on HAIs.

- There is dedicated time to collect patient feedback on IPC measures and experiences including HAIs
- There is dedicated funding for staff training on collecting feedback from patients and whānau who have experienced a HAI

1.7 The organisation adheres to the Health and Disability Services (HDS) standards related to IPC.

- Programmes and systems in place to demonstrate the meeting of HDS standards

2. Surveillance, audit and research is done in partnership with patients and outputs are made available to patients, carer and whānau.

2.1 Patient education and information includes outcome data in an appropriate format to support preventive action.

- Appropriate systems are in place for collecting and monitoring data that enable the sharing of outcome data with patients in an appropriate way
- Engagement is meaningful, collaborative and reciprocal with patients, carers and whānau
- Staff are aware of key HAI surveillance trends in their clinical area and include these and preventative actions when providing information to patients, prior to procedures or during healthcare contact
- Care is taken to explain medical jargon and specialised terms, with information delivered in a way that is meaningful to patients and their whānau
- Written information provided to patients includes surveillance trends and ways for patients to engage in preventative measures
- Education and information provided empowers patients to be involved in their care by adopting a shared responsibility to prevention or early intervention of HAIs

2.2 Patient risk factors are identified, and signs of emerging HAIs are monitored.

- Surveillance data is collected on potential patient risk factors for HAIs, and is monitored to better understand their effect
- Vital signs and point of care information is recorded and monitored at a patient, ward, and service level for signs of emerging HAIs

2.3 Processes are in place to routinely collect patient, carer and whānau feedback on IPC concerns to inform IPC activities.

- Information is available to patients throughout the patient journey including on arrival, pre-procedure, and in common areas, which enable patients to comment on IPC in a culture of quality improvement. Examples include:
  - » It's okay to question healthcare workers about their hand hygiene practices
  - » It's okay to question a healthcare worker about whether they should be using protective personal equipment or whether they are using it properly
- Opportunities are made for patients and whānau to identify and communicate concerns about IPC in real time including facility maintenance and cleanliness

2.4 The effects of HAIs on patients, carers and whānau are collected consistently and regularly.

- There are opportunities to discuss any cultural needs before engaging with patients to ensure stories are gathered in an ethical and culturally appropriate manner
- Stories are captured through a variety of information sources and participation methods, such as short, standardised surveys and face to face opportunities
- Mechanisms are put in place to ensure patient experiences of HAIs inform reviews or investigations, with outcomes shared with patients, carers and whānau

2.5 IPC interventions routinely include monitoring and evaluation with an equity-focused analysis.

- Equity-focused analysis is done that includes analysing data by demographics including ethnicity, deprivation and geographic location

3. Skilled workforce and clinical care that supports partnerships with patients.

3.1 Recognised patient risk factors for HAI are communicated to the patient, carers and whānau and interventions are put in place to decrease risk.

- For planned admissions and procedures, information on HAI risk and prevention is included with opportunities for discussion as part of informed consent (e.g. carer and whānau involvement, planning for wound review, wound care planning, checklist for patient factors)
- Discharge paperwork includes ways to prevent and recognise infection and is explained to patients, carers and whānau with the opportunity for them to ask questions (e.g. wound care, managing lines and medical devices)

3.2 All materials provided to patients are evidence based and designed with patient, carer and whānau involvement.

- Patient, carer and whānau receive relevant information, including pre-contact with healthcare, during healthcare contact and post contact delivered through a variety of media (e.g. posters in waiting rooms, printed material and educational videos)
- Information given to patients and whānau is in their preferred language through written materials or a medical interpreter
- Information is tailored to the patient's needs, culturally appropriate and accessible to people with additional needs such as physical, or sensory impairments and health literacy level

3.3 Appropriate testing is carried out and treatments are administered for HAIs.

- Organisations have access to appropriate laboratory and testing expertise
- Dedicated funding is available for staff training on recognising risk factors for HAIs, appropriate recording and reporting
- Staff are trained to ask and answer appropriate questions around testing and treatment
- Opportunities are available to discuss any patient support needs before testing and treatment to ensure the process is delivered in a clinically safe and culturally appropriate manner
- There is appropriate use of antimicrobial treatment
- There is appropriate use of testing for microorganisms
- There are planned reviews of wounds and treatment

3.4 The reasons for appropriate use of antimicrobials is communicated to patients so that the patient can consider the risks of adverse effects.

- Patients or carers fully understand what antimicrobials they are on, how to take them including for how long, alternatives available, and potential adverse effects with mitigation strategies

3.5 Staff, patients and visitors are prevented from exposing others while infectious.

- Fit for purpose occupational health advice is available, either through a dedicated team, or other responsible person that ensures the prevention staff and visitors spreading infection
- Clear occupational health guidelines for staff exist and include prevention, mandatory immunisation, what to do when staff notice they are unwell, and when to return to work
- Patients are prompted to disclose their health or risk status if there is a potential risk or source of infection to healthcare workers or others within the healthcare facility
- Patients and visitors are aware of their role in minimising risks by following basic hand hygiene, respiratory hygiene and cough etiquette

3.6 There is a culture of open disclosure in clinical care regarding HAIs; admitting mistakes, taking ownership and taking steps to mitigate future harm in line with Te Tiriti o Waitangi principles.

- Policies include explaining HAIs to patients, carers and whānau, as well as accountability and any compensatory measures to be implemented with the policy publicly available and reviewed regularly
- Patients who have a HAI are notified (including if identified post discharge), told about the impact it could have on their care, and given relevant information about minimising the risk to others

PRINCIPLE 2

Individuals, teams and systems within organisations work in partnership to improve IPC and achieve equitable outcomes.

Te Tiriti o Waitangi: Principle of Equity.

These partnerships are relationship-based and facilitated by regular and efficient communication to improve IPC and prioritise equitable care. These partnerships demonstrate shared responsibility, a commitment to quality service and explicitly encourage physical, mental, social, spiritual and economic wellness for the individual, whānau hapu, iwi and community in which they live in.

4. Governance and Leadership at all levels of the organisation recognises the importance of IPC and is appropriately resourced.

4.1 The governance group demonstrates leadership in IPC including a specific board lead for IPC with appropriate executive leadership and Clinical Director accountabilities.

- Board lead identifies and works with relevant senior management and IPC staff, ensuring HAIs are included in board agenda when appropriate with time set aside in meetings
- Board lead ensures that the impact of HAIs on the organisation are understood (e.g. financial, effects on staff and patients)
- Executive leadership takes a key role in ensuring HAI work programme is sufficiently resourced and visible within the organisation
- Clinical Director works to ensure that HAI work programme is operationalised in partnership with IPC staff
- Regular communication occurs between senior management and the wider organisation on IPC expectations

4.2 The organisation has a regularly reviewed IPC strategy that is based on organisational surveillance, with clear actions and appropriate resources.

- There are standardised organisational policies on IPC that align with best practice, internal and external quality improvement programmes
- IPC policies include clear structures, roles and responsibilities
- Policies take into account the needs of different levels of care and allow for flexibility in the deployment of resources

- High risk procedures are reviewed and a risk reduction strategy put in place including not going ahead with the procedure if resources are not adequate to manage potential complications
- All clinical staff are resourced to have sufficient time to fulfil their responsibilities for IPC
- Local workforce planning and workforce reviews explicitly consider, and are informed by the IPC strategy
- IPC policies include mitigation strategies for dealing with IPC threats from workforce retention issues and staff turnover
- There is regular IPC training and continuing professional development (CPD) for all staff which is designed for their role, with appropriate non-clinical time available
- Training modules exist for IPC and examples include:
  - » Preventing HAIs
  - » Recognising, recording and responding to risk factors for HAI including recognising potential outbreaks
  - » High risk procedures and exposures in line with other available programmes
  - » Early recognition and recording of HAI symptoms
  - » Early intervention and appropriate treatment
  - » Communicating about HAIs with patients, carers and whānau
  - » Understanding HAI surveillance

4.3 There are organisational wide incident plans to investigate and manage major infection outbreaks and HAI incidents.

- Adequate data is collected in an appropriate format to monitor, identify and respond to major infection outbreaks
- High-level managerial and clinical mechanisms are in place for coordination, internal and external communications and deploying adequate resources
- Recommendations and necessary actions are identified following an incident and these are implemented in a timely manner
- A mechanism is in place to ensure rapid response cleaning is initiated within appropriate timeframe

4.4 There is early consultation with the IPC team on any environmental changes that may influence HAIs.

- The IPC team is appropriately resourced for the size and context of the organisation, and there is capacity to engage
- IPC team is engaged with on changes to equipment purchased and used, development of new and changes to existing infrastructure, and layout of physical facilities to limit the risk of HAIs; seeking expert advice if necessary

4.5 Senior clinical staff act as champions for IPC at a departmental level.

- IPC champions include staff from a range of levels and areas of the organisations
- Senior staff demonstrate excellence in basic IPC practices such as hand hygiene

4.6 There is occupational health resource that screens and manages short- and long-term employees to decrease the risk of them contributing to a HAI.

- All staff undergo pre-employment health screening within one month of starting and there is a mechanism in place to identify this has been done for locum / agency / casual staff
- Programme in place to review the immunisation status of staff and/or ensure immunity
- All clinical and frontline staff are vaccinated as per best practice

4.7 Protocols and information on IPC programmes are readily available to all clinical staff through easy to access written or electronic systems.

- This includes (but isn't limited to):
  - » Hand hygiene
  - » Surgical site infections
  - » Lacerations or breaks in the skin
  - » Procedures to insert change or manage urinary catheters, IV lines, external feeding tubes and drainage tubes
  - » Taking and labelling samples
  - » Disposal of sharps and waste
  - » Cleaning and environmental decontamination
  - » The details and availability of isolation spaces
- Electronic access is available and may include desktop, intranet or handheld electronic devices

5. Surveillance, monitoring and research is carried out and fed back to all levels of the organisation.

5.1 Adequately resourced fit for-purpose IT systems support surveillance activity for monitoring HAIs and assisting with an appropriate response.

- There is ongoing funding for fit-for-purpose IT systems to support recording, reporting and surveillance activities capturing patient demographics, HAI type, risk factors, aetiology, severity, antimicrobial resistance (AMR) patterns and burden of disease
- The system allows for ongoing updates, changes and building of interfaces with other IT systems including other organisation IT systems

- The system incorporates laboratory results
- There is prompt identification of HAIs including positive laboratory results, incidents and trends; and alerts sent to appropriate staff
- The system incorporates data from multiple sources in real time and has capability to carry out time series analysis (epidemiological, clinical, microbiological, surgical, pharmacy and patient feedback)
- Reporting includes comparative data on performance within the organisation over time and is compared with other local or national data
- Analysis of trends from local and national surveillance data informs quality improvement initiatives across the organisation
- Validation processes are in place to ensure data accuracy

5.2 Outputs from surveillance systems are regularly fed back to relevant clinical teams and leads to change.

- Adequate surveillance systems are in place to capture appropriate HAI data
- Surveillance outputs are fed back at a ward, team and clinical area level at regular team meetings and plans put in place to mitigate future HAI risks
- Surveillance feedback is used to improve cleaning programmes
- An independent multi-disciplinary review is undertaken when a serious HAI is identified
- Audit results are shared, and feedback is provided, not only with those being audited (individual change), but also with hospital management and senior administration (organisational change)
- Regular review of the surveillance programme takes place to ensure it supports the quality improvement targets for IPC

5.3 Patient demographics are recorded and reported as a routine part of HAI surveillance.

- Appropriate surveillance systems and infrastructure should be in place to capture patient demographics alongside HAI data
- Ethnicity data collection aligns with Statistics NZ ethnicity data collection protocols

5.4 Opportunities for joint HAI research and evaluation are encouraged and supported throughout the organisation.

- There are mechanisms in place to support people who wish to conduct research into quality improvement methodology, behavioural sciences or other areas to improve the way HAIs are prevented or controlled and includes an understanding of the patient journey
- Prospective researchers are supported with guidance on how to meaningfully engage and build relationships through their research

5.5 The organisation has access to high quality microbiology and laboratory technology, which is used appropriately.

- Laboratory arrangements include agreements on only collecting and analysing samples when clinically appropriate
- There is timely feedback from laboratory services
- There is an appropriate alert system for positive samples, preferably electronic
- Clear guidelines are in place for reviewing antimicrobial choice based on laboratory results

5.6 Environmental programmes regularly monitor cleanliness, and this is regularly audited.

- Cleaning programme is adequately resourced with trained/certified staff
- The effectiveness of cleaning is regularly audited, with auditing stipulated in external contracts

6. Workforce collaborates across teams and specialties to provide clinical care that minimises the risk of HAIs and responds to them appropriately.

6.1 Staff in all areas understand their roles and responsibilities for IPC, fostering service integration based on the needs of the patient, carer and whānau.

- All healthcare staff are able to identify HAI risks in their own context and select the appropriate course of action
- Regular environmental monitoring is carried out and includes visual methods for routine and outbreak environmental assessments
- IPC objectives are included in job descriptions and performance feedback given in regular staff reviews including professional development focus areas
- Orientation pack for new staff includes information on where to access relevant IPC protocols
- Staff have necessary time and resources to fulfil IPC responsibilities
- Staff adhere to best practice in prescribing and reviewing antimicrobial treatment
- Staff consider risks in carrying out specific procedures and questioning the necessity of the procedure as part of clinical decision-making
- Appropriate training and education of staff with responsibility for cleaning in the use of equipment, disinfection and decontamination
- There is a dedicated staff pathway for raising IPC concerns

6.2 Ongoing IPC training includes individual and team skill building, recognising HAIs do not occur in isolation.

- There is dedicated professional development for the IPC team
- IPC education and training is integrated into other regular training opportunities for all staff
- Culturally responsive-Tikanga based training is available to gain deeper insights and understanding of Māori world views, the on-going impacts of colonisation and how to strengthen relationships with Māori
- Staff are given the opportunity to learn from each other's experiences in relation to IPC through in-service education and other means
- There is coordination around IPC and HAI training/upskilling with professional bodies who manage professional standards of practice e.g. through formal training or conferences
- Ongoing teamwork training is available and includes skills for participating and leading in different types of teams
- Annual review of IPC training resources is carried out to ensure consistency with the national evidence base, professional and occupational standards

6.3 Student and trainee healthcare workers recognise and respond to HAI risks.

- Students are expected to work according to organisational IPC processes
- Students are enabled to integrate a risk management approach into their daily tasks/duties that involves IPC and HAIs
- Students are supported to attend role specific and organisational IPC and HAI education sessions

6.4 Arrangements are in place to identify and communicate infection risks as patients move between services.

- Clear communication channels exist to facilitate information sharing on risks or established HAIs including colonisation with resistant organisms

6.5 The IPC team is well supported and appropriate for the size and complexity of the organisation or there is access to external IPC expertise.

- Regular processes are in place to review the skills, competence and capacity of the multi-disciplinary IPC team to ensure it is fit-for-purpose and appropriately supported and resourced
- IPC staff are available to support clinical staff or a defined process for gaining IPC advice and support if not available within the organisation - IPC expertise may be provided by other organisations to assist smaller facilities

PRINCIPLE 3

Partnerships between organisations improve IPC and positively promote equity

Te Tiriti o Waitangi: Principle of Active Protection and Equity.

Individuals, teams and systems within organisations work in partnership to improve IPC. Through active leadership, these partnerships are facilitated by regular and efficient communication and prioritise equitable care at all levels.

7. Leadership exists between organisations and resources are made available for organisational partnerships.

7.1 There is a nominated staff member at a leadership level who interacts with other organisations to prevent and manage HAIs.

- There is engagement with organisations to prevent and manage HAIs, which may be through one of the senior clinical leadership team
- Māori included at leadership and decision-making level, including when regarding IPC and HAIs

7.2 Local health providers participate in and promote a joint regional strategy, policy or pathway for decreasing HAIs which includes shared goals.

- Manaakitanga, whānaungatanga and kotahitanga are prioritised when working together
- Collaboration reflects the principles of Te Tiriti o Waitangi
- Collaboration safeguards the rights, dignity, privacy and interests of the patient, whānau, hapu, iwi and their communities
- A documented terms of reference exists for multi-agency collaboration to reduce HAIs
- A defined, shared and agreed governance structure exists with other regional health and social care providers that includes clear lines of accountability
- The organisation participates in regional arrangements for collaborative working beyond mandatory or contractual agreements to investigate and manage risks of HAI
- Mechanisms are in place to share learnings around HAI incidents and outbreaks
- Timely sharing of information occurs between organisations to minimise harm from HAIs

Partners may include:

- Academics/ researchers
- Māori health providers
- Consumer advisors and patient groups
- Other service providers
- Allied health, including laboratory staff
- Aged Residential Care
- Public Health Units (PHUs)

7.3 In the event of a HAI outbreak, legislated requirements are complied with and there is collaborative working with local PHUs.

- The organisation acts in line with statutory requirements
- There is evidence that the organisation works collaboratively with the local PHUs to investigate and manage HAI outbreaks which may involve sharing data and other information to help contain the outbreak

7.4 Outsourcing of care arrangements with other organisations ensures adherence to IPC best practice and actions to reduce the risk of HAIs.

- IPC considerations are included in contractual arrangements with health, social and other partner organisations

7.5 Organisations work together to achieve equity in HAI rates.

- This is facilitated by data sharing at a demographic level
- Partnerships include organisations who have specific expertise in achieving equity

8. Organisations participate in regional and national surveillance and monitoring programmes and enable opportunities for joint evaluation and research.

8.1 Organisations participate in developing regional and national surveillance and monitoring frameworks with information sharing and disseminating of results.

- Organisations have appropriate internal surveillance infrastructure and processes, and these can be shared at a regional or national level
- Appropriate, robust and agreed policies for data sharing between organisations are in place
- All organisations have mechanisms for timely data feedback and active HAI detection methods throughout the patient journey

- There is potential for organisations to compare their data to other regional and national data and is used for benchmarking purposes
- There is a standardised set of case definitions, coding practices and laboratory methods across organisations
- There is microbiological support provided by at least one national reference laboratory
- Evaluation monitoring framework includes the impact of interventions
- There is alignment with external auditing processes e.g. HDS standards
- Organisations participate in national training initiatives for performing surveillance
- Surveillance and monitoring support the partnership's commitment to equity
- Collaboration happens which promotes high-quality ethical research for social, cultural and economic wellbeing

8.2 Information on populations, procedures and exposures that are high risk for HAIs is shared at a regional and national level.

- Organisations have a robust surveillance system and processes to capture data and inform risk factors for HAIs in their context
- Sharing of results happens through an annual review or report on HAIs

9. Mechanisms are in place to improve patient care and share IPC learnings between organisations.

9.1 Local health organisations provide consistent IPC information to patients, carers and whānau.

- Patient information is developed collaboratively to improve efficiency and consistency

9.2 Organisations share learnings from their own experiences with others in the sector which includes best practice initiatives and managing HAIs.

- Formalised processes and active sharing of insights and lessons learnt with other organisations. Could include:
  - » Joint networking events
  - » Presenting at conferences
  - » Through professional bodies/newsletters

9.3 Arrangements are in place to ensure health providers in different settings can identify and communicate infection risks as the patient moves between services.

- HAI considerations are included in care planning and discharge planning
- Audit of communication between different health and social care providers is carried out e.g. auditing discharge summaries to general practitioners (GPs) and admission letters from care homes
- Admission, discharge and transfer policies for patients with an infection exist and these have been agreed by all organisations including local community and public health teams
- Agreed policy includes a risk assessment on admission, and risk of acquiring or transmitting infection is determined for all transfers of care and risk mitigation strategies put in place

9.4 There is a joint programme in place to consider current quality improvement activities and developments in HAI innovation and technology.

- Joint quality improvement is resourced and occurs between organisations
- Partnerships promote innovation to better understand HAIs and minimise harm

APPENDIX 1: Development Methodology

The HAI Guiding Principles were developed using a robust process with clear governance, current international best practice, published evidence and sector engagement. The Guidelines were developed by the Synergia Project Team.

Governance

The project had a multi-level governance structure. ACC's Infection Prevention and Control Advisory Group had overall governance for the direction of each stage of the guideline development. The group members and their areas of work are outlined below. A specific Guiding Principles Working Group was established to direct the development of the overarching guidelines, assist with stakeholder engagement, and to review and test implementation methodology.

Name	Role (at time of Guidelines Development)	Affiliations
Dr Michelle Balm	Clinical leader for infection services	Capital & Coast DHB
Francie Morgan	Infection prevention & control nurse specialist	MercyAscot
Dr Matthew Kelly	Infectious diseases and general physician	Hutt Valley DHB
Nikki Grae	Senior advisor infection prevention & control	Health Quality & Safety Commission
Dr Win Bennet		
Dr Margaret Macky	Clinical Lead	ACC Healthcare Associated Infection Prevention Team

Best practice evidence

A literature review was undertaken that included published evidence as well as international guidelines on infection prevention and control, and healthcare associated infections. Key sources of information include:

- The World Health Organization
- US Centers for Disease Control and Prevention
- U.S. Department of Health & Human Services - Office of Disease Prevention and Health Promotion
- UK National Institute for Health and Care Excellence
- Australian National Health and Medical Research Council
- Standards New Zealand

Sector engagement

A number of face-to-face and zoom meetings took place to engage with leaders and key informants in Infection Prevention and Control and Healthcare Associated Infections including those working at HQSC, DHBs, Private Surgical Hospitals and Primary Care. Thematic analysis was undertaken to identify necessary themes and content for the Guiding Principles and barriers and enablers to national implementation.

Equity Review

An equity review was undertaken by Māori researcher Mary-Kaye Wharakura to align the Guiding Principles with Te Tiriti o Waitangi principles and ensure all usage of Te Reo Māori was correct and appropriate.

APPENDIX 2: Information about HAIs

Healthcare associated infections (HAIs) are those infections that patients acquire while receiving health care. HAIs may be caused by infectious agents from endogenous or exogenous sources. Endogenous sources are body sites, such as the skin, nose, mouth, gastrointestinal (GI) tract, or vagina that are normally inhabited by microorganisms. Exogenous sources are those external to the patient, such as patient care personnel, visitors, patient care equipment, medical devices, or the health care environment. Understanding the true burden of HAIs is problematic as many go unreported and there is often little uniformity in diagnosing and coding HAIs for surveillance purposes.

HAIs are preventable

A large systematic review showed that a large proportion of common HAIs are preventable. Interventions, including those that promote basic handwashing have been shown to decrease central line-associated bloodstream infections (CLABSI) and catheter-associated urinary tract infections by up to 70%, ventilator-associated pneumonias and surgical site infections by 55%, and there is overwhelming evidence that intensive care unit line interventions significantly decrease sepsis rates.

HAI definition

A consensus definition of healthcare-associated infection (HAI) has not been reached, with a range of organisations using different definitions. Key points of difference within definitions include type of infection, time of onset of infection, where the patient is located when they develop the infection, how it is diagnosed and the inclusion of underlying comorbidities or risk factors.

The definition used for this project developed by the Guiding Principles Working Group:

A HAI is an infection occurring in a patient receiving a health service, which was not present or incubating before contact with the heath service.

ACC's role in preventing and limiting harm from HAIs

ACC reports on and funds treatment and rehabilitation for 'treatment injuries,' which may be in the form of an infection. As per ACC legislation, claims are paid by for injuries/ infections that are caused by treatment by a registered health professional, either through a direct action or inaction. Data on claims for treatment injuries are reported annually by ACC and in 2019, the costs for Infection related treatment injuries were just under $20 million.

APPENDIX 3: Guiding Principle Approach

The development and use of guiding principles are becoming increasingly common within both the private and public sectors. Guiding principles have been used in the transport sector, in health and for information and financial governance. The recent Guiding Principles for Pressure Injury Prevention and Management in New Zealand, developed by ACC, is a good example of using guiding principles in the prevention and management of injury and illness.

A principle can be defined as a fundamental truth or proposition that serves as the foundation for a chain of reasoning. It is a general statement with widespread support, which is intended to support truth and fairness and acts as a guide to action. Principles cannot be replaced by mechanical rules. Sometimes a set of rules may be proposed to guide the observance of a principle, but it will always be a matter of judgement whether following these rules will actually achieve the conformity to the principle.

Rule based approaches

Rule based approaches often focus on compliance and often have a high degree of certainty with clear definitions and key tasks to be performed. Rules are more specific in content and more restricted in scope than principles. Regulatory appetite for rules is driven by a desire for comparability and risks are decreased when judgements are explicit. Unfortunately, they also set up an environment where the bare minimum is often the goal (a culture of mere compliance or tick box mentality) without thinking of the why of an action, limiting critical thinking and innovation by individuals. Rules can lead to de-skilling of professions where individuals assume their responsibilities have been discharged simply by adherence to a rule. Rules require that the actions stipulated in the rule are followed and, if not, sanctions will apply. Rule based approaches struggle to handle and respond to complexity and subjectivity. The versatility of rules is limited when the decision-maker is faced with a situation which may not have been anticipated by the drafters and thus no rule has been provided.

Principle based approaches

New solutions are needed address increasingly complex, changing or overwhelming health issues. Hard rules cannot cope with the myriad considerations, which include uncertain risks, uncertain futures and uncertain outcomes. Principle based approaches identify the key underlying principle that must be met and leave how that principle is met largely to the skill and ability of the people applying it. Principles should be seen as fundamental starting points to guide deliberation and action. They point decision-makers in the direction of the relevant values and considerations to be taken into consideration when a particular decision or course of action is being contemplated. Organisations can recommend tools to use to deliver on principles, but there is also room for alternative approaches mores suited to context.

This approach also places a higher expectation on all individuals to demonstrate integrity, extending beyond simple compliance, and exercising their own judgement and values

and reflection to guide their actions. Principle based approaches can promote more responsibility on the part of decision-makers to demonstrate the credibility of their conduct and to engender trust in their processes. They encourage mutual learning and engagement in the governance exercise promoting partnership in governance.

Principles based approaches, in contrast to rule based approaches, focus less on fixed procedures and regulation, focussing instead on developing more flexible general approaches. Principles allow a common frame of reference, values and language for decision making. Principles based approaches encourage deliberation and dialogue and the search for overlapping consensus. A principles-based approach fosters engagement over interpretation, with consensus and a clear way forward more likely to emerge as a result.

How do they fit together?

Most overarching solutions and frameworks will include aspects of both principle and rule based approaches. In turn it means that principles and rules are not mutually exclusive in their operation and that their deployment becomes a matter of good design rather than a preference for one over another. Rules might provide a greater degree of certainty at the cost of flexibility; principles might provide greater flexibility but also far greater latitude which, we accept, might not always be welcomed in a regulatory environment

Adopting and applying a principles-based approach can at times prove challenging and apparently antithetical to governance and regulatory objectives. The value that principles can offer in decision-making outweighs the challenges that emerge in applying them. Principle based standards don't need to stay static.

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