Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Guide to the monitoring programme undertaken against the National Standards for the prevention and control of healthcare-associated infections

18 May 2017

Safer Better Care

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent authority established to drive high-quality and safe care for people using our health and social care services in Ireland. HIQA's role is to develop standards, inspect and review health and social care services and support informed decisions on how services are delivered.

HIQA aims to safeguard people and improve the safety and quality of health and social care services across its full range of functions.

HIQA's mandate to date extends across a specified range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children and Youth Affairs, HIQA has statutory responsibility for:

- **Setting Standards for Health and Social Services —** Developing person-centred standards, based on evidence and best international practice, for health and social care services in Ireland.
- **Regulation —** Registering and inspecting designated centres.
- **Monitoring Children's Services —** Monitoring and inspecting children's social services.
- **Monitoring Healthcare Safety and Quality —** Monitoring the safety and quality of health services and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health Technology Assessment —** Providing advice that enables the best outcome for people who use our health service and the best use of resources by evaluating the clinical effectiveness and cost-effectiveness of drugs, equipment, diagnostic techniques and health promotion and protection activities.
- **Health Information —** Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information about the delivery and performance of Ireland's health and social care services.

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Document revision history

Publication date	Document title
March 2014	Guide: Monitoring programme undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections
28 May 2015	Guide: Monitoring programme undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections
18 May 2017	Guide: Monitoring programme undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections

Purpose of this guide

The purpose of this guide is to provide an understanding of the Health Information and Quality Authority's (HIQA's) revised approach to monitoring public acute hospitals against National Standards for the prevention and control of healthcare-associated infections.

The *National Standards for the Prevention and Control of Healthcare Associated Infections* were first published by HIQA in 2009.[1] Under the Health Act 2007,[2] part of HIQA's role is to set such standards in relation to the quality and safety of healthcare.

The guide aims to give both service providers and members of the public an overview of HIQA's monitoring programme against these National Standards and subsequent revisions to the Standards. It includes information about the:

- format of HIQA's phased monitoring programme
- the format of unannounced hospital inspections
- and the type of information, documentation and data that HIQA requests before and during a hospital inspection.

This guide may be revised periodically as this monitoring programme progresses and or changes. In this guide the *National Standards for the Prevention and Control of Healthcare-Associated Infections* (2009) and subsequent revisions will be referred to as the National Standards. Explanation of some terms used in this guide are contained in a glossary at the end of this document. This guide replaces the previous guide which was published by HIQA on 28 May 2015. This guide is structured as follows:

Sections 1 and 2 give background information and the current context in relation to the revision of HIQA's monitoring against the National Standards.

Section 3 provides an overview of the unannounced hospital-inspection process.

Section 4 provides details on HIQA's risk identification and notification process.

Section 5 describes HIQA's process for reporting the findings of unannounced inspections.

Section 6 summarises the response expected from hospitals regarding unannounced inspection findings.

1. Background to the revision of this monitoring programme

It is recognised internationally that the setting and implementation of standards and monitoring hospital's compliance with them are important levers in promoting improvements in quality and safety in healthcare.

A healthcare-associated infection is an infection that is acquired as a result of contact with healthcare services. This is most frequently during or after treatment in a hospital, but can also be associated with treatment in outpatient clinics and other healthcare settings. These infections can affect both patients and healthcare workers. An infection occurs when micro-organisms such as bacteria, fungi or viruses enter the body and causes harm or damage to it.

People carry micro-organisms on their skin and in their gastrointestinal tract. Invasive medical and surgical procedures can place people at risk of infection because their natural defences have been breached, for example, when the skin is broken. Some infections can travel to the bloodstream and cause more serious generalised illness such as bloodstream infection and sepsis.

People can develop healthcare-associated infection for different reasons. Infection can develop when micro-organisms on or in the patients' own body cause infection, such as following surgery. Additionally, patients can develop an infection through contact with the unclean hands of healthcare workers, contaminated medical equipment, or an unclean hospital environment. Infection can spread from person to person in hospitals when patients with transmissible infection are accommodated in the same rooms as patients without infection.

Preventing and controlling infections in hospitals is complex and requires input and commitment from everyone working in the facility — from the most senior management level to front-line staff. Patients and their visitors also have a role in preventing and controlling infections in hospitals particularly in relation to hand hygiene. Effective infection prevention and control in hospital depends on effective leadership, governance and management.

Hospital staff need to consistently implement evidence-based best practice in relation to the prevention and control of healthcare-associated infection, and implementation needs to be overseen at local level by hospital managers. Managers with overall responsibility for the delivery of high-quality, safe care in hospitals need to be assured that the people using their services and staff working in these services are protected in as far as possible from developing healthcare-associated infections and that the healthcare environment is kept clean and appropriately maintained.

1.1 Current context

Protecting patients from infection becomes more challenging when hospitals are operating in circumstances where there is high bed-occupancy and reduced bed-capacity. In Ireland and in many other countries, the need for effective prevention and control of healthcare-associated infection has never been more essential with the growing problem of antimicrobial resistance. Internationally, rates of the Meticillin-Resistant *Staphylococcus aureus* (MRSA) have declined largely due to targeted infection prevention and control efforts.

However, there has been a significant increase in resistance among a family of bacteria known as Enterobacteriaceae. Similar to other bacteria these can cause urinary tract infection and bloodstream infection, several strains of the enterobacteriaceae family of bacteria have been found to be resistant to antimicrobials including carbapenems. Carbapenems are a powerful group of broad spectrum (penicillin-related) antibiotics. In many cases, these are patients' last effective defence against infections caused by multi-drug resistant bacteria, such as some strains of Enterobacteriaceae including *Klebsiella pneumoniae*.

An increase has also been seen nationally in relation to strains of bacteria known as Enterococci. Hospitals need effective infection control measures to prevent the spread of antimicrobial-resistant bacteria. Overuse or inappropriate use of antimicrobials has contributed to this problem. Antimicrobial use may also contribute to *Clostridium difficile* infection, and prescribing practices need to be optimised to minimise this risk.

Healthcare-associated infections can result in serious illness, prolonged hospital stays and potentially long-term disability or death. Healthcare-associated infections result in a significant financial burden for the healthcare system.

International evidence indicates that healthcare-associated infections can be both prevented and reduced by up to 50% or more. Hospital programmes to prevent and control healthcare-associated infections and the implementation of evidence-based practice have been shown to reduce the occurrence of healthcare-associated infection.

In this revised monitoring programme, HIQA will assess public acute hospitals to determine if service providers have the essential elements in place in order to prevent and control healthcare-associated infections.

HIQA's approach to monitoring public acute hospitals against the National Standards has been revised in consideration of infection risk factors for patients, previous HIQA inspections and review findings, and increasing antimicrobial resistance in Ireland.

The programme has been designed with the aim of being risk-based and proportionate.

1.2 HIQA's monitoring programme against the National Standards

HIQA started its monitoring programme against the National Standards in the final three months of 2012. The monitoring programme from 2012 to 2015 comprised both unannounced inspections and announced inspections which looked at the implementation of these National Standards in both pre-hospital emergency care and acute hospital care settings.

The programme has been revised periodically to broaden the focus of monitoring. From mid 2015 to 2016, unannounced inspections were focused on infection prevention and control aspects of the hospital physical environment, hand hygiene and the implementation of infection prevention care bundles for invasive medical devices. Inspections were extended from general wards into higher risk clinical areas during that time. In 2016, HIQA published a national review of antimicrobial stewardship measures against the National Standards in public acute hospitals.

HIQA's monitoring programme against these National Standards has been revised in 2017 and will again build upon previous monitoring programmes.

This revised programme uses nationally mandated clinical effectiveness guidelines in addition to current national and international good practice guidelines around infection prevention and control as reference points to inform HIQA's monitoring approach. This monitoring programme aims to promote the implementation of best practice. Examples of national and international guidelines in relation to the prevention and control of healthcare-associated infections are included in this guidance document.

1.3 Stakeholder engagement, and the voice of the patient

In order to update service providers of proposed changes to this monitoring programme, HIQA held information sessions with the seven hospital groups in March and April 2017 to provide an overview of HIQA's current and planned healthcare monitoring activity.

In addition, a new National Patient Experience Survey run in partnership between HIQA, the Department of Health and the Health Service Executive (HSE) started in May 2017. This survey gives patients the opportunity to provide feedback about their experience in hospital in order to inform and guide quality improvement initiatives for the health service at local and national level.

During this monitoring programme, HIQA will take note of the findings of this survey that relate to aspects of infection prevention and control in hospitals. Furthermore, in order to provide information to service providers, healthcare workers and the public, this guide and any subsequent revisions will be published on HIQA's website www.hiqa.ie.

2. Monitoring programme plan

The 2017 monitoring programme will be implemented in three phases, with the second and third phases building on the findings of the first phase. The monitoring programme is comprised of:

- Phase 1: Self-assessment tool completion by public acute hospitals
- Phase 2: Unannounced inspections in public acute hospitals
- Phase 3: Targeted monitoring of the reprocessing of reusable invasive medical devices in public acute hospitals.

Phase 1: April to May 2017

In Phase One of this revised monitoring approach, hospital managers in 49 public acute hospitals in Ireland were sent a self-assessment tool[1] which comprised 135 questions about essential elements of infection prevention and control practice.

The self-assessment tool included specific questions in relation to the prevention and control of infection presented in three sections:

- infection prevention and control programme
- infection prevention and control training and implementation of policies, procedures, protocols and guidelines
- systems to detect, prevent, and respond to healthcare-associated infections and multidrug-resistant organisms.

A copy of the self-assessment tool which was adapted for HIQA monitoring purposes is included in Appendix 1. The self-assessment tool was sent to hospitals by HIQA on

[1] Adapted from Centers for Disease Control and Prevention. *Infection Control Assessment Tool for Acute Care Hospitals. Version 1.3.2* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016.

5 April 2017 with a request to complete and return it by 4 May 2017. In addition, hospital managers were requested to submit the following documents to HIQA:

- a hospital infection prevention and control programme plan for the current year
- an infection prevention and control annual report for the previous year
- an organisational chart clearly showing the governance structure of the hospital's infection prevention and control service, to include lines of communication between the infection prevention and control team and or committee and the hospital's executive management team and board and hospital group as relevant.

The information provided by hospital self-assessment tools will, in part, assist HIQA in establishing whether or not hospitals have essential elements in place in relation to the prevention and control of healthcare-associated infection. The information provided will be reviewed by HIQA and will be used to inform subsequent phases of this monitoring programme.

Phase 2: May 2017 onward

Phase Two of this monitoring programme comprises unannounced inspections in public acute hospitals from May 2017 onward. During these inspections, HIQA aims to verify aspects of self-assessment tool submissions made by hospitals in Phase 1 during monitoring against the National Standards in Phase 2.

3. Unannounced hospital inspections

The following section provides an overview of the planned unannounced inspection process, starting in May 2017.

3.1 Before an unannounced hospital inspection

Prior to an unannounced hospital inspection, key pieces of information relating to the hospital will be reviewed by HIQA. These will include:

- self-assessment responses and related documents submitted by the hospital to HIQA
- previous HIQA inspection reports
- relevant unsolicited information received by HIQA in relation to the hospital
- and relevant published HSE hospital performance indicators.

3.2 The day of inspection

Monitoring against the National Standards as set out in Section 8(1)(c) of the Health Act 2007 will be performed by an inspector or inspection team. Inspection teams comprise personnel who have been appointed by HIQA with the approval of the Minister for Health as authorised persons under Section 70 of the Health Act 2007.

Using specified lines of enquiry, the inspection team will gather information in relation to the governance and management of the prevention and control of healthcare-associated infections at the hospital during unannounced one-day inspections in public acute hospitals. Appendix 2 shows the lines of enquiry for this monitoring programme which have been aligned to the National Standards. Information will be gathered by the inspection team through:

- speaking with the hospital's chief executive officer (CEO) or general manager
- speaking with clinical area managers and other hospital staff
- reviewing documentation and data and
- observing clinical environments and local practices.

The inspection team may also revisit areas previously inspected and speak with hospital management to determine progress in addressing findings identified during a previous HIQA inspection.

Hospital executive level management

The inspection team will arrange to meet with the hospital's CEO or general manager to gather information. A request for documentation, data and information from the hospital's CEO or general manager will occur at the start of the inspection (see Appendix 3). In addition, the inspection team will speak with the hospital's CEO or general manager or the CEO designate or general manager designate to find out about arrangements for the prevention and control of healthcare-associated infection at the hospital.

The inspection team will look for information in relation to:

- governance arrangements
- risk management
- monitoring and evaluation (including audit)
- policies, procedures and guidelines
- staff training and education.

The inspection team will look for evidence to assess if the following arrangements are in place.

Governance arrangements:

- a formalised governance structure for the prevention and control of healthcare-associated infection in the hospital
- a defined annual infection prevention and control programme aligned to baseline requirements and any risks identified.

Risk management, monitoring and evaluation:

- identification and management of risks in relation to the prevention and control of healthcare-associated infection
- formal recording of identified infection prevention and control risks
- regular review of multiple sources of information to identify risk and areas requiring improvement
- use of feedback from patients to identify any focus for improvement and to identify risks
- formal incident reporting of episodes of healthcare-associated infection
- management of identified risks
- monitoring of performance in relation to the prevention and control of healthcare-associated infection, including hospital hygiene with formal reporting through defined governance structures
- putting in place measures to improve practice
- sharing of performance information with relevant staff.

Policies, procedures and guidelines:

- The hospital has a comprehensive and up-to-date approved set of relevant policies, procedures, protocols and guidelines related to infection prevention and control.

Staff training and education

Training of staff in relation to the:

- prevention and control of healthcare-associated infection
- insertion and management of invasive devices.

Implementation of evidence-based or best practice to prevent healthcare-associated infection

- The hospital has implemented evidence-based best practice to prevent intravascular device-related infection and urinary catheter-associated infection, ventilator-associated pneumonia and surgical site infection.
- The hospital has systems in place to detect, prevent, and respond to healthcare-associated infections and multi-drug resistant organisms in line with national guidelines.

Hospital clinical area management

The inspection team will visit a sample of areas and speak with clinical area managers or those delegated to act on their behalf in order to gather information. HIQA will ask for documentation, data and information from the clinical area manager (see Appendix 4). In addition, the inspection team will observe aspects of the clinical environment and local practices around the prevention and control of healthcare-associated infection. The inspection team will specifically gather information in relation to the local management and oversight of the prevention and control of healthcare-associated infections in addition to information in relation to aspects of some or all of the following:

- invasive medical device insertion and care
- safe injection practice
- prevention and control of transmission of:
  - antimicrobial-resistant bacteria
  - *Clostridium difficile* infection
- Aspergillosis prevention measures if building works are in progress near patient care areas.

For information purposes, samples of the monitoring tools that HIQA inspectors will use during hospital inspections are included in Appendices 5 to 9 of this document.

These monitoring tools may be revised by HIQA as the monitoring programme progresses. It should be noted that these tools were specifically designed for HIQA monitoring purposes.

The inspection team will look for evidence in relation to the following aspects of the prevention and control of healthcare-associated infection:

Availability and accessibility of policies, procedures and guidelines

- The hospital has a comprehensive, and up-to-date approved set of relevant policies, procedures, protocols and guidelines related to infection prevention and control.

Risk management, monitoring and evaluation

- Identified infection prevention and control risks are formally recorded.
- Episodes of healthcare-associated infection are formally reported as incidents.
- Performance in relation to the prevention and control of healthcare-associated infection including hospital hygiene is continually monitored and formally reported through defined governance structures.

- Defined measures are put in place to address evidence of poor performance identified through continual monitoring and audit.
- Performance information is shared with staff.

Staff training and education

- Staff receive training in relation to the prevention and control of healthcare-associated infections.
- Clinical staff have been trained to insert and manage invasive medical devices.

Implementation of evidence-based best practice including:

- standard and transmission-based infection control precautions
- care bundles.

A sample unannounced one-day inspection plan is set out here in Figure 1 on the following page.

Figure 1. Sample one-day unannounced hospital inspection plan

- Introduction and overview of inspection plan and schedule. Baseline information gathering.
- A documentation and data request will be requested from the hospital CEO or general manager.

- Inspection team visit a sample of areas and gather information through speaking with the area manager and staff, visual inspection and documentation review. The inspection team will look at practice in relation to some of the following areas:
  - invasive devices
  - safe injection practice
  - *Clostridium difficile* infection
  - prevention and control of antimicrobial-resistant bacteria
  - Aspergillosis prevention (if indicated)
  - evaluation and monitoring of the prevention and control of infection.
- A documentation and data request will be provided to the area manager in the areas inspected.
- Preliminary feedback will be provided to the area manager.

- The inspection team may revisit areas inspected previously by HIQA.
- The documentation and data requested will be reviewed.
- Inspection team will speak with leaders of the infection prevention and control programme, if available.

- Inspection team will meet with the hospital manager and designates to determine governance arrangements including risk management, resources and monitoring and evaluation arrangements.

- Preliminary feedback will be provided to the hospital manager at the close of the inspection.

Phase 3 of this monitoring programme will involve targeted monitoring of the reprocessing of reusable invasive medical devices in public acute hospitals. HIQA will be guided in this process by advice from an expert advisory group. A separate guide will be published by HIQA in relation to Phase 3 of the monitoring programme against the National Standards in due course. It is intended to begin these inspections under Phase Three in 2018.

3.3 Practical information about hospital inspections

- Inspections will be unannounced meaning that the hospital will not receive any prior notification of the date of an inspection.
- Inspections will generally be performed within core working hours. However, weekend and out-of-hours inspections may be carried out.
- Inspectors will:
  - request access to a secure room for the purpose of documentation review.
  - carry visitor name badges or door-access cards required to facilitate movement throughout the hospital. These should be made available to the inspection team as soon as possible upon arrival on site. These will be returned at the end of the inspection.
  - inform the hospital's CEO or general manager during the inspection of any high risks which require action to allow them to put the necessary actions in place to address any risks identified.
  - provide feedback on the preliminary inspection findings to the hospital's CEO or general manager at the end of the inspection.

Hospital inspection teams

- During inspections, inspectors will carry a HIQA authorisation card.
- Inspectors will work within the powers described in the Health Act 2007.
- Inspectors are obliged to comply with HIQA's Code of Conduct which is available on HIQA's website, www.hiqa.ie.

Confidentiality

Hospitals must not send named patient information or information that could identify an individual patient to HIQA by email or by post.

Freedom of information

HIQA is subject to the Freedom of Information Acts [3] and the statutory Code of Practice regarding Freedom of Information.[4]

4. Risk identification and notification process

Risks identified by HIQA during this monitoring programme will be escalated to the hospital CEO or general manager in line with HIQA's risk management process as follows.

- High risks identified during a hospital inspection which require immediate mitigation, will be brought to the attention of the hospital's CEO or general manager for the service during the inspection. This is to allow them to implement the actions necessary to mitigate such risks.
- Formal written notification of any identified risk arising during this monitoring programme will be issued to the hospital's CEO or general manager by email within two working days of the risk's identification, with the requirement to formally report back to HIQA stating how the risk has been mitigated within a further two working days.
- In the case of high risks which do not require immediate mitigation, formal notification of the identified risk will be issued to the hospital's CEO or general manager by email within two working days of the identification of the risk with the requirement to formally report back to HIQA with an action plan to reduce and effectively manage the risk within a further five working days of this correspondence from HIQA.

HIQA's risk escalation process is outlined in a diagram in Appendix 10.

A copy of this correspondence may also be sent to the relevant hospital group chief executive officer and the HSE's National Director for Acute Services.

5. HIQA's inspection report

An individual report will be generated for each hospital inspected. Following an unannounced inspection:

- HIQA will send a draft report of inspection findings together with a factual accuracy and feedback form by email to the hospital's chief executive officer or general manager. A copy of the draft report will also be sent by email to the hospital group Chief Executive Officer.
- The report will outline HIQA's findings including areas of good practice and any identified opportunities for improvement. The report will include risks, if any, that were identified during the monitoring process and may include correspondence between HIQA and the hospital's CEO or general manager in relation to the management of such risk.
- The hospital's CEO or general manager should complete the factual accuracy and feedback form provided with the draft report, and return this to HIQA within five working days of receipt.
- The inspection team will review the feedback received and will amend the report if deemed necessary when considered alongside inspection findings, prior to finalising the report.

Publication of HIQA unannounced inspection reports

Reports of unannounced hospital inspections will be published on HIQA's website. Publication of hospital inspection reports facilitates sharing of information with the public and across the hospital system to highlight areas of good practice, identified risks and opportunities for improvement.

HIQA will send a copy of the final hospital inspection report to the hospital's CEO or general manager five working days in advance of planned publication on HIQA's website www.hiqa.ie.

In addition, a copy of the final report will be sent to the relevant hospital group chief executive officer, relevant senior managers in the HSE and to the Department of Health five working days in advance of planned publication on HIQA's website www.hiqa.ie.

6. Expected hospital response following an unannounced hospital inspection

In the event that the inspection team identifies high risks to patients (either immediate or not), it is the responsibility of the hospital to respond as previously outlined in Section 4 of this guidance document.

Each service provider is accountable for the development of a quality improvement plan that prioritises the improvements necessary to comply with the National Standards. These quality improvement plans must be approved by the hospital's identified individual who has overall executive accountability, responsibility and authority for the delivery of high-quality, safe and reliable services.

The inspection team will also check during future inspections for evidence that hospitals have taken account of the findings of their individual inspection report and if appropriate plans have been put in place to address any shortcomings that HIQA had identified.

References

1. Health Information and Quality Authority. *National Standards for the prevention and Control of Healthcare Associated Infections.* Dublin: Health Information and Quality Authority; 2009. [Online]. Available from: https://www.hiqa.ie/sites/default/files/2017-01/Standards_Prevention_Control_Infections.pdf

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Appendix 1 — Self-assessment tool

Section 1: Infection prevention and control programme			
1.1.1	The hospital has a formalised governance structure for infection prevention and control.	Yes	No
1.1.2	An annual infection prevention and control risk assessment is performed which takes into consideration potential risks for infection, contamination, and infection-related exposures in the hospital in addition to local and national antimicrobial resistance trends.	Yes	No
1.1.3	The hospital develops an annual infection prevention and control programme plan which includes priorities based on identified risks and the demographic profile of the population served by the hospital.	Yes	No
1.1.4	An annual infection prevention and control report is produced.	Yes	No
1.1.5	The hospital provides financial and human resource support for maintaining the infection prevention and control programme.	Yes	No
1.1.6	Written infection prevention and control policies, procedures and guidelines available in each clinical area are current, and are based on evidence-based best practice guidelines and national standards and safety alerts including those from the National Clinical Effectiveness Committee, the Health Protection Surveillance Centre, the Health Service Executive, HIQA and others as applicable.	Yes	No
1.1.7	The performance of the service in relation to the prevention and control of healthcare-associated infection is continuously monitored within the hospital. There is measurement of performance indicators and targets that are relevant to the service.	Yes	No
1.1.8	There is reporting in relation to prevention and control of healthcare-associated infection performance through formalised governance structures.	Yes	No
1.1.9	Written reports are prepared following significant outbreaks of infection to identify opportunities for improvement.	Yes	No
1.1.10	Information about infection prevention and control is provided to patients and their carers and or visitors.	Yes	No

Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			
Section 2: Infection prevention and control training and implementation of policies, procedures, protocols and guidelines			
2.1: Standard and transmission-based precautions			
2.1.1	The hospital has an up to date hand hygiene policy that is in line with current national guidelines.	Yes	No
2.1.2	Hospital hand hygiene policy promotes preferential use of alcohol-based hand hygiene products over soap and water except when hands are visibly soiled or after caring for patients known or suspected to have *Clostridium difficile* infection.	Yes	No
2.1.3	Completion of hand hygiene training for healthcare workers is mandatory at least every two years and at induction.	Yes	No
2.1.4	Facilities and supplies necessary for implementation of standard and transmission-based precautions are made available and are accessible to personnel in clinical areas.	Yes	No
2.1.5	A multi-modal hand hygiene improvement strategy is followed in the hospital and the implementation of this is reviewed periodically.	Yes	No
2.1.6	The hospital regularly audits hand hygiene practices and feeds the results of any audits back to relevant personnel and senior management and reports hand hygiene performance in line with national reporting requirements. Audits are linked to an improvement programme as indicated.	Yes	No
2.1.7	Mandatory infection prevention and control training is provided to relevant personnel at induction and periodically in line with the national Core Infection Prevention and Control Knowledge and Skills framework document 2015.	Yes	No
2.1.8	Training is provided to all personnel who may need to use personal protective equipment (PPE) which includes 1) appropriate indications for specific PPE components, 2) proper donning, doffing, adjustment, and wear of PPE, and 3) disposal of PPE. This is provided at induction and periodically.	Yes	No
2.1.9	The hospital audits the implementation of national healthcare-associated infection guidelines and its own policies, procedures and guidelines. Audits are linked to an improvement programme as indicated.	Yes	No

Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			
2.2: Prevention of catheter-associated urinary tract Infection (CAUTI)			
2.2.1	The hospital has a competency-based training program for all clinical personnel who **insert** urinary catheters.	Yes	No
2.2.2	The hospital regularly audits (monitors and documents) adherence to recommended practices for **insertion** of urinary catheters.	Yes	No
2.2.3	The hospital provides feedback from audits to personnel regarding their performance for **insertion** of urinary catheters.	Yes	No
2.2.4	Evidence-based urinary catheter care bundles have been implemented across the hospital.	Yes	No
2.2.5	The hospital regularly audits (monitors and documents) adherence to evidence-based urinary catheter care bundles.	Yes	No
2.2.6	The hospital provides feedback from audits to personnel regarding their adherence to evidence-based urinary catheter care bundles.	Yes	No
2.2.7	The hospital monitors CAUTI data and uses this information to direct prevention activities.	Yes	No
2.2.8	The hospital provides feedback of CAUTI data to frontline personnel.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.3: Prevention of intravascular catheter-related bloodstream infection			
2.3.1	The hospital has an up to date policy detailing measures to prevent intravascular catheter-related bloodstream infection that includes care bundle elements.	Yes	No
2.3.2	The hospital has a competency-based training program for all clinical personnel who **insert** intravascular catheters.	Yes	No
2.3.3	Training is provided to all personnel who are given responsibility for insertion of intravascular catheters.	Yes	No
2.3.4	Training is provided when new equipment or protocols are	Yes	No

	introduced for the management of intravascular catheters.		
2.3.5	The infection prevention and control team are consulted before new equipment or protocols for the management of intravascular catheters are introduced.	Yes	No
2.3.6	The hospital regularly audits (monitors and documents) adherence to recommended practices for **insertion** of intravascular catheters.	Yes	No
2.3.7	The hospital provides feedback from audits to personnel regarding their performance for **insertion** of intravascular catheters.	Yes	No
2.3.8	Evidence-based intravascular catheter care bundles have been implemented across the hospital.	Yes	No
2.3.9	The hospital regularly audits (monitors and documents) adherence to evidence-based intravascular catheter care bundles.	Yes	No
2.3.10	The hospital provides feedback from audits to personnel regarding their adherence to evidence-based intravascular catheter care bundles.	Yes	No
2.3.11	The hospital monitors intravascular catheter-related infection and uses this information to direct prevention activities.	Yes	No
2.3.12	The hospital provides feedback of intravascular catheter-related infection data to frontline personnel.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.4: Prevention of ventilator-associated pneumonia (Please leave this section blank if you do not manage mechanically ventilated inpatients in your hospital)			
2.4.1	The hospital has an up to date policy detailing measures to prevent ventilator-associated pneumonia that includes care bundle elements.	Yes	No
2.4.2	Regular training is provided to relevant clinical personnel in relation to the prevention of ventilator-associated pneumonia.	Yes	No
2.4.3	Evidence-based ventilator-associated pneumonia care bundles have been implemented in clinical areas accommodating ventilated patients.	Yes	No

2.4.4	The hospital regularly audits (monitors and documents) ventilator-associated pneumonia care bundle compliance.	Yes	No
2.4.5	The hospital provides feedback from audits to personnel regarding their compliance with ventilator-associated pneumonia care bundles.	Yes	No
2.4.6	The hospital performs ventilator-associated pneumonia infection surveillance and uses this information to direct prevention activities.	Yes	No
2.4.7	The hospital provides regular feedback of ventilator-associated pneumonia infection data to frontline personnel.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.5: Safe injection practice			
2.5.1	The hospital has competency-based training programs for multi disciplinary personnel involved in the preparation and administration of parenteral medications (e.g. by intravenous, intramuscular and subcutaneous routes) outside of the pharmacy.	Yes	No
2.5.2	Training is provided on induction and prior to being allowed to prepare and/or administer injections and parenteral infusions.	Yes	No
2.5.3	Training is provided to relevant personnel when new equipment or protocols are introduced in relation to the preparation and administration of parenteral medications.	Yes	No
2.5.4	Personnel are required to demonstrate competency in the preparation and/or administration of injections and parenteral infusions following each training.	Yes	No
2.5.5	The hospital maintains current documentation of competency in preparation and/or administration procedures for all personnel who prepare and/or administer injections and parenteral infusions.	Yes	No
2.5.6	The hospital regularly audits (monitors and documents) adherence to safe injection practices.	Yes	No
2.5.7	The hospital provides feedback of safe injection practice audit findings to frontline personnel.	Yes	No
2.5.8	The hospital has up to date policies around the administration of medications by injection or infusion.	Yes	No

2.5.9	Multi use vials are avoided wherever possible.	Yes	No
2.5.10	Insulin multi-dose vials and insulin pens are designated single patient use.	Yes	No
2.5.11	Retractable lancets/needles used for capillary blood testing are single use only.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			
2.6: Prevention of Surgical Site Infection (SSI)			
2.6.1	The hospital has implemented national recommendations in relation to the prevention of surgical site infection.	Yes	No
2.6.2	The hospital has a surgical site infection prevention policy that reflects up to date evidence-based recommendations in relation to pre-operative, intra-operative and post-operative management of patients.	Yes	No
2.6.3	The hospital regularly audits (monitors and documents) implementation of recommended measures to prevent surgical site infection.	Yes	No
2.6.4	The hospital provides feedback from audits to personnel regarding their implementation of measures to prevent surgical site infection.	Yes	No
2.6.5	Patients and or their carers or other service providers are provided with advice in relation to post operative wound care.	Yes	No
2.6.6	The hospital monitors surgical site infection rates (in targeted patient groups) and antimicrobial resistance surveillance data and uses findings to direct prevention activities.	Yes	No
2.6.7	The hospital provides feedback of surgical site infection data to surgeons and other relevant clinical personnel.	Yes	No
2.6.8	The information collected and analysed from surgical site infection surveillance and audit is used to evaluate and support the activities and effectiveness of the programme to prevent and control surgical site infections. This is reported regularly to senior management.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.7: Prevention of *Clostridium difficile* infection (CDI)			
2.7.1	The hospital performs CDI surveillance and uses the information gathered to direct prevention activities.	Yes	No
2.7.2	The hospital has an up to date policy detailing measures to manage patients with CDI that includes care bundle elements.	Yes	No
2.7.3	The hospital reviews CDI data in conjunction with other relevant indicators at clinical area/directorate and hospital management level at least every four weeks and more often during an outbreak.	Yes	No
2.7.4	The hospital has a locally defined threshold incidence for CDI that triggers implementation of additional infection prevention and control precautions.	Yes	No
2.7.5	The hospital has specific antimicrobial stewardship strategies in place to reduce the incidence of *Clostridium difficile* infection.	Yes	No
2.7.6	At a minimum, systems analysis is performed for each episode of severe CDI and all cases of CDI associated with a cluster or an outbreak of infection.	Yes	No
2.7.7	The hospital provides feedback of CDI data to frontline personnel.	Yes	No
2.7.8	The hospital formally reviews management of CDI outbreaks/clusters in order to identify precipitating factors and necessary control measures.	Yes	No
2.7.9	It is hospital policy that patients with potentially infectious diarrhoea are promptly isolated in a single ensuite room until an infective cause is ruled out.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.8: Environmental and patient equipment cleaning			
2.8.1	There is a designated person with delegated responsibility for the management of environmental and patient equipment hygiene in the hospital.	Yes	No

2.8.2	Training is provided to all personnel who clean and disinfect patient care areas and patient equipment. Personnel may include, but are not limited to, hospital cleaning staff, clinical staff, healthcare assistants, porters and ancillary staff.	Yes	No
2.8.3	Training is provided to personnel prior to being allowed to perform environmental and equipment cleaning.	Yes	No
2.8.4	Training is provided when new equipment or protocols are introduced for environmental and equipment cleaning.	Yes	No
2.8.5	If the hospital contracts environmental services, the contractor has a comparable staff training program.	Yes	No
2.8.6	The hospital has a cleaning specification or matrix that identifies elements to be cleaned, method of cleaning, frequency of cleaning and discipline responsible, in line with national cleaning guidelines.	Yes	No
2.8.7	The hospital provides the necessary resources and facilities for environmental and patient equipment cleaning.	Yes	No
2.8.8	The hospital has protocols to ensure that healthcare personnel can readily identify equipment that has been cleaned and disinfected and is ready for patient use (e.g. tagging system, placement in dedicated clean area).	Yes	No
2.8.9	The hospital regularly audits (monitors and documents) adherence to cleaning and disinfection procedures, including use of products in accordance with manufacturers' instructions (e.g., dilution, storage, shelf-life, contact time).	Yes	No
2.8.10	The hospital provides feedback from audits to personnel regarding their adherence to cleaning and disinfection procedures.	Yes	No
2.8.11	The hospital regularly audits (monitors and documents) the standard of environmental and patient equipment hygiene across the hospital. Audit findings are trended and linked to an improvement plan as indicated.	Yes	No
2.8.12	The standard of environmental and patient equipment hygiene is overseen and continuously monitored at senior management level in the hospital.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

2.9: Device reprocessing

This section refers to all medical devices that may be reused in the hospital. Device categories include:

Critical items (e.g. surgical instruments) are objects that enter sterile tissue or the vascular system and must be sterile prior to use.

Semi-critical items (e.g. endoscopes for upper endoscopy and colonoscopy, laryngoscope blades, ultrasound probes) are objects that contact mucous membranes or non-intact skin and require, at a minimum, high-level disinfection prior to reuse.

Non-critical items (e.g. blood pressure cuffs, point-of-care devices) are objects that may come in contact with intact skin but not mucous membranes and should undergo cleaning and low or intermediate-level disinfection depending on the nature and degree of contamination.

2.9.1	The hospital has a named decontamination co-ordinator with responsibility for reusable invasive medical device reprocessing.	Yes	No
2.9.2	Decontamination of medical devices at the hospital is overseen by a decontamination committee.	Yes	No
2.9.3	The hospital has an inventory of all **critical and semi-critical devices** used in the facility that identifies areas in the hospital and services provided by the hospital where such devices are used.	Yes	No
2.9.4	Decontamination of critical items and semi-critical items is performed in a designated decontamination area in line with best practice guidelines.	Yes	No
2.9.5	The hospital has up to date policies and procedures for the reprocessing of all reusable invasive medical devices used in and by the facility in line with relevant national guidelines.	Yes	No
2.9.6	The hospital has a competency-based training program for reprocessing of **critical and semi-critical** devices.	Yes	No
2.9.7	There is a continuing programme of training and education for personnel involved in device decontamination.	Yes	No
2.9.8	The hospital regularly audits (monitors and documents) adherence to reprocessing procedures for **critical and semi-critical** devices.	Yes	No
2.9.9	The hospital provides feedback from audits to relevant personnel and hospital management regarding adherence to reprocessing procedures for **critical and semi-critical** devices.	Yes	No

2.9.10	Single-use devices (SUDs) labelled by the manufacturer for a single use are not reprocessed.	Yes	No
2.9.11	The hospital allows adequate time for reprocessing to ensure adherence to all steps recommended by the device manufacturer, including drying and proper storage.	Yes	No
2.9.12	The hospital has an adequate supply of instruments for the volume of procedures performed to allow sufficient time for all reprocessing steps.	Yes	No
2.9.13	The hospital has a service level agreement outlining governance and accountability arrangements with respect to external contractor's involvement in device handling and where decontamination services are outsourced.	Yes	No
2.9.14	The hospital has a standard operating procedure in place based on national guidelines if devices are loaned, borrowed or trialled to minimise the risk of infection to patients, personnel and others.	Yes	No
2.9.15	If chemicals used for high-level disinfection are not single use, routine testing for appropriate concentration is performed and replacement of chemicals is documented.	Yes	No
2.9.16	Each step of the decontamination cycle is recorded, including the identity of the person undertaking each step.	Yes	No
2.9.17	The infection prevention and control team is consulted whenever new devices or products are to be purchased or introduced to ensure implementation of appropriate reprocessing policies and procedures.	Yes	No
2.9.18	All reusable invasive medical device sets (e.g. surgical instrument sets) and endoscopes can be traced through the decontamination process to the patient.	Yes	No
2.9.19	The hospital has policies and procedures outlining hospital response (i.e. risk assessment and recall of device, look back) in the event of a reprocessing error or failure.	Yes	No
2.9.20	The hospital central decontamination unit operates a quality management system in line with EN ISO 13485.	Yes	No
2.9.21	Endoscope and local decontamination units operate a quality system in line with the key elements of EN ISO 13485.	Yes	No

2.9.22	Personnel trained in decontamination practice are available to reprocess reusable invasive medical devices for out of hour's unplanned emergency procedures if there is a requirement to decontaminate the device immediately following use e.g. an endoscope.	Yes	No
2.9.23	The hospital has up to date policies and procedures to minimise the exposure of patients and employees to transmissible spongiform encephalopathies.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

Section 3: Systems to detect, prevent, and respond to healthcare-associated infections and multidrug-resistant organisms (MDROs)			
3.1.1	The hospital has systems in place for the early detection and management of potentially infectious persons **at initial points of entry to the hospital**, including rapid isolation as appropriate.	Yes	No
3.1.2	Admission to another hospital, travel and occupational history is included as part of a patient's admission and triage assessment.	Yes	No
3.1.3	The hospital has up to date policies detailing measures to prevent the transmission of infection in line with relevant national and international guidelines.	Yes	No
3.1.4	The hospital has systems in place for early detection and isolation of potentially infectious patients identified **during the hospital stay,** including rapid isolation of patients as appropriate.	Yes	No
3.1.5	The hospital has systems in place for **INTER-facility** communication of infectious status and isolation needs of patients **prior to admission from and transfer to** other facilities.	Yes	No
3.1.6	The hospital has systems in place for communication of infectious status and related future care needs of patients **prior to or upon transfer of care to** primary healthcare providers e.g. GP, public health nurse, or primary care team.	Yes	No
3.1.7	The hospital has a surveillance programme to monitor incidence of epidemiologically important organisms and targeted healthcare-associated infections.	Yes	No

3.1.8	The microbiological service has a system in place to rapidly report alert organisms to the treating healthcare professional and the infection prevention control team that is accompanied by expert advice.	Yes	No
3.1.9	The hospital uses surveillance data to implement corrective actions rapidly when transmission of epidemiologically important organisms or increased rates or persistently elevated rates of healthcare-associated infections are detected.	Yes	No
3.1.10	The hospital has systems in place to facilitate the prompt identification of suspected/confirmed outbreaks of infection.	Yes	No
3.1.11	Outbreaks of infection are managed in line with local policies and procedures and national guidelines.	Yes	No
3.1.12	There is oversight of outbreak management at executive management level at the hospital.	Yes	No
3.1.13	Findings from outbreak investigations are used to improve the services provided.	Yes	No
3.1.14	The hospital has an antimicrobial stewardship programme in place in line with national guidelines.	Yes	No
3.1.15	The hospital screens patients for multi-drug resistant organisms in line with current national guidelines for Meticillin resistant *Staphylococcus aureus* (MRSA), multi-drug resistant organisms excluding MRSA and resistant enterobacteriaceae.	Yes	No
3.1.16	Patients with a history of admission to another Irish hospital are screened for Carbapenemase resistant Enterobacteriaceae, as necessary, after consideration of the source hospital history and the unit/s into which the patient will be admitted, in line with current national guidelines.	Yes	No
3.1.17	Patients with suspected or confirmed multi-drug resistant organism colonisation or infection are isolated in line with current national guidelines.	Yes	No
3.1.18	The hospital has an occupational health programme that has policies regarding the management of personnel with potentially transmissible conditions and the management of personnel that have been exposed to transmissible infection.	Yes	No

3.1.19	The hospital offers immunisation to healthcare personnel in line with the recommendations of the National Immunisation Advisory Committee.	Yes	No
3.1.20	The hospital is compliant with mandatory reporting requirements for notifiable diseases, healthcare-associated infections (as appropriate), and potential and confirmed outbreaks.	Yes	No
3.1.21	The Infection Prevention and Control Team are involved in discussions around planned construction and or demolition of and renovation and repairs to hospital buildings.	Yes	No
3.1.22	The hospital implements control measures relevant to construction, renovation, demolition and repairs including the performance of an infection control risk assessment before work commencement.	Yes	No
3.1.23	The Infection Prevention and Control Team are involved in the planning of new facilities, procurement of new equipment and the provision of new services at the hospital in relation to infection prevention and control implications.	Yes	No
3.1.24	The hospital implements preventative measures relevant to water-borne infection including the performance and annual review of risk assessment in line with national guidelines. Risks identified are addressed within recommended timeframes.	Yes	No
3.1.25	The hospital has implemented additional control measures in relation to water borne infection in augmented care units including intensive care units, neonatal high dependency units, burns units and transplant units.	Yes	No
Please insert additional comment or clarification below related to this section of the tool, with reference to the question number where relevant			

Sample of declaration

Declaration to be completed by the hospital Chief Executive Officer/General Manager and by the hospital group Chief Executive Officer

I declare, that to the best of my knowledge and belief, all of the information that I have given in connection with this self-assessment, is full and correct. I am aware that under the Health Act 2007 it is an offence to provide false or misleading information.

For Chief Executive Officer/General Manager

Name:

Signed:

Date:

For Hospital Group Chief Executive Officer

Name:

Signed:

Date:

Please note that this form can be signed electronically if the user has a previously existing digital signature. However if the user does not have an existing digital signature, or does not wish to create one, then please print, physically sign and scan page 18 of this document and return it as an extra attachment with this tool.

Appendix 2 — Lines of enquiry

1. Governance arrangements, risk management, monitoring and evaluation

1.1: The hospital has formalised governance arrangements with clear lines of accountability and responsibility around the prevention and control of healthcare-associated infections.

1.2: Risks in relation to the prevention and control of infection are identified and managed.

2. Policies, procedures and guidelines

The hospital has policies, procedures and guidelines in relation to the prevention and control of infection and hospital hygiene.

3. Staff training and education.

Hospital personnel are trained in relation to the prevention and control of healthcare-associated infections.

4. Implementation of evidence-based best practice

4.1: The hospital has implemented evidence-based best practice to prevent intravascular device-related infection and urinary catheter-associated infection, ventilator-associated pneumonia and surgical site infection.

4.2: The hospital has systems in place to detect, prevent, and respond to healthcare-associated infections and multidrug resistant organisms in line with national guidelines.

Appendix 3 — Chief Executive Officer/General Manager: HIQA documentation and data request

No.	Documentation/data
1	List of current infection prevention and control related policies procedures and guidelines — **these can be viewed electronically by inspectors**
2	Terms of Reference and list of members by discipline for the infection prevention and control committee
3	Minutes of infection prevention and control committee meetings for the last three meetings
4	Infection prevention and control-related risks on the current hospital risk register
5	Written reports of any outbreaks or clusters of infection in the hospital in the past 12 months
6	Latest overall hand hygiene compliance audit result for the hospital (last measurement period) presented by staff discipline if available
7	Percentage of staff trained in hand hygiene in the last two years — presented by staff discipline if available
8	Quarterly incidence of newly diagnosed cases of Meticillin-Resistant *Staphylococcus aureus* bloodstream infection and *Clostridium difficile* infection for the past six months
9	Number of healthcare-associated infection incidents recorded on the hospital incident management system in the past 12 months or last calendar year — if available
10	Trended care bundle compliance audit results (past 12 months)
11	Trended hospital hygiene audit results (past 12 months)
12	Trended patient equipment hygiene audit results (past 12 months)
13	Examples of action plans to address poor performance identified through monitoring or audit

14	Any hospital performance reports in relation to the prevention and control of healthcare-associated infection for the past six months
15	List of content of the mandatory infection prevention and control education programme for hospital staff.
16	Additional information: any recent reports of quality improvement projects, awards, publications in relation to the prevention and control of healthcare-associated infection in this hospital.
17	Total number of hospital beds
18	Number of inpatients for which single room isolation is indicated today
19	Number of inpatients isolated in single rooms today
20	Total number of single rooms in the hospital
21	Number of single rooms with an en-suite toilet
22	Number of neutral or negative pressure isolation rooms
23	Most recent Legionella risk assessment review date

Appendix 4 — Clinical area: HIQA documentation and data request

No.	Documentation/data
1	Most recent hand hygiene compliance audit results by staff discipline
2	Hand hygiene training uptake by staff in this clinical area in the past year or the past two years — percentage
3	Most recent records of staff attendance at infection prevention and control training
4	Environmental and patient equipment hygiene audit results for the past six months and any associated action plans
5	Care bundle compliance audit results for the past six months
6	Cleaning specification for clinical area environment — list of what should be cleaned, staff member responsible, cleaning method and cleaning frequency
7	Cleaning specification for patient equipment — list of what should be cleaned, staff member responsible, cleaning method and cleaning frequency
8	Results of any other infection prevention and control audits performed in this clinical area in the past 12 months

Appendix 5 — Safe injection practice monitoring tool for HIQA inspectors

No.	Element to be assessed	Yes	No
1	Medication for injection and sterile supplies are stored in a clean area away from potential sources of contamination such as tap water.		
2	Items that could have come in contact with blood or body fluids are not placed near or in the medication preparation area for example, used needles or syringes.		
3	Multi-dose vials are not stored in the immediate patient treatment area.		
4	Medication administration trays are cleaned after each use.		
5	Alcohol hand rub is located immediately beside medication preparation areas.		
6	A clinical hand-wash sink is available in the medication preparation room.		
Clinical environment — medication preparation area			
7	Medication for injection is prepared on a designated clean, clutter-free, non-contaminated surface.		
Clinical environment — management of multi-dose vials and insulin pens			
8	The hospital has a policy stating that the use of multi-dose vials should be avoided as far as possible.		
9	If multi-dose vial use is unavoidable, multi-dose vials are dated when first opened and discarded within 28 days of opening or in line with manufacturer's instructions.		
10	If multi-dose vial use is unavoidable, multi-dose vials are designated named-single-patient use.		
11	Insulin pens are designated named-single-patient use.		

No.	Element to be assessed	Yes	No
Clinical practice			
12	Single use items such as needles, syringes, and intravenous cannulae are never reused on other patients or to access medications or solutions for injection more than once.		
13	Syringes containing medication are never used for more than one patient, even if the needle is changed.		
14	Medications drawn up in a clinical area are considered immediate use and should be administered within one hour of preparation.		
Clinical practice — multi-dose vials			
15	Needles are not left in rubber septums of vials for the purpose of multiple withdrawals.		
16	An aseptic technique is used by staff preparing medication for injection.		
17	Medications for intravenous administration are not 'batch' prepared.		
18	Bags and bottles of intravenous solution are used for one patient and are not as a source of flush solution for multiple patients.		
19	Administration of spiked intravenous infusions is initiated within one hour of preparation.		
Clinical practice — capillary blood sampling			
20	Single use lancets that permanently retract upon puncture are used for capillary blood sampling.		
21	Devices with removable lancets are not used for more than one patient.		
22	Finger stick devices and cotton wool balls are not reused.		
23	Blood glucose monitors are decontaminated after each use.		

No.	Element to be assessed	Yes	No
24	Glucometers are visibly clean.		
25	There is a policy for blood glucose monitor decontamination.		
26	Only the supplies required for a single patient blood glucose measurement are taken to the point of care.		
Clinical practice — sharps safety			
27	Sharps that incorporate safety-engineered protection mechanisms are used for injections and for the intravenous administration of medications or solutions or additives.		
28	Sharps are disposed of at the point of use into a rigid CE-approved, biohazard labelled sharps container.		
29	Sharps boxes are sealed when the fill line has been reached.		
30	Sharps boxes are stored or located in a manner that does not present risk of sharps spillage.		
High-risk clinical areas — clinical environment			
31	Fixed blood analysers are located appropriately so that their use does not present a risk of contaminating clean supplies.		
32	The surfaces of fixed blood analysers and surrounding areas are clean.		
33	Hand hygiene (sink or gel) and waste receptacles and disposable gloves are located next to fixed blood analysers.		
34	Medications drawn up in a clinical area are considered immediate use and should be administered within one hour of drawing up.		

No.	Element to be assessed	Yes	No
35	**Medications prepared in advance of anticipated use such as emergency drugs** Where injectable medicines are prepared in advance of anticipated use outside of a controlled clean area such as an aseptic compounding unit: ▪ there is a formal policy in place for this process ▪ medication or fluid for injection or infusion is labelled with the name of the person who prepared it, the name of the medication, the strength of the medication and the date and time it was prepared ▪ these medications and infusions are stored hygienically.		

Appendix 6 — Prevention of invasive device-related infection monitoring tool for HIQA inspectors

No.	Element to be assessed	Yes	No
Intravascular devices: policies, procedures and guidelines			
1	The hospital has an up-to-date policy or procedure for the insertion and maintenance of peripheral vascular and central venous catheters.		
2	Care bundles elements are included in the hospital policy for peripheral vascular and central venous catheters management.		
Intravascular devices: staff training, education and competency			
3	There is a structured competency-based training programme for trainee clinical staff who insert and manage peripheral vascular and central venous catheters.		
Intravascular devices: evidence-based best practice			
4	Evidence-based care bundles for peripheral vascular and central venous catheters are implemented.		
5	Central venous catheter insertion packs are available in clinical areas where central venous catheters are inserted.		
Intravascular devices: audit			
6	Compliance with peripheral vascular and central venous catheter care bundle elements is routinely monitored.		
7	There is audit of adherence to recommended practice for intravascular device insertion.		
8	Action plans are developed when a need for improvement is identified.		
9	Care bundle compliance audit results are routinely fed back to staff.		

No.	Element to be assessed	Yes	No
10	Feedback in relation to central venous catheter insertion is provided to relevant staff and any audits are linked to improvement plans as required.		
11	Catheter-related bloodstream infection surveillance is performed and data is fed back to staff.		
Urinary catheters: policies, procedures and guidelines			
12	The hospital has an up-to-date policy or procedure for insertion and maintenance of urinary catheters.		
13	Care bundles elements are included in the hospital policy for urinary catheter management.		
Urinary catheters: staff training, education and competency			
14	There is a structured competency-based training programme for trainee clinical staff who insert and manage urinary catheters.		
Urinary catheters: evidence-based best practice			
15	Evidence-based care bundles for urinary catheters are implemented.		
16	Urinary catheter insertion packs are available in clinical areas where urinary catheters are inserted.		
Urinary catheters: audit			
17	Compliance with urinary catheter care bundle elements, insertion and maintenance is routinely monitored.		
18	There is audit of adherence to recommended practice for urinary catheter insertion.		
19	Action plans are developed when a need for improvement is identified.		
20	Care bundle compliance audit results are routinely fed back to staff.		

No.	Element to be assessed	Yes	No
21	Feedback in relation to urinary catheter insertion and care is provided to relevant staff and any audits are linked to improvement plans as required.		
22	Catheter-associated urinary tract infection surveillance data is performed and results are fed back to staff.		
Urinary catheters: Clinical environment			
23	A clean reusable or disposable receptacle is used to empty urinary catheter drainage bags.		
Urinary catheters: clinical environment			
24	Reusable receptacles used to drain catheter bags are decontaminated in a bed-pan washer disinfector or equivalent.		
25	Urinary catheter insertion packs are available in clinical areas where urinary catheters are inserted.		
Ventilator-associated pneumonia: policies, procedures and guidelines			
26	The hospital has an up-to-date policy or procedure for ventilator-associated pneumonia prevention.		
27	Care bundles elements are included in the hospital policy for ventilator-associated pneumonia prevention.		
Ventilator-associated pneumonia: staff training, education and competency			
28	Training in relation to ventilator-associated pneumonia prevention is provided to staff for staff who manage ventilated patients.		
Ventilator-associated pneumonia: evidence-based best practice			
29	Evidence-based care bundles for ventilator-associated pneumonia prevention are implemented.		

No.	Element to be assessed	Yes	No
Ventilator-associated pneumonia: audit			
30	Compliance with ventilator-associated pneumonia care bundle elements is routinely monitored.		
31	Surveillance of ventilator-associated pneumonia among mechanically ventilated patients is performed in critical care units.		
32	Action plans are developed when a need for improvement is identified.		
33	Care bundle compliance is routinely fed back to staff.		
34	Ventilator-associated pneumonia-related surveillance data is fed back to staff.		

Appendix *7* — *Clostridium difficile* infection prevention and control monitoring tool for HIQA inspectors

No.	Element to be assessed	Yes	No
***Clostridium difficile* infection: evidence-based best practice**			
1	Care bundles for *Clostridium difficile* infection management are implemented.		
2	Patients are assessed on admission for signs and symptoms of infection and patients with potentially infectious diarrhoea are accomodated in an isolation room.		
3	If a patient is to be transferred to another facility or discharged home, there is a designated section to record history of infection and any future care instructions is included in discharge correspondence templates.		
4	There is a system to record infection prevention and control risk when making an electronic diagnostic test or procedure request that necessitates movement of a symptomatic case out of their ward.		
***Clostridium difficile* infection: implementation of infection prevention and control precautions**			
5	Patients with *Clostridium difficile* infection are managed in a single isolation room with an en-suite toilet and shower.		
6	Designated patient equipment is used for isolated patients.		
7	There is signage to communicate that isolation precautions are needed.		
8	Staff are familiar with isolation room ventilation settings and controls (if controlled ventilation in isolation rooms).		
9	Isolation room doors are kept closed when room occupied.		
10	Hand-washing facilities and supplies are present in a patient's room.		

No.	Element to be assessed	Yes	No
11	Personal protective equipment is worn by staff caring for isolated patients in line with local policy.		
14	A trained cleaning staff member is available 24 hours a day to deal with spillages and terminal cleaning requirements.		
15	A working or serviced bedpan washer or macerator is available in this ward.		
16	Disinfection is performed in line with hospital policy as indicated.		
17	Patient equipment is clean, and clean equipment is stored in a designated location and or tagged to indicate that it has been cleaned.		
18	Ward commodes are clean, intact and stored correctly.		
19	Moving and handling slings that are designated to a single patient or 'single-patient-use' slings are used.		
20	Cleaning materials are colour coded in line with hospital policy.		
21	Linen is segregated into colour-coded bags at the point of use and managed in line with hospital policy or national guidelines.		
22	Waste is managed in line with hospital policy.		
23	The patient environment is cleaned every day.		

Appendix 8 — Prevention and control of antimicrobial-resistant bacteria monitoring tool for HIQA inspectors

No.	Element to be assessed	Yes	No
Patients with suspected or diagnosed colonisation or infection with antimicrobial-resistant organisms are managed in line with national guidelines			
1	Patients are assessed on admission to determine if they have signs and symptoms of infection (such as diarrhoea, skin rash) or if they have a history of being colonised or infected with transmissible infection (including transfers from other hospitals).		
2	Patients are screened in line with hospital policy or national guidelines.		
3	There is a system in place to recognise patients known to be previously colonised or infected with multidrug resistant bacteria.		
4	There is a system to record infection control risk when making diagnostic test or procedure requests that necessitate movement out of the clinical area.		
5	If patients are to be transferred to another facility the history of antimicrobial-resistant organism colonisation or infection and any instructions are recorded in discharge correspondence.		
Transmission-based precautions are implemented for the management of patients colonised or infected with an antimicrobial-resistant organism.			
6	Patients requiring isolation are accommodated in single rooms with en-suite toilet and shower.		
7	If an isolation room is not available, patients are managed in line with an isolation prioritisation policy and input from infection prevention and control staff as necessary.		
8	If cohorted, patients in the cohort are colonised or infected with similar organisms.		
9	Dedicated nursing and ancillary staff are assigned to care for isolated or cohorted patients.		

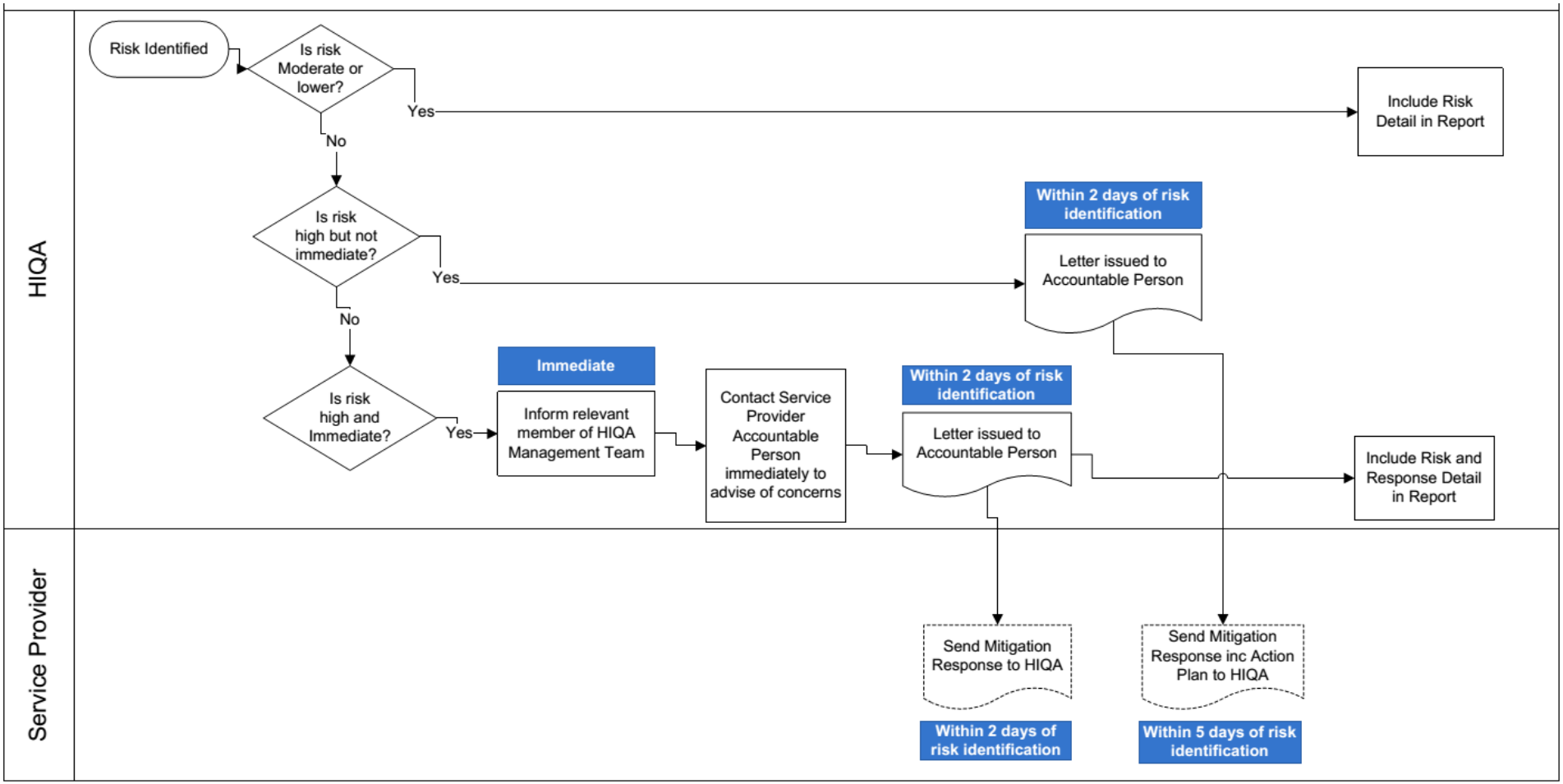
No.	Element to be assessed	Yes	No
10	Signage is used to communicate the requirement for isolation precautions.		
11	Staff are familiar with isolation room ventilation settings and controls if such controls are present.		
12	Designated patient equipment is used for isolated or cohorted patients		
13	Hand-washing facilities and supplies are available in isolation rooms and in cohort rooms.		
14	Personal protective equipment supplies are available outside isolation rooms and in cohort rooms.		
15	Waste is managed in line with hospital policy.		
16	Linen is segregated into colour-coded bags at the point of use and managed in line with hospital policy or national guidelines.		
17	The patient environment is cleaned every day.		
18	Patient equipment is clean, and clean equipment is stored in a designated location and or tagged to indicate that it has been cleaned.		
19	Moving and handling slings that are designated to a single patient or 'single-patient-use' slings are used.		
20	A working or serviced bedpan washer or macerator is available in this ward.		
21	Ward commodes are clean, intact and stored appropriately.		
24	Disinfection is performed in line with hospital policy as indicated.		
25	A trained cleaning staff member is available 24 hours a day to deal with spillages and terminal cleaning requirements.		
26	Cleaning materials are colour coded in line with hospital policy.		

Appendix 9 — Monitoring tool for HIQA inspectors for Aspergillosis prevention during dust-generating building, renovation and maintenance works

No.	Element to be assessed	Yes	No
Preparation for building, renovation and maintenance works			
1	The Infection Prevention and Control Team was consulted for advice in advance of the planned construction or renovation project.		
2	Representatives from clinical teams of patients who might be impacted by construction or maintenance works were consulted in relation to potential risk in advance of works.		
3	An infection control risk assessment was performed by the Infection Prevention and Control Team prior to commencement of work.		
4	The contractor has signed a construction permit in relation to the project or projects		
5	Method statements have been developed relevant to the project.		
Policies, procedures and guidelines			
6	A prevention of invasive aspergillosis policy, procedure or guideline is available.		
Staff education and communication			
7	Clinical staff have been made aware of planned works, at-risk patients and preventative measures.		
8	Staff education regarding aspergillosis was provided in advance of work.		
9	Hospital cleaners and their supervisors have been educated regarding aspergillosis.		
10	Contractors and the project team have been educated regarding aspergillosis.		

No.	Element to be assessed	Yes	No
Management of at risk patients			
11	Formal visual checks of implementation of control measures are performed by a designated person at regular intervals.		
12	Air sampling is used to monitor fungal counts in areas where the highest-risk patients are accommodated in line with national guidelines. Risks identified are addressed.		
Visual checks			
13	At risk patients are physically protected or relocated from the project site as required.		
14	Access to the project site is restricted.		
15	Movement of construction workers through the hospital is restricted as necessary.		
16	Measures to control dust emission from the construction area are in place.		
17	A high-efficiency particulate air filtration system is installed in at-risk areas if required.		
18	Enhanced cleaning is in place and vacuum cleaner filters are changed regularly.		
19	Windows, doors and ventilation grilles are sealed in areas adjacent to at-risk patients if indicated.		
20	Dust and debris generated by works is removed promptly.		

Appendix 10 — HIQA's risk escalation process



Note: Accountable Person: identified individual who has overall executive accountability, responsibility and authority for the delivery of high quality, safe and reliable services.

Key: inc = including, days = working days.

Glossary of terms and abbreviations

This glossary details key terms and a description of their meaning within the context of this document.

Antimicrobial: a substance that kills or inhibits the growth of micro-organisms such as bacteria, viruses or fungi.

Antimicrobial resistance: resistance of a micro-organism to an antimicrobial drug that had been originally effective for treating infections caused by it.

Antimicrobial stewardship: a systematic approach to promoting and monitoring the judicious use of antimicrobials to preserve their future effectiveness.

Aspergillosis: a fungal infection caused by the fungal species aspergillus. Outbreaks of invasive aspergillosis have occurred among people with impaired immunity in hospitals following the release of fungal spores as a result of building and construction works.

Assured: is being sure or certain about systems, processes and procedures and standing over business objectives. It involves monitoring risk and implementing controls to mitigate that risk.

Care bundle: a set of evidence-based best practices which when consistently used together significantly improve patient outcomes.

Catheter-related bloodstream infection: is defined as bloodstream infection originating from an intravenous tube or catheter. This type of infection can result in serious complication or death.

Cleaning: the physical removal of foreign material such as bloody and bodily substances, rust, dust, dirt, debris, spillages, and so on. Cleaning physically removes rather than kills micro-organisms. It is achieved with water, detergents and mechanical action.

***Clostridium difficile* infection:** an infection due to a spore-forming bacterium called *Clostridium difficile*. Symptoms include watery diarrhoea, fever, nausea, and abdominal pain. It can be associated with serious complications.

Cohort: a ward or a unit in which a group of patients (cohort) with the same infection are placed together. Cohorts are created based on clinical diagnosis, microbiological confirmation when available, epidemiology, and mode of transmission of the micro-organism.

Disinfection: a process used to reduce the number of viable micro-organisms, but which may not necessarily inactivate some infectious agents.

Equipment: this consists of a large group of equipment, typically divided into four broad groups including single-use items; single patient-use items; reusable non-invasive communal patient care equipment; and reusable invasive medical devices. The list of equipment includes, but is not limited to, commodes, beds and mattresses, portable patient-monitoring equipment and intravenous stands.

Evaluation: a formal process to determine the extent to which the planned or desired outcomes of an intervention are achieved.

Governance: in healthcare, an integration of corporate and clinical governance; the systems, processes and behaviours by which services lead, direct and control their functions in order to achieve their objectives, including the quality and safety of services for service users.

Hand hygiene: a general term referring to any action of hand cleansing.

Healthcare-associated infection: a healthcare-associated infection is an infection that is acquired after contact with healthcare services.

Hygiene: the practice that serves to keep people and the environment clean. In a healthcare setting it incorporates the following key areas: environment and facilities; hand hygiene; management of laundry; waste and equipment, specifically in the context of preventing and controlling infection.

Infection: The invasion and reproduction of pathogenic or disease-causing micro-organisms inside the body that may cause tissue injury and disease.

Infection prevention and control: the discipline and practice of preventing and controlling healthcare-associated infection and the spread of infectious diseases in a healthcare service.

Infection prevention and control committee: a multidisciplinary group of people from within and outside a hospital or groups of hospitals, which reports to senior management. The committee is responsible for the review and oversight of the service to prevent and control infection in the hospital or hospitals in question.

Infection prevention and control nurse: a nurse with specialist postgraduate qualifications and expert knowledge in infection prevention and control.

Infection prevention and control programme: structures, systems and processes a service has in place to prevent and control healthcare-associated infections.

Infection prevention and control team: a group of people, from within and outside the service, with complementary knowledge and skills relating to infection prevention and control.

Isolation room: an enhanced single room with en-suite facilities and ventilated lobby. The pressure in the room is dependent on whether the patient needs source isolation (for infections spread by airborne route such as influenza or tuberculosis) or protective isolation (for the care of immunocompromised patients).

***Klebsiella pneumoniae*:** a bacterium that normally lives inside human intestines, where it does not cause disease. However, these bacteria can cause serious infection in the bloodstream and the lungs. An increase in antimicrobial-resistant strains of these bacteria has made some infections more difficult to treat.

Medical device: a product, except medicines, used in healthcare to diagnose, prevent, monitor or treat illness or disability. For example, a device might be a blood pressure monitor, blood glucometer, or an infusion pump.

Meticillin-Resistant *Staphylococcus aureus* (MRSA): strains of the bacteria *Staphylococcus aureus* resistant to one or more antimicrobial classes including penicillins.

Micro-organism: a living organism, such as bacteria, viruses and fungi too small to be seen with the naked eye but visible under a microscope.

Monitoring: systematic process of gathering information and tracking change over time. Monitoring provides a verification of progress towards achievement of objectives and goals.

Multidisciplinary: an approach to the planning of treatment and the delivery of care for a service user by a team of healthcare professionals who work together to provide integrated care.

Multidrug-resistant organisms: micro-organisms (predominantly bacteria) resistant to one or more classes of antimicrobial agents. Examples include Meticillin-Resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant Enterococci (VRE), Enterobacteriaceae which may produce enzymes such as extended spectrum beta lactamases (ESBL) or carbapenemases, whereby they may be called carbapenem resistant Enterobacteriaceae (CRE) or carbapenemase-producing Enterobacteriaceae (CPE).

Outbreak: when two or more people have the same infection, or more people than expected have the same infection. The cases will be linked by a place or common exposure and a time period.

Outcomes: the impact that a test, treatment, policy, programme or other intervention has on a person, group or population.

Performance indicator: specific and measurable elements of practice that can be used to assess quality and safety of care.

Point of care: the place where the following three elements come together: the patient, the healthcare worker and the care or treatment involving contact with the patient or the patient's surroundings.

Policy: a written operational statement of intent which helps staff make appropriate decisions and take actions, consistent with the aims of the service provider, and in the best interests of service users.

Procedure: a written set of instructions that describes the approved and recommended steps for a particular act or sequence of events.

Quality improvement: a systematic approach using specific methods to improve quality through achieving successful and sustained improvement.

Reprocessing: steps necessary to make a contaminated reusable invasive medical device ready for its intended use. These steps include cleaning, disinfecting, sterilising, functional testing, packaging and labelling.

Reusable invasive medical device: a device used for diagnostic or therapeutic purposes which, in whole or in part, penetrates inside the body, either through a body orifice or through the surface of the body and which can be reused after appropriate decontamination procedures have been carried out. The list of devices includes, but is not limited to, endoscopes, invasive transducer probes, surgical equipment and so on.

Risk: risk is the effect of uncertainty on objectives. It is measured in terms of consequences and likelihood.

Risk assessment: refers to the overall process of risk analysis and risk evaluation. Its purpose is to develop agreed priorities for the identified risks. It involves collecting information through observation, communication and investigation.

Risk management: coordinated activities to direct and control an organisation with regard to risk.

Risk mitigation: this describes the appropriate management options for dealing with identified risk such as modifying procedures, protocols or work practices, or providing education.

Sharps: any items that have the potential to puncture the skin and inoculate the recipient with infectious material.

Single room: a patient bedroom which accommodates one patient only. Single rooms should also have en-suite facilities. Isolation in a single room is effective in reducing transmission of infections spread by the contact or droplet routes, when combined with other infection prevention and control measures such as hand hygiene and personal protective equipment.

Single-use item: a medical device that is intended to be used on an individual patient during a single procedure and then discarded.

Standard precautions: the minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where healthcare is delivered.

Sterilisation: the process to make an object free from viable micro-organisms.

Surgical site infection: a surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place.

Surveillance: the ongoing systematic collection, collation, analysis and interpretation of data; and the sharing of information to those who need to know in order that action may be taken.

Transmission-based precautions: these are additional precautions that staff need to take when standard precautions may be insufficient to prevent cross-transmission of specific infectious agents. Transmission-based precautions are categorised by the route of transmission of infectious agents (some infectious agents can be transmitted by more than one route) including contact, droplet and airborne precautions.

Related infection prevention and control guidelines[≠]

Staff education

Health Service Executive. *Core infection prevention and control knowledge and skills. A framework document.* Dublin: Health Service Executive; 2015. Available online from: https://www.hse.ie/eng/about/Who/QID/nationalsafetyprogrammes/HCAIAMR/CoreInfectionPreventionandControl.pdf

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World Health Organization. *Global guidelines for the prevention of surgical site infection.* Geneva: World Health Organization; 2016. Available online from: http://apps.who.int/iris/bitstream/10665/250680/1/9789241549882-eng.pdf?ua=1

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Health Protection Surveillance Centre. *Recommendations for Surveillance of Surgical Site Infection.* Dublin: SARI Healthcare-associated Infection Surveillance Sub-committee; 2008. Available online from: https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Surveillance/SurgicalSiteInfectionSurveillance/CaseDefinitions/File,3290,en.pdf

Royal College of Physicians of Ireland/Royal College of Surgeons in Ireland. *Preventing Surgical Site Infections: Key Recommendations for Practice*. Dublin: Joint Royal College of Surgeons in Ireland/Royal College of Physicians of Ireland Working Group on Prevention of Surgical Site Infections; 2012. Available online from: https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2016/01/Preventing-Surgical-Site-Infections-Key-Recommendations-for-Practice.pdf

[≠] All online references were accessed when preparing this guidance. Please note that online links may change over time.

Berríos-Torres SI, Umscheid CA, Bratzler DW et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. JAMA Surgery, published online 3 May 2017. doi:10.1001/jamasurg.2017.0904. Available online from: http://jamanetwork.com/journals/jamasurgery/fullarticle/2623725

Ventilator-associated pneumonia

SARI Working Group, Health Protection Surveillance Centre. *Guidelines for the Prevention of Ventilator-associated Pneumonia in adults in Ireland.* Dublin: Health Service Executive, Health Protection Surveillance Centre; 2011. Available online from: https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12530,en.pdf

Aspergillosis

Fenelon L and Aspergillus Sub-committee of the Scientific Advisory Committee, National Disease Surveillance Centre. *National Guidelines for the Prevention of Nosocomial Invasive Aspergillosis During Construction/Renovation Activities.* Dublin: National Disease Surveillance Centre; 2002. Available online from: http://www.hpsc.ie/A-Z/Respiratory/Aspergillosis/Guidance/File,896,en.pdf

Safe injection practice

Siegel JD, Rhinehart E, Jackson M, Chiarello L and the Healthcare Infection Control Practices Advisory Committee. *2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*. Atlanta, GA: Centers for Disease Control and Prevention. Last update: 2017. Available online from: https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines.pdf

Dolan SA, Meehan Arias K, Felizardo G, Barnes S, Kraska S, Patrick M et al. *APIC [Association for Professionals in Infection Control and Epidemiology] position paper: Safe injection, infusion and medication practices in health care*. Washington, DC: American Journal of Infection Control 2010; 38:167-172. [Online]. Available from: http://www.ajicjournal.org/article/S0196-6553(16)00283-2/fulltext

Prevention of sharps injuries

Irish Statute Book. S.I. No. 135/2014 - European Union (Prevention of Sharps Injuries in the Healthcare Sector) Regulations 2014. Available online from: http://www.irishstatutebook.ie/eli/2014/si/135/made/en/print

Legionellosis and water

O'Donnell J and Legionnaires' Disease Subcommittee, Health Protection Surveillance Centre. *National Guidelines for the Control of Legionellosis in Ireland, 2009: Report of Legionnaires' Disease Subcommittee of the Scientific Advisory Committee.* Dublin: Health Protection Surveillance Centre; 2009. Available online from: https://www.hpsc.ie/A-Z/Respiratory/Legionellosis/Publications/File,3936,en.pdf

Knowles S and Prevention and Control of Infection from Water Systems in Healthcare Facilities Sub-Committee of the HPSC Scientific Advisory Committee, Health Protection Surveillance Centre. *Guidelines for the Prevention and Control of Infection from Water Systems in Healthcare Facilities.* Dublin: Health Service Executive, Health Protection Surveillance Centre; 2014. Available online from: https://www.hpsc.ie/AboutHPSC/ScientificCommittees/Sub-CommitteesofHPSCSAC/WaterGuidelinesSub-Committee/File,14451,en.pdf

Catheter-associated urinary tract infection

Strategy for the Control of Antimicrobial Resistance in Ireland (SARI) Subgroup. *Guidelines for the prevention of catheter-associated urinary tract infection.* Dublin: Health Protection Surveillance Centre; 2011. Available online from: https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12913,en.pdf

Clostridium difficile infection

National Clinical Effectiveness Committee. *Surveillance, Diagnosis and Management of Clostridium difficile Infection in Ireland. National Clinical Guideline No. 3.* Dublin: Department of Health; 2014. Available online from: http://health.gov.ie/wp-content/uploads/2015/01/National-Clinical-Guideline-No.-3-Clostridium-difficile.pdf

Meticillin-Resistant *Staphylococcus aureus*

National Clinical Effectiveness Committee. *Prevention and Control Methicillin-Resistant Staphylococcus aureus (MRSA). National Clinical Guideline No.2.* Dublin: Department of Health; 2013. Available online from: http://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/guidelines/File,14478,en.pdf

Multi-drug resistant organisms

Royal College of Physicians of Ireland Clinical Advisory Group on Healthcare Associated Infections. *Guidelines for the prevention and control of multidrug resistant organisms (MDRO) excluding MRSA in the healthcare setting.* Dublin: Royal College of Physicians of Ireland/Health Service Executive; 2014. Available online from: http://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/guidelines/File,12922,en.pdf

Hand hygiene

Royal College of Physicians of Ireland Clinical Advisory Group on Healthcare Associated Infections. *Guidelines for Hand Hygiene in Irish Healthcare Settings Update of 2005 Guidelines*. Dublin: Royal College of Physicians of Ireland/Health Service Executive; 2015. Available online from: https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,15060,en.pdf

Hospital hygiene

National Hospitals Office, Quality, Risk and Customer Care. *HSE Cleaning Manual Acute Hospitals.* Dublin: Health Service Executive; 2006. Available online from: http://hse.ie/eng/services/publications/Hospitals/HSE_National_Cleaning_Standards_Manual.pdf

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The British Standards Institute. *PAS 5748:2014 Specification for the planning, measurement and review of cleanliness services in hospitals.* Available from: http://shop.bsigroup.com/ProductDetail/?pid=000000000030292594.

Reusable invasive medical devices

Healthcare Infection Control Practices Advisory Committee. *Essential Elements of a Reprocessing Program for Flexible Endoscopes – Recommendations of the Healthcare Infection Control Practices Advisory Committee*. Atlanta, GA: Centers for Disease Control and Prevention; 2016. Available online from: https://www.cdc.gov/hicpac/pdf/Flexible-Endoscope-Reprocessing.pdf

Health Service Executive National Decontamination of Reusable Invasive Medical Devices Advisory Group*. Health Service Executive Standards and Recommended Practices for Central Decontamination Units*. Dublin: Health Service Executive; 2011. Available online from: http://www.hse.ie/eng/about/Who/qualityandpatientsafety/resourcesintelligence/Quality_and_Patient_Safety_Documents/Decontamination/HSE_Standards_Recommended_Practices_CDUs.html

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Health Service Executive National Decontamination of Reusable Invasive Medical Devices Advisory Group. *Part. 1 Background. Health Service Executive Code of Practice for Decontamination of Reusable Invasive Medical Devices*. Dublin: Health Service Executive; 2007. Available online from; http://www.hse.ie/eng/services/publications/hospitals/HSE_Publications/Code_of_Practice_for_Decontamination_of_Reuable_Invasive_Medical_Devices_1.pdf

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Health Service Executive National Decontamination of Reusable Invasive Medical Devices Advisory Group. *Part. 3 Recommended Practices for Central Decontamination Units. Health Service Executive Code of Practice for Decontamination of Reusable Invasive Medical Devices*. Dublin: Health Service Executive; 2007. Available online from: http://www.hse.ie/eng/services/publications/hospitals/HSE_Publications/Code_of_Practice_for_Decontamination_of_Reuable_Invasive_Medical_Devices_3.pdf

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