



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at Wexford General Hospital.

Monitoring programme undertaken against the National Standards for the prevention and control of healthcare-associated infections in acute healthcare services

Date of on-site inspection: 09 November 2017

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.

Table of Contents

1.	Introduction.....	1
2.	Findings at Wexford General Hospital	3
2.1	Risk identified during this inspection.....	3
2.2	Governance	4
2.3	Risk management.....	12
2.4	Policies, procedures and guidelines.....	14
2.5	Staff training and education	15
2.6	Implementation of evidence-based best practice	17
2.6.1	Prevention of invasive device-related infection	17
2.6.2	Surveillance of invasive device-related and surgical site infection.....	18
2.7	Systems to prevent and manage healthcare-associated infections and multidrug-resistant organisms.....	20
2.7.1	Preventing the spread of antimicrobial-resistant organisms	20
2.7.2	Safe injection practice	23
2.7.3	Other measures to prevent the transmission of infection.....	24
2.8	Quality improvement initiatives	27
2.9	Progress since the previous HIQA inspection	28
3.	Conclusion.....	29
4.	References	30
5.	Appendix 1	34
	Lines of enquiry for the monitoring programme undertaken against the <i>National Standards for the prevention and control of healthcare-associated infections in acute healthcare services</i>	34
	Appendix 2: Copy of the high risk letter issued to Wexford General Hospital regarding the finding of an unannounced inspection.....	35
	Appendix 3: Copy of the response letter received from Wexford General Hospital regarding the high risk identified during the HIQA inspection.....	37

1. Introduction

HIQA monitors the implementation of the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services*¹ in public acute hospitals in Ireland to determine if hospitals have effective arrangements in place to protect patients from acquiring healthcare-associated infection. The *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* will be referred to as the National Standards in this report.

In 2017, HIQA commenced a revised monitoring programme against the National Standards. The aim of this revised monitoring programme is to assess aspects of the governance, management and implementation of designated programmes to prevent and control healthcare-associated infections in hospitals. This monitoring programme comprises Phases One, Two and Three which will be described next.

The National Standards were updated in 2017 and therefore supersede the previous version. Hospitals should work towards implementing these revised National Standards.

Phase One

All public acute hospitals were requested to complete and return a self-assessment tool to HIQA during April and May 2017. The self-assessment tool comprised specific questions in relation to the:

- hospital infection prevention and control programme and associated oversight arrangements
- training of hospital personnel to implement policies, procedures, protocols, guidelines and evidence-based practice in relation to the prevention and control of infection
- the systems in place to detect, prevent, and respond to healthcare-associated infections and multidrug-resistant organisms.

The hospital Chief Executive Officer or General Manager and the Health Service Executive (HSE) Hospital Group Chief Executive Officer were asked to verify that the information provided to HIQA accurately reflected the infection prevention arrangements within the hospital at that time.

Phase Two

Using a revised assessment methodology HIQA commenced a programme of unannounced inspections against the National Standards in public acute hospitals in May 2017.

Specific lines of enquiry were developed to facilitate monitoring in order to validate some aspects of self-assessment tools submitted by individual hospitals. The lines of enquiry which are aligned to the National Standards are included in this report in Appendix 1.

Further information can be found in the *Guide to the monitoring programme undertaken against the National Standards for the prevention and control of healthcare-associated infections*² which was published in May 2017 and is available on HIQA's website: www.hiqa.ie

Phase Three

Phase Three of this monitoring programme will focus on the reprocessing of reusable medical devices and HIQA will commence onsite inspections in this regard in 2018.

Information about this inspection

This inspection report was completed following an unannounced inspection carried out at Wexford General Hospital by Authorised Persons from HIQA; Noreen Flannelly-Kinsella, Aileen O' Brien and Emma Cooke. The inspection was carried out on 09 November 2017 between 10.00hrs and 17.30hrs.

Prior to this inspection, authorised persons reviewed the hospital's completed self-assessment tool and related documentation submitted to HIQA earlier in May 2017.

During this inspection inspectors spoke with hospital managers and staff, and a member of the Infection Prevention and Control Team. Inspectors requested and reviewed documentation and data and observed practice within the clinical environment in a small sample of clinical areas which included the:

- Intensive Care Unit
- Paediatric ward

Inspection findings presented in this report are aligned to HIQA's monitoring lines of enquiry as shown in Appendix 1. The inspection team used specifically designed monitoring tools during this inspection in relation to aspects of:

- Prevention of invasive device-related infection (Section 2.6)
- Prevention and control of transmission of antimicrobial-resistant bacteria (Section 2.7.1)
- Safe injection practice (Section 2.7.2)

HIQA would like to acknowledge the cooperation of the hospital management team and all staff who facilitated and contributed to this unannounced inspection.

2. Findings at Wexford General Hospital

The following sections 2.1 to 2.9 present the general findings of this unannounced inspection which are aligned to monitoring lines of enquiry. The report is structured as follows:

- section 2.1 outline the risk identified during this unannounced inspection
- section 2.2 to 2.9 present the general findings of this unannounced inspection which are aligned to monitoring lines of enquiry.

2.1 Risk identified during this unannounced inspection

During an unannounced inspection by HIQA on 09 November 2017, a risk was identified at Wexford General Hospital in relation to the prevention and control of healthcare-associated infection. Specifically the risk identified was in relation to:

- the lack of on-site consultant microbiologist presence at the hospital for the previous two month period. Additionally, there appeared to be no agreed timeframe by which this deficiency would be addressed.

In light of the complexity of services provided in Wexford General Hospital, this deficiency posed a potential risk to the clinical management of patients with infection and also the ongoing delivery and progression of the infection prevention and control programme and antimicrobial stewardship at the hospital.

Details of this risk were communicated to the hospital General Manager. In response, the hospital General Manager outlined key actions to mitigate the risk identified by HIQA. Specifically these key actions included:

- the appointment of a permanent consultant microbiologist at University Hospital Waterford anticipated to commence in quarter one 2018 with confirmation that University Hospital Waterford will then provide three sessions per week to Wexford General Hospital. This will mean an increase of two extra sessions on the previous arrangement, which equates to a total of nine hours on site per week
- in the interim, University Hospital Waterford will continue to provide 24-hour, seven-days-a-week consultant microbiologist expert clinical advice by telephone to Wexford General Hospital
- in addition a consultant microbiologist onsite visit will be provided to Wexford General Hospital on request.

A copy of the letter issued on 13 November 2017 to the hospital General Manager regarding the risk identified during the inspection and a copy of the response

received from the hospital General Manager are shown in Appendices 2 and 3 respectively.

The hospital should review this proposed arrangement to be assured that the necessary resources are in place to deliver a safe sustainable service.

2.2 Governance

Line of enquiry 1.1

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

Governance arrangements

Wexford General Hospital is a statutory hospital owned and managed by the Health Service Executive and is part of the Ireland East Hospital Group. The General Manager as the person with overall accountability and responsibility for the hospital reported to and attended monthly performance meetings with the Chief Executive Officer (CEO) of the Ireland East Hospital Group. The General Manager was accountable for the overall management and monitoring of the prevention and control of healthcare-associated infection at the hospital.

Inspectors found through this inspection that governance and management arrangements around the prevention and control of healthcare-associated infection were not fully aligned to the current Ireland East Hospital Group governance structure. The consultant microbiologist service at the hospital was provided by University Hospital Waterford which was part of the South/South West Hospital Group. This was a legacy arrangement originating from the previous HSE South East Region and remained unchanged when the Ireland East Hospital Group governance structure was formed. This arrangement does not facilitate effective governance and oversight at hospital group level.

Additionally, HIQA was informed that infection prevention and control teams from five hospitals (including Wexford General Hospital) were members of a regional south east infection prevention and control advisory team which met monthly. The meetings were chaired by a consultant microbiologist and encompassed representatives from five hospitals from two different hospital groups and a community health organisation. Defined terms of reference detailed the aims and objectives of the team which included policy, education and programme development, and provision of advice, support and a forum for shared learning. This committee did not form part of the formal infection prevention and control governance structure of Wexford General Hospital.

Within the current governance construct some formalised working arrangements were in place between the Infection Prevention and Control Team at Wexford General Hospital and their counterparts in other hospitals in the Ireland East Hospital Group. This included an Ireland East Infection Prevention and Control Nurses Forum

which had been in place for the previous two year period. In addition, a healthcare-associated infection and antimicrobial resistance group had been recently convened in the Ireland East Hospital Group. This group was attended by the HSE National Lead for Healthcare-Associated Infection and Antimicrobial Resistance and chaired by the Ireland East Hospital Group Chief Executive Officer. Members of the Infection Prevention and Control Team at Wexford General Hospital attended this meeting. This is a positive development and facilitates greater collaboration at hospital group level in relation to the prevention and control of healthcare-associated infection.

The Infection Prevention and Control Committee at Wexford General Hospital co-ordinated and provided oversight of the infection prevention and control programme and was responsible for ensuring that processes and systems were in place to prevent and control the risk of infection. The committee was chaired by the General Manager and had defined terms of reference detailing the membership of the group, frequency and quorum for committee meetings. The committee met bimonthly and had multi-disciplinary membership which included a consultant microbiologist, pharmacist, public health medical representative, clinical director, medical consultants, infection prevention and control clinical nurse specialist, nursing management, quality and safety manager and bed manager.

The Infection Prevention and Control Team provided an infection prevention and control team advisory report for each meeting and documentation reviewed showed that meetings followed a standardised agenda which included feedback and consideration of the following issues:

- national and local hand hygiene audits
- infection prevention and control training
- surveillance reports
- national key performance indicators
- care bundle implementation
- antimicrobial stewardship reports
- policies, procedures, protocols and guidelines
- incidents and risks
- workforce and vaccination updates.

Minutes of infection prevention and control committee meetings were shared electronically with clinical departments. The Infection Prevention and Control Committee formally reported to the Quality and Safety Executive Committee on a quarterly basis as did 17 other hospital committees and five governance groups. The hospital organogram showed that an additional 32 groups and committees reported into the five governance groups. Previous monitoring work by HIQA identified that other similar sized hospitals have rationalised the number of hospital committees

reporting into an oversight committee in order to strengthen governance arrangements.³

Membership of the Quality and Safety Executive Committee comprised multiple specialities including the hospital's General Manager. Minutes of meetings reviewed by inspectors showed that infection prevention and control was a standing agenda item. The Quality and Safety Executive Committee reported to the Board of Management meeting held monthly which included the hospital General Manager, Clinical Director, Surgical Clinical Lead, Director of Nursing, and a general practitioner.

Infection prevention and control service

The infection prevention and control service at Wexford General Hospital was ratified and overseen by the Infection Prevention and Control Committee and delivered by the Infection Prevention and Control Team. The team was responsible for the co-ordination of infection prevention and control services, antimicrobial stewardship and microbiological services including surveillance. The team also provided feedback, advice and guidance to staff, hospital committees and clinical governance group meetings on all aspects of the infection prevention and control programme including decontamination and purchasing of patient equipment, and delivered education to all grades of staff.

A consultant microbiologist based in University Hospital Waterford, attended Wexford General Hospital in person for 3hrs, on one day a week (0.1 whole-time equivalent hours (WTE)).* Since the position had become vacant two months previous to the inspection date, there had been no onsite presence of a consultant microbiologist at the hospital for that period. This deficiency had been escalated by the hospital to the Ireland East Hospital Group and had been entered on the hospital risk register. Twenty four hour clinical microbiology advice was available by telephone to hospital staff and this was provided on a rotational basis by consultant microbiologists, all based in University Hospital Waterford.

Given the size and complexity of services provided at the hospital and in light of the importance of such a position from both a leadership and expertise perspective, HIQA found that onsite consultant microbiologist resource allocation was relatively limited. Therefore the proposal to provide two additional sessions equating to nine hours per week in total by a consultant microbiologist from University Hospital Waterford at Wexford General Hospital when the position is backfilled is a welcome development.

* Whole-time equivalent (WTE): allows part-time workers' working hours to be standardised against those working full-time. For example, the standardised figure is 1.0, which refers to a full-time worker. 0.5 refers to an employee that works half full-time hours.

Membership of the Infection Prevention and Control Team also included 2.0 WTE infection prevention and control clinical nurse specialists of which 0.4 WTE nursing hours were allocated to the community. During this inspection it was identified that the nursing staffing compliment had been reduced to 1.0 WTE for the previous two month period. Inspectors also learned that there was no agreed timeframe by which this deficiency would be addressed. The hospital should implement workforce contingency and succession planning for all staff, including trained specialist staff in infection prevention and control so that the service continues seamlessly at these times.

The team was supported by 0.8 WTE antimicrobial pharmacist who in the absence of a chief pharmacist, provided cover in the interim of the position being filled. Hospital management informed inspectors that a chief pharmacist had been appointed at the hospital and was due to commence employment shortly. The hospital anticipated that there would be full resumption of antimicrobial stewardship activities once this position was filled. Antimicrobial stewardship was a standing agenda item on a number of committees including drugs and therapeutics, clinical governance, quality and safety executive meetings and infection prevention and control committee meetings at the hospital. Additionally, three hours dedicated administrative resource was provided to support the implementation of the infection prevention and control programme.

Bimonthly infection prevention and control advisory team reports were provided by the Infection Prevention and Control Team for hospital committees including the Infection Prevention and Control Committee, the Quality and Safety Committee, the Hygiene Committee and the Board of Management. The reports included information on the following:

- design, construction and modification of facilities
- policies, procedures and guidelines
- surveillance data in relation to healthcare-associated infection and multidrug-resistant organisms
- care bundle implementation
- catheter-related bloodstream infections
- hand hygiene compliance audits
- outbreaks and incidents
- education and training
- governance and human resources
- antimicrobial stewardship reports.

Monitoring and evaluation

Hospital management monitored the following performance indicators in relation to the prevention and control of healthcare-associated infections in line with HSE national reporting requirements:

- hospital-acquired *Staphylococcus aureus* bloodstream infection
- hospital-acquired *Clostridium difficile* infection
- alcohol hand rub consumption.

Hospital management also monitored performance in respect of the following indicators:

- median hospital total antibiotic consumption
- percentage compliance of hospital staff with the World Health Organisation 5 moments of hand hygiene
- mandatory hand hygiene training uptake by current healthcare staff who interact with patients in the rolling 24 month period.

The Infection Prevention and Control Team also monitored local performance indicators as follows:

- surveillance of 'alert' organisms and 'alert' conditions[†]
- clusters or outbreaks of infection
- Group A *Streptococcus* surveillance
- data reported to the European Antimicrobial Resistant Surveillance Network (EARS-Net)[‡]
- enhanced colonisation and bloodstream infection surveillance including *Staphylococcus aureus* bacteraemia surveillance
- new and recurrent enhanced hospital-acquired *Clostridium difficile* infection
- surveillance of intensive care unit catheter-related bloodstream infections.

The surveillance programme was coordinated and implemented by the team and surveillance of alert organisms and alert conditions were carried out daily. Surveillance and root cause analysis was performed at the hospital in respect of *Staphylococcus aureus* bloodstream infection and *Clostridium difficile* infection.

[†] Alert conditions include physical symptoms such as skin rashes, vomiting, diarrhoea, respiratory illness that could be due to an infectious illness.

[‡] EARS-Net performs surveillance of antimicrobial susceptibility of bacteria causing infections in humans including; *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Acinetobacter* species, *Streptococcus pneumoniae*, *Staphylococcus aureus*, *Enterococcus faecalis* and *Enterococcus faecium*.

The hospital showed that they had actively worked to reduce the number of methicillin-sensitive *Staphylococcus aureus* bloodstream infections associated with intravascular devices in 2016. Documentation reviewed showed that root cause analysis were performed and action plans developed in relation to bloodstream infections identified through surveillance. Education and awareness sessions were provided in relation to care bundle compliance audits and introduction of needle-free access devices. To support this quality improvement initiative, the hospital displayed posters in relation to aseptic non-touch technique and 'scrub the hub'[§] and introduced designated spaces in clinical rooms for intravenous medication preparation. Inspectors were informed that staff successfully addressed this area for improvement by reducing the rate of catheter-related *Staphylococcus aureus* bloodstream infections in 2017.

The Infection Prevention and Control Team conducted audits across the hospital in 2016 in relation to:

- hand hygiene
- environment and patient equipment hygiene
- compliance with methicillin-resistant *Staphylococcus Aureus* screening policy
- patient isolation audits.

An annual infection prevention and control report and plan was produced by the Infection Prevention and Control Team.

Hospital management told inspectors that environmental and patient equipment hygiene standards were continuously monitored at the hospital. Findings in this regard will be presented in section 2.7.1 in this report. Other process measures monitored at the hospital included care bundle implementation and findings in this regard will be presented in section 2.6.1.

The housekeeping department which was overseen by the Hygiene Services Committee had responsibility for the management of hospital hygiene and met bimonthly. Monthly environmental and patient equipment hygiene audits were undertaken at the hospital and audit results were presented quarterly at hygiene meetings and to the hospital's senior management team. Audit findings in relation to the clinical areas visited on this inspection will be presented in section 2.7.1. A hygiene operational team also undertook fortnightly hygiene spot check audits in the hospital and a process was put in place to address findings. Documentation reviewed

[§] An evidenced-based aseptic technique used to prepare and disinfect intravascular catheter caps or hubs prior to accessing and attaching a syringe or tubing to the cap or hub which is aimed at preventing catheter-related bloodstream infections.

showed that hospital hygiene audit results were tracked and trended by hospital management.

Monthly quality and safety walk-rounds were undertaken by the Executive Management Group at the hospital. Documentation reviewed by inspectors showed that the CEO and the Director of Quality and Patient Safety of the Ireland East Hospital Group also did a walk-round at the hospital in July 2017.

Wexford General Hospital participated in a national point prevalence survey of hospital-acquired infections and antimicrobial use in May 2017 which was part of a European-wide point prevalence study. This demonstrates a commitment by the hospital to proactively identify areas for improvement at the hospital.

2.3 Risk management

Line of enquiry 1.2

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

The hospital had systems in place to identify and mitigate or manage risk in relation to the prevention and control of infection at the hospital. Risk assessment forms were escalated to the Quality and Safety Department, risk rated and entered on the hospital risk register.** The risk register was reviewed bimonthly at both hospital management and local clinical area level. Clinical incidents were reported on incident forms and escalated to the Clinical Risk Manager at the hospital. Incident forms were entered on the National Incident Management System by staff in a clinical risk office based at Kilcreene Hospital, Kilkenny.

Infection prevention and control incidents and risks were standing agenda items on the Infection Prevention and Control Committee, Quality and Safety Executive Committee and the Board of Management meetings. Minutes of these meetings received and reviewed by inspectors showed that updates were given in relation to incidents and risks and serious reportable incidents. The risk register was forwarded to relevant heads of department on a two monthly basis. There was a requirement on local managers to provide updates in relation to the risks reported and local control measures implemented in relation to the risks. HIQA was informed that clinical incidents and risks were also presented at monthly performance meetings with the CEO of the Ireland East Hospital Group.

The hospital's risk register reviewed by inspectors in relation to infection prevention and control outlined the existing control measures enacted by the hospital to address current risks. As early as 2014, the hospital had identified that the provision of consultant microbiology sessions at Wexford General Hospital was insufficient and posed a risk to patient safety. This deficiency had been escalated by the hospital to the Ireland East Hospital Group and entered on the hospital risk register.

Previous HIQA reports in 2015 and 2016 in relation to Wexford General Hospital stated that the hospital had identified consultant microbiologist sessions as being insufficient and had submitted a business case seeking 1.0 WTE post for Wexford General Hospital in 2014. Minutes of infection prevention and control committee

** A risk register is a database of assessed risks that face any organisation at any one time. Always changing to reflect the dynamic nature of risks and the organisation's management of them, its purpose is to help hospital managers prioritise available resources to minimise risk and target improvements to best effect. The risk register provides management with a high level overview of the hospital's risk status at a particular point in time and becomes an active tool for the monitoring of actions to be taken to mitigate risk.

meetings reviewed by inspectors showed that this risk had been discussed by the hospital in November 2015, March 2016 and July 2017.

Insufficient isolation room capacity had been entered on the hospital risk register in 2016. An isolation prioritisation policy was developed and staff completed incident report forms in cases where isolation rooms were not available for patients who required transmission-based precautions. The hospital had made an application for capital funding for a new build medical block with 75 single rooms and an intensive care unit as part of Wexford General Hospital and Ireland East Hospital Group development plans for 2022.

Some of the additional risks identified on the risk register included nursing staff shortages, high bed occupancy rates and overcrowding at the hospital. In order to mitigate these risks, the hospital had implemented a number of control measures which included holding interviews for nursing staff positions in August 2017 and opening ten additional medical beds as part of the winter bed planning initiative in November 2017.

2.4 Policies, procedures and guidelines

Line of enquiry 2

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

Inspectors found that the hospital had a suite of infection prevention and control policies in relation to standard precautions, transmission-based precautions and outbreak management. It was practice that hospital policies relevant to infection prevention and control were reviewed and approved by the Infection Prevention and Control Committee and the regional infection prevention and control team.

Current HSE policy states that hospital policies, procedures and guidelines should be reviewed every three years.⁴ Inspectors observed that some policies were due for review at the time of inspection. Hospital managers stated that a number of policies such as standard precautions, aseptic technique, urinary catheter insertion, and peripheral vascular catheter insertion were either under review or in draft format.

Hospital policies, procedures and guidelines were available to staff in both electronic format and in hard copy in folders in clinical areas. Inspectors found some older hard copy versions of infection prevention and control policies in a clinical area inspected. Additionally HIQA observed that some staff had difficulty accessing documents electronically. In order to facilitate access to policies in a timely manner and to ensure that staff have the most up-to-date information to support and guide service delivery the document management system should be reviewed and improved upon.

Inspectors were informed in one of the areas inspected that policies not available at the hospital were often accessed on other hospital websites. It is recommended that this practice is reviewed to ensure a standardised approach in the hospital which complies with National Standards and HSE guidelines.

The Infection Prevention and Control Team provided updates in relation to policies, procedures and guidelines in the infection prevention and control team advisory report for infection prevention and control committee meetings.

2.5 Staff training and education

Line of enquiry 3

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

Hand hygiene training in the hospital was mandatory for staff at induction and every two years thereafter in line with national hygiene guidelines.⁵ Hand hygiene training requirements were met by staff by either attending a classroom-based training session or by completing the HSE eLearning training module.

Documentation provided to inspectors showed that 71% of relevant hospital staff had attended hand hygiene training in the previous two year rolling period. Data breakdown per discipline during this period showed 69% and 45% of nursing and medical staff respectively had attended this training. It was reported to inspectors that figures may not be fully up-to-date at the time of inspection.

In order to facilitate attendance at hand hygiene training, the hospital had devised a hand hygiene flow chart for staff which outlined training options available and provided information in relation to recording attendance to facilitate oversight by senior management. Documentation provided showed that 93% of staff in the paediatric ward and over 90% of staff working in the Intensive Care Unit were up-to-date with hand hygiene training.

Responsibility for ensuring staff attendance at training and for maintaining attendance records rested with unit managers. Training attendance was collated centrally on a mandatory training database maintained by the office of the hospital's General Manager. Documentation reviewed showed that issues in relation to protected time and resources had affected staff attendance at mandatory education in 2017. Risks in relation to staffing resources had been included in the hospital risk register.

Infection prevention and control and hand hygiene training was provided on a monthly basis by the Infection Prevention and Control Team. Inspectors were informed that 32% of staff in the paediatric ward had attended infection prevention and control training. Documentation reviewed by inspectors indicated that 15 additional training and education sessions were provided in 2017 in relation to multidrug-resistant organisms including Carbapenemase Producing *Enterobacteriaceae*. Hospitals should continue to align infection prevention and control education for staff to the national framework for such knowledge and skills.⁶

As part of the hand hygiene strategy at the hospital, a hand hygiene leader programme was introduced in 2014 to promote best practice in relation to hand hygiene and provide informal hand hygiene education sessions to staff and undertake local hand hygiene observational audits.

The hospital had also provided staff with opportunities to become infection prevention and control link practitioners^{††} and train as local champions within their own clinical areas. A number of link nurse practitioners had been assigned to auditing in areas such as hand hygiene and aseptic non-touch technique practices. In addition, due to increasing demands on the Infection Prevention and Control Team the hospital had trained eleven nursing leads to continue to roll-out aseptic non-touch techniques in clinical areas in the hospital.

A competency-based training programme for midwifery and nursing staff was provided in relation to intravenous cannulation upon commencement of their employment at the hospital and 83 nurses and midwives had attended this programme since November 2016. Training in relation to aseptic non-touch technique and peripheral catheter care bundle implementation was provided during these training sessions. Staff education sessions had also been provided to medical teams at medical and surgical departmental meetings at the hospital. Infection prevention and control education was provided to student nurses during training and to non-consultant hospital doctors and hospital interns at induction.

Inspectors were informed that management staff with responsibility for household staff and hospital cleaning, had completed a recognised cleaning training programme and had trained a number of staff to become 'train the trainers' in relation to hospital cleaning and environmental hygiene.

All staff at the hospital had access to advice from the Infection Prevention and Control Team and clinical staff had access to advice from a consultant microbiologist.

^{††} A link practitioner acts as an infection prevention and control role model within their clinical area supporting and educating staff and acting as an infection prevention and control resource, having been provided with the necessary knowledge and training to take on the role.

2.6 Implementation of evidence-based best practice

Line of enquiry 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.

2.6.1 Prevention of invasive device-related infection

Care bundles⁺⁺ to reduce the risk of different types of infection have been introduced across many health services over the past number of years, and there have been a number of guidelines^{7,8,9} published in recent years recommending their introduction across the Irish health system. The implementation of care bundles to prevent invasive device-related infection was reviewed in the clinical areas inspected.

Inspectors were informed that peripheral vascular catheter care bundles had been implemented throughout the hospital in line with national guidelines. Care bundles in relation to urinary catheter care had not yet been implemented. Inspectors were informed that elements of a urinary catheter care bundle had been incorporated into a urinary catheter care plan in the interim.

Monitoring compliance with care bundles are important process measures for evaluation of catheter-related blood stream infection preventative programmes. Monthly peripheral catheter care bundle audit results for the hospital showed variation in compliance of 75%-100% from January to September 2017 in different ward areas. Results of an audit of peripheral vascular catheter care bundles in the paediatric ward in February 2017 showed 60% compliance. Documentation received by the ward following this audit and reviewed by inspectors, indicated that an action plan should have been devised in response to these compliance results. However at the time of inspection an action plan had not been put in place. Full compliance with all essential care bundle components has shown improved patient outcomes.

Inspectors also looked at aspects of the prevention of invasive device-related infection in the Intensive Care Unit. Care bundles for peripheral vascular catheters and central venous access devices were in place in the Intensive Care Unit. However, compliance with care bundle implementation was not audited in the Intensive Care Unit. This needs to be progressed. Staff in the unit did however perform two spot checks a month which included checks of some intravascular device and urinary catheter care bundle elements. Findings were fed back to unit

⁺⁺ A bundle is a small, straightforward set of evidence-based practices that, when performed collectively and reliably, have been proven to improve patient outcomes.

staff at safety pause meetings. Audit of adherence to recommended best practice for arterial line management was performed periodically by unit staff using an audit tool developed at the hospital.

Monthly Nursing and Midwifery HSE Quality Care Metrics also recorded limited data in relation to elements of invasive device management at the hospital.

2.6.2 Surveillance of invasive device-related and surgical site infection

The surveillance of healthcare-associated infection is one of the core components of an effective infection prevention and control programme.^{10,11,12} National guidelines recommend healthcare-associated infection surveillance in relation to surgical site infection, central venous access device-related infection, urinary catheter-associated urinary tract infection and ventilator-associated pneumonia.^{13,14,15} Other health systems have advanced the surveillance of healthcare-associated infection to the benefit of both patients and health service providers by demonstrating reductions in these type of infections.^{16,17}

Surveillance of vascular catheter-related bloodstream infection in line with international guidelines had been commenced by staff in the Intensive Care Unit in collaboration with the Infection Prevention and Control Team in March 2017. A detailed analysis was performed if an episode of vascular catheter-related infection was detected. Surveillance findings were fed back to staff in the unit. This represents good practice and could be included in local performance reports.

Ventilator-associated pneumonia care bundles were not implemented in the Intensive Care Unit and surveillance of ventilator-associated pneumonia was not performed. The hospital did not have a formal policy in relation to ventilator-associated pneumonia prevention. Staff in the unit had undertaken training in relation to ventilator-associated infection prevention in 2016. Staff at the hospital had trialled an oral cleansing method and suctioning system in 2017 across a number of clinical areas including the Intensive Care Unit. An evaluation report showed that the trial method had improved patient's oral hygiene. Following this evaluation hospital staff reviewed local oral care policies and were planning to implement a new oral hygiene pack in late 2017.

The hospital did not perform catheter-associated urinary tract infection surveillance.

Surgical site infection surveillance represents good practice and demonstrates a commitment to monitoring the quality of patient care. It is recommended that surveillance of healthcare-associated infection is targeted in patients at greatest risk of infection or in areas where deficiencies have been identified. Surgical site infection surveillance had been suspended in Wexford General Hospital since 2015 due to resource deficiencies. Documentation reviewed showed that the hospital had

estimated a 44% reduction of surgical site infections since the programme commenced in 2007. HIQA acknowledges that the undertaking of such surveillance would require additional resources.

The hospital did not have a policy in relation to the prevention of surgical site infection. Such a policy should be developed based on best practice guidelines.^{18,19,20} Documentation reviewed showed that elements of a surgical site care bundle had been included in perioperative care plan documentation and guidelines for surgical antimicrobial prophylaxis had been updated in July 2017.

2.7 Systems to prevent and manage healthcare-associated infections and multidrug-resistant organisms

Line of enquiry 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.

Inspectors looked at systems in place to detect, prevent and respond to healthcare-associated infections and multidrug-resistant organisms at Wexford General Hospital in line with national guidelines.

2.7.1 Preventing the spread of antimicrobial-resistant organisms

Measures to prevent the spread of antimicrobial-resistant organisms and implementation of aspects of transmission-based precautions were reviewed in both of the clinical areas inspected. Patients with suspected or confirmed communicable disease including healthcare-associated infection and multidrug-resistant organisms should be placed in a suitable isolation room, single room or cohort area^{§§} in line with national guidelines.^{21,22}

Hospital managers told inspectors that there were 226 hospital beds at Wexford General Hospital of which 157 were inpatient beds. The hospital had 25 single rooms in total of which 22 had en-suite facilities. On the day of inspection all inpatients who required isolation were isolated in single rooms or in a cohort room as appropriate. In addition there were two neutral or negative pressure rooms for patients with airborne infection at the hospital.

Patient assessment to determine previous colonisation^{***} or infection with a transmissible infection was undertaken on admission to the clinical areas. The hospital also had a computerised system to record and alert staff when patients who

^{§§} A cohort area is a bay and or a ward in which a group of patients (cohort) with the same infection are placed together. 'Cohorting' of patients classically means the separation of those patients and their nursing staff from other patients because single room isolation facilities are not available. It is generally used as a measure of last resort in situations where single room capacity is greatly exceeded by the number of patients who are colonised with a particular alert organism, in an effort to prevent cross transmission from this patient cohort to the wider hospital patient population.

^{***} Colonisation is the presence of bacteria on a body surface (like on the skin, mouth, intestines or airway) without causing disease in the person. Infection is the invasion of a person's bodily tissues by disease-causing organisms.

were previously colonised or infected with a transmissible infection were readmitted to hospital. Patients with transmissible infections were accommodated in single rooms when available.

It was reported that screening of patients for colonisation or infection was performed in line with national guidelines in the paediatric ward inspected and in critical care areas in the hospital. However screening of all patients in the hospital was not fully in line with national guidelines in relation to multidrug-resistant organisms. It was reported that additional resources would be required to support full implementation of national guidelines in relation to screening for Carbapenemase Producing *Enterobacteriaceae*⁺⁺⁺ across the hospital.

Minutes of Quality and Safety Executive Committee meetings reviewed by inspectors showed that the hospital was exploring the possibility of incorporating an infection prevention and control risk assessment in relation to multidrug-resistant organisms, in nursing admission documentation. In the paediatric ward nursing admission assessment had a question in relation to a previous history of infection and the ward also had a specific paediatric nursing care plan for patients in isolation.

The Infection Prevention and Control Team had devised a hierarchy of isolation prioritisation policy for management of patients with transmissible infection as a quick reference guide in relation to screening and isolation requirements. A daily list identifying patients who required transmission-based precautions was produced by the bed management team for the Infection Prevention and Control Team.

Intensive Care Unit

Processes were in place in the Intensive Care Unit to facilitate identification of patients who required transmission-based precautions and to screen patients for multidrug-resistant organisms. It was practice in the unit to isolate patients transferred from other hospitals until results of microbiological screening performed on admission were available. Processes were in place to communicate any infection risk to other hospitals in the event of patient transfer.

Overall environmental surfaces and patient equipment inspected in the Intensive Care Unit were visibly clean, with few exceptions. The unit was very well maintained. Monthly hygiene audits performed by staff in the unit showed over 95% compliance with desirable standards in audits performed from January to October in 2017. This was reflected on the day of inspection. Patient care equipment audits showed 100% compliance with patient equipment hygiene in the Intensive Care Unit in January 2017.

⁺⁺⁺ Carbapenemase Producing Enterobacteriaceae (CPE), are a family of Gram-negative bacteria which can cause infections that are difficult to treat because of high levels of resistance to antimicrobials.

The Intensive Care Unit contained five beds with four beds in an open plan area and one single room which opened directly into the open plan area. Inspectors were told that because of insufficient isolation facilities in the unit, patients with transmissible microorganisms were sometimes accommodated in the open plan area of the unit which does not facilitate effective containment of transmissible infection.

The design and infrastructure of the Intensive Care Unit was outdated in that there was limited space in the open plan aspect of the unit and in between beds. Storage space for supplies and equipment was limited. Patient equipment was stored on a corridor linking the Intensive Care Unit to the Operating Theatre Department. There was no toilet for patients in the unit. The 'dirty' utility^{***} room opened directly into the open plan area of the unit. There were insufficient facilities for the storage and management of patient equipment and cleaning equipment. Household cleaning equipment was stored in a room shared with the adjacent operating theatre complex.

Paediatric ward

Measures to prevent and control multidrug-resistant organisms were reviewed in the paediatric ward inspected. The paediatric ward was located at the back of a surgical ward requiring staff, patients and visitors to walk through a surgical ward to access the ward which is less than ideal from an infection prevention and control perspective. The ward comprised 26 beds including seven single rooms of which three had en-suite facilities and one had neutral pressure with controlled ventilation. The ward was well maintained with suitable ancillary rooms however the hospital should review the design and size of the four small single rooms from an infection prevention and control perspective.²³ The four rooms in this specific area were much smaller than other single rooms on the ward and had minimal space to facilitate parents and accommodate staff movement thereby making cleaning difficult. The ward had also five two-bedded and three six-bedded rooms. On the day of inspection, seven inpatients required transmission-based precautions, of which three were isolated in single rooms and four were cohorted in a four-bedded room.

Dedicated nursing staff were assigned to isolated and cohorted patients on the day of inspection. Signage to communicate isolation precautions were not consistently in place however personal protective equipment supplies were available outside rooms. There was no clinical healthcare risk waste bin in isolation rooms inspected to facilitate the correct segregation of waste at the point of generation and to ensure that the risk of transmission of healthcare risk waste is mitigated. This was

^{***}Rooms equipped for the disposal of body fluids and the decontamination of reusable equipment such as bedpans, urinals, commodes and body fluid measuring jugs. Waste, used linen and contaminated instruments may also be temporarily stored in this room prior to collection for disposal, laundering or decontamination.

highlighted on the day of inspection for review by the Infection Prevention and Control Team.

Overall on the day of inspection the patient environment and patient equipment inspected was generally clean with few exceptions. There was a good standard of cleaning observed in relation to the patient environment and there was good ownership from local through to senior management level. Overall there was evidence of clear processes and responsibilities for cleaning both the environment and patient equipment in the ward. Daily checklists for environmental cleaning had been consistently completed. Cleaning specifications were in place which identified the specific elements to be cleaned, the cleaning frequency and the person responsible for cleaning.

Monthly hygiene audits performed by staff in the ward showed over 95% compliance with desirable standards in audits performed from April to June 2017. This was also reflected on the day of inspection. Mattress audits checking the integrity of mattresses were also undertaken on a regular basis.

Patient care equipment audits showed between 94% and 100% compliance with desirable standards in January 2017. The hospital should ensure that children's toys stored in a playroom are also aligned to recommended minimum cleaning frequencies for such equipment.²⁴

2.7.2 Safe injection practice

Inspectors looked at aspects of standard precautions to assess safe injection practice in the clinical areas inspected.

Staff who spoke with inspectors were able to describe recommended practice in relation to giving injections safely in the Intensive Care Unit. Inspectors observed nurses preparing medication for injection and using aseptic non-touch technique as appropriate. There was a designated medication preparation area within the clean utility room which was part of a wider hospital initiative to prevent intravascular device-related infection as referred to previously in section 2.2 in this report. Opportunities for improvement were identified in relation to the management of procedure trays used for preparing medication for injection in that two trays were unclean. Practice in this regard should be reviewed.

The location of two blood analysers in the clean utility room was less than ideal as these were located quite close to the medication preparation area. A sharps container was not available directly beside these machines instead staff discarded blood samples into a sharps container located next to the medication preparation area. This should be reviewed and ideally blood analysers should be located in a separate area so as to reduce any possible risk of contamination of clean surfaces.

Staff who spoke with inspectors in the paediatric ward were also able to describe recommended practice in relation to giving injections safely. The ward also had a clearly designated area for medication preparation in the clinical room. Disposable procedure trays were available for staff and inspectors were informed that these were disposed of after single use.

Given the relatively small space available, the medication preparation area had been divided so that there was clear separation of both clean and dirty functions. Staff placed used integrated sharps trays in a designated labelled dirty area to identify that they needed to be cleaned. Following cleaning, the trays were stored in either the designated clean side of the medication preparation area or in a designated space under the medication preparation area.

Multi-dose vials of insulin were labelled with the date of opening and inspectors were informed that once the vials were opened they were dedicated single patient use only as recommended and marked with date of disposal.

The location and management of a blood analyser on a shelf above a photocopier at the nurses' station was also found to be inappropriate. The machine was found to be unclean with multiple red stains visible. Additionally gloves, alcohol gel or hand wash facilities were not available adjacent to the machine. Similar to the Intensive Care Unit, the location and management of this machine should be reviewed.

2.7.3 Other measures to prevent the transmission of infection

Hand hygiene

Wexford General Hospital participates in the national hand hygiene audits, results of which are published twice per year. The hospital achieved 86.2% hand hygiene compliance rate in the national hand hygiene audit in June and July 2017 which is below the HSE national hand hygiene compliance target of 90%. Data breakdown showed that nursing staff achieved 94% and medical staff achieved 64% compliance respectively in this audit. It is recommended that targeted education is performed in order to drive improvement in hand hygiene compliance across all staff disciplines. This should also be addressed by the hospital as part of a quality improvement plan.

Hand Hygiene training uptake and compliance was monitored by the Quality and Safety Executive Committee and information on staff compliance with hand hygiene was provided to the heads of departments. Documentation provided to inspectors showed variation in hand hygiene compliance audit results across all clinical areas in 2017.

Staff in the Intensive Care Unit achieved an average of 88% hand hygiene compliance in monthly audits performed between January and July 2017. Local hand hygiene audits were performed monthly by a staff member in the unit who had been

trained as a 'hand hygiene leader'. Audit results were communicated to the Infection Prevention and Control Team. Hand hygiene compliance audits undertaken in 2016 showed 90% overall compliance in the Intensive Care Unit.

Local quarterly hand hygiene compliance audit results in the paediatric ward inspected showed between 72% and 79% compliance in 2017. Documentation reviewed showed that an overall average compliance of 98% in 2016 in the same ward. It is recommended that the hospital continues working towards achieving compliance with the recommended target of 90%.

Outbreak management and infection incidents

Documentation reviewed showed that there had been three outbreaks of infection within the hospital in the preceding 12 months. Infection prevention and control outbreaks were recorded in the infection prevention and control team advisory report and presented at infection prevention and control committee meetings. Outbreak reports were produced in respect of any outbreak. There were no outbreaks ongoing on the day of inspection. A meeting regarding learning from a norovirus outbreak in October and November 2016 was convened in December 2016 reflective of good practice.

The incidence of newly diagnosed cases of vancomycin-resistant *Enterococci* (VRE) at the hospital had increased in 2016. This increase was attributed to the implementation of the national screening programme in place at the hospital. The hospital reported a sharp rise in the number of patients requiring isolation due to colonisation with multidrug-resistant organisms in 2016 resulting in a shortage of isolation facilities.

Prevention of *Clostridium difficile* infection

The hospital reported the rate of new cases of *Clostridium difficile* infection monthly to the HSE. Documentation reviewed by inspectors showed that episodes of *Clostridium difficile* infection were investigated by the Infection Prevention and Control Team. Data for August and September 2017 showed a slight increase in the incidence of *Clostridium difficile* infection which was greater than the national HSE key performance indicator. Against the background of persistently high activity levels and limited isolation facilities at the hospital, and a reduced infection prevention and control team, the prevention and control of *Clostridium difficile* infection must remain a priority for all relevant staff including hospital management. Effective antimicrobial stewardship programmes have been associated with reduced *Clostridium difficile* infection rates therefore full implementation of the antimicrobial stewardship programme at the hospital should be progressed as a matter of priority.

Prevention of water-borne infection

A formal Legionella site risk assessment had been performed at the hospital in December 2016 and the final report was received in August 2017 as reported by the hospital. Inspectors were informed that internal controls and preventative measures in relation to water-borne infection were implemented in the hospital including regular outlet flushing and microbiological testing of water.

Governance and oversight in relation to water-borne infections at the hospital was the responsibility of the recently convened Environmental Monitoring Committee. Membership included an infection prevention and control nurse and public health doctor and water test results were overseen by the committee and the Infection Prevention and Control Team. The hospital should consider membership by a consultant microbiologist in line with national guidelines.²⁵

Inspectors were informed that the hospital had recently provided a training day for relevant personnel in relation to Legionella.

The hospital should assure itself that any recommendations from the risk assessment are addressed promptly in line with national standards and infection prevention and control standards.

2.8 Quality improvement initiatives

Hospital management were asked to provide inspectors with information about any quality improvement initiatives or new measures that had been implemented in relation to the prevention and control of infection at the hospital and included some of the following initiatives:

Improving hand hygiene compliance

A multi-disciplinary team at the hospital undertook a quality improvement project in 2016 with the objective of increasing the level of hand hygiene and reducing the rate of unit-acquired infections in the Intensive Care Unit. A project story board was devised which spanned over a 7-8 month period. Monitoring hand hygiene training and hand hygiene compliance, daily surveillance of unit-acquired infections using safety crosses, monitoring trends in alcohol gel usage, and initiation of a blood culture improvement project and featuring a patient story was part of the success of the quality improvement project.

Sepsis management

Documentation received showed that the hospital undertook a retrospective audit in relation to compliance with the implementation of the sepsis management national clinical guideline. A report was provided to the national sepsis programme and the hospital sepsis team.

Hygiene awareness day

The hospital held a hygiene awareness day in May 2017 which promoted 'It's OK to Ask' campaign which invited patients and visitors to remind staff to wash their hands. Staff in clinical areas displayed posters and patient and visitor information leaflets were also provided in relation to this campaign.

2.9 Progress since the previous HIQA inspection

Since the last HIQA inspection in 2016, a new Early Pregnancy Assessment Unit had been opened at the hospital. Additionally, refurbishment and renovation works had been completed in the Central Sterile Supplies Department.

HIQA reviewed the quality improvement plan²⁶ developed by the hospital following the 2016 HIQA infection prevention and control inspection. The hospital had undertaken a revision of intravenous medication preparation practices and had established a defined clean work space in clean utility rooms in clinical areas. This was evident on the day of inspection in both areas inspected. In addition, the implementation of aseptic non-touch technique policy had been progressed.

Elements of environmental cleaning had been revised and improved upon and this was also evident on the day of inspection. Systems to ensure that sterile supplies were stored appropriately or returned to stores had been implemented. Clinical waste management training had been provided in June 2017 and a waste management policy had been redrafted due for approval end of the year. The company responsible for supplying oxygen cylinders to the hospital had been contacted in relation to rust and the hospital reported that a nationwide programme of repainting cylinders had commenced by the company in 2017.

The hospital had reviewed and improved procedures and processes in relation to reprocessing of reusable ultrasound probes and weekly auditing schedules had been commenced in relation to reprocessing procedures. The hospital had purchased three automated decontamination systems for decontamination and reprocessing of reusable medical devices and probes outside of designated decontamination units.

The hospital had made an application for capital funding for a new build medical block with 75 single rooms and an intensive care unit as part of Wexford General Hospital and Ireland East Hospital Group development plans for 2022.

3. Conclusion

Overall HIQA found that Wexford General Hospital was committed to improving infection prevention and control practices at the hospital and were endeavouring to fully implement the National Standards for the prevention and control of healthcare-associated infections in acute healthcare services.

Although the hospital had systems in place to identify and manage risk in relation to the prevention and control of healthcare-associated infections, on this inspection HIQA identified an inherent risk in relation to the lack of onsite consultant microbiologist presence at the hospital for the previous two month period. It is acknowledged that the hospital had also identified this risk and had escalated it through governance structures to the Ireland East Hospital Group. In light of the risk identified by HIQA and the key actions outlined by the hospital to mitigate the risk, the hospital should review proposed interim arrangements to be assured that the necessary resources are in place to deliver a safe sustainable service. The hospital should also implement workforce contingency planning for the specialist staff in infection prevention and control so that the service continues seamlessly at all times.

The Infection Prevention and Control Team had put in place many elements of an infection prevention and control programme and with additional resources, could be expanded to facilitate wider evaluation of the impact of infection prevention and control measures. It is recommended that Wexford General Hospital continues to work with the Ireland East Hospital Group to progress with the full implementation of the national guidelines for screening patients for Carbapenemase Producing *Enterobacteriaceae*. The hospital needs to continue to build an awareness and best practices relating to hand hygiene compliance to ensure it reaches and sustains the national target of 90%. It is recommended that targeted education and audit is performed in order to drive improvement among staff disciplines where compliance could be improved.

Care bundles should be consistently implemented in line with evidence-based best practice guidelines as full compliance with all essential care bundle components has shown improved patient outcomes. The hospital should progress with the full implementation and audit of care bundles across the hospital in line with national guidelines.

Overall the patient environment and equipment was generally clean in the areas inspected. There was good ownership in relation to hospital hygiene and evidence of clear processes and responsibilities from clinical areas through to executive management level which is commendable. The hospital had improved upon hygiene service delivery and this was evident on the day of inspection.

4. References

1. Health Information and Quality Authority. National Standards for the prevention and control of healthcare-associated infections in acute healthcare services. Dublin: Health Information and Quality Authority; 2017. [Online]. Available from: <https://www.hiqa.ie/sites/default/files/2017-05/2017-HIQA-National-Standards-Healthcare-Association-Infections.pdf>
2. Health Information and Quality Authority. Guide to the monitoring programme undertaken against the National Standards for the prevention and control of healthcare-associated infections. Dublin: Health Information and Quality Authority; 2015. [Online]. Available from: <https://www.hiqa.ie/sites/default/files/2017-05/Guide-monitor-National-Standards-healthcare-associated-infections.pdf>
3. Health Information and Quality Authority. Review of progress made at the Midland Regional Hospital, Portlaoise, in implementing recommendations following HIQA's investigation. Dublin: Health Information and Quality Authority; December 2016. [Online]. Available online from: https://www.hiqa.ie/sites/default/files/2017-02/MRHP_Review_Report.pdf
4. Health Service Executive. HSE National Framework for developing Policies, Procedures, Protocols and Guidelines (PPPGs). Health Service Executive; December 2016. [Online]. Available online from: <http://www.hse.ie/eng/about/Who/QID/Use-of-Improvement-Methods/nationalframeworkdevelopingpolicies/HSE-National-Framework-for-Developing-Policies-Procedures-Protocols-and-Guidelines-PPPGs-2016.pdf>
5. 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. [Online]. Available online from: <https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,15060,en.pdf>
6. Health Service Executive. Core infection prevention and control knowledge and skills. A framework document. Dublin: Health Service Executive; 2015. [Online]. Available online from: <https://www.hse.ie/eng/about/Who/QID/nationalsafetyprogrammes/HCAIAMR/CoreInfectionPreventionandControl.pdf>
7. Health Protection Surveillance Centre. *Prevention of Intravascular Catheter - related Infection in Ireland. Update of 2009 National Guidelines September 2014*. 2014. [Online]. Available online from:

<http://www.hpsc.ie/AZ/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/IntravascularIVlines/Publications/File,14834,en.pdf>

8. Health Protection Surveillance Centre. *Guidelines for the Prevention of Catheter associated Urinary Tract Infection*. [Online]. Available online from: <http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12913,en.pdf>
9. Health Protection Surveillance Centre. *Guidelines for the prevention of ventilator-associated pneumonia in adults in Ireland. SARI Working Group*. 2011. [Online]. Available online from: <http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12530,en.pdf>
10. World Health Organization. *Guidelines on Core Components of Infection Prevention and Control Programmes at the National and Acute Healthcare Facility Level*. Geneva: World Health Organization; 2016. [Online]. Available online from: <http://www.who.int/gpsc/ipc-components/en/>
11. Zingg W, Holmes A, Dettenkofer M, Goetting T, Secci F, Clack L, et al. Hospital organisation, management, and structure for prevention of health-care-associated infection: a systematic review and expert consensus. *Lancet Infect Dis*. 2015;15(2):212-24.
12. Haley RW, Culver DH, White JW et al. The efficacy of infection surveillance and control programs in preventing nosocomial infections in US hospitals. *American Journal of Epidemiology* 1985; 121: 182–205.
13. 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. [Online]. Available online from: <https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12530,en.pdf>
14. 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. [Online]. Available online from: <https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12913,en.pdf>

15. Royal College of Physicians of Ireland. Prevention of Intravascular Catheter-related Infection in Ireland. Partial update of 2009 National Guidelines. 2014 [Online]. Available on line from: <http://www.hpsc.ie/A-Z/Hepatitis/GuidanceforRenalUnits/File,4115,en.pdf>
16. Centres for Disease Control (CDC), Healthcare Associated Infections (HAIs) Progress Report, US CDC, Atlanta, 2016. [Online]. Available online from: <https://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf>
17. Bärwolff S, Sohr D, Geffers C, et al. Reduction of surgical site infections after Caesarean delivery using surveillance. *Journal of Hospital Infection*, 2006; 64: 156–61. [Online]. Available online from: [http://www.journalofhospitalinfection.com/article/S0195-6701\(06\)00297-0/pdf](http://www.journalofhospitalinfection.com/article/S0195-6701(06)00297-0/pdf)
18. National Institute for Health and Care Excellence. Surgical Site Infection (QS49). London: National Institute for Health and Care Excellence; 2013. [Online]. Available online from: <https://www.nice.org.uk/guidance/qs49/resources/surgical-site-infection-2098675107781>
19. 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. [Online]. Available online from: <https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2016/01/Preventing-Surgical-Site-Infections-Key-Recommendations-for-Practice.pdf>
20. 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. [Online]. Available online from: <http://jamanetwork.com/journals/jamasurgery/fullarticle/2623725>
21. 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. [Online]. Available online from: <http://www.hpsc.ie/az/microbiologyantimicrobialresistance/infectioncontrolandhai/guidelines/File,12922,en.pdf>
22. National Clinical Effectiveness Committee. *Prevention and Control Methicillin-Resistant Staphylococcus aureus (MRSA). National Clinical Guideline No.2*. Dublin:

Department of Health; 2013. [Online]. Available online from: <http://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/guidelines/File,14478,en.pdf>

23. Department of Health, United Kingdom. Health Building Note 00-09. Infection Control in the built environment. Department of Health. March 2013. [Online] Available online from: <https://www.gov.uk/government/publications/guidance-for-infection-control-in-the-built-environment>

24. National Hospitals Office, Quality, Risk and Customer Care. HSE National Cleaning Manual Appendices. Health Service Executive; 2006. [Online] Available online from: http://www.hse.ie/eng/services/publications/hospitals/HSE_National_Cleaning_Standards_Manual_Appendices.pdf

25. Health Protection Surveillance Centre. National Guidelines for the Control of Legionellosis in Ireland, 2009. Report of Legionnaires Disease Subcommittee of the Scientific Advisory Committee. [Online]. Available online from: <http://www.hpsc.ie/AboutHPSC/ScientificCommittees/Publications/File,3936,en.pdf>

26. Wexford General Hospital. Quality Improvement Action Plan. [Online]. Available online from: <http://www.hse.ie/eng/services/list/3/acutehospitals/hospitals/wexford/reports/WGH-QIP-updated-August-2017.pdf>

5. Appendices

Appendix 1: Lines of enquiry for the monitoring programme undertaken against the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services*

Number	Line of enquiry	Relevant National Standard
1.1	The hospital has formalised governance arrangements with clear lines of accountability and responsibility around the prevention and control of healthcare-associated infections.	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 5.2, 5.3, 5.4, 6.1, 7.1
1.2	Risks in relation to the prevention and control of infection are identified and managed.	2.1, 2.3, 2.5, 3.1, 3.6, 3.7, 3.8
2	The hospital has policies, procedures and guidelines in relation to the prevention and control of infection and hospital hygiene.	2.1, 2.5, 3.1, 3.6, 3.8, 5.4, 7.2
3	Hospital personnel are trained and in relation to the prevention and control of healthcare-associated infection	2.1, 2.8, 3.1, 3.2, 3.3, 3.6, 6.1, 6.2
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.	1.1, 2.1, 2.3, 3.5
4.2	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.	2.1, 2.3, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8,

Appendix 2: Copy of the high risk letter issued to Wexford General Hospital regarding the finding of an unannounced inspection



Lily Byrnes
General Manager
Wexford General Hospital
Lily.byrnes@hse.ie

13 November 2017

Ref: PCHCAI/38

Dear Lily,

High risk issue identified during a routine monitoring inspection at Wexford General Hospital

During the course of an unannounced inspection against *the National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* at Wexford General Hospital on 09 November 2017, inspectors identified a risk in relation to the lack of onsite consultant microbiologist presence at the hospital for the previous two month period. Additionally, there appeared to be no agreed timeframe by which this deficiency would be addressed.

In light of the complexity of services provided in Wexford General Hospital, this deficiency poses a potential risk to the clinical management of patients with infection and also the ongoing delivery and progression of the infection prevention and control programme and antimicrobial stewardship at the hospital.

HIQA is bringing this issue to your attention now so that you may act to mitigate and manage the identified risk as a matter of urgency.

Head Office:
Unit 1301, City Gate, Mahon,
Cork, Ireland.
Tel: +353 (0) 21 240 3600
Fax: +353 (0) 21 240 3600

Dublin Regional Office:
George's Court, George's Lane,
Dún Laoghaire, Ireland
Tel: +353 (0) 1 814 7400
Fax: +353 (0) 1 814 7400

e-mail: info@hiqa.ie www.hiqa.ie



Please formally report back to HIQA by **5pm on Monday 20 November 2017** to qualityandsafety@higa.ie, outlining the measures that have been enacted to mitigate the identified risk. Details of the risk identified will be included in the report of the inspection. This will include copies of HIQA's notification of this risk and the service provider's response.

Should you have any queries, please do not hesitate to contact me at qualityandsafety@higa.ie. Please confirm receipt of this letter by email (qualityandsafety@higa.ie).

Yours sincerely,

A handwritten signature in black ink that reads "Noreen Flannelly-Kinsella".

NOREEN FLANNELLY-KINSELLA
Authorised Person

CC: Mary Day, Chief Executive Officer, Ireland East Hospital Group
Mary Dunnion, Director of Regulation, Health Information and Quality Authority

□ **Head Office:**
Unit 1501, City Gate, Mahon,
Cork, Ireland.
Tel: +353 (0) 21 240 0000
Fax: +353 (0) 21 240 0000

☏ **Dublin Region Office:**
George's Court, 21-23, Temple Lane,
Dublin 7, Ireland
Tel: +353 (0) 1 814 7400
Fax: +353 (0) 1 814 7455

e-mail: info@higa.ie www.higa.ie

Appendix 3: Copy of the response letter received from Wexford General Hospital regarding the high risk identified during the HIQA inspection

General Manager's Office
Tel: 053-9153156. Fax: 053-9144583
E-Mail: Jacinta.Egan@hse.ie (P.A.)

16 November 2017

Ms. Noreen Flannelly-Kinsella,
Authorised Person,
Health Information & Quality Authority,
George's Court,
George's Lane,
Dublin 7.

RE: HIGH RISK ISSUE IDENTIFIED DURING A ROUTINE MONITORING INSPECTION AT WGH.

Dear Noreen,

I wish to acknowledge receipt of your letter dated 13th November, 2017 with regard to the above.

In order to mitigate the identified risk as a result of the lack of an on-site Consultant Microbiologist we have sought additional resources and I attach copy of response from SVUH in response to our request. Also, University Hospital Waterford have confirmed that they will provide three sessions to WGH per week, which is an increase of two sessions on the previous arrangement, which equates to six additional hours on site. It is hoped that the post-holder will be in place in Quarter 1 2018. In the interim, a 24/7 telephone support is being provided to WGH from UHW and, on request, a hospital visit will be provided.

I trust that the above answers your query. If I can provide any further assistance, please do not hesitate to contact me.

Yours sincerely,

**LILY BYRNES,
GENERAL MANAGER.**

For further information please contact:

**Health Information and Quality Authority
Dublin Regional Office
George's Court
George's Lane
Smithfield
Dublin 7**

Phone: +353 (0) 1 814 7400

Email: qualityandsafety@hiqa.ie

URL: www.hiqa.ie

© Health Information and Quality Authority 2018