

# Report of the unannounced inspection at Sligo University Hospital

Monitoring programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections

Date of on-site inspection: 25 May 2016

# **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 and support services in Ireland. HIQA's role is to develop standards, inspect and review health and social care and support services, and support informed decisions on how services are delivered. HIQA's ultimate aim is to safeguard people using services and improve the quality and safety of 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 the Minister for Children and Youth Affairs, the Health Information and Quality Authority has statutory responsibility for:

- Setting Standards for Health and Social Services Developing personcentred standards, based on evidence and best international practice, for health and social care and support services in Ireland.
- Regulation Registering and inspecting designated centres.
- Monitoring Children's Services Monitoring and inspecting children's social services.
- Monitoring Healthcare Quality and Safety Monitoring the quality and safety 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 and support services.

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#### 1. Introduction

The Health Information and Quality Authority (HIQA) carries out unannounced inspections in public acute hospitals in Ireland to monitor compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections.* <sup>1</sup> The inspection approach taken by HIQA is outlined in guidance available on the website, <a href="www.hiqa.ie">www.hiqa.ie</a> – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections.* <sup>2</sup>

The aim of unannounced inspections is to assess hygiene in the hospital as observed by the inspection team and experienced by patients at any given time. It focuses specifically on the observation of the day-to-day delivery of services and in particular environment and equipment cleanliness and compliance with hand hygiene practice. In addition, following the publication of the 2015 *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*, HIQA began assessing practice around the implementation of infection prevention care bundles. In particular this monitoring will focus upon peripheral vascular catheter and urinary catheter care bundles, but monitoring of performance may include other care bundles as recommended in prior national guidelines and international best practice.

Assessment of performance will focus on the observation of the day-to-day delivery of hygiene services, in particular environmental and hand hygiene and the implementation of care bundles for the prevention of device related infections under the following Standards:

- Standard 3: The physical environment, facilities and resources are developed and managed to minimize the risk of service users, staff and visitors acquiring a Healthcare Associated Infection.
- Standard 6: Hand hygiene practices that prevent, control and reduce the risk of spread of Healthcare Associated Infections are in place.
- Standard 8: Invasive medical device related infections are prevented or reduced.

Other Standards may be observed and reported on if concerns arise during the course of an inspection. It is important to note that the Standards are not assessed in their entirety during an unannounced inspection and therefore findings reported are related to a particular criterion within a Standard which was observed during an inspection. HIQA uses hygiene observation tools to gather information about the

cleanliness of the environment and equipment as well as monitoring hand hygiene practice in one to three clinical areas depending on the size of the hospital. HIQA's approach to an unannounced inspection against these Standards includes provision for re-inspection within six weeks if Standards on the day of inspection are poor. This aims to drive improvement between inspections. In addition, in 2016, unannounced inspections will aim to identify progress made at each hospital since the previous unannounced inspection conducted in 2015.

An unannounced inspection was carried out at Sligo University Hospital on 25 May 2016 by Authorized persons from HIQA, Aileen O' Brien, Noreen Flannelly-Kinsella and Gearóid Harrahill between 09:10hrs and 17:40hrs. The areas assessed were:

- The Intensive Care Unit comprises an open plan unit containing five beds and an adjacent single en-suite isolation room and accommodates adult patients and occasionally paediatric patients for stabilization prior to transfer to another hospital.
- The Oncology Haematology Ward is a 19-bedded ward which comprises one six-bedded room, one five-bedded room, one four-bedded room and four single en-suite rooms.

In addition, the Renal Dialysis Unit, The Oncology Day Ward and the Day Services Unit which were inspected during an unannounced inspection by HIQA on 4 March 2015, were re-visited to assess the level of progress which had been made after the 2015 inspection.

HIQA would like to acknowledge the cooperation of staff with this unannounced inspection.

#### 2. Findings

This report outlines HIQA's overall assessment in relation to the inspection, and includes key findings of relevance. A list of additional low-level findings relating to non-compliance with the Standards has been provided to the hospital for inclusion in local quality improvement plans. However, the overall nature of the key areas of non-compliance are within this report.

This report is structured as follows:

Section 2.1 outlines the level of progress made by the Renal Dialysis Unit, the Oncology Day Ward and the Day Services Unit since the unannounced inspection on 4 March 2015.

Section 2.2 presents the key findings of the unannounced inspection on 25 May 2016.

- Section 2.3 describes the key findings relating to hand hygiene under the headings of the five key elements of the World Health Organization (WHO) multimodal improvement strategy<sup>6</sup> during the unannounced inspection on 25 May 2016.
- Section 2.4 describes the key findings relating to infection prevention care bundles during the unannounced inspection on 25 May 2016.

# 2.1 Progress since the last unannounced inspection on 04 March 2015

HIQA reviewed the latest version of the quality improvement plan (QIP) produced by Sligo University Hospital following the 2015 inspection. The hospital has taken on board the recommendations of the 2015 HIQA report and is working towards improving equipment and environmental hygiene and the clinical environment. Progress was evident on the day of inspection in this regard.

# Legionella Control

A legionella risk assessment was completed by the hospital in late 2014 and documentation reviewed showed that the hospital had addressed many of the recommendations in the legionella risk assessment as well as continuing to monitor and implement legionella control measures. A hospital site legionella risk assessment is due to be repeated at the end of 2016.

#### **Oncology Day Unit**

Since the last HIQA inspection the preparation of intravenous infusions in the Oncology Day Unit was reviewed. It was reported that ten saline infusions are prepared in advance of the morning treatment schedule and that additional saline infusions are prepared in the afternoon for later treatment sessions. It was also reported that in the case of neutropenic patients or patients with suspected and or confirmed infection that saline infusions are primed immediately prior to administration. Infusion preparation should be standardized for all patients and should be in line with best practice. It is recommended that infusions are not batch prepared in advance but that they are prepared as near as possible to the time of administration. Scheduling of patients' appointments should take into account the time necessary for clinical staff to safely prepare medications and infusions for intravenous administration.

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It was reported that practice around the labelling of prepared intravenous medication had been revised and that subsequent auditing demonstrated improvement.

The infrastructure of the clean utility room in which intravenous medications are prepared was viewed during this revisit. Overall, the room was small in size and cluttered. Worktop space was reduced following the installation of shelves to store patient's healthcare records with the result that these records were stored in open shelves directly adjacent to worktop space used to prepare intravenous medications and infusions. A computer terminal was also located in this room. It is acknowledged that space in the Oncology Day Unit is limited; however, the clean utility room should be used for the preparation and storage of medications for patients and not for other administrative functions. It is recommended that there is a clear, uncluttered worktop space allocated for medication preparation only. This should not be bordered by shelves containing healthcare records or directly next to the clinical hand wash sink in this room. This issue should be addressed as a matter of priority. It is also recommended that only healthcare records required to check medication prescriptions being prepared at that time should be brought into the clean utility room.

The icebox of a medication fridge in the clean utility did not appear to have been defrosted for some time; regular defrosting and cleaning of this fridge needs to be included in the local cleaning schedule. Replacement of this fridge with a frost-free appliance that does not require defrosting should be considered.

It was reported that cleaning processes in the Oncology Day Unit had been reviewed since the previous inspection in 2015. Patient care equipment was reported to be cleaned between patients in addition to daily cleaning of the patient environment at the end of each working day. It is recommended that ongoing verification of scheduled cleaning performance is overseen by relevant management positions.

Paintwork on walls and woodwork had become worn over time and a request had been submitted to the maintenance department for repainting. This should be completed to maintain the integrity of these surfaces and to facilitate cleaning. It was reported that there were plans to create a further patient treatment space.

#### **Renal Dialysis Unit**

It was reported that cleaning processes in the Renal Dialysis Unit had been reviewed and improved since the previous inspection in 2015. There were clearly defined roles and responsibilities for cleaning, a cleaning specification and related checklists. Some maintenance issues identified in 2015 had not been completed. Surfaces of bed

tables in the patient care area were visibly damaged and do not facilitate effective cleaning. Replacement bed tables should be made of material able to withstand frequent cleaning that is necessary in a dialysis facility. It was noted that the material covering the arm of one patient treatment couch was punctured, this should be addressed. Staff in the Renal Dialysis Unit reported that they are in the process of implementing intravascular device-related care bundles.

## **Day Services Unit**

It was reported that some but not all minor maintenance issues had been addressed in the Day Services Unit since the previous inspection.

#### 2.2 Key findings of the unannounced inspection on 25 May 2016

Opportunities for improvement were identified during the inspection in relation to patient equipment, hospital infrastructure, transmission-based precautions and the monitoring and evaluation of equipment and environmental hygiene. An overview of these findings is contained in the following section.

#### **Intensive Care Unit**

#### **Equipment and environmental hygiene**

Patient equipment and the environment in the Intensive Care Unit were generally clean with very few exceptions. There was evidence of good local ownership with regard to hygiene in general. Small red spots were visible on the external surface of three sharps containers. Two bed frames had not been comprehensively cleaned as there was staining on the side rails of these beds and dust on the bed undercarriages. Dust was present on a radiology image viewer in the unit. Multiple sterile caps for intravascular devices were stored in paper cups and on a drip stand at vacant beds; it is recommended that these supplies are brought to the bedside as required, to avoid inadvertent contamination.

#### Infrastructure and facilities

The overall infrastructure of the Intensive Care Unit was not optimal from an infection prevention and control perspective. The configuration and design of the unit was dated and did not meet the desirable standards of a modern-day critical care facility.<sup>8</sup>

Storage of patient equipment along the corridor in the Intensive Care Unit did not facilitate the movement of beds in and out of the unit.

The Intensive Care Unit has only one single isolation room which means that patients requiring transmission-based precautions are managed in the open plan area of the unit when the single room is occupied. The placement of patients with transmissible infection in an open plan unit increases the risk of spread of infections including those caused by antimicrobial resistant organisms.

Storage space was quite limited in the Intensive Care Unit and sterile consumables were stored on open shelving in the corridor and in boxes directly on the floor in storerooms which is not recommended. Stocks of sterile consumables were also stored in a mobile cart with drawers in the isolation anteroom. Storage of sterile items in an isolation anteroom is not recommended. Storage areas in this unit were not optimally organised for the operational requirements of the area. The volume of stock storage and top-up of supplies in the unit should be reviewed and rationalized. If stock levels cannot be reduced in light of local requirements it is recommended that additional storage rooms are provided within the unit.

Patient equipment including six mechanical ventilators that were not in use was stored in an empty bed space in the open plan unit adjacent to an occupied bed. Storage of clean patient equipment in this location is not recommended. Multiple items of patient equipment including moving and handling equipment, mobility aids and patient chairs were stored on the unit corridor which is not appropriate. An uncovered patient transport trolley fitted with monitoring equipment was located directly inside the main door of the unit in the path of staff and visitors. It is recommended that an appropriate storage area should be identified for such equipment so that it can be kept clean and dust-free. Battery-operated laryngoscope barrels were recharged on a worktop adjacent to a blood analyser for point of care testing, these items should be located elsewhere to prevent inadvertent contamination with blood.

#### **Oncology Haematology Ward**

#### Ward environmental hygiene

The patient environment was generally clean with some exceptions. There was light dust on some skirting boards and floor edges. There was adhesive residue on the surface of over bed lights which do not facilitate effective cleaning. Healthcare record trolleys were visibly dusty. Cleaning frequencies for this area should be in line with recommended minimum frequencies for higher risk areas. In particular, the cleaning frequency for toilets in this ward should be increased.

#### Patient equipment hygiene

Significant opportunities for improving the cleanliness of patient equipment were seen in the Oncology Haematology Ward. A red stain was visible on the surface of the blood glucose monitor holding case and used lancet tops were present in the box. It is recommended that only the blood glucose monitor and disposables required for a single patient procedure in addition to an integrated sharps tray should be brought to the point of care. This reduces the potential risk of contaminating blood glucose monitor holding cases and multiple consumables with bloodborne viruses which poses a risk of infection to patients.

A red stain was present on one integrated sharps tray and there was sticky residue of the base of another tray. Sticky residue was present on a blood glucose monitor. Sticky residue deposits do not facilitate effective cleaning. One blue injection tray did not appear to have been cleaned after use.

Organic matter was present on the under surface of a shower chair and two raised toilet seats in patients' toilets. Brown spots were noticed on the frames of two commodes in the 'dirty' \* utility room. The surfaces of two commodes inspected were damaged and as such did not facilitate effective cleaning. These items require replacement. These issues were addressed at the time of the inspection.

A disposable blood pressure cuff, attached to the blood pressure monitor was stained. This cuff was labelled as single use only and should have been disposed of after use, in line with manufacturer's instructions.

Roles and responsibilities in respect of cleaning in this ward should be clearly defined and there should be clarity in relation to cleaning frequency and cleaning methodology for all elements of equipment and environment. Responsibility regarding the cleaning of raised toilet seats should be defined. The quality of cleaning in this area requires improved supervision and regular audit so that deficiencies can be identified and addressed.

#### Safe injection practice

The Oncology Haematology Ward did not have a designated clean utility room for the preparation of intravenous medication. Instead, intravenous medications were prepared on an unclean medication cart top in what appeared to be a supply

\* A 'dirty' utility room is a temporary holding area for soiled/contaminated equipment, materials or waste prior to their disposal, cleaning or treatment.

storeroom. This room was not equipped with a clinical hand wash sink and at the time of inspection alcohol hand gel was not available in the location where medications were being prepared. Hand hygiene facilities are a basic requirement in a room used to prepare chemotherapy and other infusions and injections. These are required to facilitate the practice of aseptic technique and to provide running water in case staff sustain a splash of cytotoxic medication. Boxes of intravenous fluids were stored directly on the floor in this room which is not in line with good practice.

There should be a clean utility room with a dedicated worktop space for intravenous medication preparation and appropriate hand hygiene facilities in this ward and this needs to be addressed as a matter of priority by the hospital.

#### Infrastructure and facilities

Bed spacing in the six-bedded ward in the Oncology Haematology Ward was not ideal from an infection prevention and control perspective in that there was limited space for patients to sit out or for staff to circulate or manoeuvre patients or equipment.

A desk and computer used by clinical staff was located within the five-bedded ward. It is recommended that administration areas are not located within patient rooms. It was reported that staff used this desk to carry out documentation.

Patient equipment including raised toilet seat attachments, urinal holders, and catheter bag holders in addition to excessive supplies were stored directly on the floor in the 'dirty' utility room. This poses a risk of contamination and does not facilitate effective cleaning. Storage of such items should be revised and the volume of stock kept in the ward should be rationalised.

Cleaning equipment including a vacuum cleaner and a floor polisher were stored inappropriately on a corridor outside the designated cleaning equipment room used for the Oncology Haematology Ward. Cleaning equipment should be stored within a designated cleaning equipment room.

There were no hand hygiene facilities in the patient therapy room and the surface of the therapy couch was not intact. Surfaces in this room should be cleaned between patients and should be included in the local cleaning schedule.

#### **Transmission-based precautions**

Poor compliance with transmission-based precautions was observed in the Oncology Haematology Ward. Doors to three isolation rooms accommodating patients with transmissible infections were open at the time of inspection which is not in line with best practice. Doors to rooms of patients requiring transmission-based precautions

should be kept closed. If a risk assessment indicates a requirement to leave an isolation room door open for safety reasons, this deviation from established precaution practice should be clearly documented and communicated to staff and relevant visitors to the ward. In addition, information communicating the need for transmission precautions was not consistently recorded on the ward communication board. These findings were addressed at the time of inspection.

#### Maintenance

Some surfaces in the Oncology Haematology Ward including lockers and bed tables were damaged and as such did not facilitate effective cleaning.

#### 2.3 Key findings relating to hand hygiene

- **2.3.1 System change**<sup>6</sup>: ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.
  - Not all clinical hand wash sinks in the areas inspected were compliant with Health Building Note 00-10 Part C: Sanitary Assemblies. 10 The hospital is currently undertaking a programme to replace and upgrade clinical hand wash sinks.
  - Alcohol hand gel was available at the point of care in the clinical areas inspected.
  - Surfaces of alcohol gel dispensers in the main hospital lobby and in the corridor in the Oncology Haematology Ward were unclean.
- **2.3.2 Training/education**<sup>6</sup>: providing regular training on the importance of hand hygiene, based on the 'My 5 Moments for Hand Hygiene' approach, and the correct procedures for hand rubbing and hand washing, to all healthcare workers.
  - Regular hand hygiene training sessions are provided by the Infection Prevention and Control Team within the hospital. Hand hygiene is mandatory for all staff on induction and at least every two years. Documentation viewed indicated that 70% of relevant hospital staff had undertaken hand hygiene training in the previous 12 months.
  - Uptake of hand hygiene training was not consistent across all disciplines of staff and records viewed showed that less than 50% of medical staff had undertaken hand hygiene training in the past year.
  - **2.3.3 Evaluation and feedback**<sup>6</sup>: *monitoring hand hygiene practices and infrastructure, along with related perceptions and knowledge among health-care workers, while providing performance and results feedback to staff.*

# National hand hygiene audits

Sligo University Hospital participates in the national hand hygiene audits which are published twice a year. The hospital did not achieve compliance with the Health Service Executive (HSE) target<sup>11</sup> of 90% for hand hygiene compliance in 2015 as shown in Table 1. Hand hygiene audit results for 2016 were being analyzed and the hospital management team was optimistic that the desirable target would be reached this year.

Table 1: National hand hygiene audit results for Sligo University Hospital.

Timeframe	Result
Period 3 May/June 2012	75.5%
Period 4 Oct/Nov 2012	76.2%
Period 5 May/June 2013	84.8%
Period 6 Oct/Nov 2013	84.3%
Period 7 May/June 2014	86.2%
Period 8 Oct/Nov 2014	89.5%
Period 9 May/June 2015	88.6%
Period 10 Oct/Nov 2015	84.8%

Source: Health Protection Surveillance Centre – national hand hygiene audit results. 12

#### Local hand hygiene audits

Hand hygiene audit results for both the Oncology Haematology Ward and the Intensive Care Unit for May and October 2015 showed compliance with the HSE target of 90%.

#### Observation of hand hygiene opportunities

Authorized persons observed hand hygiene opportunities using a small sample of staff in the inspected areas. This is intended to replicate the experience at the individual patient level over a short period of time. It is important to note that the results of the small sample observed is not statistically significant and therefore results on hand hygiene compliance do not represent all groups of staff across the

hospital as a whole. In addition results derived should not be used for the purpose of external benchmarking.

The underlying principles of observation during inspections are based on guidelines promoted by the WHO<sup>13</sup> and the HSE.<sup>14</sup> In addition, authorized persons may observe other important components of hand hygiene practices which are not reported in national hand hygiene audits but may be recorded as optional data. These include the duration, technique<sup>T</sup> and recognized barriers to good hand hygiene practice. These components of hand hygiene are only documented when they are clearly observed (uninterrupted and unobstructed) during an inspection. Such an approach aims to highlight areas where practice could be further enhanced beyond the dataset reported nationally.

Authorized persons observed eight hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised the following:

- Four of the eight hand hygiene opportunities were taken. The four opportunities which were not taken comprised the following:
  - One before touching a patient
  - One after touching a patient
  - Two after touching a patient surroundings

Of the four opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the authorized persons for four opportunities and the correct technique was observed in all four hand hygiene actions.

Two healthcare workers on a clinical ward round in the Intensive Care Unit were observed wearing long-sleeved clothing at the bedside of a patient. This is not in line with national hand hygiene guidelines and may facilitate the spread of infection in this high-risk critical care area. This finding was highlighted locally and to the Senior Hospital Management team as this issue needs to be addressed.

**2.3.4 Reminders in the workplace**<sup>6</sup>: prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.

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 $<sup>^{\</sup>Upsilon}$  The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.

 Hand hygiene advisory posters were available, up-to-date and appropriately displayed.

- **2.3.5 Institutional safety climate**<sup>6</sup>: creating an environment and the perceptions that facilitate awareness-raising about patient safety issues while guaranteeing consideration of hand hygiene improvement as a high priority at all levels.
  - Findings in the Intensive Care Unit at the time of inspection indicated that some clinicians were not prioritizing effective hand hygiene practice as described above.

# 2.4 Key findings relating to infection prevention care bundles<sup>†</sup>

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 published in recent years recommending their introduction across the Irish health system.

The hospital reported that peripheral venous catheter and urinary catheter infection prevention care bundles had been implemented across the hospital. This was demonstrated in the Oncology Haematology Ward.

There was evidence of advanced practice in the Intensive Care Unit in relation to the implementation of best practice guidelines to reduce the risk of infection associated with invasive devices and invasive therapy such as mechanical ventilation. The hospital invested in an electronic documentation system in the Intensive Care Unit in 2011 following which staff in the unit had implemented surveillance of device-related infection in 2012. Using electronic data collection the unit is able to record insertion and removal dates for all invasive devices. By using this information in addition to clinical and microbiological findings the unit is able to determine the incidence of device-related infection. Evidence based practice recommendations have been implemented in respect of central venous access devices. By introducing new oral cleansing packs and other interventions for mechanically ventilated patients the unit was able to show a reduction in the incidence of ventilator-associated pneumonia in 2016 compared to 2015. The unit has also invested in specialized endotracheal tubes to facilitate sub glottal suctioning which has been shown to reduce the rate of ventilator-associated pneumonia. In addition, the Intensive Care Unit benchmarks its ventilator-associated pneumonia rates with similar type services in the UK. This level

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<sup>&</sup>lt;sup>†</sup> A care bundle consists of a number of evidence based practices which when consistently implemented together reduce the risk of device related infection.

of investment and commitment to infection prevention and improving the quality of patient care is commendable.

Information regarding compliance with care bundle implementation in the Oncology Haematology Ward was not available on the ward on the day of inspection. Care bundle implementation data although recorded in the Intensive Care Unit was not routinely fed back to staff. Audit of compliance with bundle implementation should be performed regularly to include feedback of results to staff and reciprocal action of inconsistent implementation of care bundles if indicated. Overall it was evident that the hospital was committed to implementing evidence practice in order to reduce the risk of infection for patients.

## 3. Summary

Patient equipment and the environment in the Intensive Care Unit were generally clean with very few exceptions. There was evidence of good local ownership with regard to hygiene in general. However, opportunities for improvement are required in the cleanliness of patient equipment in the Oncology Haematology Ward. The hospital needs to urgently provide a designated clean utility room in the Oncology Haematology Ward for the safe preparation of intravenous medications. Clarity around staff roles and responsibilities, and improved frequency and methodology of patient equipment and environment cleaning is required. This is needed to ensure that all required elements are cleaned completely in line with best practice. Storage facilities in the Intensive Care Unit and the Oncology Haematology Ward need to be improved. Transmission-based precautions in the Oncology Haematology Ward need to be consistently implemented in line with best practice.

Deficiencies relating to the infrastructure of the Intensive Care Unit and oncology and haematology services need to be addressed in the hospital development plan going forward.

The hospital is committed to improving the management of invasive devices in line with best practice guidelines in order to reduce the risk of infection for patients. Infection prevention care bundles have been implemented across the hospital. The implementation of these care bundles now needs to be audited and results should be fed back to staff in order to guide practice. Significant investment has been made in the Intensive Care Unit to facilitate the implementation of evidence based practice to reduce the risk of invasive device and ventilation related infection. Staff in the Intensive Care Unit are performing surveillance of intravascular device and mechanical ventilation-related infection and are using this information to inform improvements which is commendable.

#### **Next steps**

Sligo University Hospital must now revise and amend its quality improvement plan (QIP) that prioritizes the improvements necessary to fully comply with the Standards. This QIP must be approved by the service provider's identified individual who has overall executive accountability, responsibility and authority for the delivery of high quality, safe and reliable services. The QIP must be published by the hospital on its website within six weeks of the date of publication of this report and at that time, provide HIQA with details of the web link to the QIP.

It is the responsibility of Sligo University Hospital to formulate, resource and execute its QIP to completion. HIQA will continue to monitor the hospital's progress in implementing its QIP, as well as relevant outcome measurements and key performance indicators. Such an approach intends to assure the public that the hospital is implementing and meeting the Standards, and is making quality and safety improvements that safeguard patients.

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<sup>&</sup>lt;sup>4</sup> All online references were accessed at the time of preparing this report.

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