

Report of inspections at Roscommon 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 inspections: 28 September and 16 November 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.
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Appendix 1- Copy of letter issued to Roscommon University Hospital following the unannounced inspection on 28 September 2016.

Appendix 2- Copy of response received from Roscommon University Hospital to the letter issued by HIQA following the unannounced inspection on 28 September 2016.

Report of inspections at Roscommon	University Hospital
Health Information and	d Quality Authority

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.*¹ The inspection approach taken by HIQA is outlined in guidance available on the website, www.hiqa.ie – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections.*²

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 the practice of the implementation of infection prevention care bundles. In particular this monitoring focused upon peripheral vascular catheter and urinary catheter care bundles, but monitoring of performance may include other care bundles as recommended in prior national guidelines^{3,4} and international best practice.⁵

Assessment of performance will focus on the observation of the day-to-day delivery ² 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.

Timeline of inspections:

An unannounced inspection was carried out at Roscommon University Hospital on 28 September 2016. A re-inspection was performed six weeks later. This report was prepared after the re-inspection and includes the findings of both inspections and any improvements observed between the first and second inspections. A summary of these inspections is shown in Table 1.

Table 1: Summary of inspections carried out at Roscommon University Hospital 2016

Date of inspection	Authorized Persons	Clinical areas inspected/visited	Time of inspection
28 September	Noreen Flannelly-	St Bridget's Ward	09.35hrs-
2016	Kinsella	was inspected.	18.45hrs
	Shane Grogan	The Operating Theatre Department was visited. The Out-Patient Department was visited.	
		The Endoscopy Unit was visited.	
16 November	Noreen Flannelly-	St Coman's Ward	09.50hrs-
2016	Kinsella	was inspected	17.50hrs
	Aileen O' Brien	St Bridget's Ward was visited.	

HIQA would like to acknowledge the cooperation of staff during both inspections.

2. Findings

This section of the report outlines the findings of inspections undertaken at Roscommon University Hospital on 28 September and 16 November 2016.

Overview of areas inspected

St Bridget's Ward is a 29-bedded surgical ward with both five-day inpatient and day case accommodation comprising two single en-suite rooms, two single rooms with a shared en-suite facility, two two-bedded rooms, one three-bedded room, three four-bedded rooms and one six-bedded room.

St Coman's Ward is a 46-bedded medical ward comprising one single en-suite room, five single rooms, four two-bedded rooms, four four-bedded rooms, two five-bedded rooms and one six-bedded room.

The Operating Theatre Department was visited to assess the level of progress made following the unannounced inspection by HIQA on 16 September 2015.

In addition, the Outpatient Department and the new Endoscopy Unit were visited.

Structure of this report

The structure of the remainder of this report is as follows:

- **Section 2.1** describes immediate high risk findings identified during the inspection on 28 September 2016 and the mitigating measures implemented by the hospital in response to the findings.
- **Section 2.2** summarizes additional key findings relating to areas of poor practice and hospital infrastructure observed during the inspection on 28 September 2016 and the level of progress made by the hospital in response to these findings at the time of the re-inspection on 16 November 2016.
- **Section 2.3** outlines the progress made by the hospital following the unannounced inspection on 16 September 2015.
- Section 2.4 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.⁶
- Section 2.5 describes the key findings relating to infection prevention care bundles.

This report outlines HIQA's overall assessment in relation to these inspections, and includes key findings of relevance. In addition to this report, a list of additional low-level findings relating to this inspection has been provided to the hospital for completion. However, the overall nature of all of the findings is fully summarized within this report.

2.1 Immediate high risk findings

Introduction

During the unannounced inspection on 28 September 2016, immediate high risk findings were identified in Roscommon University Hospital in relation to:

- Facilities for reusable invasive medical device decontamination
- Environmental and patient equipment hygiene

Cumulative findings identified were such that HIQA deemed that a re-inspection was necessary within six weeks. Details of these risks were communicated by HIQA to the hospital. A copy of the letter issued to the hospital regarding the risks identified on 28 September 2016, and a copy of the response received from the hospital, are shown in Appendices 1 and 2 respectively.

Risks identified during the September 2016 inspection and the level of progress assessed during the re-inspection in November 2016 are outlined below.

Facilities for reusable invasive medical device decontamination

A previous HIQA inspection in September 2015 had identified deficiencies in relation to facilities for decontamination of reusable invasive medical devices. These deficiencies had not been fully addressed by hospital management in the interim.⁷

Decontamination of reusable invasive medical devices including surgical instruments and rigid nasopharyngeal endoscopes was still performed in an unsuitable area within the Operating Theatre Department. As previously identified, the infrastructure of this decontamination area were not in line with national standards and relevant guidelines.^{1,8} The hospital did not have an agreed plan or timeframe whereby this issue would be addressed.

During this inspection, facilities for decontamination of reusable invasive medical devices in the Outpatient Department were again not in line with national standards and relevant guidelines. Flexible nasopharyngeal endoscopes were decontaminated in a patient consultation room which was not an appropriate location for this process. Decontamination areas should be physically separated from other areas, should allow segregation of 'dirty' and 'clean' activities and facilitate a unidirectional work flow from the 'dirty' area to the 'clean' area. A decontamination area should not be used for any other purpose. Ideally decontamination of reusable invasive medical devices such as flexible endoscopes should be performed in a designated facility with dedicated staff trained in decontamination and where there are validated decontamination processes.

It is acknowledged that significant improvements in relation to facilities for decontamination of gastrointestinal endoscopes had been made since the previous HIQA inspection. Specifically, decontamination of gastrointestinal endoscopes within the Operating Theatre Department had ceased when the hospital transferred this process to the hospitals' new purpose built Endoscopy Unit with dedicated decontamination facilities which opened in June 2016.

Hospital management reported that plans were in place to transfer the decontamination of flexible nasopharyngeal endoscopes from the Outpatients Department to the new Endoscopy Unit going forward. In order to progress this change, it was reported that specialist equipment had been purchased in order to facilitate decontamination of these devices in the automated endoscope reprocessing machines used in the Endoscopy Unit.

Environmental hygiene

The quality of environmental hygiene in St Bridget's Ward was not in line with national infection prevention and control standards and national cleaning guidelines.^{1,11} Deficiencies were identified in relation to the management and oversight of environmental hygiene.

Dust and or stains were observed on furnishings in some patient bed spaces which were reported to have been cleaned and these included beds, bedside lockers, bedside tables and chairs. Dust was also present on a staff workstation, patient healthcare record trolleys and on floors, curtain rails and window ledges in some areas. Some waste bins were stained and rusty. Surfaces and finishes in some areas did not appear to have been proactively maintained and included bedside furnishings, floor covering, woodwork, and walls which showed signs of wear and tear. Surfaces adjacent to one clinical hand wash sink were quite damaged and did not facilitate effective cleaning.

Clinical hand wash sinks and their surrounds were unclean in some areas of the ward. In some patient's toilets, stains were observed on toilet pedestals and on wall tiles and some toilet brush holders were unclean. Fixtures within some patient's showers were unclean and the design of these fixtures meant that they were difficult to keep clean. Surface finishes behind toilets were poor and facilitated the collection of dust and debris. Flooring in some toilets was not flush with the wall or with sanitary fixtures and therefore was not easy to clean. Documentation reviewed and inspection findings did not provide assurance that ward toilets were cleaned as often as they should have been. HIQA was informed that St Bridget's Ward operated from Monday to Friday only, therefore there was an opportunity for enhanced cleaning and or maintenance of this ward at weekends when the ward was empty.

Results of local environmental hygiene audits performed in St Bridget's Ward in August and September 2016 had identified deficiencies in relation to environmental hygiene and maintenance. Overall environmental hygiene audit scores in St Bridget's Ward were 65% and 74% respectively for August and September 2016 which is poor. Environmental hygiene audit action plans showed that findings identified were individually addressed with the housekeeping team and that maintenance issues were referred to the Maintenance Department. However, there did not appear to be effective oversight of hygiene audit results to proactively address recurring cleaning and maintenance deficiencies. It was reported that there were deficiencies in relation to cleaning resources in the hospital which impacted negatively on the standard of cleaning delivered.

A Roscommon University Hospital Performance, Finance and Quality and Safety Report dated September 2016 clearly identified consistent deficiencies in relation to hygiene in the hospital's two inpatient wards, St Bridget's Ward and St Coman's Ward. Monthly environmental hygiene audit results by clinical area presented in this report showed that environmental hygiene audit scores for both wards averaged 77 to 79% from January to August 2016. Environmental hygiene audit results were also presented at the hospital's Hygiene Committee meetings. These findings should have prompted a review of cleaning resources, cleaning specifications and maintenance requirements given that these were older parts of the hospital that had experienced significant change in patient activity and patient dependency levels in recent years.

Subsequent communication received by HIQA from the hospital highlighted further deficiencies in relation to hospital hygiene. It was identified that there was no one designated person in charge of hospital hygiene. Additionally there were insufficient resources provided for day to day supervision and delivery of environmental hygiene services.

Overall findings in relation to hospital hygiene did not provide assurance that cleaning activity had been appropriately resourced, organized or supervised to achieve desirable standards. Audit findings appeared to identify issues that could have been addressed if there were appropriate cleaning, supervision and proactive maintenance arrangements in place. Audit findings should provide a means of identifying scope for improvement rather than basic service management. It was recommended that the hospital comprehensively review all aspects of the management of environmental hygiene delivery to facilitate compliance with national standards and recommended guidelines.

Patient equipment hygiene

Similar to the findings outlined above, the standard of patient equipment hygiene in St Bridget's Ward was not in line with national standards and guidelines. Stains and or dust were observed on commodes, on a drip stand and on portable observation monitors. There was dust on equipment including a dressing trolley, a resuscitation trolley and a portable suction machine.

Audit results and cleaning schedules reviewed and findings on the day did not indicate that patient equipment was cleaned as often as it should have been. Documentation reviewed showed that the hospital policy was to clean patient equipment after each use and weekly. This cleaning schedule was not in line with national minimum cleaning frequencies for higher risk areas. Additionally, labels present on some items of patient equipment indicated that equipment was not cleaned in accordance with the hospitals' own guidelines.

A breakdown of patient equipment hygiene audit results reported in the Hospital Performance, Finance and Quality and Safety Report dated September 2016 identified consistent deficiencies in relation to patient equipment hygiene across clinical areas in the hospital. Results showed that patient equipment hygiene scores averaged 70% from January to September 2016. These findings should also have prompted a review of patient equipment cleaning resources and cleaning specifications.

It was reported that the ward did not have a sufficient allocation of resources for the cleaning of patient equipment. Results of a patient equipment hygiene audit performed in St Bridget's Ward in August 2016 showed only 36% compliance with desirable standards which is unacceptable. It was of concern that although the hospital had identified a less than optimal standard of patient equipment hygiene this had not been effectively addressed. In addition, documentation reviewed showed that despite poor findings, patient equipment hygiene was not re-audited shortly after the August audit or indeed in September 2016 in accordance with the hospitals' own hygiene audit schedule.

Re-inspection on 16 November 2016

Facilities for reusable invasive medical device decontamination

Hospital management was in the process of addressing deficiencies in relation to decontamination facilities for reusable invasive medical devices.

It was reported that reusable invasive medical devices used in the Operating Theatre Department would be decontaminated in another hospital in the Saolta Hospital Group. In order to effect this change, practical arrangements were being made to progress this.

It was also reported that decontamination of flexible nasopharyngeal endoscopes would be transferred to the decontamination facility in the new Endoscopy Unit within the hospital as soon as the new equipment required for this process was

commissioned. Hospital management anticipated that this would happen over the coming weeks.

Environmental hygiene

Some improvement was evident in relation to the standard of environmental hygiene in St Bridget's Ward following the September inspection. It was reported that enhanced cleaning had been performed in the ward. On the day of re-inspection the ward environment was found to be generally clean with some exceptions. There was dust and or stains on bed frames, bed tables and an armchair in two vacant patient bed spaces. In addition, two toilets were unclean.

Surfaces in some areas of the ward had been repainted or resurfaced and included woodwork and flooring. A 'dirty'* utility room and one patient toilet room had been renovated and had appropriate facilities, surfaces and finishes to facilitate effective cleaning. Inspectors were informed that the hospital had plans to renovate other toilet facilities in the ward. Storage facilities in the ward had been improved. Some bedside lockers had been replaced and new equipment including bedside tables, medication trolleys, healthcare record trolleys and waste bins were on order. Hospital management reported that the ward cleaning resource had been increased somewhat since the inspection in September 2016.

It was of concern that environmental hygiene audit findings in St Bridget's Ward following the September HIQA inspection continued to show deficiencies in relation to cleaning. Environmental hygiene audit scores for St Bridget's Ward averaged 70 and 63% respectively in October and November 2016. Inspectors observed that cleaning checklists had again not been consistently completed. This indicates that fundamental issues in relation to environmental hygiene service delivery had not been effectively addressed.

It is again recommended that the management of environmental hygiene service delivery and related assurance arrangements in the hospital be revised and improved.

Patient equipment hygiene

Items of patient equipment inspected in St Bridget's Ward during the November reinspection were generally clean. Resources allocated for patient equipment cleaning had been increased slightly since the last inspection; however, the ward still did not have an allocated daily resource for patient equipment cleaning. This needs to be

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

reviewed and resources should be allocated so that patient equipment is cleaned in line with national minimum cleaning frequencies for higher risk areas.

Local hygiene audits showed that patient equipment hygiene had not been reaudited since August 2016 which showed that patient equipment was not consistently audited in line with the hospital auditing schedule.

2.2 Key findings of the 2016 inspections

Introduction

Key findings relating to areas of poor practice and hospital infrastructure observed during the September and November inspections are outlined below.

St Bridget's Ward inspected on 28 September 2016

<u>Infrastructure</u> and facilities

St Bridget's Ward accommodated both five-day inpatients and day case patients. There was no dedicated cleaning equipment room in St Bridget's Ward which was not in line with national guidelines.

The hospital did not have suitable arrangements in place for the collection and delivery of cleaning textiles; instead these items were stored on a public corridor which was not appropriate.

Re-inspection on 16 November 2016

In order to address infrastructural deficiencies and space restrictions within inpatient areas it was reported that hospital management had submitted a capital submission to the Health Service Executive (HSE) for a new 50-bed inpatient facility.

Progress had been made since the September HIQA inspection in that the hospital had created a designated cleaning equipment room in St Bridget's Ward and were in the process of revising arrangements for the collection and delivery of cleaning textiles as recommended in the previous inspection.

St Coman's Ward inspected on 16 November 2016

Prevention of nosocomial aspergillosis during construction/renovation activities

Authorised persons observed that remedial work was underway in the ward which involved the disturbance of ceiling tiles on the ward corridor which could have resulted in some dust generation. This was brought to the attention of senior managers at the time. This activity did not appear to have presented any risk to patients. However, it was of concern that the infection prevention and control team had not been contacted in advance of this work so that an appropriate risk

assessment could be performed in line with national guidelines.¹³ It is recommended that any anticipated maintenance, renovation or construction work should be communicated to the infection prevention and control team so that an appropriate risk assessment can be performed.

Safe injection practice

Reconstituted antimicrobial medication for intravenous infusion was placed directly on a worktop rather than into a clean medication tray. During the inspection a staff member placed a used medication tray on a clerical staff workstation which was inappropriately located within a medication room in the ward. This was highlighted during the inspection. A medication room should be designated for that purpose only. This is not an appropriate location for a staff workstation. Practice in relation to intravenous medication preparation and related equipment hygiene should be reviewed.

Environmental and patient equipment hygiene

Overall the environment and patient equipment in St Coman's Ward was generally clean with a few exceptions. Dust was present on surfaces and equipment on and around staff work stations. This was a large 46-bedded medical ward with many highly dependent patients and it was not apparent on the day of inspection that there was a sufficient allocation of cleaning resources.

Two patient toilets were malodorous and it was noted that there was staining and moisture around a toilet pedestal in one of these rooms. Ventilation extract grilles in toilet and or shower rooms were dusty and this likely prevented effective ventilation. Floor covering that is no longer impermeable to moisture in such areas should be replaced. This finding was highlighted in the 2015 HIQA inspection and did not appear to have been effectively addressed. Ventilation grilles must be cleaned regularly. Cleaning checklists reviewed indicated that ward toilets were not cleaned as frequently as they should have been. It was reported that because of an insufficient allocation of cleaning resources that cleaning activity was more focused in patient rooms. This is not an acceptable arrangement going forward and needs to be addressed as a matter of priority.

Opportunities for improvement were also identified in relation to maintenance which included damaged woodwork and rusted radiators. Patient equipment stored on ward corridors did not facilitate effective cleaning. Storage facilities should be reviewed to facilitate the storage of waste for collection, linen carts and patient equipment.

The Roscommon University Hospital Performance, Finance and Quality and Safety Report dated September 2016 also clearly identified consistent deficiencies in

relation to environmental hygiene in St Coman's Ward. St Coman's Ward scored an average of 77% in monthly environmental hygiene audits performed from January to September 2016. This level of performance requires significant improvement. It is recommended that the management of environmental hygiene service delivery and related assurance arrangements in the hospital be revised and improved.

Infrastructure

Findings made by HIQA during the September 2015 HIQA inspection in respect of ward infrastructure had not been addressed. There were insufficient isolation and ensuite facilities and poor spatial separation between beds in some multi-occupancy patient rooms in St Coman's Ward. It was reported that where possible, staff on the ward tried to accommodate patients in a manner that facilitated better spatial separation. It was reported however that due to activity levels the hospital was unable to permanently increase spacing between beds within the current ward design. As stated earlier a capital submission had been made to the HSE for a 50-bed inpatient facility which would help to address this issue.

A number of toilet and shower rooms in the ward required upgrading to facilitate effective cleaning of surfaces and fixtures.

Similar to a finding of the 2015 HIQA inspection a staff workstation was inappropriately located in a multi-occupancy room for patients undergoing cardiac monitoring. It was reported that this facility would be relocated to a larger room in another part of the ward and that technical arrangements to progress this were scheduled to occur shortly.

2.3 Progress since the unannounced inspection on 16 September 2015

HIQA reviewed the quality improvement plan (QIP)¹⁴ published by Roscommon University Hospital following the 2015 inspection. Progress since the unannounced HIQA inspection in September 2015 is outlined below.

Facilities for decontamination of reusable invasive medical devices

Issues identified in relation to the facilities for decontamination of reusable invasive medical devices were not all addressed as described earlier in this report.

Hospital infrastructure

Since the last inspection the hospital opened a new Endoscopy Unit with on-site decontamination facilities in June 2016 designed to comply with recommended practices for Endoscope Reprocessing Units¹⁵ and the Joint Advisory Group (JAG) accreditation standards.¹⁶ This is a significant positive development and is to be

commended. It was reported that hospital staff had received positive feedback from patients who have been cared for in this unit.

Following the relocation of the endoscopy service from the Operating Theatre Department to the new Endoscopy Unit, the hospital had invested in improvement and upgrade works in the Operating Theatre Department. This included the development of a patient reception area and staff workstation. Improvement works included resurfacing of walls and floors, enclosure of pipe work and improved storage facilities.

Some improvement works had been performed in St Coman's Ward in 2016 which included the creation of a second medication room and in addition, one of two 'dirty' utility rooms had been renovated. The ward had also been repainted.

Clostridium difficile infection

The overall incidence of *Clostridium difficile* infection in the hospital had decreased since the previous inspection and was in line with the desirable national performance indicator which is a positive development.

Legionellosis risk management

It was reported that since the last HIQA inspection a repeat Legionella risk assessment was undertaken in the hospital in August 2016, the report of which was almost complete. Any recommendations from this latest risk assessment should be addressed within recommended timeframes.

Patient equipment

It was reported that damaged commodes had been replaced. Documentation reviewed showed that blood glucose monitoring equipment had been audited following the 2015 HIQA inspection and that practice in relation to blood glucose monitoring procedures had been reviewed.

2.4 Key findings relating to hand hygiene

2.4.1 System change⁶: 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 conformed with Health Building Note 00-10 Part C: Sanitary assemblies.¹⁷
- Alcohol gel was available at each point of care in St Bridget's Ward and in St Coman's Ward.
- Some alcohol gels inspected were past product expiry date in St Bridget's Ward.
- A number of alcohol gel dispensers in St Bridget's Ward and in St Coman's Ward and in the main hospital reception area were unclean and some were empty.

- Access to clinical hand wash sinks in two multi-occupancy rooms in St Coman's Ward was restricted due to the location of these sinks and the placement of waste bins.
- **2.4.2 Training/education** ⁶: 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.
- Roscommon University Hospital provides mandatory hand hygiene training to all staff on a yearly basis which is over and above the national recommendation of two yearly training.
- Documentation reviewed by HIQA indicated that 92% of relevant staff had completed hand hygiene training in the past two years.
- 80% of staff in St Bridget's Ward had undertaken hand hygiene training in the previous 12 months.
- Infection prevention and control training provided to staff in Roscommon University Hospital in 2016 also included standard precautions, Healthcare Associated Infections and isolation requirements.
- **2.4.3 Evaluation and feedback** ⁶: *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 audit results

Roscommon University Hospital participates in national hand hygiene audits which are published twice a year, results of which are shown in Table 2 overleaf. Hospital hand hygiene compliance for May/June 2016 was 89.4%, which is just below the desirable national compliance target of 90%. ¹⁸ The hospital needs to improve and sustain good hand hygiene compliance going forward.

Table 2: National hand hygiene audit results for Roscommon University Hospital

Time period	Result
October/November 2011	72.2%
May/June 2012	73.3%
October/November 2012	85%
May/June 2013	83.5%
October/November 2013	78.6%
May/June 2014	85.8%
October/November 2014	92.5%
May/June 2015	86.7%
October/November 2015	95.8%
May/June 2016	89.4%

Source: Health Protection Surveillance Centre – national hand hygiene audit results. 19

Local hand hygiene audits

- Hand hygiene compliance audit results for St Bridget's Ward were 93% and 85% respectively in June and August 2016.
- Documentation reviewed showed that St Coman's Ward achieved 93% compliance in a hand hygiene audit in August 2016.
- Hospital hand hygiene audit results showed an improved overall compliance of 93% in August 2016.

Observation of hand hygiene opportunities

Observation of hand hygiene practice was not performed during this inspection.

- **2.4.4 Reminders in the workplace**⁶: prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.
- Hand hygiene advisory posters observed were up-to-date, clean and appropriately displayed in the areas inspected.

2.4.5 Institutional safety climate⁶: *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.*

- Hand hygiene compliance and hand hygiene training uptake among relevant staff was included in hospital management performance reports.
- A large poster was displayed beside the reception desk at the main entrance to the hospital to remind patients, staff and visitors about hand hygiene.

2.5 Key findings relating to infection prevention care bundles

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.^{3,4}

Both peripheral vascular access device and urinary catheter care bundles had been implemented in St Bridget's Ward and in St Coman's Ward since the 2015 HIQA inspection. Inspectors were informed that nursing staff had received training in relation to care bundle implementation. Standard operating procedures in relation to care bundle auditing had been developed.

Documentation reviewed showed that care bundle implementation had not been consistently audited every month in line with hospital policy. Some care bundle compliance audit results identified opportunities for improvement.

Monthly nursing metrics recorded data in relation to some elements of invasive device management in the hospital.

Overall, HIQA found that further improvement in relation to care bundle implementation was indicated in order to fully embed the use of care bundles into practice.

3. Summary

During an unannounced inspection in Roscommon University Hospital on 28 September 2016, immediate high risk findings were identified in relation to reusable invasive medical device decontamination facilities and environmental and patient equipment hygiene. Cumulative findings identified were such that HIQA carried out a re-inspection after six weeks.

Facilities for reusable invasive medical device decontamination in both the Operating Theatre Department and the Outpatients Department did not comply with national

[†] A care bundle consists of a number of evidence-based practices which when consistently implemented together reduce the risk of device-related infection.

standards and guidelines. It was reported at the time of re-inspection that these issues were being actively addressed by hospital management.

Deficiencies were identified in relation to the management and oversight of environmental and patient equipment hygiene in St Bridget's Ward which did not provide assurance that cleaning activity had been appropriately resourced, organized or supervised to achieve desirable standards. St Coman's Ward was generally clean with some exceptions. However, similar to St Bridget's Ward monthly environmental hygiene audit results and cleaning resource allocation did not provide assurance that environmental and equipment hygiene was appropriately managed and supervised. It is recommended that the hospital comprehensively review all aspects of the management of hygiene service delivery and related assurance arrangements to facilitate compliance with national standards and recommended guidelines.

Following the September 2016 HIQA inspection, improvement works had been performed in St Bridget's Ward which included upgrading of flooring, surfaces and some ancillary rooms.

Since the last HIQA inspection in 2015, the hospital had opened their newly built Endoscopy Unit in June 2016 which was designed to comply with recommended practices for Endoscope Reprocessing Units and the Joint Advisory Group (JAG) accreditation standards. This is a significant positive development and is to be commended.

Findings made during the September 2015 HIQA inspection in relation to ward infrastructure in St Coman's Ward had not all been addressed. There was insufficient isolation and ensuite facilities and poor spatial separation between beds in some multi-occupancy patient rooms. Some ancillary areas of the ward had been upgraded; however, further improvement works were required. Hospital management stated that a capital submission had been made to the HSE for a 50-bed inpatient unit which would help to address these issues.

Opportunities for improvement were identified in relation to safe injection practice in St Coman's Ward.

The hospital needs to continue to build on awareness and best practices relating to hand hygiene to ensure that it sustains good performance.

HIQA found that further improvement in relation to care bundle implementation is indicated in order to fully embed the use of care bundles into practice.

4. Next steps

Roscommon University Hospital must now revise and amend its 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 Roscommon 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.

5. References⁴

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Appendix 1-Copy of letter issued to Roscommon University Hospital following the unannounced inspection on 28 September 2016



Elaine Prendergast Hospital Manager Roscommon University Hospital Roscommon elaine.prendergast@hse.ie

29 September 2016

Ref: PCHCAI/674

Dear Elaine

National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI) Monitoring Programme

During the course of the unannounced inspection at Roscommon University Hospital on 28 September 2016, Authorized persons identified specific issues in relation to environmental and patient equipment hygiene in St Bridgets Ward and surgical instrument decontamination facilities in the Theatre Department. These issues may present a serious risk to the health or welfare of patients, visitors and staff and immediate measures need to be put in place to mitigate these risks.

The quality of environmental and patient equipment cleaning in St Bridgets Ward was poor and cleaning processes and systems in place was not effective and not in line with best practice. In addition, the arrangements for surgical instrument decontamination within the Theatre Department do not comply with the Health Service Executive Code of Practice for Decontamination of Reusable Invasive Medical Devices, and are not in compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infection.*

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The arrangements in place for surgical instrument decontamination in the Theatre Department have been longstanding and were highlighted during the 2015 HIQA inspection visit. HIQA requested at that time that surgical instrument decontamination within the Theatre Department is revised as a matter of priority. HIQA note that this issue has been recorded as the highest possible risk rating on the hospital risk register. It is also noted that proposals are being explored and plans being developed to fully address this risk. However, in the interim, it is requested that the hospital outlines to HIQA the assurance measures enacted to ensure patient safety in light of the current non-compliant arrangements in place, and confirm that the current arrangements in place are safe from an infection prevention and control perspective.

Consequently, please respond in writing to HIQA within 2 working days, to provide assurance that patient safety is not currently compromised by current arrangements for surgical instrument decontamination. Also, please provide an overview of the plans in place, with associated agreed timelines, for the overall mitigation of the identified risks in the short term. Please report back to HIQA by 5pm on 3 October 2016 to qualityandsafety@hiqa.ie, to provide these assurances.

Finally, please note that the totality of findings from the inspection in both St Bridgets Ward and the Theatre Department necessitate reinspection **within six weeks.**

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

Yours sincerely

NOREEN FLANNELLY-KINSELLA Authorized Person

Acree Flamelly- Knsella

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Appendix 2-Copy of response received from Roscommon University Hospital to the letter issued by HIQA following the unannounced inspection on 28 September 2016



Roscommon University Hospital Saolta University Healthcare Group Athlone Road Roscommon F42 AX6 Tel: (090) 663 2218 / 2270

3rd October 2016

Ms Noreen Flannelly-Kinsella Authorised Person HIQA Head Office Unit 1301 Citygate Mahon Cork

Dear Ms Flannelly-Kinsella

Re: National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI)
Monitoring Programme
Ref: PCHCAI/674

Thank you for your letter of 29th September relating to the above.

We are taking this matter very seriously and I will outline to you below the steps were taking to mitigate risks.

We have already commenced a review of an off-site decontamination solution which I intend to put in place within the next 4-6 weeks. The long term solution will be the capital development of a CSSD on the campus.

Current Situation and Background Information

The area where decontamination of instruments takes place in our theatre is non-compliant with the RIMD Decontamination Standards (Standard 1.3.1 and 3.3). Elective and mainly minor (e.g. toenails, veins) and some intermediate surgical procedures are carried out in our theatre (average of approximately 90 procedures using general anaesthesia – GA- and 45 procedures using local anaesthesia – LA- per month – 2016 figures). Of these approximately 20% are performed using disposable instruments and every effort is made to facilitate as many procedures as possible using disposables. Whilst there is no formal post-operative surveillance in place there are no known cases of post-operative infection during the past 5 years (and longer). Average length of stay on the surgical ward has decreased from 3.6 days in August 2015 to 2.5 days in August 2016.

Since 2015 the Decontamination Lead for GUH has provided sessional commitment to Roscommon University Hospital and a multi-disciplinary Decontamination Committee is in place with Microbiologist attending.

Current Mitigation of Risks

Whilst cognisant of the non-compliant environment, staff adhere to strict processes in relation to the decontamination of instruments with traceability in place, and adhere to sterile supplies best practice in order to maintain sterility. All equipment is serviced, maintained, and validated on a contract basis by an

external Authorised Person. Environmentally, Microbiology carry out air sampling and contact plates testing fortnightly and to date all results have been within acceptable limits.

Following your inspection we have mandated that all staff working in theatre complete the HSELand Decontamination Module within the two weeks. We are ensuring that there is a full suite of policies and procedures in relation to every aspect of the Decontamination process in theatre by the end of October, and an audit is scheduled for 27th October by the Decontamination Lead for Galway/Roscommon University Hospitals.

Interim Solution - 4-6 weeks

We are investigating an off-site decontamination solution i.e. an external provider will pick up dirty instruments and decontaminate off site and return. The company will meet the requirements of ISO 13485. A detailed business case is being prepared at present and contact has been made with external providers.

Long Term Solution

A brief for the capital development of a CSSD on the Roscommon University Hospital campus will be drafted and submitted to the Saolta Group by 31st October 2016. This is already on the Saolta Group Priority Capital Plan list, a copy of which was given to you when you visited us.

I hope this is sufficient to assure you of our commitment to address this issue as a matter of urgency. Please advise if you require any further information in relation to same.

Yours sincerely,		
Elaine Prendergast, General Manager.		

Cc Maurice Power, CEO, Saolta Group

Liam Woods, National Director of Acute Hospitals, HSE

Mary Dunnion, Chief Inspector and Director of Regulation, Health Information and Quality Authority

Margaret Brennan Quality and Patient Safety Lead, Acute Hospitals Division, Dr. Steevens Hospital,

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