



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# **Report of the unannounced inspection at the Coombe Women & Infants University Hospital, Dublin 8**

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

Date of inspection: 16 August 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 person-centred 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.

## **Table of Contents**

1. Introduction .....	1
2. Findings .....	2
2.1 Immediate high risk findings.....	3
2.2 Key findings of the unannounced inspection on 16 August 2016 .....	7
2.3 Progress since the unannounced inspection on 9 January 2015.....	7
2.4 Key findings relating to hand hygiene.....	8
2.5 Key findings relating to infection prevention care bundles.....	10
3. Summary .....	11
4. Next steps.....	12
5. References .....	14

Appendix 1- Copy of the letter to the Coombe Women & Infants University Hospital following the unannounced inspection on 16 August 2016.

Appendix 2- Copy of the response received from the Coombe Women & Infants University Hospital to the letter issued by HIQA following the unannounced inspection on 16 August 2016.

## 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, [www.hiqa.ie](http://www.hiqa.ie) – *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*,<sup>2</sup> 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<sup>3,4</sup> and international best practice.<sup>5</sup>

Assessment of performance will focus on the observation of the day-to-day delivery<sup>2</sup> 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 the Coombe Women & Infants University Hospital on 16 August 2016 by Authorized Persons from HIQA, Aileen O' Brien and Liam Strahan, between 10:20hrs and 18:00hrs. The area assessed was

- **The Operating Theatre Department** which has four operating rooms and a five-bay recovery room.

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** describes immediate high risk findings identified during the unannounced inspection on 16 August 2016 and the hospital's response to these findings.
- **Section 2.2** presents key findings of the unannounced inspection on 16 August 2016.
- **Section 2.3** outlines the level of progress made by the hospital after the unannounced inspection on 29 January 2015.
- **Section 2.4** describes 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>
- **Section 2.5** describes the key findings relating to infection prevention care bundles.

## **2.1 Immediate high risk findings**

### **Introduction**

During the unannounced inspection on 16 August 2016, immediate high risk findings were identified in the main Operating Theatre Department in relation to:

- Infrastructure and design
- Endoscope decontamination facilities
- Separation of functional activities.

Details of these risks were communicated to the hospital and will be described in further detail below. A copy of the letter issued to the hospital regarding the findings of the inspection on 16 August 2016, and a copy of the response received from the hospital, are shown in Appendices 1 and 2 respectively.

### **Operating theatre department infrastructure and design**

The infrastructure of the Operating Theatre Department did not comply with international standards, HIQA standards, or basic best practice guidelines for surgical facilities, and was therefore not fit for purpose.<sup>1,7</sup> Two of the operating rooms were opened in 1967 and a further two operating rooms were added in 1995. The Operating Theatre Department design was outdated and neither meets the desirable standards of a modern surgical facility nor facilitates the implementation of effective infection prevention and control measures.

The operating theatre ventilation system did not meet recommended specifications for healthcare premises.<sup>8</sup> During the inspection, windows and doors in ancillary rooms were open as were doors to an operating room which meant that unfiltered air from outside was circulating in an operating room during surgery.

The design of the department was such that operating rooms, preparation spaces and scrub up areas were in an open plan configuration and were not physically separated. Scrubbed operatives were required to walk through Theatre 1 and a narrow preparation area in order to reach Theatre 2, which is less than ideal.

Ancillary facilities that are required within an operating theatre were absent. As a result the separation of clean and dirty functional activities, which will be described further, was difficult to achieve.

Poor infrastructure and design did not facilitate an optimal workflow pattern; for example used surgical instrument sets, healthcare risk waste including bodily fluids

were transported along a narrow single corridor to a 'dirty'\* utility room. Some ancillary rooms and staff areas along this corridor did not have doors, and as such were not physically separated from such activity.

Surfaces and finishes in operating and ancillary rooms were not in line with guidelines for surgical facilities. Window blinds, lighting fixtures and floor coverings did not facilitate effective cleaning. There were multiple horizontal surfaces including ledges, radiators and window sills. There was also a substantial amount of exposed pipe work and electrical wiring on ceilings and along walls. Worktops and shelves were present in some operating rooms and were used to store sterile equipment and stationery within operating rooms which is not recommended. There should be minimal fixtures and shelves within an operating room. These areas should be free of clutter and stored supplies in order to facilitate cleaning and to avoid inadvertent contamination. Sterile supplies should be stored in fully enclosed storage units in order to prevent inadvertent contamination, preferably not within the actual operating room.

Due to inadequate storage facilities, sterile supplies were stored inappropriately within operating rooms and in an anaesthetic room. Similarly, patient equipment was stored within an anaesthetic room and this had to be moved aside to accommodate patients as required.

The Recovery Room which was created within the existing operating theatre department footprint opened in 2005. Space in this room was limited and there were inadequate facilities for appropriate storage of sterile supplies and patient equipment. There were no curtains between trolleys in the Recovery Room; mobile screens were used which further reduced floor space in the room and did not facilitate effective cleaning.

There were no designated rooms for managing and storing cleaning equipment. Cleaning equipment was stored inappropriately in a 'dirty' utility room and also on a staircase landing.

There was no bedpan washer or macerator in the Operating Theatre Department. This meant that if bedpans were used they had to be taken to an adjacent ward for decontamination which is not recommended practice. Appropriate facilities should be available for this purpose within a 'dirty' utility room in the Operating Theatre Department.

---

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

Facilities for staff were insufficient to comfortably cater for the number of people working in the department.

At the time of inspection HIQA was informed that risks in relation to the Operating Theatre Department infrastructure had been placed on the hospital risk register and had been escalated to hospital group level. Capital funding had been sought by the hospital to address the issues identified. HIQA acknowledges that risks in relation to the infrastructure of this department cannot be mitigated in the short term. Provision of an operating theatre department that is in line with current infrastructural guidelines will require significant capital investment. There is a proposed national plan that the Coombe Women & Infants University Hospital will move to a new site in the grounds of St James's Hospital in the future but this could take several years to complete. Risks identified in this report will need to be addressed in the interim.

### **Reprocessing of flexible endoscopes in the Operating Theatre Department**

Decontamination facilities for the reprocessing of flexible endoscopes within the Operating Theatre Department were not in line with current good practice guidelines and standards.<sup>9 10</sup>

There was no designated separate area for endoscope reprocessing in the department. Endoscope cleaning was performed in a 'dirty' utility room used for multiple functions and endoscope disinfection was performed in a preparation area that could only be accessed through one of two operating rooms. Reprocessing facilities for endoscopes should be physically separate from all other work areas and should facilitate effective segregation of clean and dirty activities in order to provide an environment that minimizes the risk of contamination of clean and disinfected devices. It is recommended that endoscope reprocessing facilities are fully compliant with the specified requirements for such facilities.

### **Separation of functional activities in the Operating Theatre Department**

A lack of required ancillary rooms and space in the Operating Theatre Department did not facilitate the separation of functional activities. A 'dirty' utility room was used inappropriately for multiple functions. These functions included: endoscope cleaning, cleaning equipment storage, dilution and dispensing of detergents, separation and disposal of healthcare risk waste including bodily fluids following surgical procedures, paperwork related to decontamination, arterial and cord blood analysis, footwear cleaning, stirrup cleaning and the storage of spare surgical instruments. The use of this room needs to be reviewed so as to reduce the risk of cross-contamination and to provide a safe place of work.

It is clear that the major infrastructural deficiencies identified during this inspection cannot be addressed without major capital investment. There are, however, some findings identified during this inspection that could be addressed in the short-term. These relate to: flexible endoscope reprocessing, appropriate separation of functional activities, provision of a bedpan washer or macerator, decluttering and removal of non-essential items from operating rooms and the reorganisation of storage facilities.

### **Surgical site infection surveillance programme**

The hospital performs limited caesarean section surgical site infection surveillance in line with European surveillance definitions among inpatients and patients who present to the hospital with infection following this operation. Infection rates are trended and presented to relevant staff which is good practice. Ideally caesarean site infection surveillance should include all patients who undergo this surgery in order to facilitate accurate quantification of post-operative infection rates.

### **Hospital response to HIQA's immediate high risk findings**

The response received from the hospital in relation to the immediate high risk findings identified during the HIQA inspection on 16 August 2016 is shown in Appendix 2. Since the day of inspection the hospital management team had received confirmation that a proposal in respect of operating theatre department extension and upgrade submitted in January 2016 had been approved by the Health Service Executive capital group. This is a welcome development.

Hospital management also confirmed that they planned to address risks identified in relation to endoscope reprocessing, ancillary rooms, bedpan decontamination facilities and storage of supplies.

The hospital reported that windows and extraction fans within operating rooms had been sealed. In light of these changes there should be appropriate arrangements in place to ensure sufficient ventilation in the Operating Theatre Department in the interim of planned works.

The hospital management team also reported that they were in discussion with relevant clinicians in relation to expanding caesarean section surgical site infection surveillance.

## **2.2 Key findings of the unannounced inspection on 16 August 2016**

### **Environmental and patient equipment hygiene**

Overall the Operating Theatre Department environment and patient equipment was generally clean.

Effective teamwork in relation to cleaning in general was evident during the inspection where a team of staff cleaned each operating room immediately after it had been used. Roles and responsibilities in relation to cleaning were clearly defined. All of the elements to be cleaned were clearly identified in local cleaning specifications which included the required cleaning method and frequency. There was also a schedule of regular deep cleaning. Daily cleaning checklists had been consistently signed off to indicate that cleaning had been completed. There was good ownership of hygiene in general which extended from local area to senior management level.

Monthly environmental hygiene audits were performed by ward managers and results of these were trended and overseen by the hospital management team. The hospital senior management team also performed quality and safety leadership rounds in clinical areas. Environmental hygiene audits were also performed weekly by housekeeping staff supervisors. Deficiencies identified in relation to cleaning or maintenance were clearly described in audit reports which included the action required, the person responsible and the date of completion. Results of an environmental hygiene audit performed in the Operating Theatre Department in June 2016 showed an overall compliance score of 73% with required standards which is less than desirable. Documentation reviewed showed that general improvement was observed in the department in relation to environmental and patient equipment hygiene in a subsequent audit in August 2016. Many issues identified in monthly environmental hygiene audits related to the infrastructure of the department and maintenance of both the environment and patient equipment. Maintenance requests should be addressed in a timely manner, particularly in high risk areas such as operating theatres. Documentation provided showed an overall compliance score for hospital-wide environmental hygiene audits between January and August 2016 of 89%. Findings in relation to hygiene on the day of inspection were consistent with good overall compliance in this regard.

### **2.3 Progress since the unannounced inspection on 29 January 2015.**

HIQA reviewed the quality improvement plan (QIP)<sup>11</sup> published by the Coombe Women & Infants University Hospital following the 2015 HIQA inspection. It was reported that the hospital had addressed the issues identified during the last

inspection. Practice in relation to injection safety in the Delivery Suite Emergency Operating Theatre had been revised and the hospital had introduced pre-filled syringes for three medications used during clinical emergencies, which is an example of good practice. Practice in relation to labelling and storing medication and the preparation of intravenous infusions was revised.

Cleaning regimes and waste management arrangements had been revised to address the findings identified in the previous inspection report. An annual programme for deep cleaning beds had been introduced. The hospital has an ongoing replacement programme for clinical hand wash sinks which were replaced as clinical areas were refurbished and as funding became available. A programme to increase the number of hand hygiene auditors in clinical areas had also been introduced.

## **2.4 Key findings relating to hand hygiene**

**2.4.1 System change:**<sup>6</sup> *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.*

- Alcohol gel dispensers were available at each point of care in the Operating Theatre Department.
- The design of clinical hand wash sinks observed in the Operating Theatre Department did not comply with the standard advised in Health Building Note 00-10.<sup>12</sup>
- Access to clinical hand wash sinks in the Recovery Room was partially restricted by patient equipment including cots.
- There was one scrub sink for Operating Rooms 1 and 2 which meant that scrubbed operatives had to walk through Operating Room 2 and a narrow preparation area in order to access Operating Room 1.

**2.4.2 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.*

- It was reported that 83% of relevant hospital staff had undertaken hand hygiene training within the last two years. Systems for maintaining hand hygiene training records in the hospital required refinement in order to facilitate detailed breakdown of training undertaken by staff discipline.
- In the Operating Theatre Department 95% of staff were up to date with hand hygiene training. Systems were in place to identify staff that were due to undertake retraining.

- Hand hygiene training was provided to relevant staff at induction and at two yearly intervals by both the Infection Prevention and Control Team and link staff.

**2.4.3 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**

The Coombe Women & Infants University Hospital participates in the national hand hygiene audits, results of which are published twice a year. Since 2013, the hospital had almost consistently achieved the required Health Service Executive (HSE) national hand hygiene compliance target of 90%<sup>13</sup> as shown in Table 1, which is commendable. Documentation reviewed showed a decrease in the hospital hand hygiene compliance rate for May/June 2016 to 86% which did not meet the national compliance target.

**Table 1: National Hand Hygiene Audit Results for the Coombe Women & Infants University Hospital.**

<b>Time period</b>	<b>Result</b>
March/April 2011	83.3%
October/November 2011	82.4%
May/June 2012	80.9%
October/November 2012	84.3%
May/June 2013	89.8%
October/November 2013	91.4%
May/June 2014	90%
October/November 2014	91.4%
May/June 2015	89.5%
October/November 2015	92.9%

Source: Health Protection Surveillance Centre – national hand hygiene audit results.<sup>14</sup>

## Local hand hygiene audits

Hand hygiene audits were performed monthly in the Operating Theatre Department. It was reported that the result of a hand hygiene compliance audit among staff in the Operating Theatre Department was 77% in May 2016.

## Observation of hand hygiene opportunities

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

**2.4.4 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.*

- Hand hygiene advisory posters were available, up to date, clean and appropriately displayed in the areas inspected and in the hospital entrance lobby.

**2.4.5 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.*

- A range of performance data in relation to infection prevention and control including hand hygiene compliance was regularly presented to the hospital senior management team.

## 2.5 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.<sup>3,4</sup>

Peripheral vascular catheter care bundles had been in place across inpatient clinical areas in the hospital for three years. Bundle compliance was audited monthly and results were fed back to staff and displayed on notice boards in wards. Peripheral vascular catheter care bundle compliance audit results discussed at the Infection Prevention and Control Committee meeting in July 2016 showed some variation in compliance scores. This was being addressed by the practice development team in the hospital who were focussing on improving aspects of device insertion, maintenance and related documentation. The Coombe Women & Infants University

---

<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.

Hospital had developed an e-learning project in relation to peripheral vascular catheters in neonates. This learning platform is to be rolled out to clinical staff nationally. This is commendable and shows a commitment to promoting safer patient care.

It is recommended that when next revised, hospital policies for the insertion and care of intravenous catheters reflect required care bundle elements.

The hospital had enhanced surveillance systems in place for caesarean section surgical site infection, bloodstream infection and ventilator associated pneumonia, in addition to screening neonates for colonisation and infection with multi drug resistant organisms.

A detailed infection prevention and control data dashboard was presented quarterly to the hospital management team and to relevant clinical staff. Neonatal infection surveillance data was presented monthly to clinical staff. The hospital also submitted infection surveillance data to the Vermont Oxford Network in respect of low birth weight babies.

### **3. Summary**

Risks were identified during this inspection in relation to Operating Theatre Department infrastructure, and also the reprocessing of endoscopes and the separation of functional activities within the Operating Theatre Department. The infrastructure and design of the main Operating Theatre Department did not meet international best practice guidelines for operating theatre infrastructure and was not fit for purpose. Facilities for endoscope reprocessing and functional separation of activities in the Operating Theatre Department were not in line with current recommendations for practice. Risks identified during the inspection were communicated to the hospital. HIQA acknowledges that risks in respect of operating theatre department infrastructure cannot be addressed without major capital investment. However, some of the other risks identified could be addressed in the short-term.

Since this inspection, hospital management confirmed that a proposal in respect of operating theatre department extension and upgrade submitted in January 2016 has been approved by the Health Service Executive capital group. This is a welcome development. Hospital management also confirmed that they planned to address risks identified in relation to aspects of ventilation, endoscope decontamination, ancillary rooms, bedpan decontamination facilities and storage of supplies.

Overall patient equipment and the environment in the areas inspected were generally clean with few exceptions. There was evidence of good local ownership

and teamwork in relation to hygiene in general, and the hospital had an effective system in place in relation to cleaning and associated assurance arrangements in the Operating Theatre Department.

Hand hygiene compliance in the hospital had decreased to 86% for May/June 2016 which did not meet with the required Health Service Executive (HSE) national hand hygiene compliance target of 90%. The hospital had implemented peripheral vascular care bundles across inpatient clinical areas, in line with best practice guidelines. A range of performance data in relation to infection prevention and control which includes hand hygiene compliance is regularly presented to the hospital senior management team.

The Coombe Women & Infants University Hospital had developed an e-learning project in relation to peripheral vascular catheters in neonates. This learning platform is to be rolled out to clinical staff nationally. This is commendable and shows a commitment to promoting safer patient care.

Surveillance is performed in the hospital to determine the incidence of wound infection following caesarean section. This represents good practice and demonstrates a commitment to monitoring the quality of patient care. Ideally, surgical site infection surveillance should be performed so that all relevant patients are followed for signs of infection until 30 days after the operation, and efforts should be extended to enhance this important programme. A recent national review by HIQA identified the need for an improved approach to surveillance and quality assurance in the area of infection prevention and control and antimicrobial resistance nationally.<sup>15</sup> The need for enhanced surveillance of surgical site infection in particular was identified.

#### **4. Next steps**

The Coombe Women & Infants 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 the Coombe Women & Infants 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. References<sup>‡</sup>

---

1. Health Information and Quality Authority. *National Standards for the Prevention and Control of Healthcare Associated Infections*. Dublin: Health Information and Quality Authority; 2009. [Online]. Available from: <http://www.hiqa.ie/publication/national-standards-prevention-and-control-healthcare-associated-infections>.
2. Health Information and Quality Authority. *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*. Dublin: Health Information and Quality Authority; 2015. [Online]. Available from: <http://www.hiqa.ie/system/files/Guide-to-HCAI-Unannounced-Inspections-2015.pdf>
3. Health Protection Surveillance Centre. *Prevention of Intravascular Catheter - related Infection in Ireland*. Update of 2009 National Guidelines. September 2014 [Online]. Available from: <http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/IntravascularIVlines/Publications/File,14834,en.pdf>
4. Health Protection Surveillance Centre. *Guidelines for the prevention of catheter-associated urinary tract infection*. SARI Working Group. 2011. [Online]. Available from: <https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12913,en.pdf>
5. Loveday H.P., Wilson J.A., Pratt R.J., Golsorkhi M., Tingle A., Bak A., Browne J. et al (2014) epic 3: National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. *Journal of Hospital Infection*. 2014 January, Volume 86, Supplement 1: ppS1-S70. [Online] Available from: <http://www.sciencedirect.com/science/article/pii/S0195670113600122>
6. World Health Organization. *A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy*. Revised August 2009. [Online]. Available from: [http://www.who.int/gpsc/5may/tools/system\\_change/en/](http://www.who.int/gpsc/5may/tools/system_change/en/).

---

<sup>‡</sup> All online references were accessed at the time of preparing this report.

7. Department of Health, United Kingdom. *Health Building Note 26. Facilities for surgical procedures*: Volume 1. [Online]. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/148490/HBN\\_26.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/148490/HBN_26.pdf).
8. Department of Health, United Kingdom. *Heating and ventilation systems. Health Technical Memorandum 03-01: Specialised ventilation for healthcare premises. Part A: Design and validation*. 2007. [Online]. Available from: [https://www.his.org.uk/files/4713/7907/0658/HTM\\_03-01\\_Part\\_A\\_Specialised\\_Ventilation\\_for\\_Healthcare\\_Premises.pdf](https://www.his.org.uk/files/4713/7907/0658/HTM_03-01_Part_A_Specialised_Ventilation_for_Healthcare_Premises.pdf)
9. Health Service Executive. *Standards and Recommended Practices for Endoscope Reprocessing Units*. 2012. [Online]. Available from: [http://www.hse.ie/eng/about/Who/qualityandpatientsafety/resourcesintelligence/Quality\\_and\\_Patient\\_Safety\\_Documents/Decontamination/HSE\\_Standards\\_and\\_Recommended\\_Practices\\_for\\_Endoscope\\_Reprocessing\\_Units.html](http://www.hse.ie/eng/about/Who/qualityandpatientsafety/resourcesintelligence/Quality_and_Patient_Safety_Documents/Decontamination/HSE_Standards_and_Recommended_Practices_for_Endoscope_Reprocessing_Units.html)
10. Department of Health, United Kingdom. *Health Technical Memorandum 01-06: Decontamination of flexible endoscopes. Part B: Design and installation*. March 2016. [Online]. Available from: <https://www.gov.uk/government/publications/management-and-decontamination-of-flexible-endoscopes>
11. *National Standards for the Prevention and Control of Healthcare associated Infections. Quality Improvement Plan based on the unannounced inspection 29 January 2015 Coombe Women & Infants University Hospital*. [http://www.coombe.ie/content/files/Quality\\_Improvement\\_Plan\\_May\\_2015.pdf](http://www.coombe.ie/content/files/Quality_Improvement_Plan_May_2015.pdf)
12. Department of Health, United Kingdom. *Health Building Note 00-10 Part C: Sanitary Assemblies*. [Online]. Available from: [http://www.dhsspsni.gov.uk/hbn\\_00-10\\_part\\_c\\_l.pdf](http://www.dhsspsni.gov.uk/hbn_00-10_part_c_l.pdf).
13. Health Service Executive. *National Service Plan 2016*. [Online]. Available from: <https://www.hse.ie/eng/services/publications/serviceplans/nsp16.pdf>
14. The Health Protection Surveillance Centre. *National Hand Hygiene Audit Results*. [Online]. Available from: <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditResults/>.
15. Health Information and Quality Authority. *Report of the review of antimicrobial stewardship in public acute hospitals*. June 2016. [Online]. Available from:

<https://www.hiqa.ie/publications/report-review-antimicrobial-stewardship-public-acute-hospitals>

**Appendix 1- Copy of the letter issued to the hospital following the unannounced inspection on 16 August 2016**



Sharon Sheehan  
Master  
Coombe Women and Infants University Hospital  
Dublin 8  
[ssheehan@coombe.ie](mailto:ssheehan@coombe.ie)

18 August 2016

Ref: PCHCAI/660

Dear Sharon

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

The Health Information and Quality Authority (HIQA) undertook an unannounced inspection against the National Standards for the Prevention and Control of Healthcare Associated Infection at the Coombe Women and Infants University Hospital on 16 August 2016.

Risks were identified during this inspection which related primarily to the main Operating Theatre Department infrastructure. The infrastructure of the main Operating Theatre Department does not comply with international standards, HIQA standards, or basic best practice guidelines for surgical facilities and is therefore not fit for purpose. The risks identified included:

Major capital works that will require significant capital investment as follows;

- The operating theatre ventilation system does not meet recommended specifications.
- The design of the theatre is such that operating rooms, preparation spaces and scrub up areas are in an open plan configuration and are not physically separated. Scrubbed operatives are required to walk through Theatre 1 and a preparation area in order to reach Theatre 2.

□ **Head Office:**  
Unit 1301, City Gate, Mahon,  
Cork, Ireland.  
**Tel:** +353 (0) 21 240 9300  
**Fax:** +353 (0) 21 240 9600

□ **Dublin Regional Office:**  
George's Court, George's Lane,  
Dublin 7, Ireland  
**Tel:** +353 (0) 1 814 7400  
**Fax:** +353 (0) 1 814 7499

e-mail: [info@hiqa.ie](mailto:info@hiqa.ie) [www.hiqa.ie](http://www.hiqa.ie)

- Ancillary facilities that are required within an operating theatre complex are absent making separation of clean and dirty activities difficult to achieve.

It was reported that these operating theatre department deficiencies have been escalated through the hospital group structure to the Health Service Executive (HSE) and that the hospital is currently awaiting approval for capital funding to build a new extension to facilitate the upgrading of surgical facilities.

In the interim of the identified operating theatre department renovation and extension, some of the actual and potential risks identified at the time of inspection can be dealt with without any major capital investment. Findings that should be addressed in the short-term include:

- Windows and doors in the operating and ancillary rooms were open therefore unfiltered air was circulating during surgery.
- Flexible endoscope decontamination facilities were not in line with the HSE code of practice for the decontamination of reusable invasive medical devices.
- Limited caesarean section surgical site infection surveillance is in place.
- The dirty utility room has no door.
- There was no bedpan washer or macerator within the department.
- There was inappropriate storage of sterile supplies and equipment in operation rooms and other areas.

Please report back to HIQA by **5pm on 25 August 2016** to [qualityandsafety@hiqa.ie](mailto:qualityandsafety@hiqa.ie) with your planned quality improvement measures to address these risks.

HIQA will conduct an unannounced inspection in the Coombe Hospital within the next six months to determine the progress made in respect of recommendations arising from this letter and the inspection report to follow.

□ **Head Office:**  
Unit 1301, City Gate, Mahon,  
Cork, Ireland.  
Tel: +353 (0) 21 240 9300  
Fax: +353 (0) 21 240 9800

☒ **Dublin Regional Office:**  
George's Court, George's Lane,  
Dublin 7, Ireland  
Tel: +353 (0) 1 814 7400  
Fax: +353 (0) 1 814 7499

e-mail: [info@hiqa.ie](mailto:info@hiqa.ie) [www.hiqa.ie](http://www.hiqa.ie)

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

Yours sincerely



**AILEEN O' BRIEN**  
Authorized Person

CC: Mary Dunnion, Chief Inspector and Director of Regulation, HIQA  
Susan O' Reilly, Chief Executive Officer, Dublin Midlands Hospital Group  
Liam Woods, National Director of Acute Services, Health Service Executive

□ Head Office:  
Unit 1301, City Gate, Mahon,  
Cork, Ireland.  
Tel: +353 (0) 21 240 9300  
Fax: +353 (0) 21 240 9600

☑ Dublin Regional Office:  
George's Court, George's Lane,  
Dublin 7, Ireland  
Tel: +353 (0) 1 814 7400  
Fax: +353 (0) 1 814 7499

e-mail: [info@hiqa.ie](mailto:info@hiqa.ie) [www.hiqa.ie](http://www.hiqa.ie)

**Appendix 2- Copy of the response received from the hospital to the letter issued by HIQA following the unannounced inspection on 16 August 2016**



**Coombe Women & Infants University Hospital**

*Excellence in the Care of Women and Babies*

*Foirfeacht i gCuram Ban agus Naíonán*

Cork Street  
Dublin 8  
telephone +353-1-408 5200  
fax +353-1-453 6033  
www.coombe.ie

Ms. Aileen O'Brien  
Authorized Person  
Health Information and Quality Authority  
Dublin Regional Office  
George's Court  
George's Lane  
Dublin 7  
[qualityandsafety@hiqa.ie](mailto:qualityandsafety@hiqa.ie)

23 August 2016

Ref: PCHCAI/660

Dear Aileen

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

Further to the unannounced monitoring assessment of the Coombe Women and Infants University Hospital on 16 August 2016, we firstly want to thank you for the inspection and subsequent correspondence on the risks you identified in our Theatre Suite.

As discussed at our meeting, the Hospital earlier this year submitted the outcome of a Feasibility Study to the Health Services Executive to address the infrastructural issues within our main Theatres and are delighted to advise you that we have this week received correspondence that the proposal has been approved the Health Service Executive's Capital Group. We now await notification around funding timeline.

The interim actual and potential risks identified will be dealt with as follows –

- ***Windows and doors in the operating and ancillary rooms were open therefore unfiltered air was circulating during surgery.***

Windows in Theatre 3 & 4 and the Recovery Room were sealed immediately. Remedial ventilation plans are currently being worked on to find the appropriate solution for the area.

We are working on a programme to replace the doors in Theatres 1 & 2 as well as the Anaesthetic Room. The latter room, which has side door access into each theatre will also have the doors replaced.

[1]



Removal of the 'window fans' in Theatre 3 & 4 will require closure of the rooms for a prolonged period, however in the interim they have been sealed until a time in the coming months allows for the work to be undertaken, mostly likely to be over the Christmas period.

The doors from the changing rooms into Theatres 1 & 2 will be sealed in the coming weeks.

- ***Flexible endoscope decontamination facilities were not in line with the HSE code of practice for the decontamination of reusable invasive medical devices.***

The Hospital is urgently considering alternative suitable areas outside of the Main Theatres to which this decontamination equipment can be relocated.

- ***Limited caesarean section surgical site infection surveillance is in place.***

Caesarean section surgical site surveillance using ECDC definitions has been in place since 2010. Full enhanced surveillance is carried out on patients who present to the Hospital with caesarean site infection, superficial deep and organ-space. Monthly rates are reported on the Infection Prevention and Control dashboard and are comparable month-by-month and year-by-year within the Hospital.

Rates are brought to the attention of relevant staff and management on a monthly basis. The Coombe Women and Infants University Hospital Management are actively in favour of increasing surveillance and are currently in discussion with the obstetric team on how best to progress this matter.

- ***The dirty utility room has no door.***

A number of options are currently being explored for this room which will involve relocation of some of the services currently being provided within that location to other more appropriate ones as well as re-configuration of existing rooms to meet the required standard.

- ***There was no bedpan washer or macerator within the department.***

Existing technologies are currently being evaluated to determine suitability for Theatre. Access to a bedpan washer, required on a limited basis, is currently provided within the adjacent Gynaecology Day Ward, with the bedpan washer in this area on a service contract.

- ***There was inappropriate storage of sterile supplies and equipment in operation rooms and other areas.***

Thank you for your advice regarding the use of enclosed storage in the Theatre rooms. We are in the process of replacing the existing storage in the Theatres, combined with a review of stock levels within the area.

If you require any further information or clarification please do not hesitate to contact me.

Yours sincerely,



**Patrick Donohue**  
Secretary & General Manager

Cc Dr. Sharon Sheehan, Master & CEO

**Published by the Health Information and Quality Authority**

**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](mailto:qualityandsafety@hiqa.ie)  
URL: [www.hiqa.ie](http://www.hiqa.ie)**

**© Health Information and Quality Authority 2016**