Report of inspections at Letterkenny General Hospital, Letterkenny, Co Donegal

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

Date of on-site inspections: 18 June and 23 July 2015
About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is the independent Authority established to drive high quality and safe care for people using our health and social care services. HIQA’s role is to promote sustainable improvements, safeguard people using health and social care services, support informed decisions on how services are delivered, and promote person-centred care for the benefit of the public.

The Authority’s mandate to date extends across the quality and safety of the public, private (within its social care function) and voluntary sectors. 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 those health and social care services in Ireland that by law are required to be regulated by the Authority.

- **Supporting Improvement** – Supporting services to implement standards by providing education in quality improvement tools and methodologies.

- **Social Services Inspectorate** – Registering and inspecting residential centres for dependent people and special care units and inspecting children detention schools, foster care services and child protection services.

- **Monitoring Healthcare Quality and Safety** – Monitoring the quality and safety of health and personal social care services and investigating as necessary serious concerns about the health and welfare of people who use these services.

- **Health Technology Assessment** – Ensuring the best outcome for people who use our health services and best use of resources by evaluating the clinical and cost effectiveness of drugs, equipment, diagnostic techniques and health promotion activities.

- **Health Information** – Advising on the efficient and secure collection and sharing of health information, evaluating information resources and publishing information about the delivery and performance of Ireland’s health and social care services.
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1. Introduction

The Health Information and Quality Authority (the Authority) 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 the Authority is outlined in guidance available on the Authority’s 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,*² the Authority will assess the prevention of invasive device related infections by monitoring the implementation of infection prevention care bundles.* In particular this monitoring will focus upon peripheral vascular catheter and urinary catheter care bundles, but monitoring of performance may include other care bundles as recommended in national³-⁴ and international guidelines⁵.

Assessment of performance will focus on compliance with the following Standards:

- Standard 3: The physical environment, facilities and resources are developed and managed to minimise 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. The Authority uses hygiene observation tools to gather information about the cleanliness of the environment and equipment, hand hygiene practice and infection prevention care bundles in one to three clinical areas depending on the size of the hospital. The Authority’s approach to an unannounced inspection against

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¹ A care bundle consists of a number of evidence based practices which when consistently implemented together reduce the risk of device related infection.
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 2015, unannounced inspections will aim to identify progress made at each hospital since the previous unannounced inspection conducted in 2014.

**Timeline of unannounced inspections:**

An unannounced inspection was carried out at Letterkenny General Hospital on 18 June 2015 followed by a re-inspection on 23 July 2015. The re-inspection examined the level of progress which had been made regarding infection prevention and control risks identified during the June 2015 inspection. 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 inspections and ward visits is shown in Table 1.

**Table 1: Summary of inspections carried out at Letterkenny General Hospital**

<table>
<thead>
<tr>
<th>Date of Inspection</th>
<th>Authorised Persons</th>
<th>Clinical Areas Inspected/Visited</th>
<th>Time of Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 June 2015</td>
<td>Katrina Sugrue</td>
<td>Medical 2 inspected</td>
<td>08:30 hrs – 17:30 hrs</td>
</tr>
<tr>
<td></td>
<td>Aileen O’ Brien</td>
<td>Orthopaedic Unit inspected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rachel McCarthy</td>
<td>Surgical 2 visited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anna Delany</td>
<td>Medical 4 visited</td>
<td></td>
</tr>
<tr>
<td>23 July 2015</td>
<td>Katrina Sugrue</td>
<td>Orthopaedic Unit re-inspected</td>
<td>08:30 hrs – 16:30 hrs</td>
</tr>
<tr>
<td></td>
<td>Aileen O’ Brien</td>
<td>Medical 2 re-inspected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rachel McCarthy</td>
<td>Operating Theatre Complex inspection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anna Delany</td>
<td>Paediatric Ward visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intensive Care Unit (ICU) visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surgical 2 visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical 4 visit</td>
<td></td>
</tr>
</tbody>
</table>

The Authority would like to acknowledge the cooperation of staff during both unannounced inspections.
2. Letterkenny General Hospital Profile*

<table>
<thead>
<tr>
<th>Founded – September 1960</th>
<th>Number of Beds – 323</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Pre-flood – 299 Aug 2013)</td>
</tr>
<tr>
<td>Catchment Population – Circa 160,000</td>
<td>Staffing – 1,348 WTE</td>
</tr>
<tr>
<td>In-patient discharges 2013 – 19,885</td>
<td>Day case discharges – 17,709</td>
</tr>
<tr>
<td>No of OPD Attendances – 60,233</td>
<td>Annual Budget - €100.4m</td>
</tr>
<tr>
<td>ED Attendance 2014 (to date) – 8,380 (Jan to Mar)</td>
<td>General Manager – Mr Sean Murphy</td>
</tr>
</tbody>
</table>

Introduction

Letterkenny General Hospital (LGH) is a 323 inpatient bedded Acute General Hospital providing a broad range of acute services on an in-patient, out-patient and day case basis including:

- Intensive Care
- Coronary Care
- General Surgery
- Orthopaedics
- Paediatrics (Inc neo-natal services)
- Oncology
- Pathology
- Visiting: Neurology; Dermatology; Oral Maxillo Facial; Paediatric Cardiology; ENT; and Ophthalmology
- Emergency Department
- General Medicine
- Urology
- Obstetrics and Gynaecology
- Renal Services – Regional Centre (inc dialysis)
- Haematology
- Radiology

The hospital serves a catchment population of circa 160,000 encompassing the County of Donegal and the surrounding environs.

* The hospital profile information contained in this section has been provided to the Authority by the hospital, and has not been verified by the Authority.
There are also a full range of clinical and non-clinical support services available on site including theatres; pathology; radiology; pharmacy; physiotherapy and occupational therapy. The radiology unity has CT, MRI scanning and DEXA scanning, and an integrated PACS/RIS system installed.

Other services provided;

- Symptomatic Breast Cancer – Satellite centre of GUH designated centre
- Rectal Cancer Surgery – as per National Cancer Strategy
- Interventional Radiology
- Interventional Cardiology
- Sexual Assault Treatment Unit
- PCCC Acute Mental Health Services provided on site
- PCCC Genito Urinary Medicine Services provided on site

The hospital provides an undergraduate Medical Education Program as an academy of National University of Ireland Galway Medical School. Undergraduate Nurse, Midwifery, and AHP training and clinical placements are also provided at LGH. Postgraduate Medical and Nursing education is also delivered within the hospital.
3. Findings

This section of the report outlines the findings of the inspections undertaken at Letterkenny General Hospital on 18 June and 23 July 2015.

Overview of areas inspected

**Medical 2 Ward** is a care of the elderly medical ward comprising 12 single ensuite rooms in addition to four isolation rooms with anterooms and two ensuite four-bedded rooms. The ward is approximately three years old and built to a high specification.

**The Orthopaedic Unit** is a 37-bedded inpatient unit comprising three six-bedded wards, one five-bedded ward, two three-bedded wards and eight single ensuite rooms.

**The Operating Theatre Complex** comprising four operating theatre suites and a four bay recovery room.

Inspectors may visit but not inspect a clinical area to follow up on information received during an inspection or to determine progress on a quality improvement plan (QIP). Surgical 2 and Medical 4 were inspected in 2014 and revisited during the June 2015 inspection. The Paediatric Ward, Surgical 2 Ward, Medical 4 Ward and the Intensive Care Unit were also visited during the July 2015 inspection.

Structure of this report

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

- **Section 3.1** describes the immediate high risks identified during the inspection on 18 June 2015 and the mitigating measures implemented by the hospital in response to the findings. Copies of the letter sent to the hospital regarding the findings and the QIP prepared by the hospital in response are shown in Appendices 1 and 2 respectively.
- **Section 3.2** summarises additional key findings relating to areas of non-compliance observed during 2015 inspections.
- **Section 3.3** outlines the progress made by Medical 4 Ward and Surgical 2 Ward following the unannounced inspection by the Authority on 8 May 2014.
- **Section 3.4** 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 during the inspections on 18 June 2015 and 23 July 2015.
- **Section 3.4** describes the key findings relating to infection prevention care bundles during the unannounced inspection on 18 June 2015.
This report outlines the Authority’s overall assessment in relation to the inspection, and includes key findings of relevance. In addition to this report, a list of additional low-level findings relating to non-compliance with the standards has been provided to the hospital for completion. However, the overall nature of all of the findings are fully summarised within this report.

3.1 Immediate high risk findings

Introduction

During the unannounced inspection on 18 June 2015, a number of high risks were identified, the composite of which presented an immediate high risk finding. High risks were identified regarding non-compliance with Standard 3 and Standard 6 of the National Standards for the Prevention and Control of Healthcare Associated Infection. Significant improvements were required with respect to; environmental hygiene and auditing, infrastructure, maintenance, hand hygiene practices and training, aspergillus control and safe injection practices. Details of these risks were communicated to the hospital (see Appendix 1) and in response a comprehensive QIP (see Appendix 2) was prepared by the hospital to address the finding. The level of progress made in the implementation of the QIP was assessed during the re-inspection on 23 July 2015 and is outlined below.

Inspection on 18 June 2015

Environmental Hygiene

The overall standard of environmental hygiene in both areas inspected was poor with varying levels of dust observed in all areas inspected. Dust control measures were insufficient. Floor cleaning practices observed on Medical 2 during the inspection were not in line with national best practice guidelines for hospital cleaning. Vacuum cleaning was not routinely carried out and dust control mops were coated in dust and fluff. Dust, fluff and grit were present on floor corners and edges in all patient and ancillary rooms inspected in both Medical 2 and the Orthopaedic Unit. There were unacceptable levels of dust on most surfaces in Medical 2 Ward despite the fact that the ward was designed to a high specification that could facilitate effective cleaning.

On Medical 2 Ward, heavy dust was visible on the majority of ceiling ventilation grilles inspected and grille cleaning was not checked off in the ward cleaning checklist. Good air quality is important in the control and prevention of airborne infections in healthcare facilities. Failure to keep ventilation grilles clean can potentially result in the contamination of air conditioning systems and the dispersal of contaminated/irritant dust into clinical areas.
The ward cleaning checklist on Medical 2 was not comprehensive and did not include all surfaces that required cleaning. Alcohol gel dispensers were sticky and unclean. Cleaning of dispensers was not included in the ward cleaning checklist. Computer keyboards, telephone receivers and surfaces at workstations within the ward were visibly dusty. Frequently touched surfaces such as computer keyboards and telephone receivers are regularly found to be contaminated with Meticillin Resistant *Staphylococcus aureus* and other microorganisms and therefore should be included in the daily ward cleaning schedule.

Surfaces of sanitary ware, tiles, floors, shower screens and accessories including toilet roll holders in ensuite washrooms in two multi occupancy rooms in Medical Ward 2 were not cleaned to an acceptable standard. Brown staining was visible on some toilet roll holders, toilet seats, toilet bowls and grab rails. Inspectors found that many surfaces in a patient toilet remained unclean following the morning cleaning session. Improvements were also required in the maintenance and management of the sanitary facilities inspected on the Orthopaedic Unit.

Spray bottles containing a detergent concentrate and tap water mixture used for general surface cleaning had not been emptied and washed out appropriately following previous cleaning sessions. Topping up spray bottles can encourage bacterial growth in the solution which may result in the dispersal of microorganisms in particular gram negative bacteria into the clinical environment. Local processes should ensure that spray bottles are emptied, washed out and allowed to air dry at the end of each cleaning session.

Surfaces in the areas used to store cleaning equipment and supplies in both areas inspected were dusty, stained and cluttered. Wet cloths and wet mop heads were present on cleaning trolleys in Medical 2 Ward during a break in the cleaning session. Inappropriate use of personal protective equipment was observed by Authorised Persons during a cleaning session. In addition, there was evidence that the same mop head used for dust control was used in all patient areas, including isolation rooms.

In the Orthopaedic Unit, equipment used for washing floors was stored inappropriately in the ‘dirty’ utility room. Cleaning equipment was also stored incorrectly in the cleaning store room. For example, dust control mops were stored directly on the floor. Mop handles with attached mop heads were stored over taps on the janitorial sink, not off floor level on wall mounted hooks. Dust and grit was present on a cleaning trolley. Extraneous items were stored directly on the floor. Hazardous consumables were not locked away even though there was a locking system in place which was not activated at the time of the inspection. Staff informed the Authority that there were not enough mop heads available to facilitate daily cleaning.
Re-inspection on 23 July 2015

There was no significant improvement in the overall standard of environmental hygiene on Medical 2 Ward or the Orthopaedic Unit at the time of re-inspection. Despite identification and communication of poor standards of environmental hygiene on Medical 2 Ward, it was not evident that deep cleaning had been carried out following the first inspection. Similar deficits identified during the June inspection in relation to environmental hygiene were again observed upon re-inspection of both areas.

During the July inspection the Authority was informed that dust control training had been recently completed by cleaning staff. However, the Authority did not observe improvements in the levels of dust evident in the Orthopaedic Unit or Medical 2 Ward during the re-inspection.

On Medical 2 Ward, dust and grit was present on floors in patient rooms, brown staining was present on toilet roll holders in patient bathrooms, bathroom floors had not been comprehensively cleaned and walls and shower screens were stained. Ventilation extract grilles were coated with dust and fluff and had not been cleaned since the previous inspection. Cleaning checklists had not been fully completed and did not provide assurance about appropriate cleaning supervision.

It was reported to the Authority that a meeting was held in the Orthopaedic Unit to communicate and discuss the findings of the June inspection. Individual and collective responsibility for the cleanliness of the ward and patient equipment was emphasised. Training was provided to healthcare attendants in the cleaning of patient equipment. Staff reported to inspectors that there was an increased awareness on the ward regarding the cleaning of equipment. Despite the measures enacted, the Authority found that there was dust present on floor edges, corners, on bedside storage, bedside tables and curtain rails in patient areas inspected. The undercarriages of the beds inspected were heavily soiled with sticky oily residue and heavy dust. The Authority notes that the design of these bed frames did not facilitate easy access for effective cleaning. Unacceptable dust levels were present in a patient area which had been cleaned following patient discharge.

There was no improvement in the cleaning storage facility since the June inspection. It was of concern that high level dusters were washed on the ward and dried on a radiator. It was explained to inspectors that there was an insufficient supply of these dusters.

The Authority was not assured from the QIP that learning from the June inspection with regard to environmental hygiene was shared across the hospital. During the July inspection, similar environmental hygiene issues were
identified during spot checks on all wards visited. Dust was identified under beds, on floors, on work stations, on bedside monitors and on curtain rails. It is of particular concern to the Authority that heavy dust was observed in areas, such as an unoccupied isolation room in the Intensive Care Unit.

Findings at the time of the 2015 inspections did not provide assurance that an acceptable standard of environmental hygiene was consistently maintained in Letterkenny General Hospital in line with Standard 3 of the National Standards for the Prevention and Control of Healthcare Associated Infections.¹ A review of the processes, resources and systems in place to ensure a consistent and high level of environmental hygiene is required. Hospital hygiene plays an important role in the prevention and control of healthcare associated infections and should be a key priority for all healthcare organisations.⁵ A clean environment not only reduces the risk of acquiring an infection but also promotes patient and public confidence and demonstrates the existence of a positive safety culture.⁸

**Patient Equipment**

The overall standard of patient equipment cleaning and maintenance was unsatisfactory and opportunities for improvement were observed in both areas inspected.

On Medical 2, red staining was visible on an integrated sharps tray which had not been cleaned following use. Items of patient equipment had green tags to indicate that they had been cleaned however a number of these items had not been effectively cleaned. For example, enteral feeding pumps and the under surfaces of some patient chairs and bed tables were stained. Debris was present on some portable nebulisers. Surfaces of commodes were clean with the exception of the wheels which were coated with dust and fluff. Dust was observed on the undercarriages and pull out shelves of beds, on electrocardiograph machines, moving and handling hoists, a cardiac monitor and medical chart trolleys. A fabric type bag containing a portable bladder scanner was dusty and stored directly on a floor beneath a hand wash basin in the clean utility room; this bag could not be effectively cleaned.

Six of eight mattresses inspected on Medical 2 were compromised with significant visible staining inside mattress covers. One mattress interior was grossly stained and malodorous and the mattress cover was visibly damaged. Stained mattresses were stored within a clean equipment storeroom. It was reported that the exterior of mattress covers was checked periodically however the hospital did not have a scheduled inspection system in place to check that mattress covers were fully impermeable. The hospital should put in place a scheduled system of mattress inspection which includes unzipping mattress covers and checking mattress interiors. Compromised mattress should be removed from circulation.
Red staining was visible on intravenous medication trolleys and the sharps bins stored on these trolleys in the clean utility room on the Orthopaedic Unit. A blood glucose monitor holder, which contained supplies of finger stick blood sampling devices, was unclean. This is not in line with best practice as it increases the risk of equipment contamination and transmission of blood borne viruses. It is recommended that only the equipment required for a single procedure on an individual patient should be brought to the patient bedside. These issues were brought to the attention of the ward manager at the time of the inspection for immediate mitigation.

Servicing of bed pan washers on both Medical 2 and Orthopaedic Unit was performed at a 15 month rather than the 12 month interval recommended by the manufacturers.

**Re-inspection on 23 July 2015**

In response to the deficiencies highlighted in relation to patient equipment hygiene, staff in Medical 2 Ward had reviewed some local processes. Checklists for patient equipment had been developed and a system to audit and track mattresses had been developed. However there was lack of clear responsibility for cleaning duties in relation to patient equipment and workstation cleaning. The new cleaning checklists were basic, contained little detail and did not indicate who was specifically responsible for cleaning. There was evidence locally of a significant amount of de-cluttering and general tidying and reorganisation of ancillary rooms. Extraneous items requiring disposal had been removed from the ward.

In response to the deficiencies highlighted in relation to patient equipment hygiene, some cleaners were scheduled to be retrained. However, the Authority did not see evidence during the July inspection that retraining in relation to patient equipment hygiene had been completed. In addition, the domestic supervisor and ward manager carry out daily checks of patient equipment and the ward manager has responsibility for checking compliance with cleaning tagging system. Issues with the cleaning of patient equipment were again observed during the re-inspection of the Orthopaedic Unit. Equipment which had been labelled as clean on the day of the inspection was dusty. Brown and red stains were present on a blood pressure cuff. Staining was also observed on several components of an intravenous trolley, a blood glucose monitor holder and a commode, which were similar to the June finding. These findings indicated that little improvement had occurred in the management of patient equipment on the Orthopaedic Unit between the 2015 inspections.

The hospital informed the Authority that a hospital wide mattress audit was completed following the June inspection. A replacement order for compromised mattresses and covers was completed and the hospital expected delivery of new
mattresses by the end of July. However, a planned schedule for regular checks of mattresses was not available to view by the Authority at the time of the re-inspection.

**Environmental Auditing**

The Authority received hygiene audit schedules which demonstrated that audits were to be completed on a quarterly basis. Records of audits completed indicated that audits were carried out in January and February 2015. However, follow-up audits for areas which achieved poor compliance and audits scheduled to be carried out in April and May 2015 were not completed. Inspectors were informed that audits were completed by the domestic supervisor. Independent monitoring of hygiene audits was not evident. There was no multidisciplinary hygiene audit team in the hospital and little assurance provided that the monitoring of environmental hygiene was adequate. The Orthopaedic Unit achieved 74.1% in a hygiene audit undertaken in February 2015. A follow up audit was not carried out.

Medical 2 achieved 89.1% compliance in an audit carried out in January 2015. Poor dust control in relation to ventilation grilles, washroom floors and hoists were identified at the time. This high level of compliance was clearly not evident in either the June or July inspections.

The findings and deficiencies identified in the cleanliness of the wards inspected indicated that there was a lack of local ownership relating to ward cleanliness and awareness of hygiene audit results at local level in the wards inspected. In addition, there was a need for more oversight of environmental hygiene by middle and senior management.

**Re-inspection on 23 July 2015**

The hospital informed the Authority that the environmental audit schedule was reviewed and audit dates were agreed between the ward or unit manager and domestic supervisor for the remainder of 2015. The desirable score for hygiene audits is greater than 85%. Where poor compliance was demonstrated, re-auditing and action plans were to be compiled for those wards. It was reported to the Authority that 26 audits were conducted in the interim between the June and July inspections, 11 of which did not achieve the required compliance. The Authority viewed an environmental audit which had been completed in the Orthopaedic Unit on 25 June 2015 and an action plan which addressed the issues identified during the audit. The Unit achieved a poor 56.67% result during this audit. However, a re-audit was not completed by the time of the July re-inspection. Many of the issues related to dust control and maintenance issues, which were similar to those identified during both inspections.
The hospital informed the Authority that details of wards failing to achieve compliance with environmental audits would be submitted in a monthly Quality and Patient Governance report to the Hospital Executive Board. The submission of such a report was not evident on viewing the minutes of the Hospital Executive Board meetings for the month following the June inspection.

The Authority viewed records of a schedule of senior management hygiene walk arounds; two of which were completed in July with five areas being assessed. The Orthopaedic Unit was one of the areas included in this walkabout; however Medical 2 was not assessed. It is of concern that there was no evidence provided to inspectors at the time of the inspection that an environmental audit had been conducted in Medical 2 following the June inspection given the nature of the findings and the risks identified.

Required cleanliness performance levels should be agreed by hospital management to ensure that the clinical environment that accommodates patients is clean and safe and enables effective infection control practices. Measurement and audit of the required levels of cleanliness in the healthcare environment is an essential quality assurance mechanism. While Letterkenny General Hospital demonstrated that there was an auditing schedule in place, the deficiencies relating to the standards of cleanliness within the areas inspected and the ineffective auditing process indicated there is significant room for improvement.

Prior to the re-inspection, the domestic supervisor had responsibility for conducting environmental auditing. The ward managers now co-share this responsibility. At the time of the re-inspection, a multidisciplinary hygiene audit team had not been put in place in line with national guidelines and best practice. Multidisciplinary hygiene audit teams can assist in the promotion of collective and local ownership of hospital cleanliness. Assurance was not provided during both inspections that the governance arrangements in place to oversee the monitoring and measurement of hospital cleanliness and the follow up of identified issues were effective.

The Authority’s concerns regarding the quality of environmental cleaning and the supervision of monitoring and auditing of environmental cleaning were escalated to senior hospital management at the close out meeting. Immediate actions to address the deficiencies identified were requested to provide assurances that the physical environment, facilities and resources are managed and monitored in line with Standard 3 of the National Standards for the Prevention and Control of Healthcare Associated Infections.
Infrastructure and Maintenance

Maintenance of the patient environment in the Orthopaedic Unit was of significant concern to the Authority at the time of the June inspection. Inspectors observed ward wide issues related to maintenance. Surfaces, finishes, flooring and some furnishings in patient rooms including windows, wall paintwork, woodwork, wood finishes were worn and poorly maintained and as such did not facilitate effective cleaning. Similar maintenance issues were highlighted in the 2014 HIQA inspection.

The Authority was informed that the last time the ward was painted was 10 years ago. A large window on a corridor in the unit was leaking. The paintwork around the window was flaking and degraded. This was reported as an issue over a five year period. Floor covering in several places was degraded and was missing under a radiator in one area. It is a concern that maintenance issues have not been addressed in a timely manner.

A poorly maintained clinical environment can impact effective infection control practices and has been a causative factor in several outbreaks. The Orthopaedic Unit carries a high infection control risk by the nature of the procedures provided to patients. It is of significant concern that such a high risk functional area has not been maintained to a high level. The Authority was informed that a planned refurbishment programme in this wing of the hospital was imminent.

Re-inspection on 23 July 2015

A plan to address all the maintenance issues on the Orthopaedic Unit and Surgical 2 Ward was compiled and was in the early stages of implementation on the Orthopaedic Unit at the time of the re-inspection. It was planned to complete all necessary refurbishment works in both areas by February 2016. The schedule of works includes the total refurbishment of several rooms in each ward and upgrading of some shower and bathroom facilities. It is planned to install wall protectors behind beds and install fire proof veneers and door protectors on all doors on the two wards.

Painting was in progress in the Orthopaedic Unit; one six bed ward was closed for painting and wall resurfacing at the time of the re-inspection.

While the leaking window in the Orthopaedic Unit was being prioritised and some improvement had been made to the surrounding plaster and paintworks, the underlying substantive issue remains. It was explained to the Authority that the source of the ingress of water was not as yet determined, despite being identified as an issue five years previously. It was suggested that the source of the problem could involve the external facade of all floors directly above and below the window. The remedial works required to address the window issue requires the replacement
of the windows and curtain walling the exterior of the building. This work was not included as part of the planned schedule of works for the Orthopaedic Unit and there was still no exact date on when this longstanding issue would be rectified.

Maintenance issues were also identified on all wards visited, such as damaged flooring in the Paediatric Ward and issues with regard to hand hygiene taps in Medical 4 Ward. It was explained to the Authority, that after a number of years of reactive maintenance measures, there is now a prioritised plan for proactive preventative maintenance which will be rolled out across the hospital on a phased basis. The Authority viewed the 2015 Maintenance Department Service Plan and action plans. Many of the items detailed on these action plans did not have completion dates and others were noted to be ‘on hold’. The Authority was informed that the implementation of the maintenance service plan was dependant on a number of factors. These included approval of HSE funding, prioritising works at senior management level and available labour resources.

The Authority was informed that currently the hospital uses a cascade system of reporting which requires ward managers to feedback to senior managers in relation to maintenance issues in each department. The hospital informed the Authority that the long term plan is to introduce an electronic system to manage maintenance requests.

The Authority acknowledges that the hospital has faced many challenges relating to remedial works required to address extensive damage caused by flooding. There are also several building projects underway within the hospital which can place increased demands on the systems and resources in place. However, notwithstanding current and future facility upgrade plans, acute healthcare facilities need to be continuously maintained and care should be provided in a safe environment. It is therefore imperative that the resources required to facilitate the implementation of a proactive preventative maintenance programme are allocated and protected to achieve and sustain improvements within the facility.

**Poor performance in relation to hand hygiene**

The hospital has demonstrated high compliance in national and local hand hygiene audits. However, at the time of the inspection, poor performance in relation to hand hygiene practice was observed in both areas inspected with only 55% of hand hygiene opportunities observed by inspectors taken. In addition, while most staff groups were up-to-date with hand hygiene training, it was a concern that only 50% of consultants and 62% of non-consultant hospital doctors had attended training in the previous two years.
Re-inspection on 23 July 2015

In response to the deficiencies highlighted in relation to hand hygiene training, hand hygiene training was provided and staff were encouraged to complete the HSELaND e-learning training programme (the HSE's online resource for learning and development). The Authority was informed that consultants who were not up-to-date with training had been notified in writing by the hospital and incoming non-consultant hospital doctors were obliged to furnish proof of completion of hand hygiene training before commencing employment. In addition, the Hospital Executive Board has agreed to publish the names of staff who fail to attend mandatory hand hygiene. At the time of the July re-inspection, 58% of consultants and 79% of NCHDs were trained which was an increase in compliance since the June inspection.

Inspectors observed an improvement in performance in hand hygiene practice during the July inspection; 88% of hand hygiene opportunities observed by inspectors were taken. Monthly hand hygiene audits conducted for the first six months of 2015 indicated that hospital wide hand hygiene compliance is sustained well above that national target of 90%. Hand hygiene is also one of the key performance indicators monitored on a monthly basis by senior management. While 85% of staff on the Orthopaedic Unit were up-to-date with hand hygiene training at the time of the re-inspection, it was notable that targeted refresher hand hygiene training was not provided to staff on the Orthopaedic Unit in response to the poor compliance observed during the June inspection.

It was apparent during both inspections that the hospital is committed to improving hand hygiene practice and sustaining greater than 90% compliance in local and national hand hygiene audits.

Aspergillus Control

Extensive building works were underway at the hospital throughout both inspections. A written risk assessment and evidence of communication and education, which outlined measures to reduce the incidence of invasive aspergillosis, were not available to view by the Authority during the June inspection. The Authority was not assured that the risk of invasive aspergillosis was being fully managed in line with the Infection Prevention and Control Standards.

Re-inspection on 23 July 2015

The Authority viewed examples of risk assessment with recommended infection prevention and control measures to be implemented during the construction of renovation works. It was reported to the Authority that the necessary infection
prevention and control measures are undertaken during construction/renovation works to protect at risk patients from hospital acquired invasive aspergillosis.

Education of staff and patients and an effective communication strategy are important preventative measures to control invasive aspergillosis. Such measures ensure that the correct information is provided to, and understood by relevant personnel so as to assure compliance. It was reported to the Authority that staff receive training on aspergillus control as part of infection prevention and control training. Additional informal ward based education is also provided as required. However, there were no training records, records of communication or patient information leaflets regarding aspergillus control provided at the time of the inspections.

The Authority recommends that the hospital review the policy, procedures and guidelines relating to aspergillus control to provide assurance that susceptible patients are sufficiently protected to minimise the risk of infection during renovation and construction activity.

**Safe injection practices**

A multi-dose vial of medication was not managed in line with best practice guidelines. The opening date of the vial was recorded however the vial was not labelled for single patient use.\textsuperscript{10} Multi-dose vials have been linked to outbreaks of Hepatitis B infection\textsuperscript{11} and should be managed in line with current international guidance.\textsuperscript{10, 12}

Sterile supplies for injections and infusions, including ampoules of normal saline, butterfly needles, syringes and syringe locking caps were stored in storage carts located on corridors outside patient rooms on Medical 2 Ward. Storage of sterile items in this manner is not recommended in order to prevent inadvertent contamination. Sterile supplies required for injection or infusion procedures should be prepared in a clean designated area such as a clean utility room using an aseptic non touch technique, preceded by hand hygiene. These supplies should be taken to the patient bedside in a clean injection tray. A stained vacutainer with an attached blood bottle puncture needle was found at the time of inspection in the base of a healthcare risk waste bin rather than a dedicated sharps container in line with safe practice.

Both the Ward Manager and Senior Management were informed of the findings at the time of the inspection.

**Re-inspection on 23 July 2015**

The Authority noted some improvements following the June inspection in Medical 2 Ward in that some sterile supplies had been removed from storage carts located in
the corridor. However, similar to the findings in the June inspection, Authorised Persons observed that sterile supplies including swabs and venous catheter dressings remained in the storage carts. Although the hospital informed the Authority that they were no longer storing sterile injection consumables on point of care trolleys it was acknowledged that further work was required in order to change practices locally.

Unsafe injection practices were identified in an anaesthetic room of an operating theatre during the July re-inspection. Anaesthetic drugs were drawn up in syringes early in the morning in anticipation of an elective afternoon operating theatre cases. These medications were labelled with the name of the drug only and were stored on a medication tray on a counter top. It was reported that the hospital are exploring options for installing a medication dispensing system in the operating theatre.

Empty syringes and needles had also been removed from their sterile packaging and assembled in anticipation of use later that day. Syringes not in sterile packaging were present on equipment trolleys in the recovery room. A multidose vial of insulin was labelled with the date of opening but was not designated for single patient use as recommended.10, 12

The practice of pre preparing intravenous medication may result in an increased risk of infection for patients. It is recommended that medications and infusions are prepared as close as possible to administration time and that only the required supplies for an individual procedure are brought into the patient zone.

The Authority recommends that the hospital reviews local practices relating to the preparation, storage and administration of intravenous medication and the use of multiple dose vials to assure itself that the potential risks to patients in this regard are fully mitigated. In addition, safe injection practices should be audited on a regular basis and ongoing training for staff on safe injection practice and aseptic non touch technique should be provided to staff.

3.2 Additional key findings of the 2015 inspections

Introduction

During both inspections, the Authority identified other areas of non-compliance with the National Standards for the Prevention and Control of Healthcare Associated Infections which, although not deemed to represent an immediate high risk to patients, still warranted improvement. An overview of these findings is contained in the following section.
Transmission Based Precautions

Precautionary signage was not displayed in accordance with hospital policy in the areas inspected and revisited. An incorrect airborne precautionary sign was in place for a patient requiring contact precautions. Precautionary signage was not displayed on the door of another isolation room for a patient who had transmissible infection.

The Authority was informed in Medical 2 that precautionary signage was not displayed on isolation room doors to protect patient confidentiality. This was not in line with hospital policy. A list of isolation room numbers and the alert organism was displayed in the cleaning equipment room, which is not recommended as an appropriate means of communicating isolation room cleaning requirements.

Transmission precautions were not being effectively implemented in that staff who were dispensing medication did not change aprons between rooms, isolation room doors were left open and linen from isolation rooms was not segregated in line with international guidelines.\(^\text{13}\)

Re-inspection on 23 July 2015

During the re-inspection of Medical 2 Ward, Authorised Persons observed that advisory signage was appropriately displayed on the doors of rooms used to accommodate patients requiring transmission precautions. However two of the single rooms displaying precautionary signs were open at the time of inspection which is not in line with best practice.\(^\text{13}\) Precautionary signage was not applied in line with best practice on the Paediatric Ward when inspectors visited the ward in July. Similar to the June inspection, precautionary signage was missing and the door was open in a room accommodating a patient requiring protective isolation. In addition, precautionary signage was present on the doors of rooms which were not being used to isolate patients at the time of the inspection. The Authority again raised this issue with the ward managers on duty at the time of inspection.

Failure to effectively manage patients requiring transmission precautions can increase the risk of environmental contamination and the transmission of infection to other patients in the vicinity.

Operating Theatre

The operating theatre complex was inspected during the July 2015 inspection. Overall the environment in the recovery room and in a vacant operating theatre inspected was generally clean and well maintained with a few exceptions. Some extract vents in the operating theatre were visibly dusty. Light levels of dust were present on some high level surfaces in the recovery room. Ventilation system tubing used by the surgical team in the orthopaedic theatres was stained in places and some of these tubes were draped over the door of a dirty utility room.
Some improvements were required regarding maintenance issues. For example, there was some paintwork and woodwork wear and damage. There was damage to the floor in the recovery room where pipe work had been accessed and ineffectively repaired, this part of the floor cannot be effectively cleaned and requires resurfacing.

There was a general lack of storage in the theatre complex and there was no single designated cleaning equipment room. This resulted in inappropriate storage of patient equipment on corridors in the pathway of patients moving in and out of theatres; cleaning materials and equipment were stored in three different areas in the theatre complex. It is recommended that there is a designated room for the storage and maintenance of cleaning equipment and supplies.

It is acknowledged that the operating theatre complex is approximately thirty years old and was never designed to accommodate the increased amount of equipment now used in surgical practice. However, the design and footprint of the operating theatre complex should be reviewed in light of current and future demands in relation to equipment storage and cleaning requirements.

Decontamination of fiber-optic endoscopes used in the Operating Theatre was not in line with best practice guidelines. Endoscope decontamination was not performed in an area designated and designed solely for this purpose with clear segregation between clean and dirty areas. Authorised Persons highlighted this risk at senior management level and recommended an immediate review of the reprocessing of endoscopes in the operating theatre.

**Endoscopy facilities**

The hospital has reported to the Authority that a minor capital works plan is under development to address the endoscopy unit. It was reported that the main endoscopy unit in which bronchoscopy is carried out does not have a specialised ventilation system. It is recommended that bronchoscopy should preferably be performed in a room with air handling equipment to protect staff and third parties from exposure to infectious pathogens. It was reported to the Authority that issue was under review at the time of the inspection.

**Visits to other clinical areas 23 July 2015**

The Intensive Care Unit, Medical 4, the Paediatric Ward and Surgical 2 were visited during the July 2015 inspection. All areas visited demonstrated a high compliance in hand hygiene audits and hand hygiene training. There was little evidence of shared learning in respect of the issues identified in the June inspection. Inconsistent practices were reported regarding safe injection practices. Maintenance issues were highlighted in three of the four areas visited. As mentioned earlier, dust control issues were evident in spot checks of areas assessed in these wards. The ceiling
vent in the ensuite of a multi-bedded ward on Medical 4 was heavily clogged with dust. In addition, similar to the findings of the June inspection of Medical 2, multiple sterile supplies of respiratory equipment were stored in lockers within patient zones on Medical 4 which could lead to inadvertent contamination. As reported previously and similar to the findings during the June inspection, precautionary signage was not applied in line with best practice on the Paediatric Ward.

There was no evidence on any of the areas visited, that staff had received training on aspergillus control.

### 3.3 Progress since the unannounced inspection on 8 May 2014

The Authority reviewed the QIP\(^\text{14}\) published by Letterkenny General Hospital following the 2014 inspection. At the time of the June 2015 inspection, the QIP did not outline which items were completed and which were outstanding.

Inspectors revisited Surgical 2 and Medical 4 during the June inspection. New bedside tables were in place in all areas of the Surgical 2 ward. The Authority was informed that the floor in the treatment room, four single rooms and under the sink of a wash hand basin in one of the wards had been replaced, however maintenance issues in other areas remained outstanding. For example, there were significant issues with regard to chipped paint and scuff marks, damaged doors and door frames and radiators. The Authority was also informed that funding approval has been received for a new nurses’ station desk and the hospital hope to have this in place shortly. Staff informed inspectors that a sink replacement programme and a keyboard replacement programme were in place.

It was reported to the Authority that a bedpan rack was installed in the ‘dirty’ utility room in Medical 4 Ward following the 2014 inspection. Inspectors were informed that a mattress was replaced, however while the exterior of mattresses were regularly checked for damage; unzipping of mattresses and inspecting the core was not routinely included in mattress checks. Dust was observed on some patient equipment and the environment during the June revisit. Sinks on Medical 4 Ward were similar in design and specification as those on Medical 2 Ward; issues relating to these sinks outlined earlier in the report also applied in Medical 4 Ward.

### 3.4 Key findings relating to hand hygiene

#### 3.4.1 System change\(^6\): ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.

- The clinical hand wash sink in the Operating Theatre recovery room and all of the clinical hand wash sinks in the Orthopaedic Unit were not in conformance with Health Building Note 00-10 Part C: Sanitary assemblies.\(^15\)
Medical 2 Ward and Medical 4 Ward are located in a new wing of the hospital which was designed in 2007/2008 and built in 201/2011. The sanitary fittings, although relatively new, with sensor operated wall mounted taps, conformed to Health Technical Memorandum (HTM) 64: Sanitary assemblies but not to Health Building Note 00-10 Part C: Sanitary assemblies. Health Building Note 00-10 Part C: Sanitary assemblies was published in 2013 and now supersedes HTM 64: Sanitary assemblies. It was reported that the operation of ward sensor taps has been problematic since the ward was commissioned and at the time of inspection it was noted that water outlets had been adjusted to the extent that water exited the tap at a 90 degree angle. Authorised persons noted poor water pressure and inconsistent water temperature at the clinical hand wash sinks inspected. Technical problems that create potential barriers to effective hand hygiene should be addressed.

Alcohol gel was available in the wards inspected at the point of care in the majority but not all cases.

Alcohol gel was available at multiple locations along ward corridors. Alcohol gel was located at every hand wash sink. There is the potential that this may be inappropriately used instead of liquid soap for hand washing in such circumstances. The infection prevention and control team should be consulted regarding the appropriate placement of alcohol gel dispensers in clinical areas.

Alcohol gel dispensers were available for use at points of care in the Operating Theatre recovery room but were not conveniently located on anaesthetic trolleys or in anaesthetic rooms.

3.4.2 Training/education: providing regular training on the importance of hand hygiene, based on the 'My 5 Moments for Hand Hygiene’ approach, and the correct procedures for handrubbing and handwashing, to all healthcare workers.

Hospital staff can avail of either practical onsite hand hygiene training or the HSElanD e-learning training programme (the HSE’s online resource for learning and development). Hospital staff are deemed to be trained in hand hygiene if they have completed one or both training modes. It was reported that 95% of hospital staff were trained in the previous two years; 33% had completed HSEland e-learning and 67% had attended hospital based hand hygiene training.

Documentation viewed showed that the majority of staff were up to date in their hand hygiene training in the areas inspected and visited.

3.4.3 Evaluation and feedback: 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

- Letterkenny General Hospital participates in the national hand hygiene audits which are published twice a year.\(^{16}\) The hospital has achieved an average compliance of 90% or above across the two most recent audits in 2014 and 2015, which is above the national target of 90% set by the HSE.\(^{17}\)

<table>
<thead>
<tr>
<th>Hand hygiene audit period</th>
<th>Hand hygiene compliance result</th>
</tr>
</thead>
<tbody>
<tr>
<td>March/April 2011</td>
<td>65.2</td>
</tr>
<tr>
<td>Oct/Nov 2011</td>
<td>77.6</td>
</tr>
<tr>
<td>May/June 2012</td>
<td>76.6</td>
</tr>
<tr>
<td>Oct/Nov 2012</td>
<td>79.0</td>
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<tr>
<td>May/June 2013</td>
<td>92.4</td>
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<tr>
<td>Oct/Nov 2013</td>
<td>89.5</td>
</tr>
<tr>
<td>May/June 2014</td>
<td>90.0</td>
</tr>
<tr>
<td>Oct/Nov 2014</td>
<td>91.4</td>
</tr>
</tbody>
</table>

Source: Health Protection Surveillance Centre – national hand hygiene audit results.\(^{16}\)

Local hand hygiene audits

Local hand hygiene audits are carried out by an infection prevention and control nurses on a monthly basis. The most recent results are displayed on the entrances to each ward. The hospital has consistently demonstrated high compliance in the monthly average of the 24 areas audited.

Observation of hand hygiene opportunities

Authorised Persons observed hand hygiene opportunities using a small sample of staff in the inspected areas. This is intended to replicate the experience at the individual patient level over a short period of time. It is important to note that the results of the small sample observed is not statistically significant and therefore results on hand hygiene compliance do not represent all groups of staff across the hospital as a whole. In addition results derived should not be used for the purpose of external benchmarking.

The underlying principles of observation during inspection are based on guidelines promoted by the WHO\(^ {18}\) and the HSE.\(^ {19}\) In addition, Authorised Persons may observe other important components of hand hygiene practices which are not reported in
national hand hygiene audits but may be recorded as optional data. These include the duration, technique and recognised barriers to good hand hygiene practice. These components of hand hygiene are only documented when they are clearly observed (uninterrupted and unobstructed) during an inspection. Such an approach aims to highlight areas where practice could be further enhanced beyond the dataset reported nationally.

The Authority observed 48 hand hygiene opportunities in total during the June and July inspections. Hand hygiene opportunities observed comprised the following:

- 13 before touching a patient
- one after body fluid exposure risk
- three after touching a patient
- 28 after touching patient surroundings
- three which combined a number of indications

- 29 of the 48 hand hygiene opportunities were taken. The 19 opportunities which were not taken comprised the following:
  - six before touching a patient
  - 11 after touching patient surroundings
  - two which combined a number of indications

- Of the 29 opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for 20 opportunities and the correct technique was observed in 16 hand hygiene actions.

In addition the Authorised Persons observed:

- That a briefcase was taken to the patient bedside.
- That staff did not remove gloves before leaving a patient room on one occasion.

**3.4.4 Reminders in the workplace⁶:** prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.

- While there were hand hygiene advisory posters were available in Orthopaedic Unit, they were not highly visible or sufficient.
- Hand hygiene advisory posters were available, up-to-date, clean and appropriately displayed in Medical 2.

⁶ The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.
Some of the hand hygiene advisory posters need to be updated beside lifts and on main corridors.

3.4.5 Institutional safety climate: 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.

- Letterkenny General Hospital has a regular hand hygiene training programme in place and its performance in national hand hygiene audits in the second half of 2014 and 2015 is in line with the national target set by the HSE. Improvements are required to ensure that all staff groups are up-to-date with mandatory hand hygiene training. The hospital needs to build on the achievements attained to date to ensure that hand hygiene compliance is sustained.

3.5 Key findings relating to care bundles†

Authorised persons looked at documentation and practices and spoke with staff relating to infection prevention care bundles in the areas inspected. Overall infection prevention and control bundles have been well advanced and embedded in the hospital which is commendable. The hospital had incorporated the insertion and safe management record for peripheral catheters into their national early warning score patient observation chart which was both efficient, and potentially worthy of replication elsewhere.

Evidence was observed both on the ward and in discussion with senior management and infection control specialists, of an active audit and feedback programme around implementation of infection prevention care bundles, with data feedback to ward level regarding compliance on a regular basis. The hospital also has a programme of invasive device infection surveillance, which provides further feedback to ward level on performance, and afforded ward staff with an awareness of blood stream infection rates. The Authority was informed that a root cause analysis is completed for every infection related to an invasive device. It is notable that the number of days since the last case of unit acquired Meticillin Resistant Staphylococcus aureus bloodstream infection and the last Clostridium difficile infection in each ward was publicly displayed on ward notice boards, as a measure to promote better staff awareness and adherence to best practice.

A target of six peripheral and urinary catheter care bundle audits was to be undertaken each quarter. The results of these audits were displayed on notice boards outside each ward in addition to ward infection rates and other local audit results. The mean average for care bundle compliance across the hospital in quarter one of 2015 was 90% in peripheral care bundles and 33% in urinary catheter care.

† A care bundle consists of a number of evidence based practices which when consistently implemented together reduce the risk of device related infection.
bundles. Records indicated that an improvement in compliance with hospital policy relating to the number of audits to be undertaken is required in the majority of areas within the hospital.

Improvements were also required in the completion of care bundle record sheets in Medical 2 and the Orthopaedic Unit which were viewed by the Authority during the June inspection. The bundle includes recording daily monitoring checks for the inserted catheter which can prompt staff to review or remove the device if it is not longer required. Insertion details for peripheral care bundles were not documented in most of the record sheets viewed. There was no care bundle documentation in place for one patient with a urinary catheter in place in line with local policy, however patient records viewed indicated that a daily review was undertaken.

The hospital informed the Authority that nurses received training with regard to the implementation of care bundles and non-consultant hospital doctors receive training during induction. Staff on the wards had a good awareness and knowledge of care bundles. In addition, it was reported that patients were given information verbally on admission regarding care bundles, which is likewise an important and positive measure.

4. Summary

Hospital hygiene and maintenance plays an important role in the prevention and control of healthcare associated infections and should be a key priority for all healthcare organisations. A clean environment not only reduces the risk of acquiring an infection but also promotes patient and public confidence and demonstrates the existence of a positive safety culture. Poor maintenance and environmental hygiene have been cited as contributory causal factors in serious outbreaks of infection in hospitals.

Rigorous and systematic monitoring and review of documented policies and procedures is essential to effective quality assurance. Despite measures taken by Letterkenny General Hospital in response to the June inspection, the findings of the July inspection showed little improvement in hospital cleanliness and demonstrated poor compliance with Criterion 3.6. of the National Standards for the Prevention and Control of Healthcare Associated Infections. A collective approach to the implementation of good practice by all staff is needed. This will require more effective leadership at all levels, and more effective governance at a senior level within the hospital to promote best practice in environmental hygiene.

A review of the reprocessing of endoscopes in the Operating Theatre is recommended to ensure that the hospital is compliant with the HSE’s Standards and Recommended Practices for Endoscope Reprocessing Units and to minimise the risks of infection to patients and staff.
5. Next steps

Letterkenny General Hospital must now revise and amend its QIP that prioritises 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 the Authority with details of the web link to the QIP.

It is the responsibility of the Letterkenny General Hospital to formulate, resource and execute its QIP to completion. The Authority 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.
6. References


\[\text{All online references were accessed at the time of preparing this report.}\]
Available from:
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Appendix 1 - Copy of letter issued to Letterkenny General Hospital

Sean Murphy
General Manager
Letterkenny General Hospital
Letterkenny
Donegal
sean1.murphy@hse.ie

22 June 2015

Ref: PCHCAI/439

Dear Sean

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

I am writing as an Authorised Person under Section 70 of the Health Act 2007 (the Act) for the purpose of monitoring against the National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI) pursuant to Section 8(1)(c) of the Act.

Under section 8(1)(c) of the Act, Authorised Persons of the Health Information and Quality Authority (the Authority) carried out an unannounced inspection at Letterkenny General Hospital, Co Donegal on 19 June 2015.

During the course of the unannounced inspection, the Authorised Persons identified specific issues that 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 cumulative findings identified were such that a second unannounced re-inspection will be conducted within six weeks. The risks concerned included, but were not limited to;
- **Poor performance related to hand hygiene** – Hand hygiene compliance was observed to be poor during the Authority’s inspection. Twenty one of the forty opportunities were taken. Records showed that only 58% of NCHDs and consultants were up-to-date with hand hygiene training which was well below other staff groups.

- **Environmental and patient equipment hygiene** – The quality of cleaning on Medical 2 Ward was insufficient on the day of inspection and local cleaning processes were not in line with best practice. Dust control measures were also suboptimal on the Orthopaedic Unit. There were deficiencies in the cleaning of some of the patient equipment in both areas at the time of the inspection. The quality of mattress integrity was poor at the time of inspection and was not effectively monitored and assessed.

- **Environmental auditing** – The Authority notes that hygiene audits are carried out by just one individual staff member, and that there is no multidisciplinary hygiene audit team in place at the hospital. The schedule for environmental auditing was not adhered to and re-auditing of wards that demonstrated poor compliance was not evident in the documentation viewed. There were deficiencies in the recording of improvement actions and closing out of issues highlighted through environmental audits. A lack of local ownership was demonstrated in both areas inspected with respect to hygiene matters. The composite of findings related to environmental hygiene did not provide assurances that the quality of the hygiene services is effectively monitored and evaluated.

- **Infrastructure and maintenance** – Deficits with respect to maintenance on the Orthopaedic Unit were identified. Floor covering in some places was degraded and missing. Plaster and paintwork around a large window at the end of a main corridor was flaking and in poor condition. Authorised Persons were informed that this issue had remained unresolved for five years. Paintwork on doors, door frames, walls and window sills were worn and poorly maintained and as such did not facilitate effective cleaning. It was a concern that maintenance issues
related to paintwork highlighted during the 2014 inspection were not fully resolved on Surgical 2 Ward in the period since the last inspection.

- **Aspergillus control** - A risk assessment and evidence of communication and education were not available to view by the Authority at the time of the inspection, which outlined measures to reduce the incidence of invasive aspergillosis during the extensive building works in progress. The Authority was not assured that the risk of invasive aspergillosis was being fully managed in line with the Infection Prevention and Control Standards.

- **Safe injection practices** - The management of multi-dose medication vials and the storage of sterile injection consumables were not in line with based practice.

The above issues were brought to the attention of senior management at the hospital during the inspection. Given the level of potential risk associated with these cumulative findings, please formally report back to the Authority by 2pm on 29 June 2015 to qualityandsafety@hiqa.ie, outlining the measures that have been enacted to mitigate the identified risks. Details of the risks identified will be included in the report of the inspection. This will include copies of the Authority's notification of high risks and the service provider's response.

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

KAY SUGRUE
Authorised Person

CC: Maurice Power Acting CEO, West/North West Hospitals Group
    Mary Dunion, Director of Regulation, HIQA
Appendix 2 - Copy of letter and QIP received from Letterkenny General Hospital in response to correspondence from the Authority received on 29 June 2015

General Manager’s Office, Letterkenny General Hospital, 
Letterkenny Co. Donegal
Telephone: (074) 9123301 Fax: (074) 9104651

Ms Kay Sugrue
Authorised Person
HIQA
Unit 1301
City Gate
Mahon
Cork

26 June 2015

Re-Ref PCHCAI/439- Unannounced monitoring assessment in Letterkenny General Hospital on 18 June 2015

Dear Ms Sugrue

I wish to acknowledge your letter of 22 June 2015. You identified several specific issues that may present a serious risk to the health or welfare of patients, visitors and staff and you asked that we put immediate measures in place to address these.

The feedback on the day and the issues highlighted in the letter are of great concern both to me and my senior management team. Patient safety, as well as the welfare of visitors and staff, is the cornerstone of service provision in this hospital. I am personally very disappointed that you found several areas to be non-compliant with the National Standards for the Prevention and Control of Healthcare Associated Infections and this feeling is reflected throughout the hospital by staff at all levels. Our Infection Prevention and Control team has been working tirelessly to improve hand hygiene compliance rates and your observations on the day of the inspection are particularly disappointing.

As a first step we have developed an interim Quality Improvement Plan to address the specific serious issues that you have raised. I have instructed my Senior Management Team to oversee the actions and report on progress against the stated timelines. I will be closely monitoring this plan to completion and in parallel I will be working with my team to ensure that any changes in practice and policy are embedded in the operational performance of this hospital.

In feedback and in your letter you stated that the management of multi-dose medication vials was not in line with best practice. Our Pharmacist with responsibility for Safe Practice has been in contact with the product manufacturer and with other colleagues fulfilling similar roles and he has reported

Our Mission is your Health and Well-Being – Our Vision is your enhanced Quality of Care
that they cannot find any change in the guidance on the storage and use of this product. I would be
grateful if you could provide me with the evidence for the best practice and we will amend our
existing protocols based on that advice.

I have attached the Quality Improvement Plan and I understand you will be re-inspecting the hospital
with an unannounced visit within the next six weeks.

Yours sincerely

Mr. Seán Murphy
General Manager
### Report of inspections at Letterkenny General Hospital

**Health Information and Quality Authority**

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

**Quality Improvement Plan in relation to specific issues that may present a serious risk to the health or welfare of patients, visitors and staff following unannounced inspection at Letterkenny General Hospital, Co Donegal on 15 June 2015.**

**26 June 2015**

<table>
<thead>
<tr>
<th>Number</th>
<th>Issue</th>
<th>Action</th>
<th>Person Responsible</th>
<th>Completion Date</th>
<th>Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor performance related to hand hygiene – Hand hygiene compliance was observed to be poor during the Authority’s inspection. Twenty one of the forty opportunities were taken. Records showed that only 50% of NOCs and consultants were up to date with hand hygiene training which was well below other staff groups.</td>
<td>Hand hygiene compliance rates to be set to comply with national KPIs. Additional training to be targeted at consultants and NOCs. Implement previously agreed action, at Hospital Executive Board, to publish the names of staff who are non-compliant with hand hygiene training.</td>
<td>Sean Murphy (General Manager), Clinic &amp; Associates (Clinic Directors), Infection Control Team (Infection Control Team)</td>
<td>July 1st 2015</td>
<td>August 14th 2015</td>
</tr>
<tr>
<td>2</td>
<td>Environmental and patient equipment hygiene – The quality of cleaning on Medical 2 Ward was insufficient on the day of inspection and daily cleaning processes were not in line with best practices.</td>
<td>Cleaners on medical 2 Ward have commenced retraining on Friday 19 June 2015. Domestic Supervisor and Ward Manager to carry out daily hygiene checks.</td>
<td>Peter Byrne (Duty Domestic Supervisor/Ward Manager)</td>
<td>26 June 2015</td>
<td>Daily</td>
</tr>
<tr>
<td>3</td>
<td>Dust control measures were also suboptimal on the Orthopaedic Unit.</td>
<td>Cleaners on Orthopaedics ward have commenced retraining on Friday 19 June 2015. Domestic Supervisor and Ward Manager to carry out daily hygiene checks.</td>
<td>Peter Byrne (Duty Domestic Supervisor/Ward Manager)</td>
<td>26 June 2015</td>
<td>31 July 2015</td>
</tr>
<tr>
<td>4</td>
<td>There were deficiencies in the cleaning of some of the patient equipment in both wards at the time of the inspection.</td>
<td>Ward Manager to carry out daily equipment cleanliness checks using visual observation and compliance with the existing tagging system.</td>
<td>Lenta Dolan (Med 1 Domestic Supervisor/Orthopaedics)</td>
<td>26 June 2015</td>
<td>Daily</td>
</tr>
<tr>
<td>5</td>
<td>The quality of mattress integrity was poor at the time of inspection and was not effectively monitored and assessed.</td>
<td>All mattresses to be checked every week, and those that are failed or are in poor condition to be disposed of DHM to be informed of number of mattresses to be replaced.</td>
<td>All ward/unit managers</td>
<td>26 June 2015</td>
<td>31 July 2015</td>
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<td>6</td>
<td>Environmental auditing – The Authority notes that hygiene audits are carried out by just one individual staff member, and that there is no multidisciplinary hygiene audit team in place at the hospital.</td>
<td>Each ward/unit manager to agree audit dates with the Domestic Supervisor for the remainder of 2015 and provide a list of dates to the Director of Nursing and Midwifery and the Facilities Manager.</td>
<td>All ward/unit managers</td>
<td>26 June 2015</td>
<td>31 July 2015</td>
</tr>
<tr>
<td>7</td>
<td>The schedule for environmental auditing was not adhered to and reauditing of wards that demonstrated poor compliance was not evident in the documentation viewed.</td>
<td>The following areas were scored less than 65% in their last Environment Audit: 1. Day Services Unit 2. Oncology Day Unit 3. Medical 3 4. Medical 5 5. Maternity 6. Orthopaedics 7. Surgical 2 8. Theatre.</td>
<td>Ward Manager/Peter Byrne</td>
<td>26 June 2015</td>
<td>31 July 2015</td>
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<tr>
<td>8</td>
<td>There were deficiencies in the recording of improvement actions and closing out of issues highlighted through environmental audits.</td>
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<td>15) Pharmacy 11) Renal Dialysis.</td>
<td>a) Nonconformity action plans on all these 10 wards/departments will be completed before Friday, 24th June. These nonconformities will be identified as Nursing/HCA, Maintenance or Domestic Services and will be sent to the relevant managers for action. b) A plan to re-audit all 11 wards/departments to be complied with named auditors and planned re-audit dates and all 11 ward/departments will be re-audited before Friday, 3rd July. The completed plan will be circulated to all stakeholders. c) All audits will be completed in conjunction with the relevant ward/department Manager.</td>
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<td></td>
<td>16 June 2015</td>
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<td></td>
<td>3 July 2015</td>
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<td>9</td>
<td>A lack of local ownership was demonstrated in both areas inspected with respect to hygiene matters.</td>
<td>Each ward/unit manager to agree joint audit dates with the Domestic Supervisor for the remainder of 2012 and provide a list of dates to the Director of Nursing and Midwifery and the Facilities Manager. Identified nonconformities will be allocated to the appropriate staff: Nursing/HCA, Maintenance or Domestic Services and will be sent to the relevant managers for action. Ward managers will keep a record of nonconformities in a log and will be responsible for ensuring that improvement actions are actioned by the appropriate person (in conjunction with the facilities department).</td>
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<td></td>
<td>Quality &amp; Risk Manager: Siobhan O’Connell</td>
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<td></td>
<td>3 July 2015</td>
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<tr>
<td>10</td>
<td>The composite of findings related to environmental hygiene did not provide assurances that the quality of the hygiene services is effectively monitored and evaluated.</td>
<td>Each ward/unit manager to agree joint audit dates with the Domestic Supervisor for the remainder of 2012 and provide a list of dates to the Director of Nursing and Midwifery and the Facilities Manager. Identified nonconformities will be allocated to the appropriate staff: Nursing/HCA, Maintenance or Domestic Services and will be sent to the relevant managers for action.</td>
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<td>3 July 2015</td>
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</tbody>
</table>
Report of inspections at Letterkenny General Hospital

Health Information and Quality Authority

Ward managers will keep a record of nonconformities in a log and will be responsible for ensuring that improvement actions are addressed by the appropriate person (in conjunction with the facilities department).

Ward Manager to carry out daily equipment cleanliness checks

Clerical staff: Medical 2 Ward house and associated areas

Medical 3 Ward house and associated areas

Daily

Ward Manager to carry out daily hygiene checks

Hand hygiene audit results continue to be reviewed at Quality and Patient Safety Committee and for attention of the General Manager at the Hospital Executive Board.

Hand hygiene audit results and training rates to remain as a key performance indicator from LiLa to Saolta Group.

### Infrastructure and maintenance

11. **Defects with respect to maintenance on the Orthopaedic Unit**

<table>
<thead>
<tr>
<th>Defect</th>
<th>Description</th>
<th>Responsible</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>Floor covering in some places was degraded and missing (Orthopaedic unit)</td>
<td>Maintenance Manager</td>
<td>2 July 2015, 6 July 2015</td>
</tr>
<tr>
<td>13.</td>
<td>Plaster and paintwork around a large window at the end of a main corridor was flaking and in poor condition (Orthopaedic unit)</td>
<td>Maintenance Manager</td>
<td>2 July 2015, 6 July 2015</td>
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<tr>
<td>14.</td>
<td>Paintwork on doors, door frames, walls and window sills were worn and poorly maintained and as such did not facilitate effective cleaning (Orthopaedic unit)</td>
<td>Maintenance Manager</td>
<td>2 July 2015, 6 July 2015</td>
</tr>
<tr>
<td>15.</td>
<td>It was a concern that maintenance issues related to paintwork highlighted during the</td>
<td>Maintenance Manager</td>
<td>10 August 2015, 17 August 2015</td>
</tr>
</tbody>
</table>

The outstanding maintenance issues for surgical 2 highlighted in previous QIP to be completed.

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>Finish Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 July 2015</td>
<td>31 July 2015</td>
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<tr>
<td>6 July 2015</td>
<td>31 July 2015</td>
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<tr>
<td>2 July 2015</td>
<td>31 July 2015</td>
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<td>6 July 2015</td>
<td>31 July 2015</td>
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</tbody>
</table>
### Report of inspections at Letterkenny General Hospital

**Health Information and Quality Authority**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
<th>Course of Action</th>
<th>Responsible Party/Role</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Aspergillus control - A risk assessment and evidence of communication and education were not available to view by the Authority at the time of the inspection, which outlined measures to reduce the incidence of invasive aspergillosis during the extensive building works in progress. The Authority was not assured that the risk of invasive aspergillosis was being fully managed in line with the Infection Prevention and Control Standards.</td>
<td>The Infection Prevention and Control Team uses the “National Guidelines for the Prevention of Nosocomial Invasive Aspergillosis During Construction/Renovation Activities” (National Disease Surveillance Centre 2002) to determine communication and education during ongoing construction work at LGH. <strong>ACTION:</strong> Provide evidence to HQA of communication between Estates and Microbiology in relation to communication and education on Aspergillus control for the recent building works at LGH.</td>
<td>Cathy Barrett, Infection Control Manager/Michael Muhern, Consultant Microbiologist</td>
<td>1 July 2015</td>
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<td>17</td>
<td>Safe injection practices – The management of multi-dose medication vials and the storage of sterile injection consumables were not in line with best practice.</td>
<td><strong>DEVELOPMENT:</strong> Seek clarification on the policy for management of multi-dose medication vials and implement any new guidance.</td>
<td>LGH Pharmacist</td>
<td>3 July 2015</td>
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<td>18</td>
<td>Storage of sterile injection consumables not in line with best practice.</td>
<td><strong>DEVELOPMENT:</strong> No sterile injection consumables to be stored on point of care trolleys.</td>
<td>All Ward Managers</td>
<td>22 June 2015</td>
<td>22 July 2015</td>
</tr>
</tbody>
</table>