Unannounced Inspection Report

Royal Infirmary of Edinburgh | NHS Lothian
28–29 April 2015
Ensuring your hospital is safe and clean

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1 Background

The Healthcare Environment Inspectorate (HEI) was established in April 2009. Each year we carry out at least 30 inspections across NHSScotland, most of which are unannounced. Although most of our inspections are to acute hospitals, we also inspect community hospitals.

Our focus is to improve the standards of care for patients through a rigorous inspection framework. Specifically we will focus on:

- providing public assurance and protection, to restore public trust and confidence
- ensuring care is delivered in an environment which is safe and clean, and
- contributing to the broader quality improvement agenda across NHSScotland.

In keeping with our philosophy, we will use an open and transparent method for inspecting hospitals, using published processes and documentation.

Our philosophy

We will:

- work to ensure that patients are at the heart of everything we do
- measure things that are important to patients
- be firm, but fair
- have members of the public on our inspection teams
- ensure our staff are trained properly
- tell people what we are doing and explain why we are doing it
- treat everyone fairly and equally, respecting their rights
- take action when there are serious risks to people using the hospitals we inspect
- if necessary, inspect hospitals again after we have reported the findings
- check to make sure our work is making hospitals cleaner and safer
- publish reports on our inspection findings which are available to the public in a range of formats on request, and
- listen to the concerns of patients and the public and use them to inform our inspections.

We will not:

- assess the fitness to practise or performance of staff
- investigate complaints, and
- investigate the cause of outbreaks of infection.

More information about our inspection process can be found in Appendix 2.
You can contact us to find out more about our inspections or to raise any concerns you have about cleanliness, hygiene or infection prevention and control in an acute or community hospital or NHS board by letter, telephone or email.

Our contact details are:

**Healthcare Environment Inspectorate**
Gyle Square
1 South Gyle Crescent
Edinburgh
EH12 9EB

**Telephone:** 0131 623 4300

**Email:** comments.his@nhs.net
2 Summary of inspection

The Royal Infirmary of Edinburgh serves the Lothian region. It contains 911 staffed beds and has a full range of medical and surgical services. Some services, including cleaning, maintenance and catering, are provided under a separate arrangement with a private contractor.

We previously inspected the Royal Infirmary of Edinburgh in October 2013. That inspection resulted in four requirements and no recommendations. The inspection report is available on the Healthcare Improvement Scotland website http://www.healthcareimprovementscotland.org/HEI.aspx.

We carried out an unannounced inspection to the Royal Infirmary of Edinburgh on Tuesday 28 and Wednesday 29 April 2015.

We assessed the hospital against the NHS Quality Improvement Scotland (NHS QIS) healthcare associated infection (HAI) standards and inspected the following areas:

- birthing centre
- emergency department
- labour ward
- ward 109 (orthopaedic trauma)
- ward 111 (cardiothoracic critical care)
- ward 112 (cardiothoracic high dependency unit)
- ward 114 (cardiology coronary care unit)
- ward 115 (renal high dependency unit)
- ward 117 (transplant high dependency unit)
- ward 119 (obstetrics)
- ward 204 (respiratory medicine)
- ward 206 (transplant), and
- ward 210 (gynaecology).

The inspection team was made up of three inspectors and a public partner, with support from a project officer. One inspector led the team and was responsible for guiding them and ensuring the team members were in agreement about the findings reached. A key part of the role of the public partner is to talk to patients and listen to what is important to them. Membership of the inspection team visiting the Royal Infirmary of Edinburgh can be found in Appendix 4.

During our inspection, we carried out patient interviews and used patient questionnaires. We spoke with nine patients during the inspection. We received completed questionnaires from 70 patients and visitors.
Overall, we found evidence that NHS Lothian is complying with the majority of NHS QIS HAI standards to protect patients, staff and visitors from the risk of acquiring an infection. In particular:

- peripheral vascular catheters (PVCs) were generally being well managed, and
- the majority of standard infection control precautions (SICPs) were being followed.

However, we did find that further improvement is required in the following areas:

- hand hygiene in the emergency department
- cleaning of reusable patient equipment in the labour ward, and
- selection and use of personal protective equipment for environmental cleaning tasks.

**What action we expect the NHS board to take after our inspection**

This inspection resulted in four requirements and one recommendation. The requirements are linked to compliance with the NHS QIS HAI standards. A full list of the requirements and recommendation can be found in Appendix 1.

NHS Lothian must address the requirements and make the necessary improvements, as a matter of priority.

An action plan for areas of improvement has been developed by the NHS board and is available to view on the Healthcare Improvement Scotland website http://www.healthcareimprovementscotland.org/HEI.aspx.

We would like to thank NHS Lothian and in particular all staff at the Royal Infirmary of Edinburgh for their assistance during the inspection.
3 Key findings

3.1 Governance and compliance

Policies and procedures
During the inspection, we observed staff adherence to standard infection control precautions (SICPs). These are the minimum precautions that all healthcare staff should take when caring for patients. There are 10 SICPs and they include hand hygiene, patient placement procedures and how to safely manage linen, sharps and healthcare waste.

Overall, we observed good compliance with SICPs. The staff we spoke with demonstrated a good understanding of their responsibilities for infection prevention and control. They could also describe how they carry out SICPs in practice.

Alcohol-based hand rub dispensers were available throughout the hospital at the point of care. We also saw staff using personal alcohol-based hand rub dispensers. The staff we spoke with correctly described when they would use alcohol based hand rub and also when they would wash their hands with soap and water. For example, staff correctly told us they would wash their hands using soap and water when caring for a patient with Clostridium difficile infection (CDI).

Of the 70 patients and visitors who responded to our survey:

- 64 said that ward staff always or mostly wash their hands, and
- 58 said that they were always or mostly offered the opportunity to clean their hands.

During our last inspection in October 2013, we found a large number of instances where medical students missed opportunities to perform hand hygiene before or after contact with patients. During this inspection, we found hand hygiene compliance among medical students was good.

We also found hand hygiene practice amongst other staff groups was generally good in the majority of wards inspected. The exception to this was the emergency department where we found poor hand hygiene practice among the ambulance staff, visiting medical staff (from other parts of the hospital) and nursing staff working there. We observed these staff groups missing 18 out of 22 opportunities to perform hand hygiene following contact with the patient surroundings.

Requirement 1: NHS Lothian must ensure that staff working in the emergency department comply with the hand hygiene practice described in Health Protection Scotland’s National Infection Prevention and Control Manual (2015).

We saw a good supply of personal protective equipment, such as aprons and gloves. The majority of staff we observed used and disposed of aprons and gloves appropriately. However, domestic staff on wards 111, 112, 119, 204, 206, 210 and the birthing centre told us they use blue, yellow and red reusable household (‘marigold’ type) gloves. Staff told us they reuse these gloves between tasks, for example cleaning multiple isolation rooms.

The practice of re-using household (‘marigold’ type) gloves presents a risk of cross-contamination between patient areas and does not comply with national guidance.
Health Protection Scotland’s *National Infection Prevention and Control Manual* (2015) states that: “Re-usable household (‘marigold’ type) gloves are not suitable for environmental cleaning tasks in healthcare settings due to the risk of cross-infection.” The manual also states that gloves must be: “Changed immediately after each patient and/or following completion of a procedure or task.”

■ **Requirement 2:** NHS Lothian must ensure that domestic staff comply with the guidance for the selection and use of personal protective equipment described in Health Protection Scotland’s *National Infection Prevention and Control Manual* (2015).

All staff we spoke with knew the correct procedure for managing blood spillages and how to prepare the correct strength of chlorine-releasing disinfectant and detergent. We also saw posters in the sluice rooms providing advice to staff on how to manage a blood spillage. However, we noted the majority of ready-prepared bottles of chlorine-releasing disinfectant and detergent solution were not correctly labelled with the date or dilution strength. This may result in the wrong strength or out-of-date solution being used for cleaning blood and body fluid spillages.

■ **Recommendation a:** NHS Lothian should remind all staff who prepare bottles of chlorine-releasing solution, that the bottles should be labelled with the correct strength and date of preparation or expiry.

All waste was appropriately segregated. However, we found some clinical waste was not stored securely whilst awaiting uplift. The doors to most waste holds were unlocked and some of the large clinical waste hold bins were also unlocked.

■ **Requirement 3:** NHS Lothian must ensure that all clinical waste is securely stored whilst awaiting uplift.

During our inspection, several patients were being cared for in isolation because of a known or suspected infection. We observed these patients being cared for in single siderooms, with appropriate facilities. We spoke with staff about the procedures they followed when caring for these patients. All staff described the appropriate SICPs and transmission-based precautions needed to care for such patients.

We also spoke with some of the patients being cared for in isolation and they all said:

- the hospital and their room was clean, and
- staff washed their hands before leaving their room.

The domestic staff we spoke with described the cleaning procedures required for patients being cared for in isolation. They understood how to carry out a deep clean of a patient bed space after a patient with a known or suspected infection had been discharged.

**Cleaning**

We found that all patient environments inspected were generally clean. There were damaged wall and floor surfaces in some patient areas. However, NHS Lothian told us plans were already in place to repair these areas.
All patients and visitors we spoke with felt the ward environment was clean and well maintained. Of the 70 patients and visitors who completed our survey, 67 said that their ward was always or mostly clean. Patients’ comments included:

- ‘Very happy with hospital and environment and cleanliness’.
- ‘The hospital is second to none’.
- ‘Very impressive hospital’.

Sixty five respondents also said that patient equipment was always or mostly clean and in good repair.

Senior charge nurses have overall responsibility for managing the cleaning and decontamination of patient equipment.

We inspected a variety of patient equipment, including:

- beds, bedframes and mattresses
- intravenous drip stands
- blood pressure machines
- hoists, chairs and commodes, and
- bathing equipment.

Overall, we found that the majority of patient equipment inspected was clean and ready for use in wards 115, 117, 204, 206, 210 and the birthing centre. The minor exceptions we noted were brought to the attention of the nurse in charge at the time of the inspection.

In contrast, some of the reusable patient equipment inspected in wards 109, 111, 112, 119, the emergency department and the labour ward was dirty or contaminated. For example, we found:

- eight out of 29 mattresses checked were contaminated (wards 112, 114, 119, the emergency department and the labour ward), and
- three out of six cot mattresses checked were contaminated (ward 119 and the birthing centre).

Also, in the labour ward, we found blood contamination to some reusable patient equipment, including:

- patient bedframes and stirrups
- some mattress covers and one mattress
- three birthing balls, and
- two commodes.

**Requirement 4:** NHS Lothian must ensure that all patient equipment is clean and ready for use at all times. This will minimise the risk of contaminated equipment being used for patient care.
Risk assessment and patient management

PVC care bundles are a record used by staff to document the safe management of an inserted device. The bundle includes daily checks prompting staff to assess whether the device is free from any signs of inflammation and is still required. This process helps to reduce the risk of device-related bloodstream infections.

We looked at 38 PVCs and their associated patient healthcare records. Overall, we found that PVCs were being well managed across the wards and departments. The only exception to this was:

- seven PVC care bundles which had no insertion information (wards 109 and 119), and
- four PVCs which did not have a care bundle in place (ward 109).
Appendix 1 – Requirements and recommendations

The actions the HEI expects the NHS board to take are called requirements and recommendations.

- **Requirement:** A requirement sets out what action is required from an NHS board to comply with the standards published by Healthcare Improvement Scotland, or its predecessors. These are the standards which every patient has the right to expect. A requirement means the hospital or service has not met the standards and the HEI are concerned about the impact this has on patients using the hospital or service. The HEI expects that all requirements are addressed and the necessary improvements are implemented.

- **Recommendation:** A recommendation relates to national guidance and best practice which the HEI considers a hospital or service should follow to improve standards of care.

**Prioritisation of requirements**

All requirements are priority rated (see table below). Compliance is expected within the highlighted timescale.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Indicative timescale</th>
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<tbody>
<tr>
<td>1</td>
<td>Immediately on receipt of report</td>
</tr>
<tr>
<td>2</td>
<td>Within 1 month of report publication date</td>
</tr>
<tr>
<td>3</td>
<td>Within 3 months of report publication date</td>
</tr>
<tr>
<td>4</td>
<td>Within 6 months of report publication date</td>
</tr>
<tr>
<td>5</td>
<td>Within 9 months of report publication date</td>
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<tr>
<td>6</td>
<td>Within 12 months of report publication date</td>
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**Governance and compliance**

<table>
<thead>
<tr>
<th>Requirements NHS Lothian must:</th>
<th>HAI standard criterion</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1 ensure that staff in the emergency department comply with the hand hygiene practice described in Health Protection Scotland National Infection Prevention and Control Manual (2015) (see page 8).</td>
<td>1a.2</td>
<td>1</td>
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<tr>
<td>2 ensure that domestic staff comply with the guidance for the selection and use of personal protective equipment described in Health Protection Scotland’s National Infection Prevention and Control Manual (2015) (see page 9).</td>
<td>1a.2</td>
<td>1</td>
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### Governance and compliance cont.

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<tbody>
<tr>
<td>3</td>
<td>ensure that all clinical waste is securely stored whilst awaiting uplift (see page 9).</td>
<td>1a.2</td>
</tr>
<tr>
<td>4</td>
<td>ensure that all patient equipment is clean and ready for use at all times. This will minimise the risk of contaminated equipment being used for patient care (see page 10).</td>
<td>4a.1</td>
</tr>
</tbody>
</table>

### Recommendation

**NHS Lothian should:**

a. remind all staff who prepare bottles of chlorine-releasing solution, that the bottles should be labelled with the correct strength and date of preparation or expiry (see page 9).
Appendix 2 – Inspection process

Our inspection process starts with a local self-assessment, includes at least one inspection to a hospital and ends with HEI publishing its inspection report and the NHS board’s improvement action plan.

Before an inspection

First, each NHS board assesses its own performance against the Standards for Healthcare Associated Infection (HAI), published by NHS Quality Improvement Scotland (NHS QIS) in March 2008, by completing an online self-assessment and providing supporting evidence. The self-assessment focuses on three key areas:

- governance/compliance
- communication/public involvement,
- education and development.

During an inspection

We assess performance both by considering the self-assessment data and inspecting acute and community hospitals within the NHS board area to validate this information and discuss related issues. We inspect the physical environment of the clinical areas. We also speak with key staff, ward staff and patients on the wards, as well as talk with senior members of staff from the hospital and NHS board. We use audit tools to help us assess the physical environment and practices by noting compliance against a further nine areas:

- environment and facilities
- handling and disposal of linen
- departmental waste handling and disposal
- safe handling and disposal of sharps
- patient equipment
- hand hygiene
- ward/department kitchen
- clinical practice,
- antimicrobial prescribing.

The complete inspection process is described in the flow chart in Appendix 3.

Types of inspections

Inspections may be announced or unannounced. We will normally publish a written report 8 weeks after the inspection.

- **Announced inspection**: the NHS board and hospital will be given at least 4 weeks' notice of the inspection by letter or email.
- **Unannounced inspection**: the NHS board and hospital will not be given any advance warning of the inspection.
• **Follow-up inspection:** the NHS board and hospital may or may not be given advance notice of the inspection. A follow-up inspection will take place no later than 26 weeks from the publication of the initial report.

**Follow-up activity**

The inspection team will follow up on the progress made by the NHS board/hospital in relation to the implementation of the improvement action plan. Healthcare Improvement Scotland will request an updated action plan 16 weeks after the initial inspection. The inspection team will review the action plan when it is returned 2 weeks later and decide if follow-up activity is required.

The nature of the follow-up activity will again be determined by the nature of the risk presented and may involve one or more of the following elements:

- scheduling an announced or unannounced inspection
- planning a targeted announced or unannounced inspection looking at specific areas of concern
- a meeting (either face to face or via telephone/video conference)
- a written submission by the NHS board on progress with supporting documented evidence, or
- another intervention deemed appropriate by the inspection team based on the findings of the initial inspection.

A report or letter may be produced depending on the style and findings of the follow-up activity.

More information about the HEI, our inspections, methodology and inspection tools can be found at [http://www.healthcareimprovementscotland.org/HEI.aspx](http://www.healthcareimprovementscotland.org/HEI.aspx).
Appendix 3 – Inspection process flow chart

We follow a number of stages in our inspection process.

**Before inspection**

The NHS board undertakes a self-assessment exercise and submits the outcome to us.

We review the self-assessment submission to help us prepare for on-site inspections.

**During inspection**

We arrive at the hospital or service and undertake physical inspection.

We use audit tools to help us assess the physical environment and compliance with standard infection control precautions.

We have discussions with senior staff and/or operational staff, people who use the hospital or service and their carers.

We give feedback to the hospital or service senior staff.

We undertake further inspection of hospitals or services if significant concern is identified.

**After inspection**

We publish reports for patients and the public based on what we find during inspections. NHS staff can use our reports to find out what other hospitals and services do well and use this information to help make improvements. Our reports are available on our website at [www.healthcareimprovementscotland.org](http://www.healthcareimprovementscotland.org)

We require NHS boards to develop and then update an improvement action plan to address the requirements and recommendations we make. We check progress against the improvement action plan.
Appendix 4 – Details of inspection

The inspection to the Royal Infirmary of Edinburgh, NHS Lothian was conducted on Tuesday 28 and Wednesday 29 April 2015.

The inspection team was made up of the following members:

Anna Martin
Lead Inspector

Jacqueline Jowett
Inspector

Allison Wilson
Inspector

Kenneth Barker
Public Partner

Supported by:

Orlagh Sheils
Project Officer
## Appendix 5 – Glossary of abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CDI</td>
<td><em>Clostridium difficile</em> infection</td>
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<tr>
<td>HAI</td>
<td>healthcare associated infection</td>
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<td>HEI</td>
<td>Healthcare Environment Inspectorate</td>
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<td>NHS QIS</td>
<td>NHS Quality Improvement Scotland</td>
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<td>PVC</td>
<td>peripheral vascular catheter</td>
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<tr>
<td>SICP</td>
<td>standard infection control precaution</td>
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