Unannounced Inspection Report

Royal Hospital for Children | NHS Greater Glasgow and Clyde
7–8 September 2016
Ensuring your hospital is safe and clean

The Healthcare Environment Inspectorate was established in April 2009 and is part of Healthcare Improvement Scotland. We inspect acute and community hospitals across NHSScotland.

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.

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1 About this report

This report sets out the findings from our unannounced inspection to the Royal Hospital for Children, NHS Greater Glasgow and Clyde, from Wednesday 7 to Thursday 8 September 2016.

This report summarises our inspection findings on page 5 and detailed findings from our inspection can be found on page 7. A full list of the requirements can be found in Appendix 1 on page 13.

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 agreed about the findings reached. A key part of the role of the public partner is to talk with patients about their experience of staying in hospital and listen to what is important to them.

The flow chart in Appendix 2 summarises our inspection process. More information about the Healthcare Environment Inspectorate (HEI), our inspections, methodology and inspection tools can be found at www.healthcareimprovementscotland.org/HEI.aspx
2 Summary of inspection

The Royal Hospital for Children, Glasgow, officially opened in July 2015 and treats paediatric patients up to their 16th birthday. The hospital relocated from the Royal Hospital for Sick Children at Yorkhill and the new hospital is built on the site of the Queen Elizabeth University Hospital. The hospital has a paediatric intensive care unit, accident and emergency department, outpatient facilities and other paediatric specialties.

About our inspection

We carried out an unannounced inspection to the Royal Hospital for Children from Wednesday 7 to Thursday 8 September 2016.

This was the first inspection of the hospital against the new Healthcare Improvement Scotland Healthcare Associated Infection (HAI) Standards (February 2015).

Inspection focus

Before carrying out this inspection, we reviewed NHS Greater Glasgow and Clyde’s self-assessment and previous Royal Hospital for Children inspection reports. This informed our decision on which standards to focus on during this inspection. We focused on:

- Standard 2: Education to support the prevention and control of infection
- Standard 3: Communication between organisations and with the patient or their representative
- Standard 6: Infection prevention and control policies, procedures and guidance
- Standard 7: Insertion and maintenance of invasive devices, and
- Standard 8: Decontamination.

We inspected the following areas:

- accident and emergency
- ward 1E (cardiology)
- ward 2A (haemato-oncology)
- ward 2C (acute receiving unit)
- ward 3B (general surgery, ear, nose and throat, cleft, maxillo facial, plastics, ophthalmology, gastroenterology), and
- ward 3C (renal, dialysis suite, urology, orthopaedics, diabetes, medical paediatrics, rheumatology, complex respiratory).

We carried out 15 patient, relative and carer interviews and received 45 completed questionnaires.

What the hospital did well

- Staff adherence with hand hygiene was good.
- Staff knowledge of standard infection control precautions was good.
- Staff completion of HAI-related education was good.
What the hospital could do better
- Cleaning and monitoring of the accident and emergency department.
- Safe management of used mop heads.

What action we expect NHS Greater Glasgow and Clyde to take after our inspection
This inspection resulted in two requirements and no recommendations. The requirements are linked to compliance with the Healthcare Improvement Scotland HAI standards. A full list of the requirements can be found in Appendix 1 on page 13.

An improvement action plan has been developed by the NHS board and is available on the Healthcare Improvement Scotland website www.healthcareimprovementscotland.org/HEI.aspx

We would like to thank NHS Greater Glasgow and Clyde and in particular all staff and patients at the Royal Hospital for Children for their assistance during the inspection.
3 Key findings

Standard 2: Education to support the prevention and control of infection

NHS Greater Glasgow and Clyde’s self-assessment details its infection prevention and control education strategy for mandatory and continuing education. The strategy has core education requirements and recommendations for staff detailed in a matrix that shows the learning opportunities against different clinical specialties. These core education requirements can be expanded, for example, during incidents and outbreaks of infection, and staff training and education requirements can be re-assessed. The infection prevention and control team can provide any additional training needs.

Senior charge nurses were fully aware of the mandatory and continuing infection prevention and control education requirements for themselves and their staff. On the wards, the senior charge nurses had completed the training matrix to record the training staff had completed or were yet to complete. All staff we spoke with demonstrated a clear understanding of their roles and responsibilities in the prevention and control of infection.

We saw that some prevention and control of infection face-to-face training is provided. The majority of training is provided through a computer-based educational software system. During the inspection, we noted that the uptake and completion of staff training was very good.

The Scottish Government requires that all senior charge nurses and senior charge midwives undertake NHS Education for Scotland’s cleanliness champion training (Health Department Letter (HDL) (2005)7). All senior charge nurses at the Royal Hospital for Children were in the process of, or had completed, the cleanliness champions training.

Standard 3: Communication between organisations and with the patient or their representative

During the inspection, the public partner found a variety of HAI patient information leaflets displayed in wards and at the entrance to wards. The leaflets were mainly for older children and adults. The public partner found appropriate hand hygiene posters displayed at sinks and alcohol-based hand gel dispensers.

Patients, relatives and carers told the public partner that staff spoke with them about HAI. Patients being cared for in isolation said staff were good at communicating why they were in isolation and what precautions to take. Patients and relatives felt able to speak with staff to ask questions.

All wards had a quality assurance board that displayed information, including infection prevention and control-related audit results and the number of days since the last HAI. However, the public partner noted that some quality assurance boards did not show the date of the audits.

During the inspection, the public partner saw ‘you said we did’ boards at the entrance to all wards. These displayed comments from families and staff responses. Wards use a patient feedback form and families can also use an electronic patient feedback form on the NHS Greater Glasgow and Clyde website. The NHS board is currently developing a paediatric specific patient feedback process that would use social media and a new app.
The public partner spoke with public involvement representatives about communication with patients and public involvement, for example how families and volunteers are involved with the NHS board, infection control committee and ward audits. These representatives confirmed that NHS Greater Glasgow and Clyde meets with their volunteers every year and volunteers have access to training.

**Standard 6: Infection prevention and control policies, procedures and guidance**

Ward staff told us they had a good working relationship with the infection prevention and control team. They also told us that the infection prevention and control team was responsive and supportive. Ward staff said they could also get advice and support during out-of-hours from the on-call microbiologist.

The current version of the Health Protection Scotland *National Infection Prevention and Control Manual* is available to staff on the NHS board’s intranet site. All staff spoken with knew how to access the manual.

The manual describes standard infection control precautions. These are 10 key precautions staff should take when caring for patients to minimise the spread of infection. They include hand hygiene, the use of personal protective equipment (aprons and gloves), and the management of linen, waste and sharps. The manual also describes transmission-based precautions, such as respiratory precautions and contact precautions. These are precautions staff should take to help prevent cross-transmission of infections.

We were told that staff get policy update emails from the senior charge nurse and during the daily safety briefs. A safety brief is used as a communication tool which focuses on patient safety issues.

NHS boards are required to measure staff compliance with standard infection control precautions. The frequency of this compliance monitoring is determined by individual NHS boards.

During the inspection, we observed staff adhering to standard infection control precautions while carrying out their duties.

We saw medical, nursing and domestic staff decontaminating their hands in-line with the World Health Organization’s 5 moments for hand hygiene. This states that alcohol-based hand rub or soap and water must be used to decontaminate hands at the following moments:

- before touching a patient
- before clean/aseptic procedures
- after body fluid exposure risk
- after touching a patient, and
- after touching a patient’s surroundings.

Of the 45 patients, relatives and carers who completed our questionnaires, 37 patients, relatives and carers said staff ‘always wash their hands’.
We also observed the following staff practices:

- correct use of personal protective equipment, such as aprons and gloves
- appropriate storage and disposal of clinical waste, and
- appropriate actions with the safe management of linen and the disposal of sharps.

We spoke with staff to assess their knowledge of the standard infection control precautions. The majority of staff had good knowledge of:

- the management of blood and body fluid spillages, including the correct concentration of chlorine-releasing disinfectant and detergent
- the actions to be taken in the event of a needle stick injury
- hand hygiene and use of personal protective equipment
- waste and linen management
- patient placement, and
- patient isolation procedures.

Ward staff told us that they felt supported to challenge colleagues who do not adhere to guidance set out in the National Infection Prevention and Control Manual.

During the inspection, staff described the correct practices when caring for patients in isolation. We were told how staff use an electronic system to inform domestic services that isolation room cleaning is required. Staff also described how they could contact the facilities helpline to arrange a terminal clean.

During the inspection, we saw evidence of ward audit activity. The senior charge nurse carries out audits of the 10 standard infection control precautions every 6 months. Ward staff also do more frequent audits such as monthly hand hygiene audits. Patients and relatives can see audit results on display boards. Ward and departmental staff are informed of audit results at ward safety briefs.

We noted that the infection prevention and control team had not audited the accident and emergency department since the hospital opened in July 2015. The infection prevention and control team has a rolling programme of ward audits. These audits include staff compliance with standard infection control precautions and management of the environment. The lead nurse for infection prevention and control told us that each hospital area would be audited at least once a year. Following our inspection, NHS Greater Glasgow and Clyde told us that a settling in period had been allowed before starting infection prevention and control audits.

We were told that senior charge nurses and lead nurses regularly discuss audit results and action plans during their one to one meetings. Lead nurses also carry out unannounced walkrounds to observe practice and provide support to staff.

We also saw evidence of the new peer audits for the care assurance system. This system aims to develop person-centred care and uses peer assessment processes to make sure care standards are met. We look forward to seeing the progress of this quality improvement work at future inspections.
We saw good compliance by staff with the national uniform and dress code policy, in line with the Chief Executive Letter (CEL) 42 (2010) National Uniform Policy, Dress Code and Laundering Policy.

**Standard 7: Insertion and maintenance of invasive devices**

Peripheral vascular catheter and central vascular catheter care bundles are records staff use to document the safe management of invasive devices. These bundles include daily checks that prompt staff to assess that inserted devices are free from signs of inflammation and are still needed. This process helps to reduce the risk of device-related bloodstream infections.

The chief nurse for the Royal Hospital for Children and the nurse educator told us about the ongoing improvement work for peripheral and central vascular catheters. This includes a new, combined insertion and maintenance bundle which has been tested and will be in all areas by early November 2016. The improvement work aims to minimise the risk of preventable harm from invasive devices to patients.

We were told the improvement work also included providing staff with training on aseptic non-touch techniques. Forty paediatric and neonatal staff across NHS Greater Glasgow and Clyde have been trained as aseptic non-touch technique assessors. These assessors will train other staff members through an ongoing education programme.

The aseptic non-touch technique improvement work is a result of a 'What we can do to improve our SABs' (*Staphylococcus aureus* bacteraemias) discussion in the neonatal quality improvement group which was set up 7 months ago.

We look forward to seeing the outcome of this improvement work at future inspections.

**Standard 8: Decontamination**

Of the 45 patients, relatives and carers who completed our questionnaire, 43 described their ward as clean. We received the following comments from patients:

- ‘I have had no problems with the cleanliness of the ward.’
- ‘The ward feels clean; I’ve seen several bed bays cleaned.’

Of the 45 patients, relatives and carers who responded to our questionnaire, 43 described their patient equipment as clean. We also saw that all toys in wards and departments were clean and ready for use.

We were told that nursing staff are responsible for cleaning occupied patients’ bed spaces. This includes patient bedside lockers, tables and bed rails. When a patient is discharged, domestic staff are responsible for:

- checking that the mattress is clean and intact, and
- cleaning the whole bed, including the mattress and bed frame.

The majority of mattresses we looked at were clean and intact. However, on wards 2C and 1E, we found contamination on seven out of eight patient bed and cot frames. In other areas inspected, the majority of patient bed frames were clean.
All of the wards inspected had systems to monitor and identify the cleaning of patient equipment with the exception of the accident and emergency department. We saw completed weekly cleaning checklists for the cleaning of patient equipment. We were told that the assurance system involves the nurse in charge signing off that the cleaning has been done. We also saw completed, signed-off cleaning schedules for playroom equipment.

NHS Greater Glasgow and Clyde uses a ‘dynamic risk assessment’ approach to domestic cleaning in patient areas in the hospital. This approach identifies the type of cleaning and frequency required for each area.

**Areas for improvement**

During the inspection, we saw some areas that had been cleaned but had debris on the flooring. We also saw some cleaned, empty patient rooms which had dust on high level surfaces.

In the accident and emergency department, we saw dust on high surfaces such as:

- pendant lamp arms
- ledges
- cupboard tops, and
- curtain rails.

We discussed the standard of environmental cleaning with the accident and emergency department’s senior charge nurse, the domestic supervisor and the deputy facilities manager. There was no domestic cleaning or domestic cleaning supervision records for the accident and emergency department. The deputy facilities manager explained that there had been no recording of this information since the hospital opened. We were told that all domestic cleaning records in the hospital were electronic. However, this electronic system had not been put in place in the accident and emergency department. The NHS board said this was an oversight which would be dealt with immediately.

Health Facilities Scotland’s *NHSScotland National Cleaning Services Specification* (2009) provides codes that determine the minimum cleaning and monitoring frequency of different hospital areas. We saw that the accident and emergency department was being cleaned according to incorrect cleaning code. This resulted in the department not being cleaned or monitored as frequently as it should have been. The senior charge nurse had not been informed of any domestic monitoring results, including when an area had failed the audit.

**Requirement 1:** NHS Greater Glasgow and Clyde must provide a safe and clean environment in the accident and emergency department and ensure:

a) high levels are clean, minimising the risk of cross-infection
b) the department is cleaned and monitored in line with Health Facilities Scotland’s *NHSScotland National Cleaning Services Specification* and facilities management tool (2009), and
c) senior charge nurses are informed of the domestic monitoring results.
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Following the inspection, the HEI team has had positive engagement with members of the Royal Hospital for Children’s senior management team. The team has already set out an action plan to resolve the issues we found during the inspection to include the following:

- the cleaning code for the accident and emergency department has been reviewed and changed and, as a result, the frequency of cleaning and monitoring of this area has increased
- domestic staff, domestic supervisors and duty managers have had further training on cleaning standards and monitoring
- a system for signing off the completion of cleaning work in the accident and emergency department has been implemented, and
- improved communication between facilities management and nursing staff through attendance at meetings.

During the inspection, we discussed with the NHS board how staff transport used mop heads from patients’ rooms, including isolation rooms, to the laundry. Current practice is to place the used mop head in a net bag and then into an open cage. As there is no further containment of the mop heads, we discussed with the NHS board the potential risk of the spread of infection.

■ Requirement 2: NHS Greater Glasgow and Clyde must ensure that all used mop heads are appropriately bagged to minimise the risk of cross-contamination.

Since the inspection, NHS Greater Glasgow and Clyde has procured heavy duty water soluble bags to transport used mop heads to the laundry to minimise the risk of cross-contamination. We were told that this is an interim measure while a new procedure is developed which will involve the use of disposable mop heads.
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 is 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 made within the stated timescales.

■ **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, unless an extension has been agreed in writing with the lead inspector.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Indicative timescale</th>
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<tbody>
<tr>
<td>1</td>
<td>Within 1 week of report publication date</td>
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<tr>
<td>2</td>
<td>Within 1 month of report publication date</td>
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<td>3</td>
<td>Within 3 months of report publication date</td>
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<td>4</td>
<td>Within 6 months of report publication date</td>
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**Standard 8: Decontamination**

<table>
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<tr>
<th>Requirements</th>
<th>HAI standard criterion</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1 NHS Greater Glasgow and Clyde must provide a safe and clean environment in the accident and emergency department and ensure:</td>
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<td>8</td>
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<tr>
<td>a) high levels are clean, minimising the risk of cross-infection</td>
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<tr>
<td>b) the department is cleaned and monitored in-line with *Scotland Health Facilities Scotland’s National Cleaning Services Specification and facilities management tool (2009) *</td>
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<td>c) senior charge nurses are informed of the domestic monitoring results (see page 11).</td>
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## Standard 8: Decontamination continued

<table>
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<tr>
<th>Requirements</th>
<th>HAI standard criterion</th>
<th>Priority</th>
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<tr>
<td>2 NHS Greater Glasgow and Clyde must ensure that all used mop heads are</td>
<td>6</td>
<td>1</td>
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<td>appropriately bagged to minimise the risk of cross-contamination (see page</td>
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<td>12).</td>
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### Recommendations

None
Appendix 2 – 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 inspection 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 carry out further inspection of hospitals or services if we identify significant concerns.

**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.

More information about the Healthcare Environment Inspectorate, our inspections, methodology and inspection tools can be found at [www.healthcareimprovementscotland.org/HEI.aspx](http://www.healthcareimprovementscotland.org/HEI.aspx)
## Appendix 3 – Glossary of abbreviations

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<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>CEL</td>
<td>Chief Executive Letter</td>
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<tr>
<td>HAI</td>
<td>healthcare associated infection</td>
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<tr>
<td>HDL</td>
<td>Health Department Letter</td>
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<tr>
<td>HEI</td>
<td>Healthcare Environment Inspectorate</td>
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<tr>
<td>SAB</td>
<td><em>Staphylococcus aureus</em> bacteraemias</td>
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Healthcare Improvement Scotland is committed to equality. We have assessed the inspection function for likely impact on the equality protected characteristics in line with the Equality Act 2010.

Please contact the Healthcare Improvement Scotland Equality and Diversity Advisor on 0141 225 6999 or email contactpublicinvolvement.his@nhs.net to request a copy of:

- the equality impact assessment report, or
- this inspection report in other languages or formats.

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