Unannounced Inspection Report

Aberdeen Royal Infirmary | NHS Grampian
27–28 January 2015
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First published March 2015

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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**
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Edinburgh
EH12 9EB

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**Email:** hcis.chiefinspector@nhs.net
2 Summary of inspection

Aberdeen Royal Infirmary serves the Grampian region. It has approximately 900 staffed beds and a complete range of medical and clinical specialties.

We previously inspected Aberdeen Royal Infirmary in June 2013. That inspection resulted in three requirements and four 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 Aberdeen Royal Infirmary on Tuesday 27 January and Wednesday 28 January 2015.

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

- accident and emergency
- intensive care unit (ICU)
- ward 101 (acute medical initial assessment)
- ward 102 (geriatric assessment unit)
- ward 105 (general medicine/diabetes/endocrinology)
- ward 111 (infection unit)
- ward 114 (oncology)
- ward 209 (urology)
- ward 212 (orthopaedics)
- ward 213 (orthopaedics), and
- ward 308 (gynaecology).

On some of these wards, we only focused on the management of peripheral vascular catheters (PVCs). On other wards, we looked at standard infection control precautions. These are key precautions staff should take to minimise the spread of infection.

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 Aberdeen Royal Infirmary can be found in Appendix 4.

During our inspection, we carried out patient interviews and used patient questionnaires. We spoke with 17 patients and visitors during the inspection. We received completed questionnaires from 26 patients.
Overall, we found evidence that NHS Grampian is working towards complying with the NHS QIS HAI standards to protect patients, staff and visitors from the risk of acquiring an infection. In particular:

- the standard of cleanliness in the wards and departments inspected was good, and
- the standard of cleanliness of patient equipment was good.

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

- The NHS board must comply with standard infection control precautions, in particular hand hygiene.
- The NHS board should demonstrate an effective process to manage continued non-compliances identified through PVC and hand hygiene audits.

**What action we expect NHS boards to take after our inspection**

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

NHS Grampian must address the requirements and the necessary improvements made, 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](http://www.healthcareimprovementscotland.org/HEI.aspx).

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

3.1 Governance and compliance

Roles and responsibilities
Senior charge nurses have overall responsibility for making sure infection prevention and control standards are maintained on their ward. This includes ensuring adequate standards of cleaning on the ward and the cleanliness of patient equipment. They also have key responsibilities for:

- carrying out HAI-related audits
- monitoring and promoting staff, patient and visitor hand hygiene practice
- the management of peripheral vascular catheters (PVCs), and
- the appropriate placement of patients with a known or suspected infection.

Senior charge nurses and staff on the wards inspected demonstrated a clear understanding of their roles and responsibilities for the prevention and control of infection and the role they play in achieving and promoting this.

Audit and surveillance
Audit and surveillance information was displayed across the wards and departments we inspected. This included hand hygiene, cleanliness and PVC audit results, and ‘days since’ infections such as *Clostridium difficile* infection (CDI) and *Staphylococcus aureus* bacteraemias (SABs). We were told that a root cause analysis is carried out for all SABs to find out how and where the infection occurred, and to identify any lessons learned to help future practice.

Following the inspection of the Aberdeen Maternity Hospital in March 2014, we were told that a new system of environmental and standard infection control precautions audits was being introduced across the NHS board. These announced audits will be carried out every 6 months. Every alternate audit will include input from the infection prevention and control team. This provides ongoing support to senior charge nurses and nurse managers in auditing their area and will help to provide governance of the environmental audit process. During this inspection, we found evidence of this new audit process being implemented across Aberdeen Royal Infirmary. We also saw an audit plan detailing when all remaining wards and departments will receive training in the new audit process. We were told that nursing staff will take part in an audit as an objective in their personal development plan.

We saw evidence of action plans produced by the senior charge nurse as a result of these audits, in conjunction with the infection prevention and control team. The infection prevention and control team will be responsible for providing support and following up on these plans to make sure any issues are resolved and standards improved as a result of the actions taken.

In addition to this new audit process, further audits of the cleanliness of patient equipment take place once a month on each ward. These audits look at whether patient equipment was cleaned at the appropriate time, for example immediately following use and whether the correct procedure was followed. Hand hygiene audits also take place every month. We were told that action plans would be required if a ward scored less than 90% in either of these audits.
When non-compliances are identified through audit, staff re-audit on a weekly basis until standards are improved.

We were told about a new facilities and estates independent inspection process that had been recently introduced. This is carried out by the independent audit team under the quality and performance function of the facilities and estates sector. It looks at the cleanliness of the environment and equipment, and the suitability of the fabric of the building. Inspections are carried out on an unannounced basis to provide an additional level of quality assurance. Any issues identified are reported to the nurse in charge, domestic services team or the estates team as required.

We were also told that the system of ‘back-to-the-floor’ walkround audits was currently being reviewed and a new system was being developed.

**Policies and procedures**

With the exception of some medical staff on wards 105 and 111, we saw staff were adhering to the NHSScotland dress code, in line with Chief Executive Letter (CEL) 42(2010). We discussed any non-compliances with dress code with the nurses in charge of these two wards at the time of the inspection.

Standard infection control precautions are 10 key precautions staff should take to minimise the spread of infection. They include hand hygiene, the use of personal protective equipment (aprons, gloves), and the management of linen, waste and sharps. We found generally good compliance with most of the standard infection control precautions across the majority of the wards inspected. Any non-compliances we identified were raised with the nurse in charge of the ward at the time of the inspection.

The World Health Organization’s (WHO) ‘Your 5 moments for hand hygiene’ identifies five opportunities which all staff must take for carrying out hand hygiene. These are:

- before touching a patient
- before doing a clean or aseptic procedure
- after body fluid exposure
- after touching a patient, and
- after touching patient surroundings.

During this inspection, we saw many examples of staff not taking the opportunity to carry out hand hygiene on wards 102, 111 and 308. For example, staff were moving between patients without decontaminating their hands. In particular, we saw very poor hand hygiene compliance across all staff groups on ward 111 (infection unit).

In ward 105, we saw that alcohol-based hand rub was not available at the point of care and that staff were not issued with personal bottles of alcohol-based hand rub. Across some of the wards and departments inspected, we also found that not all alcohol hand gel dispensers were well sited or had clear signage.

In the accident and emergency department, we saw examples of hand hygiene audits that had been carried out. In December 2014, we saw that the hand hygiene compliance score was 65%. Compliance scores had been consistently low over the previous 6 months. We spoke with two senior charge nurses in the department who confirmed that hand hygiene compliance had been low for some time. We were told that a ‘problem assessment group’
had been set up. This multidisciplinary team was tasked with identifying the underlying causes for poor compliance, such as leadership or education. We saw an improvement action plan following a meeting of this group in December 2014. All actions were to be completed by January 2015. At the time of our inspection, not all actions had been completed in line with the action plan.

**Requirement 1:** NHS Grampian must ensure that all staff adhere to standard infection control precautions, in particular hand hygiene. This will reduce the risk to patients, staff and visitors.

Of the 26 people who responded to our survey during our inspection:

- 73% stated that ward staff always wash their hands, and
- 69% stated that they were always offered the opportunity to clean their hands.

Patients we spoke with said there was a high standard of hand hygiene by nursing and clinical staff when interacting with patients. One patient said: “The first thing they do is clean their hands”. However, some patients told us that they were not proactively encouraged or prompted by staff to carry out hand hygiene, particularly before meals or when using the toilet.

**Recommendation a:** NHS Grampian should offer the opportunity for hand hygiene to patients at mealtimes or when using the toilet.

Guidance was displayed on the wards describing the use of chlorine-releasing detergents and disinfectant to be used for general environmental cleaning and for safely cleaning blood and body fluid spillages. We spoke with a number of staff about the management of blood and body fluid spillages. The majority of staff could describe the correct process they would follow and the equipment they would use.

**Risk assessment and patient management**

Across the wards and departments inspected, staff were able to explain the correct assessment and isolation procedures for managing patients with a suspected or known infection or patients at risk of an infection. We found that patients with suspected or known infections were isolated appropriately. There was clear signage on isolation room doors instructing staff and visitors to speak to the nurse in charge before entering the room. We were told that risk assessments are completed and kept in a patient’s health record if there is a need to keep an isolation room door open, for example if a patient was at risk of falls.

An infection control risk assessment tool is also used when patients with a possible infection are admitted to hospital. This ensures that they, and other patients, are not put at increased risk. Depending on the risk score reached, the infection prevention and control team is informed about the patient. We saw evidence that this process was used to help decision-making about the placement of patients with a known or suspected infection and the isolation precautions needed.

We spoke to a patient and their relative who were satisfied with the isolation precautions being taken by staff entering their room. The patient’s relative told us they had been given verbal information about the patient’s infection and specific guidance on what they could do to help care for the patient. They also told us that their room was cleaned twice a day and cleaning was very thorough.
NHS Grampian uses PVC care bundles. This process helps to reduce the risk of device-related bloodstream infections. The care bundle includes a record to document the safe management of the inserted device. Daily monitoring checks should be documented over a 3-day period, before removal or review of the device. These checks prompt staff to make sure the device still needs to be in place and the skin around the device has no signs of inflammation. The date of the device’s insertion should also be recorded.

We reviewed 42 PVCs across the wards and departments inspected. This involved a physical check of patients’ PVCs and dressings where appropriate, as well as reviewing the accompanying insertion and maintenance care bundle documentation.

Across all wards and departments inspected, all devices we saw were dated at the site of the insertion. In particular, we found that the management of PVCs was very good in the ICU and ward 114. However, we found in the other wards and departments inspected that:

- 15 out of 42 devices did not have a clear record of when the device was inserted, and
- 10 out of 42 devices did not have the maintenance care bundle documentation completed.

In particular, of the devices we inspected on wards 212 and 213 we found:

- the devices did not match the information in the patient’s health record
- no record of insertion, or
- no record of daily maintenance checks being carried out.

We also looked at the results of PVC care bundle compliance audits that had been completed in each ward or department. On wards 111, 212 and 213, we found that PVC care bundle audit results varied between 60–100% over the previous months. In the accident and emergency department, we saw that the PVC audit result was as low as 40% compliant in December 2014. When we reviewed the department’s previous PVC audit results, we saw continued poor compliance over the last 6 months. Staff told us that compliance with completing PVC insertion bundles was affected when the department was very busy. The senior charge nurse told us what actions were being taken to improve compliance. This included education of new medical staff rotating into the department and the recruitment of a dedicated practice education facilitator for the department. No evidence was available to demonstrate the actions being taken to address continued non-compliance with the PVC care bundle.

We saw results from the last four PVC care bundle compliance audits on wards 212 and 213. These showed generally good compliance with the management of PVCs, with 100% compliance in December 2014. However, from the devices we inspected on these two wards we found poor compliance with the bundle.

**Requirement 2:** NHS Grampian must ensure that where a peripheral vascular catheter (PVC) is in place, staff adhere to local policy and complete the accompanying care bundle documentation. This will ensure that PVCs are being managed in a way which reduces the risk of infection to patients.
We spoke with a senior manager who told us they were already aware that compliance with the PVC care bundle was poor on these two wards and in the accident and emergency department. They were also aware that hand hygiene compliance was poor in the accident and emergency department. However, the NHS board could not demonstrate to us an effective process to manage continued non-compliances identified through these audits.

**Recommendation b**: NHS Grampian should demonstrate an effective process to manage continued non-compliances identified through PVC and hand hygiene audits.

**Cleaning**

During this unannounced inspection, we found a good standard of environmental cleanliness in the wards and departments inspected. Any cleanliness issues we identified were raised with the nurse in charge of the ward at the time of the inspection.

The majority of patient equipment we inspected was also clean. Any cleanliness issues we identified were raised with the nurse in charge of the ward at the time of the inspection.

All patients spoken with were satisfied with the level and frequency of cleaning in the bays, rooms, toilets and showers. Although no patients expressed any concerns about cleanliness, most patients we spoke with said they had not seen high level cleaning being carried out, such as curtain rails. Of the 26 people who responded to our survey during our inspection:

- 72% stated that they thought the wards were always clean, and
- 73% stated that the equipment used for care was always clean and in good repair.

Some patients we spoke with or who responded to our survey said:

- ‘My room is beautifully kept, the efficient cleaners are in two or three times a day.’
- ‘Couldn’t fault the cleanliness on the ward, they are very industrious.’
- ‘I have been in hospital before and have never known such helpful staff. I am a very fussy person but have never seen such a clean ward. They should get a medal.’

**3.2 Communication and public involvement**

**Communication with the public**

Throughout the hospital, a range of infection control and hand hygiene posters and signs were available for staff, patients and visitors.

However, we found an inconsistent approach to the availability of patient information and leaflets for HAI and infection control, such as hand hygiene and home laundering of patient clothing on the wards. We saw that the ‘Healthpoint’ information booth in the main hospital reception does not hold HAI-specific information.
Of the 26 people who responded to our survey during our inspection, 38% stated that they had received information about preventing infections. However, none of the patients we spoke with said that they had received written HAI-specific information either before admission or once in hospital.

- **Requirement 3:** NHS Grampian must ensure that HAI information is effectively disseminated to patients, relatives and carers. This will ensure that all patients and relatives are fully informed about the prevention and control of infection.

**Public involvement**

We spoke with a public partner representative who was an active member of the NHS board’s infection control committee, and a number of other HAI-related groups and committees. At these meetings, public partner representatives can ask questions or suggest new ideas about improving public involvement. They told us that public partner representatives also participate in hand hygiene and cleaning audits.
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>
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<tr>
<td>2</td>
<td>Within 1 month of report publication date</td>
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<tr>
<td>3</td>
<td>Within 3 months of report publication date</td>
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<tr>
<td>4</td>
<td>Within 6 months of report publication date</td>
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<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 Grampian must:</th>
<th>HAI standard criterion</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1</td>
<td>1a.2</td>
<td>1</td>
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<tr>
<td>2</td>
<td>3b.2</td>
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1. ensure that all staff adhere to standard infection control precautions, in particular hand hygiene. This will reduce the risk to patients, staff and visitors (see page 10).

2. ensure that where a peripheral vascular catheter (PVC) is in place, staff adhere to local policy and complete the accompanying care bundle documentation. This will ensure that PVCs are being managed in a way which reduces the risk of infection to patients (see page 11).

This was previously identified as a requirement in the June 2013 and August 2012 inspection reports for Aberdeen Royal Infirmary.
### Recommendations

**NHS Grampian should:**

<table>
<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td><strong>a</strong> offer the opportunity for hand hygiene to patients at mealtimes or when using the toilet (see page 10).</td>
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<tr>
<td><strong>b</strong> demonstrate an effective process to manage continued non-compliances identified through PVC and hand hygiene audits (see page 12).</td>
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### Communication and public involvement

<table>
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<tr>
<th>Requirements</th>
<th>HAI standard criterion</th>
<th>Priority</th>
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<tr>
<td><strong>NHS Grampian must:</strong></td>
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<tr>
<td><strong>3</strong> ensure that HAI information is effectively disseminated to patients, relatives and carers. This will ensure that all patients and relatives are fully informed about the prevention and control of infection (see page 13).</td>
<td>2a.2</td>
<td>3</td>
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**Recommendations**

None
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, and
- 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, and
- 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.
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

- 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 Aberdeen Royal Infirmary, NHS Grampian was conducted on Tuesday 27 January and Wednesday 28 January 2015.

The inspection team was made up of the following members:

**Allison Wilson**
Inspector (Lead)

**Jacqueline Jowett**
Inspector

**Anna Martin**
Inspector

**Fraser Tweedie**
Public Partner

Supported by:

**Jan Nicolson**
Project Officer
Appendix 5 – Glossary of abbreviations

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<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>CDI</td>
<td><em>Clostridium difficile</em> infection</td>
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<td>CEL</td>
<td>Chief Executive Letter</td>
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<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>ICU</td>
<td>intensive care unit</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>SABs</td>
<td><em>Staphylococcus aureus</em> bacteraemias</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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