High Impact Intervention No 8
Care bundle to improve the cleaning and decontamination of clinical equipment

Aims
● To improve the cleanliness and decontamination of near-patient equipment.
● To help reduce the risk of healthcare-associated infection (HCAI) cross-contamination.
● To embed the importance of cleaning into the everyday work routine of the ward.
● To improve patient confidence.

Context
The Health and Social Care Act 2008 Code of Practice\(^1\) states that organisations must audit key policies and procedures for the prevention and control of infection and ensure that patients are cared for in a clean environment. All NHS trusts that provide patients with care are now legally required to register with the Care Quality Commission. As a legal requirement of their registration, they must operate in a way that protects patients from the risk of acquiring an HCAI.

The Code of Practice also reflects the provisions of the Chief Nursing Officer’s letter of November 2007\(^2\) that the nurse in charge of any patient area has direct responsibility for ensuring that cleanliness standards are maintained throughout that shift.

Cleaning and decontamination are important in their own right, for public confidence as well as for supporting infection prevention and control.

\(^3\)Hospital cleanliness and low rates of infection are selected most often (by 74% of patients) as an important factor when choosing a hospital.\(^3\)

Significant progress has been made in improving cleanliness across NHS organisations; standards must be maintained and improvements sustained.

This High Impact Intervention (HII) will help trusts to achieve compliance under criterion 2 of the Code of Practice by providing a focus for activity and a method for measuring the implementation of policies and procedures for reducing reservoirs of infection. As such, it complements the auditing framework set out in the 2007 national specifications for cleanliness\(^4\) and provides nurses with an easy-to-use protocol for assessing cleanliness, as outlined in standard 3 of the Royal College of Nursing’s Infection prevention and control: Minimum standards.\(^5\)
In addition, it complements HII 7 to ensure that the process of cleaning and decontamination within the patient environment is thorough and follows best practice for all equipment, not just equipment used for patients with *Clostridium difficile* infection.

**Why use the care bundle?**

This care bundle provides a means for trusts to assure compliance with the Health and Social Care Act 2008 Code of Practice and the 2007 national specifications for cleanliness and, importantly, to ensure patient and public confidence that the cleanliness standards in healthcare organisations continue to rise.

The care bundle acts as a way of improving and measuring the implementation of national and local policy to ensure that patient equipment is clean prior to use.

**Elements of the care process**

- Two separate sets of elements are detailed. The correct set needs to be used depending on the HCAI status of the patient.
- Equipment which cannot be cleaned must be risk assessed on a need-to-use basis, or alternatively designated for single patient use. Local decontamination guidance from the trust's infection prevention and control and medical engineering departments should be sought.
- Single-use items must not be re-used.
- All staff should be aware of their roles and responsibilities with regard to cleaning and decontamination.
- Ward staff undertaking the cleaning of equipment must be trained in the correct cleaning and decontamination procedures as determined by the trust.
- Similarly, all staff undertaking cleaning duties should have access to the appropriate cleaning materials and products at all times.
- A clutter-free environment and the adoption of local ‘clean as you’ policies will provide the foundation for delivering high-quality care in a clean, safe place.
- When new items of equipment are considered for purchase, the manufacturer’s advice on cleaning must be sought and training, if necessary, must precede use. Careful consideration should be given to the consequences of the purchase of any item of equipment that is not capable of being disinfected by chlorine or other sporicidal agents.
- Clear identification of cleaned items and a visibly clean environment will provide reassurance to patients that they are receiving safe care in a clean environment.
- Trusts must ensure that appropriate designated areas and cleaning products are available for the cleaning of equipment and storage to take place.
### Cleaning equipment after use by or on a patient with a suspected or confirmed HCAI or in a contaminated area

#### Location of cleaning activity
- Patient equipment located in isolation areas must be cleaned prior to its removal from that area.

#### Correct hand hygiene
- Wash hands with soap and water before and after cleaning equipment.

#### Personal protective equipment
- Correct personal protective equipment (PPE) (gloves and apron as necessary) is worn.
- PPE is disposed of correctly (in line with local policy) after use.

#### Cleaning and decontamination
- Cleaning and decontamination is carried out immediately following use of the equipment by the patient or staff member.
- Equipment is cleaned with a neutral detergent followed by a 1,000 ppm chlorine-containing disinfectant solution or other sporicidal product, using a disposable cloth (products containing both detergent and chlorine can also be used). Follow local policy.
- Systematic cleaning of items (top down) is carried out in line with local policy if available; if the local policy is not available, follow manufacturers’ guidance.

#### Storage
- Cleaned and decontaminated equipment is stored separately from used items and away from areas where cleaning is taking place, to reduce risk of recontamination.

#### Documentation
- Cleaning is documented by the person who cleaned the item and the item is labelled as clean.

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### Cleaning equipment after use on a non-infected patient and in a non-contaminated area

#### Location of cleaning activity
- Equipment is cleaned in a designated area or away from clean items.

#### Correct hand hygiene
- Wash hands with soap and water before and after cleaning equipment.

#### Personal protective equipment
- Correct PPE (gloves and apron) is worn.
- PPE is disposed of correctly (in a black waste bag) after use.

#### Cleaning
- Cleaning is performed immediately following patient use.
- A neutral detergent-based product is used for general cleaning.
- Systematic cleaning of items (top down) is carried out in line with local policy if available; if the local policy is not available, follow the manufacturers’ guidance.

#### Storage
- Cleaned equipment is stored separately from used items and away from areas where cleaning is taking place to reduce risk of recontamination.

#### Documentation
- Cleaning is documented by the person who cleaned the item and the item is labelled as clean.
Using the bundle to ensure that all elements of care are performed

Checking compliance with the elements in the care process will show which elements were or were not performed. The tool below will help you to:

- identify when all elements have been performed;
- see where individual elements of care have not been performed; and
- focus your improvement effort on those elements that are not being consistently performed.

Using the compliance tool

1. Each time a care element is performed, insert a tick in the relevant column. If the action is not performed, leave it blank.

2. Do this for each action, ensuring that you tick it only when an element of care is performed correctly.

3. Calculate the totals and compliance levels.

4. Your goal is to perform every element of care every time it is needed. The ‘All elements performed’ column should be ticked when every care element is given correctly. This should total to 100% compliance when all care elements have been performed correctly on every occasion.

5. Where elements have not been performed, overall compliance will be less than 100%. This provides immediate feedback for users of the tool on those elements missed, and actions can then be taken to improve compliance levels.

6. The percentage compliance figures for individual care elements show you where you need to focus effort to improve overall compliance.

7. The number of times when all elements are performed should be the same as the number of observations you perform. For example, if you monitor the care process 10 times, then there should be 10 occasions when all elements were performed.

When the calculation is completed, you can use a graphing application such as Excel to produce manual compliance graphs and run charts for each element of care and for overall compliance with each HII.* This will show you visually where to focus your improvement efforts to achieve full compliance.

* Only a manual paper based tool is available.
Example

<table>
<thead>
<tr>
<th>Observation</th>
<th>Care element 1</th>
<th>Care element 2</th>
<th>Care element 3</th>
<th>Care element 4</th>
<th>Care element 5</th>
<th>Care element 6</th>
<th>All elements performed</th>
</tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Total number of times an individual element was performed: 5 4 4 4 4 4 2
Compliance (%): 100% 80% 80% 80% 80% 100% 40%

This example shows that, while most care elements were performed, there were only two occasions when all elements were performed correctly. Overall compliance with all elements was only 40% and, as a result, the risk of infection was significantly increased.

Best practice guides

NPSA National Colour Coding Scheme. www.nrls.npsa.nhs.uk/resources/?entryid45=59810


Department of Health HTM 07 01 Safe Management of Healthcare Waste

Recommended resources
Many guidelines and papers are available from the National Resource for Infection Control at: www.nric.org.uk.

The NHS infection control e-learning package is available at: www.infectioncontrol.nhs.uk.

Expert cleaning advice can be sought from the Association of Healthcare Cleaning Professionals (see www.ahcp.co.uk).

NPSA guidance and tools are downloadable from: www.npsa.nhs.uk/nrls/improvingpatientsafety/cleaning-and-nutrition/.
References


Bibliography


