Healthcare-associated infections: prevention and control

Public health guideline
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Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.
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This guideline is the basis of QS4, QS61, QS113 and QS49.

Overview

This quality improvement guide was produced by NICE, in partnership with Public Health England (PHE). Its aim is twofold: to reduce the risk of harm from healthcare-associated infections for patients, staff and visitors; and to reduce the costs associated with preventable infection.

The guide aims to improve the quality of care and practice over and above current standards as set out in the Department of Health's Health and Social Care Act 2008: Code of practice on the prevention and control of infections.

Who is it for?

- Board members working in (or with) hospitals
- Senior managers and others working elsewhere in the NHS
- Local authorities and the wider public, private, voluntary and community sectors
Introduction

Following a referral from the Department of Health, NICE, in partnership with Public Health England (PHE), have developed this quality improvement guide. The guide offers advice on management or organisational actions to prevent and control healthcare-associated infections (HCAIs) in secondary care settings.

The guide is aimed at board members working in (or with) secondary care. It may also be of use to senior managers, those working elsewhere in the NHS, as well as those working in local authorities and the wider public, private, voluntary and community sectors.

In producing this guide, NICE and PHE have assumed that all secondary care settings are compliant with the current code of practice on preventing and controlling infections (Department of Health's Health and Social Care Act 2008: Code of practice on the prevention and control of infections).

The guide aims to help build on advice given in the code and elsewhere to improve the quality of care and practice in these areas over and above current standards. Taken together, the quality improvement statements contained in this guide describe excellence in care and practice to prevent and control HCAIs. Examples of evidence and other data to demonstrate progress against each statement are provided.

NICE and PHE recognise that a range of factors associated with infection prevention and control have the potential to impact on health inequalities (for example, in relation to age, ethnicity, gender and disability). However, the relative impact of different factors will vary for different organisations. NICE and PHE expect trusts and other secondary care organisations to consider local issues in relation to health inequalities when implementing this guide.

What is a healthcare-associated infection?

Healthcare-associated infections (HCAIs) can develop either as a direct result of healthcare interventions such as medical or surgical treatment, or from being in contact with a healthcare setting.

The term HCAI covers a wide range of infections. The most well known include those
caused by meticillin-resistant *Staphylococcus aureus* (MRSA), meticillin-sensitive *Staphylococcus aureus* (MSSA), *Clostridium difficile* (C. difficile) and *Escherichia coli* (E. coli). HCAIs cover any infection contracted:

- as a direct result of treatment in, or contact with, a health or social care setting
- as a result of healthcare delivered in the community
- outside a healthcare setting (for example, in the community) and brought in by patients, staff or visitors and transmitted to others (for example, norovirus).

HCAIs pose a serious risk to patients, staff and visitors. They can incur significant costs for the NHS and cause significant morbidity to those infected. As a result, infection prevention and control is a key priority for the NHS (Department of Health’s board to ward: How to embed a culture of HCAI prevention in acute trusts).

**What action has been taken?**

Following National Audit Office reports highlighting concerns about HCAIs, the Department of Health introduced a range of policies and measures designed to reduce rates of infection. (National Audit Office [2000] The management and control of hospital acquired infection in acute NHS trusts in England; National Audit Office [2004] Improving patient care by reducing the risk of hospital acquired infection: a progress report.)

For example, mandatory surveillance for meticillin-resistant *Staphylococcus aureus* (MRSA) was introduced in 2001. In 2004, a target was introduced to reduce MRSA bloodstream infections by 50% by 2008 in all NHS acute and foundation trusts. With the introduction of the Health Act in 2006, for the first time it became a legal requirement to have systems in place to minimise the risk of HCAIs (Department of Health's Health Act 2006: code of practice for the prevention and control of healthcare associated infections).

**What action is needed now?**

The 2009 National Audit Office report on reducing healthcare associated infections in hospitals in England identified four systemic issues that still needed to be tackled locally and nationally to reduce infection rates. It highlighted the need:

- for a culture of continuous improvement
What is this guide for?

This guide will help secondary care and other healthcare organisations improve the quality of care and practice, reduce the risk of harm from HCAIs to patients, staff and visitors and reduce the costs associated with preventable infection. The 11 quality improvement statements provide clear markers of excellence in infection prevention and control at a management or organisational level. Each statement is supported by examples of the type of evidence that could be used to prove the organisation has achieved excellence, and examples of what this would mean in practice on a day-to-day basis.

The aim is to help boards:

- assess current practice in relation to the prevention of HCAIs
- identify areas for quality improvement
- monitor progress
- provide leadership and support to infection prevention and control teams and other staff working to implement the guide.

The guide may also help inform investment decisions.

It will also give patients and the public information about the quality of care they can expect, and how secondary care organisations can improve patient safety and outcomes by improving quality in key areas.

How should the guide be used?

This guide is not mandatory. Rather, each quality improvement statement describes a level of excellence that could be achieved to prevent and control infections. Key areas of practice that underpin infection prevention and control, such as hand hygiene, antimicrobial stewardship and environmental cleanliness are included as measures and
examples, where appropriate.

Organisations wishing to use the guide for quality assessment and improvement may choose a selection of the most appropriate measures for their setting as potential evidence of achievement. In organisations where, for example, tertiary care services are provided alongside secondary care, senior management should consider the applicability of each statement to their setting.

The examples of measures that could be taken may not be appropriate in all cases – and secondary care organisations may identify and use alternate measures as evidence of achievement, as necessary.

Performance in each statement area will depend upon healthcare professionals and other trust staff who have HCAI prevention and control – and public health, generally – as part of their remit.

Much of the information required to support the measures is already available and a range of other guidance can be used alongside this guide to assess and improve quality in secondary care settings. Overlaps between the statements and certain aspects of the code of practice are highlighted. In addition, where data routinely collated may help trusts monitor progress in an area covered by one of the statements, this is also highlighted.

How was the guide developed?

This guide was developed as a pilot project, based on processes and methods used by NICE to develop other types of guidance. A topic expert group was set up and led by an independent chair. It consisted of practitioners from the NHS, local authorities and the voluntary sector, as well as academics and patient and public representatives. The group worked with NICE and PHE to develop the guide.

The resulting quality improvement statements are based on recommendations from seven source guidance documents. They have been refined as a result of stakeholder consultation and committee discussion.

The following documents provide further information on the referral, scope, and methodology used as the basis for this guide:
• **Advice on the prevention and control of healthcare-associated infections: scope** – this sets out the referral and scope for the work

• **Quality improvement guide – prevention and control of healthcare-associated infections: topic briefing paper** - this summarises the methods and process used to develop this guide and lists the source documents
Quality improvement statement 1: Board-level leadership to prevent HCAIs

Statement

Trust boards demonstrate leadership in infection prevention and control to ensure a culture of continuous quality improvement and to minimise risk to patients.

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect all trust staff – from board to ward level – to take responsibility, and be accountable for, continuous quality improvement in relation to infection prevention and control.

What does it mean for trust boards?

Boards are proactive in ensuring continuous quality improvement by leading on, and regularly monitoring compliance with, all relevant infection prevention and control objectives, policies and procedures.

Evidence of achievement

1. Evidence that the board is up-to-date with, and has a working knowledge and understanding of, infection prevention and control.

2. Evidence that the board has an agreed set of key performance indicators for infection prevention and control which includes compliance with antibiotic prescribing policy.

3. Evidence that the agreed key performance indicators are used by the board to monitor the trust’s infection prevention and control performance.

4. Evidence that the trust's aims and objectives for infection prevention and control are
included in the board's 'Balanced score card'.

5. Evidence that a board member has been assigned to lead on infection prevention and control.

6. Evidence of a board-approved infection prevention and control accountability framework. This includes evidence of specific responsibilities allocated to staff working in, or coming into contact with, clinical areas (reflected in their job descriptions and appraisals).

7. Evidence that a mechanism is in place to report regularly to board meetings on important infection risks and the control measures that have been implemented.

8. Evidence that the board has agreed an annual improvement programme on infection prevention and control which is linked to the business planning cycle and has identified actions and resources.

9. Evidence that the trust promotes a 'self-governance' culture for infection prevention and control. This includes evidence that all staff, from board to ward, are accountable and take ownership and responsibility for continuous quality improvement.

10. Evidence that the board is assured that monitoring mechanisms are in place in each clinical area, and that each area is accountable for compliance with relevant aspects of the code of practice.

11. Evidence of regular communication from the chief executive on the trust’s expectation of patients, visitors and staff in relation to infection prevention and control.

12. Evidence that the director of infection prevention and control is involved in contract negotiations with commissioners on the key performance indicators for infection prevention and control.

13. Evidence that the board demonstrates to patients, the public, staff and itself that it is making continuous progress towards meeting all relevant statements in this guide.

14. Evidence of mechanisms to ensure transparent communication of all relevant surveillance outputs to staff and patients in line with duty of candour requirements.
Practical examples

- Annual improvement plans include comparative data on progress towards relevant quality improvement statement goals, as well as in areas covered by other relevant guidance. (An example is NICE’s guideline on surgical site infections: prevention and treatment.)

- Regular audit of board infection prevention and control accountability framework.

- Infection prevention and control features in the planned board development programme.

- Audit of infection prevention and control objectives within annual work programme.

Health and Social Care Act code of practice

Criterion 1: Guidance for compliance 1.1, 1.5

Criterion 6: Guidance for compliance 6.2

Relevant national indicators

None identified.
Quality improvement statement 2: Be a learning organisation

Statement

Trusts use information from a range of sources to inform and drive continuous quality improvement to minimise risk from infection.

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect the trust to learn from its own and other healthcare providers' experience, and to use this learning to improve the quality of care and practice in infection prevention and control.

What does it mean for trust boards?

Boards ensure mechanisms are in place for the trust to use a range of information, in addition to surveillance data, to minimise risk of infection to patients, staff and visitors. This includes information about both good and bad practice.

Evidence of achievement

1. Evidence that processes have been put in place to learn from experiences outside the organisation in relation to infection prevention and control. This includes evidence that learning is occurring on a continual basis.

2. Evidence of regular, systematic generation and sharing of learning from trust's own experiences of infection prevention and control – including good practice and adverse events. This includes evidence that learning is based on a range of intelligence sources and is used to inform, and feed into, clinical and risk management processes.

3. Evidence that mechanisms are in place to disseminate learning among relevant staff
4. Evidence that the trust promotes a culture of learning in relation to infection prevention and control, and ensures staff have time to participate in preventive learning activities.

5. Evidence that recommendations and actions identified as being needed following an incident, surveillance or learning activities have been implemented.

6. Evidence that the continuous quality improvement cycle is informed by conclusions from robust learning methodologies.

7. Evidence that the trust works with local health partners (including health protection units) to capture and learn lessons from the management of major infection outbreaks and other HCAI-related incidents.

8. Evidence that the trust promotes innovation to minimise harm from infection, for example by promoting research opportunities, practice development initiatives and action learning sets for staff.

**Practical examples**

- Local gap analyses performed on official reports and action plan developed to address identified gaps in local practice.

- Surveys of patient and staff experiences on infection prevention and control are fed into learning activities.

- A range of forums give staff the opportunity to learn from each others' experiences in relation to infection prevention and control.

- Audit of infection prevention activities undertaken across the trust as a result of learning from others.

- Audit of antimicrobial drug usage to check it complies with trust policy. Feedback given to relevant staff.

- Audit of hand-hygiene practices and feedback given to relevant staff.

- Feedback given to individual surgeons on wound infection rates.
• Audit of appropriate isolation facility usage.

Health and Social Care Act code of practice

Criterion 1: Guidance for compliance 1.1, 1.3

Relevant national indicators

Quality improvement indicators include National Library of Quality Indicators:

• patient safety incident reporting (NHSOF)
• patient safety incident reporting (CCGOIS)
• severity of harm of patient safety incidents reported.
Quality improvement statement 3: HCAI surveillance

Statement

Trusts have a surveillance system in place to routinely gather data and to carry out mandatory monitoring of HCAIs and other infections of local relevance to inform the local response to HCAIs.

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect the trust to monitor infection levels across all service areas and use this information to adjust practice, where necessary. For example, they can expect the trust to close beds, or a ward to visitors, in response to an outbreak.

What does it mean for trust boards?

Boards ensure there is a fully resourced and flexible surveillance system to monitor infection levels in the trust. Outputs are shared across the organisation and used to drive continuous quality improvement.

Evidence of achievement

1. Evidence of an adequately resourced surveillance system with specific, locally defined objectives and priorities for preventing and managing HCAIs. The system should be able to detect organisms and infections and promptly register any abnormal trends.

2. Evidence of clearly defined responsibilities for the recording, analysis, interpretation and communication of surveillance outputs.

3. Evidence of arrangements for regular review of the surveillance programme to ensure it
supports the trust's quality improvement targets for infection prevention.

4. Evidence of fit-for-purpose IT systems to support surveillance activity. This includes evidence of validation processes that ensure data accuracy and resources that can analyse and interpret surveillance data in meaningful ways.

5. Evidence of surveillance systems that allow data from multiple sources to be combined in real time (epidemiological, clinical, microbiological, surgical and pharmacy).

6. Evidence that surveillance systems capture surgical-site and post-discharge infections.

7. Evidence that trusts share relevant surveillance outputs and data with other local health and social care organisations to improve their infection prevention and control.

8. Evidence that systems are in place for timely recognition of incidents in different spaces (for example, wards, clinical teams, clinical areas, the whole trust). This includes evidence of regular time-series analyses of data.

9. Evidence that the trust reports all outbreaks, serious untoward incidents (SUIs) and any other significant HCAI-related risk and incident to the local health protection unit.

10. Evidence that surveillance data in key areas is regularly compared with other local and national data and, where appropriate, is available at clinical unit level.

11. Evidence of a process for surveillance outputs to feed into accountability frameworks, inform audit priorities and be used to set objectives for quality improvement programmes in relation to HCAI prevention.

12. Evidence of surveillance outputs being analysed alongside comparative data to ensure continual improvement.

13. Evidence of surveillance outputs being fed back to relevant staff and stakeholders, including patients, in an appropriate format to support preventive action.

14. Evidence that the trust has developed, and regularly reviews, a hospital-wide incident plan to investigate and manage major infection outbreaks and HCAI incidents. This includes evidence that high-level managerial and clinical mechanisms are in place for coordinating, communication (including with other agencies) and deploying adequate
Practical examples

- Surveillance data (for example, on antimicrobial resistance) is routinely communicated to the board and to individual clinical units. This includes comparative data on performance within the trust over time and compared with other local or national data.

- Regular publication of outputs from the surveillance system, for example, on post-surgical infection rates and rates of compliance with recommendations on surgical prophylaxis.

- Analysis of trends from local and national surveillance data informs practice across the trust or setting. For example, it could be used to initiate a review of how prepared the trust is for an infection outbreak.

- Surveillance outputs are used to monitor progress against local quality improvement objectives.

Health and Social Care Act code of practice

Criterion 9: Guidance for compliance 9.3m, 9.3u

Relevant national indicators

Quality improvement indicators:

- **Incidence of C. difficile**: National Library of Quality Indicators: incidence of healthcare-associated infection - C. difficile infection (NHSOF) and incidence of healthcare-associated infection - C. difficile infection (CCGOIS)

- **Incidence of MRSA bacteraemia**: National Library of Quality Indicators: incidence of healthcare-associated infection - MRSA (NHSOF) and incidence of healthcare-associated infection - MRSA (CCGOIS)

- **Surgical site infections**: NICE Clinical Commissioning Group indicator: readmission rates for surgical site infections within 30 days of discharge from surgery.
Quality improvement statement 4: Workforce capacity and capability

Statement

Trusts prioritise the need for a skilled, knowledgeable and healthy workforce that delivers continuous quality improvement to minimise the risk from infections. This includes support staff, volunteers, agency/locum staff and those employed by contractors.

What does this mean for patients and trust boards?

Patients can expect staff to have the necessary skills and knowledge to undertake infection prevention and control procedures in their area of work.

Boards ensure staff have the skills and training required for infection prevention and control.

Evidence of achievement

1. Evidence of local arrangements to ensure all staff working in clinical areas have an appraisal and development plan that includes discussion of infection prevention and control. This includes evidence that staff working in both clinical and non-clinical areas have clear objectives in relation to infection prevention and control which are linked to the trust’s objectives.

2. Evidence that all staff working in clinical areas, including specialist link practitioners, have sufficient time to fulfil their responsibilities on (and objectives for) infection prevention and control.

3. Evidence that staff are provided with feedback on their performance in relation to infection prevention and control (for example, on hand hygiene or when prescribing antimicrobial drugs). This includes evidence that they are given support to fulfil this role.

4. Evidence of local arrangements to ensure all staff working in clinical areas complete Healthcare-associated infections: prevention and control (PH36)
infection prevention and control training within 1 week of commencing work.

5. Evidence of local arrangements to ensure infection prevention and control training and competencies are updated and checked at appropriate intervals.

6. Evidence that local workforce planning and workforce reviews explicitly consider, and are informed by, the trust’s infection prevention and control strategy and local HCAI outcomes.

7. Evidence of local arrangements for an annual review of training resources to ensure consistency with the national evidence base and professional and occupational standards.

8. Evidence of local arrangements to ensure consultant medical staff from a range of specialities champion infection prevention control. This includes evidence that they are given protected time to achieve defined objectives in this role.

9. Evidence that all staff working in clinical areas are familiar with, and competent in applying, the trust’s infection prevention and control policies and procedures.

10. Evidence of local arrangements to train all staff in the communication skills needed to discuss HCAIs with patients and the public.

11. Evidence that the trust has a proactive, accessible and user-sensitive occupational health service. This includes evidence of a high level of competence in all areas of healthcare infection prevention and control to ensure the welfare of healthcare workers (including short-term and agency workers). In addition, evidence is needed that the service puts an emphasis on preventing blood-borne viruses, tuberculosis, vaccine-preventable diseases and acute respiratory and gastrointestinal infections.

**Practical examples**

- An agreed performance indicator for the proportion of staff appraisals that include infection prevention and control. Performance against this indicator is checked on a regular basis.

- Monitoring of proportion of new staff who undergo pre-employment occupational health screening or assessment within a given timeframe.
• Trust programme in place to review the immunisation status of staff and to ensure vaccines are offered, when necessary.

• Trust programme in place to review the skills, competence and capacity of the multi-disciplinary infection prevention and control team to ensure it is fit-for-purpose.

• A mechanism is in place to ensure the need to reduce HCAIs across the organisation is explicitly considered during workforce planning.

• Presence of an infection prevention and control 'link practitioner' or member of staff in every clinical and support unit (with protected time).

• Training needs-analysis is informed by the trust's infection prevention and control strategy and local HCAI outcomes and is reviewed annually.

• Staff education on the occupational health aspects of how to prevent and control healthcare infections is provided by occupational health service. (For example, this may include advice on the number of days staff should not work following an episode of sickness and diarrhoea.)

• Monitoring of the proportion of new staff undertaking mandatory infection prevention and control training within 1 week of commencing work.

• Presence of escalation procedures and processes for individuals who repeatedly do not fulfill their specified infection prevention and control responsibilities.

• Patient surveys of their experience of staff skills and knowledge in relation to infection prevention and control.

• Monitoring of the proportion of staff whose post-exposure prophylaxis (PEP) management to HIV is delayed.

Health and Social Care Act code of practice

Criterion 1: Guidance for compliance 1.1

Criterion 6: Guidance for compliance 6.2

Criterion 10: Guidance for compliance 10.1
Relevant national indicators

None identified.
Quality improvement statement 5: Environmental cleanliness

Statement

Trusts ensure standards of environmental cleanliness are maintained and improved beyond current national guidance.

What does this mean for: people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect secondary care settings to meet high standards of cleanliness, with each trust monitoring the condition of its premises to ensure levels exceed the minimum required standard.

What does it mean for trust boards?

Boards ensure policies, procedures and resources are in place to maintain and continuously raise the level of cleanliness across the trust.

Evidence of achievement

1. Evidence that the trust clearly sets out, and adheres to, a standard of cleanliness that is beyond current national guidance (for example, British Standards Institution PAS 5748 and/or National Patient Safety Agency specifications).

2. Evidence of clear and accessible local policies on cleaning and environmental decontamination. This includes evidence that they take into account the needs of different patient care areas and allow for flexibility in the deployment of resources. There should be evidence, for example, that individual staff understand their role and responsibilities.

3. Evidence of local arrangements for a risk-based, cleaning responsibility matrix and frequency schedule for each patient care area.
4. Evidence of a local framework for monitoring of environmental cleanliness routinely and in an 'outbreak' situation. This includes evidence of a patient feedback system.

5. Evidence that the results of routine and outbreak monitoring are reviewed and cleaning arrangements updated, where appropriate.

6. Evidence of local arrangements to ensure awareness of health and safety and environmental issues regarding the use of disinfectant preparations for decontamination purposes.

7. Evidence of regular, appropriate training and education of staff with responsibility for cleaning in the use of equipment, disinfection and decontamination.

8. Evidence that the trust incorporates patient feedback and involves patients and carers in its cleanliness monitoring programmes, with evidence that this impacts on standards.

**Practical examples**

- Mechanism is in place to ensure rapid response cleaning is initiated within appropriate timeframe.

- Clearly defined policy for cleaning and environmental decontamination (including roles, responsibilities and accountability).

- Trust collects visual and/or objective environmental monitoring data for different clinical areas. Visual and scientific methods are used for both routine and outbreak environmental assessment and the findings are used to inform improvements to the cleanliness programme.

**Health and Social Care Act code of practice**

Criterion 1: Guidance for compliance 1.1

Criterion 2: Guidance for compliance 2.1, 2.3, 2.4, 2.5, 2.6

**Relevant national indicators**

None identified.
Quality improvement statement 6: Multi-agency working to reduce HCAIs

Statement

Trusts work proactively in multi-agency collaborations with other local health and social care providers to reduce risk from infection.

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect the trust to be working collaboratively with other local health and social care providers to prevent and reduce harm from infection.

What does it mean for trust boards?

Boards are actively involved in local networks. They share governance structures, objectives and learning with other local health and social care providers to promote good practice among them.

Evidence of achievement

1. Evidence that a board member has been nominated as the trust's lead and representative for a multi-agency collaboration to prevent and manage HCAIs.

2. Evidence of support for, and participation in, joint working initiatives beyond mandatory or contractual requirements, to reduce HCAIs locally.

3. Evidence of an agreed policy for data sharing on HCAIs between local organisations.

4. Evidence of timely sharing of information risk assessments and strategic efforts to minimise harm from infection with other agencies.
5. Evidence of a defined, shared and agreed governance structure with other local health and social care providers that includes clear lines of accountability.

6. Evidence of support for, and participation in, the development and implementation of a joint local strategy, policy and pathway on HCAIs between local health and social care providers.

7. Evidence of participation in the development of shared targets and joint working with other local health and social care providers to improve outcomes locally relating to HCAIs.

8. Evidence that the trust works collaboratively with the local health protection unit and other health partners to investigate and manage HCAI outbreaks and incidents. Evidence is particularly needed of collaboration to deal with incidents which may impact on the health of the wider community.

**Practical examples**

- Documented terms of reference for multi-agency collaboration to reduce HCAIs.

- Audit of outputs from collaboration disseminated to relevant trust committees (for example, clinical governance and policy development groups).

- Audits of outputs from relevant learning methodologies are shared with other local health and social care providers.

**Health and Social Care Act code of practice**

No relevant criteria identified.

**Relevant national indicators**

None identified.
Quality improvement statement 7: Communication

Statement

Trusts ensure there is clear communication with all staff, patients and carers throughout the care pathway about HCAIs, infection risks and how to prevent HCAIs, to reduce harm from infection.

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect to be provided with information on how to reduce the risks of an HCAI and to be given the opportunity to discuss HCAIs with staff.

Patients who have an HCAI can expect to be:

- notified of their infection
- told about the impact it will have on their care
- given relevant information about minimising the risk to others.

What does it mean for trust boards?

Boards ensure processes are in place to communicate relevant information about minimising the risk of (and from) HCAIs to patients, carers, visitors and staff. They also ensure staff have access to relevant patient information resources and up-to-date local surveillance information so they can communicate about HCAIs effectively.

Evidence of achievement

1. Evidence of mechanisms to ensure transparent communication of all relevant
surveillance outputs to staff and patients.

2. Evidence that local health and social care services provide consistent patient and carer information on infection prevention and control.

3. Evidence that trust policies on infection prevention and control are available to, and used by, all staff.

4. Evidence that arrangements are in place to ensure providers in different settings can identify and communicate infection risks as the patient moves between services.

5. Evidence that patients, carers and visitors have access to up-to-date, accurate and easy to understand information about their own HCAI (if applicable) or HCAIs generally, in a suitable format. This includes evidence that they have access to information on the potential risk of infection and existing treatment and control measures.

6. Evidence that patients with an HCAI are informed of their infection and the implications for their care.

7. Evidence that staff are trained to (and can) communicate in an appropriate manner with patients and their carers about how to prevent, and reduce harm from, HCAIs.

8. Evidence of ongoing and timely dialogue with patients and carers throughout the trust's care pathway regarding the risk of HCAIs and how to prevent them.

**Practical examples**

- Audit of communications between different health and social care providers detailing any infections (for example, an audit of discharge summaries to GPs and admission letters from care homes).

- Audit of patient records for communication about HCAIs (for example, their MRSA status) throughout their hospital episode.

- Audit of patient records for communication about how to prevent HCAIs (for example, hand-hygiene procedures) throughout their hospital episode.

- Patient surveys on the trust's communication about HCAIs, and about their understanding of the risks.
• Availability of easy to understand, standardised information on HCAIs for patients, carers and staff.

• Availability of standardised trust policies on infection prevention and control.

• Audit central venous catheter and indwelling catheter procedures to check they follow trust policies on infection prevention and control.

• Audit of antimicrobial stewardship programmes to ensure good prescribing practice (for example, appropriate use of prophylactic antibiotics in surgery).

Health and Social Care Act code of practice

Criterion 3: Guidance for compliance 3.1

Criterion 4: Guidance for compliance 4.1, 4.2

Relevant national indicators

None identified.
Quality improvement statement 8: Admission, discharge and transfer

Statement

Trusts have a multi-agency patient admission, discharge and transfer policy which gives clear, relevant guidance to local health and social care providers on the critical steps to take to minimise harm from infection.

What does this mean for patients and trust boards?

Patients with an infection can expect relevant information about it to be shared between providers when they are admitted, transferred to, or discharged from a hospital to ensure seamless care.

Boards lead on the development of an agreed multi-agency admission, discharge and transfer policy. They ensure mechanisms are in place to support and monitor adherence to the policy.

Evidence of achievement

1. Evidence of an admission, discharge and transfer policy for patients with an infection that has been agreed by all agencies involved in the patient's care pathway, including local community and public health teams.

2. Evidence that the agreed policy includes a risk assessment on admission, and for all transfers, to determine the presence or risk of acquiring or transmitting infection.

3. Evidence of a procedure for documenting and sharing information about infections and their treatment. This includes evidence of information sharing to manage and support patients with an infection on an ongoing basis (including transfer and isolation arrangements for them) during admission, transfer and discharge.

4. Evidence of clear advice being given to patients on antimicrobial prescribing for their
ongoing care.

5. Evidence of clear advice being given to patients on the management of medical devices for their ongoing care.

Practical examples

- Audit of adherence to relevant policy on admissions/transfers/discharges of patients with an HCAI.

- Reduction in the number of adverse events recorded as a result of discharge and transfer of a patient with an infection.

Health and Social Care Act code of practice

Criterion 1: Guidance for compliance 1.1, 1.9, 1.10

Relevant national indicators

None identified.
Quality improvement statement 9: Patient and public involvement

Statement

Trusts use input from local patient and public experience for continuous quality improvement to minimise harm from HCAIs.

What does this mean for patients, the public and trust boards?

Patients and the public can expect the trust to provide opportunities for them to be involved with planning and decision-making on quality improvement activities to prevent and control infections.

Boards ensure the trust has mechanisms in place to seek patient and public views and involve them in decisions related to quality improvement for infection prevention and control.

Evidence of achievement

1. Evidence that a non-executive director or equivalent (for example, a trust governor) has been assigned to lead on patient and public involvement in infection prevention and control.

2. Evidence of a range of mechanisms to involve patients and the public in the trust's decision-making to ensure continuous quality improvement in infection prevention and control.

3. Evidence that a variety of information sources and participation methods are used to gain insight into patient experiences of infection prevention and control.

4. Evidence that patient and public involvement groups for infection prevention and control reflect local demographics.
5. Evidence of mechanisms to ensure patient experiences of HCAIs are used to inform reviews or investigations (such as outbreak investigations and root-cause analysis). This includes evidence that they are used to provide patients and carers with feedback on the outcome.

6. Evidence that patients' and the general public's perspective and priorities on infection prevention and control are taken into account in the trust's quality improvement programme.

**Practical examples**

- Patient and public representation on relevant groups and committees.
- Audit of HCAI reviews and investigations that include comment from patients and the public.
- Meetings between trust lead and patient and public representatives to discuss infection prevention and control.

**Health and Social Care Act code of practice**

No relevant criteria identified.

**Relevant national indicators**

None identified.
Quality improvement statement 10: Trust estate management

Statement

Trusts consider infection prevention and control when procuring, commissioning, planning, designing and completing new and refurbished hospital services and facilities (and during subsequent routine maintenance).

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect hospitals, and other parts of the trust estate, to be built and maintained in such a way as to minimise the risk of infection.

What does it mean for trust boards?

Boards ensure the whole estate is managed and maintained to minimise risk from infection.

Evidence of achievement

1. Evidence of local arrangements for involving infection prevention and control teams in the planning, design, commissioning, completion and maintenance of services and facilities used by the trust.

2. Evidence of local procedures to ensure infection prevention and control is considered during the commissioning and handover of facilities.

3. Evidence of local procedures to ensure infection prevention and control is considered during the selection, commissioning and installation of equipment.
4. Evidence of local arrangements (for example, a standard operating procedure) for involving the infection prevention and control team (or other appropriate expertise) in the development of estates policy.

5. Evidence of a planning process that ‘designs out' potential infection risks and focuses on effective infection prevention.

6. Evidence of local arrangements to ensure estate management is considered and integrated into routine practice to reduce infection risk.

7. Evidence that estates and clinical staff, including temporary staff and subcontractors, receive annual training in infection prevention and control. This should include an assessment of their relevant competencies.

8. Evidence of mechanisms for consideration of current national estates policy and whether or not it should be incorporated into local practice.

**Practical examples**

- Record of adherence to the trust estates policy, including the infection prevention and control (IPC) team's involvement. This should include sign-off of documents at relevant stages of the building and maintenance process.

- Briefs and specifications outline the need to consider infection prevention and control when procuring, commissioning, planning, designing and completing new and refurbished services and facilities.

- Record of completed and due maintenance tasks, including an assessment of whether the infection prevention and control objectives have been achieved.

- Record of estates risk assessments that have considered infection prevention and control in areas of high HCAI risk (for example, in patient care areas and for facilities such as water-storage tanks).

- IPC team-approved written protocols for routine, planned preventive maintenance (PPM), remedial and interventional maintenance activity.

- Record of planned preventive, remedial and interventional maintenance works that adheres to IPC team-approved protocols.
• Impact of planned preventive, remedial and interventional maintenance works in minimising the risk of infection to patients is regularly reviewed and considered.

• An appropriately competent person regularly reviews, verifies, confirms and signs off work delivered in accordance with infection-control protocols.

• IPC staff (or another recognised source of appropriate expertise) have allocated time and availability to review and advise on IPC issues during the initiation, planning, procurement, design and construction stages of projects.

Health and Social Care Act code of practice

Criterion 2: Guidance for compliance 2.1, 2.3

Relevant national indicators

None identified.
Quality improvement statement 11: New technology and innovation

Statement

Trusts regularly review evidence-based assessments of new technology and other innovations to minimise harm from HCAIs and antimicrobial resistance (AMR).

What does this mean for people visiting, or receiving treatment in, hospitals?

People visiting, or receiving treatment in, hospitals can expect the trust to assess relevant new technologies and innovation to help improve the quality of care and practice to prevent, and reduce the harm from, infection.

What does it mean for trust boards?

Boards routinely identify technology needs relevant to HCAI prevention and control and assess the potential of new technologies and innovation to meet those needs. Where new technologies and methods are identified, they are evaluated and implemented, as appropriate.

Evidence of achievement

1. Evidence that a mechanism is in place to undertake a regular gap analysis of technology needs relevant to infection prevention and control.

2. Evidence that information on relevant new technologies and innovation is disseminated to directorates, along with guidance on evaluation and implementation.

3. Evidence of a mechanism to assess the evidence base underpinning technology and innovation in reducing HCAIs. This includes evidence that, where relevant, new technology, innovation and practice is incorporated into policies and procedures.
4. Evidence of local arrangements to help individuals or clinical teams conduct relevant research (for example, translational research) to prevent or reduce the harm from HCAIs. This could include evidence that arrangements have been made with academic centres, or that trust-based preventive interventions have been assessed internally.

Practical examples

- Programme in place to consider current research activity and developments in HCAI innovation and technology.

- Mechanism is in place to support people who wish to conduct research into quality improvement methodology, behavioural sciences or other areas to improve the way HCAIs are prevented or controlled.

- Regular gap analyses carried out in relation to infection prevention and control.

- Relevant gaps in technology identified and communicated to appropriate research and funding bodies.

Health and Social Care Act code of practice

No relevant criteria identified.

Relevant national data indicators

None identified.
Glossary

Accountability framework
The policies, procedures and lines of accountability for specific areas within an organisation.

Adverse event
An unplanned or unanticipated event involving actual (or potential) risk or harm to patients. In the context of this guide, this would be an infection occurring as a result of medical or surgical intervention or contact with a healthcare setting.

Continuous quality improvement (CQI)
Improving the provision of services and practice by using a range of audit and statistical tools to assess the current situation, identify areas for improvement and measure the results.

Hand hygiene
The use of soap or solution (non-antimicrobial or antimicrobial) and water, or a waterless antimicrobial agent, to remove transient or residual organisms from the hands.

Key performance indicators (KPIs)
Measures that provide an indication of performance in key areas.

Learning methodologies
Techniques and approaches that provide an opportunity to evaluate current practice, identify areas for improvement and disseminate the findings.
Link practitioners

Local leaders and role models – either within a trust, or working in settings that link to that trust – promote the principles of safe, clean care or good prescribing practices during the day-to-day operation of their service. Link practitioners may have a clinical or lay background. An example of the former could be a nurse or pharmacist. An example of the latter could be a patient liaison officer.

Medical device

A product used to diagnose, treat or prevent disease or injury.

Planned preventive maintenance

The scheduling of planned maintenance to prevent damage, breakdown and functional failures.

Surveillance

Active monitoring of infection at patient, ward, trust or national level. This involves counting cases over time and recognising and controlling outbreaks and adverse trends. It also involves producing complete epidemiological records of infection outbreaks and adverse incidents which describe and summarise all cases.

Trust estates

All the buildings and grounds that fall under the management and control of the trust.
Supporting documents

See supporting evidence for a full list of supporting documents for this guidance.
Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on healthcare associated infections.

For full details of how this guide was developed, see the topic briefing paper and history of development process.

NICE has produced tools and resources to help you put this guide into practice. For general help and advice on putting our guidelines into practice, see resources to help you put NICE guidance into practice.
Update information

Minor changes since publication

January 2023: We added transparent communication of surveillance outputs to the evidence of achievement section for quality improvement statement 1.

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Supporting organisations

This guideline is supported by:

- Association for Clinical Biochemistry and Laboratory Medicine
- British Infection Association
- C-diff Support
- Healthcare Infection Society
- Infection Prevention Society
- The Institute of Biomedical Science (IBMS)
- The Kidney Alliance
- MRSA Action UK
- National Association of LINks Members
- National Concern for Healthcare Infections
- NHS Institute for Innovation and Improvement
- Royal College of Pathologists
- Royal College of Physicians (RCP)
- Society for Acute Medicine (SAM)
- UK Clinical Pharmacy Association (UKCPA)
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