Healthcare-associated infections

NICE quality standard

Draft for consultation

August 2015

Introduction

This quality standard covers organisational factors in preventing and managing healthcare-associated infections in secondary care settings. For more information see the Healthcare-associated infection topic overview.

NICE quality standards focus on aspects of health and social care that are commissioned locally.

Why this quality standard is needed

Healthcare-associated infections are a serious risk to patients, staff and visitors. They can cause significant costs for the NHS and significant morbidity to those infected. As a result, infection prevention and control is a key priority for the NHS.

Healthcare-associated infections 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).

The most well-known healthcare-associated infections include those caused by meticillin-resistant *Staphylococcus aureus* (MRSA), meticillin-sensitive *Staphylococcus aureus* (MSSA), *Clostridium difficile* (*C. difficile*) and *Escherichia coli* (*E. coli*). Norovirus and Gram-negative bacteria can also cause healthcare-associated infections.

The overall prevalence of healthcare-associated infections in all acute care hospitals surveyed in the Health Protection Agency's National Point Prevalence Survey in 2011 was 6.4%, compared with 8.2% in 2006. The 6 most common types of healthcare-associated infections in 2011, which accounted for more than 80% of all healthcare-associated infections, were respiratory tract infections (pneumonia and other respiratory infections; 22.8%), urinary tract infections (17.2%), surgical site infections (15.7%), clinical sepsis (10.5%), gastrointestinal infections (8.8%), and bloodstream infections (7.3%).

The quality standard is expected to contribute to improvements in the following outcomes:

- mortality
- hospital admissions
- accident and emergency department attendance
- patient experience
- length of stay in acute care
- reduced hospital-acquired harm.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – patient safety, patient experience and clinical effectiveness – for a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 3 outcomes frameworks published by the Department of Health:

- NHS Outcomes Framework 2015–16
- Adult Social Care Outcomes Framework 2015–16
- Public Health Outcomes Framework 2013–2016.

Tables 1–3 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 NHS Outcomes Framework 2015–16

Domain	Overarching indicators and improvement areas
1 Preventing people from dying prematurely	***Overarching indicators*** 1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare i Adults ii Children and young people
4 Ensuring that people have a positive experience of care	***Overarching indicators*** 4b Patient experience of hospital care ***Improvement areas*** ***Improving people's experience of outpatient care*** 4.1 Patient experience of outpatient services **Improving people's experience of accident and emergency services** 4.3 Patient experience of A&E services **Improving women and their families' experience of maternity services** 4.5 Women's experience of maternity services **Improving children and young people's experience of healthcare** *4.8 Children and young people's experience of inpatient services* **Improving people's experience of integrated care** *4.9 People's experience of integrated care**
5 Treating and caring for people in a safe environment and protecting them from avoidable harm	***Overarching indicators*** *5a Deaths attributable to problems in healthcare* *5b Severe harm attributable to problems in healthcare* ***Improvement areas*** **Reducing the incidence of avoidable harm** 5.2 Incidence of healthcare-associated infection (HCAI) i MRSA ii C. difficile **Improving the culture of safety reporting** 5.6 Patient safety incidents reported
Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework * Indicator is complementary Indicators in italics in development	

Table 2 The Adult Social Care Outcomes Framework 2015–16

Domain	Overarching and outcome measures
3 Ensuring that people have a positive experience of care and support	***Overarching measure*** 3A Overall satisfaction of people who use services with their care and support. Placeholder 3E: The effectiveness of integrated care*
Aligning across the health and care system * Indicator complementary	

Table 3 Public health outcomes framework for England, 2013–2016

Domain	Objectives and indicators
3 Health protection	***Objective*** The population's health is protected from major incidents and other threats, whilst reducing health inequalities ***Indicators*** 3.7 Comprehensive, agreed inter-agency plans for responding to public health incidents
4 Healthcare public health and preventing premature mortality	***Objective*** Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities ***Indicators*** 4.3 Mortality rate from causes considered preventable* 4.8 Mortality rate from communicable diseases
Alignment across the health and social care system * Indicator shared with the NHS Outcomes Framework.	

Patient experience and safety issues

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to healthcare-associated infections.

Coordinated services

The quality standard for healthcare-associated infections specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole healthcare-associated infection care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care for healthcare-associated infections in secondary care settings.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality healthcare-associated infection service are listed in Related quality standards. [Link to section in web version]

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All health, public health and social care practitioners involved in assessing, caring for and treating healthcare-associated infections in secondary care settings should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source(s) on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting people with healthcare-associated infections in secondary care settings. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

List of quality statements

Statement 1. Hospitals monitor the incidence of healthcare-associated infections, and the risk of infections in hospitals from community-wide outbreaks, to inform multi-agency action when alerts are identified.

Statement 2. Hospital staff have an appraisal of their objectives on infection prevention and control.

Statement 3. Hospitals involve infection prevention and control teams in the preventive and remedial maintenance of services and facilities.

Statement 4. People admitted to, discharged from or transferred between hospitals have information about any infections and associated treatments shared with their health and social care practitioners.

Questions for consultation

Questions about the quality standard

Question 1 Does this draft quality standard accurately reflect the key areas for quality improvement?

Question 2 If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

Question 3 Do you have an example from practice of implementing the NICE guideline that underpins this quality standard? If so please submit your example to the NICE local practice collection here. Examples of using NICE quality standards can also be submitted.

Questions about the individual quality statements

Question 4 For draft quality statement 2: How should objectives around infection control be appraised, and how often, for different types of staff working in hospitals?

Question 5 For draft quality statement 3: What is the most important contribution of infection and control teams to maintenance work on hospital services and facilities, and at what stage of this work is it important?

Quality statement 1: Surveillance

Quality statement

Hospitals monitor the incidence of healthcare-associated infections, and the risk of infections in hospitals from community-wide outbreaks, to inform multi-agency action when alerts are identified.

Rationale

Healthcare-associated infections are a serious risk to hospital patients, staff and visitors. By monitoring local incidence and trends, and identifying potential risks from community-wide outbreaks, hospitals can take action in collaboration with other local health and social care providers to deal with, or reduce the risks of, healthcare-associated infections.

Quality measures

Structure

a) Evidence of local arrangements for hospitals to monitor the incidence of healthcare-associated infections.

Data source: Local data collection.

b) Evidence of local arrangements for hospitals to monitor the risk of healthcare associated infections from community-wide outbreaks.

Data source: Local data collection.

c) Evidence of local arrangements for co-ordination of action between hospitals and other local health providers and social care providers when the risk of healthcare-associated infections is increased.

Data source: Local data collection.

What the quality statement means for service providers, health and social care practitioners, and commissioners

Service providers (hospitals) ensure that arrangements are in place to monitor the incidence of healthcare-associated infections, and the risk of infections in hospitals from community-wide outbreaks; and, when increased risks from healthcare-associated infections are identified, work with other local health and social care providers to reduce them.

Health and social care practitioners in secondary care (including hospital clinicians, nursing staff and allied healthcare professionals) report healthcare-associated infections and support action in response to outbreaks or increased risks of healthcare-associated infections.

Commissioners (such as clinical commissioning groups) ensure that they commission services from hospitals that monitor the incidence and risk of healthcare-associated infections, and commission services from local health and social care providers that work in collaboration when increased risks of healthcare-associated infections are identified.

What the quality statement means for patients, service users and carers

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

Source guidance

- Prevention and control of healthcare-associated infections (2011) NICE guideline PH36; quality improvement statements 3 and 6

Definitions

Monitor the incidence of healthcare-associated infections

Monitoring should be through a system that detects organisms and infections and promptly registers any abnormal trends. Data from multiple sources (epidemiological, clinical, microbiological, surgical and pharmacy) need to be combined in real time, and should allow for timely recognition of incidents in different spaces (for example, wards, clinical teams, clinical areas, the whole trust). Surveillance data in key areas should be regularly compared with other local and national data. [Derived from Prevention and control of healthcare-associated infections (NICE guideline PH36)].

Multi-agency action

Collaborative working between hospitals and other local health providers and social care providers to prevent and reduce harm from infection and to deal with incidents that may impact on the health of the wider community. This can involve the sharing of governance structures, objectives and learning to promote good practice; the sharing of information from risk assessments; and collaboration with the local health protection unit and other health partners to investigate and manage outbreaks and incidents of healthcare-associated infections. Evidence of collaboration is especially needed. [Derived from Prevention and control of healthcare-associated infections (NICE guideline PH36)].

Quality statement 2: Responsibilities of hospital staff

Quality statement

Hospital staff have an appraisal of their objectives on infection prevention and control.

Rationale

Every clinical and non-clinical hospital worker can play a key role in reducing the risk of healthcare-associated infections. Setting and appraising clear objectives for all hospital staff in relation to infection prevention and control, which are linked to the trust's objectives, will ensure that the workforce is knowledgeable, competent and trained to provide a care setting in which the risk of healthcare-associated infection is minimised.

Quality measures

Process

Proportion of hospital staff who have an annual appraisal of their objectives in relation to infection prevention and control.

Numerator – the number in the denominator who have an annual appraisal of their objectives in relation to infection prevention and control.

Denominator – the number of hospital staff.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and non-clinical hospital staff, and commissioners

Service providers in secondary care settings ensure that all hospital staff have their objectives in relation to infection prevention and control that are linked to the trust's objectives, that these objectives are appraised regularly and that staff are supported to carry out these objectives.

Healthcare professionals and non-clinical staff (including hospital clinicians, nursing staff, allied healthcare professionals, administrative staff and catering staff)

in secondary care settings are able to show that they follow working practices and tasks on infection prevention and control described in their personal objectives, and are supported by the trust to achieve these objectives.

Commissioners (such as clinical commissioning groups) ensure that they commission services from secondary care providers that appraise and support their staff to achieve their objectives on infection prevention and control.

What the quality statement means for patients, service users and carers

People receiving treatment in, or visiting, hospitals can expect that all hospital staff have the necessary skills and knowledge to carry out infection prevention and control procedures in their area of work.

Source guidance

- Prevention and control of healthcare-associated infections (2011) NICE guideline PH36; quality improvement statement 4

Definitions of terms used in this quality statement

Hospital staff

All clinical and non-clinical staff, including support staff, volunteers, agency or locum staff and those employed by contractors. [Derived from Prevention and control of healthcare-associated infections (NICE guideline PH36)].

Question for consultation

How should objectives around infection control be appraised, and how often, for different types of staff working in hospitals?

Quality statement 3: Maintenance of hospital facilities

Quality statement

Hospitals involve infection prevention and control teams in the preventive and remedial maintenance of services and facilities.

Rationale

The built environment of healthcare facilities can play a significant role in the transmission of infection. Maintaining these facilities should be based on good infection control principles to prevent and control infection. By involving local infection and control teams in the delivery and review of maintenance work, a hospital can ensure that this work minimises the risk of healthcare-associated infections or addresses known risks.

Quality measures

Structure

a) Evidence that hospitals have written protocols, approved by the infection prevention and control team, for preventive and remedial maintenance activity.

Data source: Local data collection.

b) Evidence of local arrangements for the review, verification, confirmation and sign-off of maintenance work delivered in accordance with local infection-control protocols.

Data source: Local data collection.

Process

Proportion of preventive and remedial maintenance works that adhere to infection prevention and control team-approved protocols.

Numerator – the number in the denominator that adhere to protocols approved by the infection prevention and control team.

Denominator – the number of preventive and remedial maintenance works of services and facilities.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers in secondary care settings ensure that infection prevention and control teams are involved in the preventive and remedial maintenance of services and facilities in hospitals, as part of managing and maintaining the whole estate to minimise the risk from infection.

Healthcare professionals (including hospital clinicians and nursing staff) who are part of the hospitals infection and control team are involved in the preventive and remedial maintenance of the services and facilities.

Commissioners (such as clinical commissioning groups) ensure they commission secondary care services from providers where infection prevention and control teams are involved in the planned preventive maintenance and remedial and interventional maintenance of services and facilities in hospitals.

What the quality statement means for patients, service users and carers

People receiving treatment in, or visiting, hospitals can expect the services and facilities in the hospital to be maintained using the principles of good infection control, to minimise the risk of infection.

Source guidance

- Prevention and control of healthcare-associated infections (2011) NICE guideline PH36; quality improvement statement 10

Definitions of terms used in this quality statement

Preventative maintenance

The scheduling of planned maintenance to prevent damage, breakdown and functional failures. [Derived from Prevention and control of healthcare-associated infections (NICE guideline PH36)]

Question for consultation

What is the most important contribution of infection and control teams to maintenance work on hospital services and facilities, and at what stage of this work is it important?

Quality statement 4: Admission, discharge and transfer

Quality statement

People admitted to, discharged from or transferred between hospitals have information about any infections and associated treatments shared with their health and social care practitioners.

Rationale

Potentially avoidable healthcare-associated infections can occur when people are admitted to, discharged from or transferred between hospitals. Sharing information on current infections or treatment can result in better care and outcomes for people with, or at risk of, infections and can help to reduce the risk of infections being spread between care settings.

Quality measures

Structure

Evidence of local arrangements to ensure information about any infections and associated treatments for people admitted to, discharged from or transferred between hospitals is shared with their health and social care practitioners.

Data source: Local data collection.

Process

Proportion of people with infections who are being admitted to, discharged from or transferred between hospitals about whom information on current infections and associated treatments is given to their new health and social care practitioners.

Numerator – the number in the denominator about whom information on current infections and associated treatments is given to their new health and social care practitioners.

Denominator – the number of people with infections who are being admitted to, discharged from or transferred between hospitals.

Data source: Local data collection.

What the quality statement means for service providers, health and social care practitioners, and commissioners

Service providers in secondary care settings ensure that a patient admission, discharge and transfer policy gives clear, relevant guidance to local health and social care providers on the critical steps to take to minimise harm from infection, including sharing information about any infections and associated treatments.

Health and social care practitioners (including hospital clinicians, nursing staff and practitioners in care homes) involved in hospital admission, discharge and transfer ensure that they share with other relevant healthcare professionals and social care practitioners all information on infections and associated treatments for people being admitted to, discharged from or transferred between hospitals.

Commissioners (such as clinical commissioning groups) ensure they commission services from health and social care providers that share relevant information about any infections and associated treatments for people admitted to, discharged from or transferred between hospitals.

What the quality statement means for patients, service users and carers

People who are admitted to, discharged from or transferred between hospitals can expect that information about any infections, treatments for infections, and treatments that include a risk of infection to be shared with the health and social care staff responsible for their care.

Source guidance

- Prevention and control of healthcare-associated infections (2011) NICE guideline PH36; quality improvement statement 8

Definitions of terms used in this quality statement

Information about any infections and associated treatments

This includes information sharing to manage and support patients with existing infections – for example, transfer and isolation arrangements for them – during

hospital admission, transfer and discharge. Information on treatments being given for existing infections should also be shared with the health and social care practitioners who will be giving the continuing care, along with information relating to the ongoing use of medical devices (such as catheters) where there is a risk of healthcare-associated infections. [Derived from Prevention and control of healthcare-associated infections (NICE guideline PH36)].

Status of this quality standard

This is the draft quality standard released for consultation from 28 August to 25 September 2015. It is not NICE's final quality standard on healthcare-associated infections. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5pm on 25 September 2015. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the NICE website from February 2016.

Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's What makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of

100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in Development sources [Link to section in web version]

Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments [add correct link] are available.

Good communication between health, public health and social care practitioners and people with healthcare-associated infections, and their carers (if appropriate), is essential. Treatment, care and support, and the information given about it, should be both age-appropriate and culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People with healthcare-associated infections in hospitals and their carers (if appropriate) should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

Development sources

Further explanation of the methodology used can be found in the quality standards Process guide.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- Prevention and control of healthcare-associated infections (2011) NICE guideline PH36

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Department of Health (2013) Guidance for infection control in the built environment
- Health Protection Agency (2012) Healthcare-associated infection: operational guidance and standards for health protection units
- Department of Health (2010) The Health and Social Care Act 2008: code of practice on the prevention and control of infections and related guidance

Definitions and data sources for the quality measures

- 2014/15 NHS Outcomes Framework

Related NICE quality standards

Published

- Antibiotics for neonatal infection (2014) NICE quality standard 75
- Infection prevention and control (2014) NICE quality standard 61
- Surgical site infection (2013) NICE quality standard 49
- Patient experience in adult NHS services (2012) NICE quality standard 15

Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Effective antimicrobial stewardship

- Influenza
- Non-antibiotic clinical management of infectious diseases
- Norovirus
- Outbreak planning and control
- Sepsis

The full list of quality standard topics referred to NICE is available from the quality standards topic library on the NICE website.

Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

This quality standard has been developed by Quality Standards Advisory Committee 4. Membership of this committee is as follows:

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About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard has been incorporated into the NICE pathway on [topic] [link to pathway and add links to other pathways if the QS is included in multiple pathways)].

Comment [g1]: To be added

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

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