

# NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

## Centre for Public Health Excellence

### Quality improvement guide – Prevention and control of healthcare-associated infections: Topic briefing paper

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## 1. Introduction

The National Institute for Health and Clinical Excellence (NICE) was asked, in partnership with the Health Protection Agency (HPA), to develop advice on the prevention and control of healthcare associated infections (HCAI) in secondary care settings. This advice has been developed as a pilot project, and published as a Quality Improvement Guide.

Health care associated infections are a key priority for the NHS (DH, 2008). Following National Audit Office reports (2000; 2004) highlighting concerns about HCAs, the Department of Health introduced a range of policies and measures designed to reduce rates of infection. 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. The Health Act introduced further HCAI legislation (DH 2006).

This briefing paper describes the pilot methods and processes that have been used to develop the advice, including sources for the recommendations and guidance that have informed the draft quality statements. Following completion of this project, the processes and methods may be reviewed and refined for future use in similar public health projects.

A draft of this topic briefing paper was originally considered at the first working meeting of the Topic Expert Group (TEG) in May 2011. The quality improvement guide was initially titled 'Advice on HCAI' when it went out for consultation in July 2011. Section 4 has been added following that meeting, to describe the development process post-consultation. The title of the guide was changed in response to consultation comments. Furthermore, what are referred to in this paper (and in the consultation document) as 'quality statements' became, post-consultation 'quality

improvement statements’, ‘supporting actions’ became ‘evidence of achievement’, and ‘supporting measures’ became ‘practical examples’. Consultation responses are summarised in a separate paper.

## 2. Developmental process

### 2.1 Background

The advice was developed using a pilot process, based on methods used in the development of other NICE products such as quality standards (see <http://www.nice.org.uk/guidance/qualitystandards/qualitystandards.jsp> for more information). Areas for board and management action were identified from key sources of published guidance. Quality statements, measures and examples were developed using the source documents, and refined through committee discussion, consensus and consultation.

The process is summarised below.

#### 2.1.1 Overview of the process

The process used to develop the advice is as follows:

- **Topic selected:** the topic is selected for development following publication of relevant NICE guidance or referral from the Department of Health
- **Topic Expert Group (TEG) recruited:** An expert chair, professional and lay members of Topic Expert Group (TEG) are appointed
- **TEG – Scoping meeting:** the TEG meet to consider and agree the scope of the advice. A final scope is published following this meeting
- **Development:** the NICE team and HPA prepare a topic briefing document for consideration by the TEG which identifies and summarises audit and

survey data, key evidence, and guidance. This includes explicit consideration of appropriate published reviews, theoretical approaches, current practice and patients/service users. The briefing document also includes draft quality improvement statements, measures and examples, and any available cost impact information

- **TEG meeting 1:** The TEG meet to consider the topic briefing paper, amend and agree the wording of the draft quality improvement statements and measures for consultation. Following this meeting, NICE and the HPA work with the TEG to amend and finalise the draft advice document
- **Consultation:** The draft advice is put out for consultation with stakeholders and the public for 4 weeks. In addition to the consultation, field-testing of the advice (consisting of workshops and an online survey) is completed. Comments and feedback from the consultation and field testing are collated and summarised for the TEG
- **TEG meeting 2:** the TEG consider findings from the consultation and field testing, and agree amendments to the advice
- **Publication and dissemination:** The final advice is signed off by the chair, the HPA, the CPHE Centre Director and NICE Guidance Executive and published as a Quality Improvement Guide.

### 2.1.2 Initial searches

Initial scoping searches on the control and prevention of healthcare-associated infections in secondary care settings were carried out by the NICE information specialist working with the NICE analysts. The results were scanned and sifted to identify relevant policy, guidance and research. These documents were analysed to establish central ‘themes’ or concepts, which were used to develop a draft

conceptual model of the topic area. This model was discussed and refined at the scoping Topic Expert Group meeting and the final version is set out in figure 1 below.

A similar thematic approach to evidence review and the development of conceptual models was used to develop 'Promoting mental wellbeing at work' (NICE public health guidance 22, 2009) (Baxter et al 2010). The approach allows an examination of the causal pathways that influence health (see '[Promoting mental wellbeing at work](#)') and takes into account the contextual factors, inputs, processes and relationships that impact on behaviour and health outcomes.

### **2.1.3 Definition of quality**

For the purpose of this advice, quality was defined as including the following characteristics:

- Effectiveness (how well an intervention or practice has been shown to work)
- Acceptability (to patients, practitioners, professionals and the public)
- Efficiency (return on investment, or the extent to which outcomes are maximised per unit of input)
- Access (availability of an intervention or practice)
- Equity (availability to all, or fair treatment)
- Relevance (to the aims and objectives of the service or practice)
- (Maxwell, 1992)

### **2.1.4 Key questions**

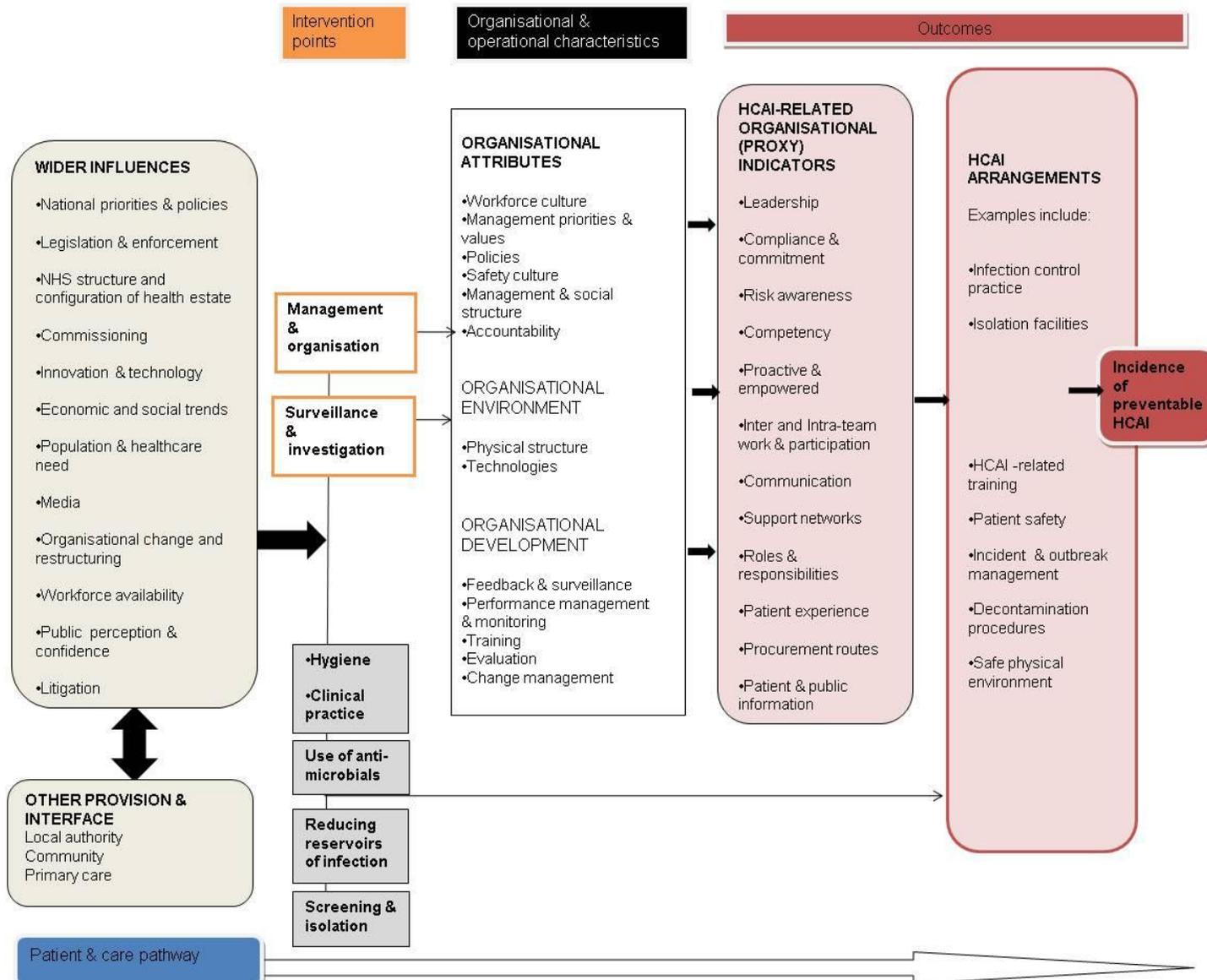
Key questions considered by the TEG in developing the advice are set out in the scope. The overarching question was:

- What organisational characteristics, arrangements and practices indicate that a secondary care trust is effectively preventing and controlling HCAI?

Secondary questions include:

- How can organisational characteristics, arrangements and practices be modified or improved to reduce HCAs?
- What are the most appropriate ways of measuring organisational characteristics, arrangements and practices which impact on rates of HCAI?
- Which organisational factors in secondary care are crucial in reducing HCAI?

**Figure 1 Conceptual model of managing and preventing HCAs in secondary care settings**



### 2.1.5 Identifying key documents

This quality improvement guide (published in consultation form as ‘advice on HCAI’) was developed as a pilot project, following methods and processes based on those used in NICE for the development of quality standards (QS). To date, the majority of QS<sup>1</sup> have been developed from existing NICE clinical guidelines. However, where a guideline does not exist, other sources may be used. The hierarchy of source information used in QS development is as follows:

- NICE clinical guideline
- Where no guideline exists, published guidance from an NHS evidence<sup>2</sup>-accredited source.
- Where no NHS evidence-accredited source exists, then the standard and statements are developed using the best available sources of guidance and recommendations, and via a process of group consensus.

In preparation for the first TEG meeting, the NICE technical team, lead by the NICE information specialist, carried out a series of literature searches to identify key policy and guidance documents to inform development of the public health advice on HCAI.

Initial searches revealed an established evidence base for the prevention and control of a range of HCAs and patient safety. The documents have been used to develop ‘Infection control’ (NICE clinical guideline 2, 2003 – which was being updated as this project was developed) and ‘Surgical site infection’ (NICE clinical guideline 74, 2008 – which was out for update consultation at the time of this project’s development).

However, no NICE guidance was identified on the role of organisational arrangements, structures and practices in preventing and controlling HCAs in secondary care settings – the ‘system-wide’ approach (for example, there is no guidance on the integration and management of good practice across a range of

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<sup>1</sup> <http://www.nice.org.uk/aboutnice/qualitystandards/qualitystandards.jsp>

<sup>2</sup> <http://www.evidence.nhs.uk/>

infections). Equally, no NHS evidence-accredited guidance was identified. Using the QS information hierarchy, the NICE team reviewed the search results to identify key policy and guidance documents.

Search results were screened by three members of the NICE team for:

- relevance to the topic area
- type of document
- development methodology (where applicable).

The NICE team identified 7 key documents to inform the development of the public health advice, which were subsequently agreed with the TEG. The source documents are:

- i) DH (2010) The Health and Social Care Act 2008: Code of Practice for health and adult social care on the prevention and control of infections and related guidance.  
[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_122604](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122604)
- ii) DH (2008) Board to Ward: How to embed a culture of HCAI prevention in acute trusts.  
[http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/documents/digitalasset/dh\\_112195.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_112195.pdf)
- iii) DH (2008) Going Further Faster II: Applying the learning to reduce HCAI and improve cleanliness.  
[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_087431](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_087431)
- iv) NAO (2009) Reducing Healthcare Associated Infections in Hospitals in England.  
[http://www.nao.org.uk/publications/0809/reducing\\_healthcare\\_associated.aspx](http://www.nao.org.uk/publications/0809/reducing_healthcare_associated.aspx)

- v) BMA (2009) Tackling healthcare associated infections through effective policy action.

[http://www.bma.org.uk/images/Tackling%20healthcare%20associated%20infections%20through%20effective%20policy%20action\\_tcm41-188116.pdf](http://www.bma.org.uk/images/Tackling%20healthcare%20associated%20infections%20through%20effective%20policy%20action_tcm41-188116.pdf)

- vi) King's College London (2008) The Impact of Organisation and Management Factors on Infection Control in Hospitals: a Scoping Review.

[http://www.rcn.org.uk/\\_data/assets/pdf\\_file/0006/287745/Kings\\_College\\_HCAI\\_Scoping\\_Review\\_July\\_08.pdf](http://www.rcn.org.uk/_data/assets/pdf_file/0006/287745/Kings_College_HCAI_Scoping_Review_July_08.pdf)

- vii) Healthcare Commission (2007) Healthcare associated infection: what else can the NHS do?

[http://www.cqc.org.uk/db/documents/HCAI\\_Report\\_2\\_200801223430.pdf](http://www.cqc.org.uk/db/documents/HCAI_Report_2_200801223430.pdf)

These documents are third-tier sources of guidance and recommendations – they are neither NICE guidance, nor developed using NHS accredited sources. They are based on a range of methods and evidence, including evidence review, professional opinion and group consensus. The sources do not systematically review the evidence relating to the dimensions of quality outlined in the scope for this work. The statements in the quality improvement guide have been developed using recommendations and information from these sources, along with expert (committee) discussion and consensus, and refined through committee discussion and consultation with stakeholders.

### **2.1.6 Scoping meeting**

At its first meeting, the TEG was asked to consider the conceptual model and identify potential areas for quality statements that were likely to have:

- the biggest impact on patient care and patient outcomes in the NHS and social care as a whole

- a high impact on outcomes that are important to patients and/or
- a high impact on reducing variation in care and outcomes and/or
- lead to more efficient use of NHS resources and/or
- promote patient choice and promote equality.

This discussion identified the following 18 potential areas for quality improvement statements:

- Infection prevention team – make-up of team and roles
- A safe hospital environment
- Surveillance
- Communication/knowledge management
- Accurate patient discharge/transfer information
- Information systems (ICT)
- Epidemiological skills – outbreak recognition
- Data quality
- Accountability
- Staffing ratios
- Senior engagement and commitment
- Infection control knowledge among architects
- Community interface
- Cost impact of HCAIs

- Patient/carer/relative information
- Effective outbreak management
- Training
- Governance structures

These 18 statements were sorted into seven overarching themes taken from the conceptual model as follows:

- Management structures
- Trust interface
- Communication/knowledge transfer
- Surveillance
- Environment and technology
- Workforce (training/skills)
- Accountability

### **2.1.7 Drafting the advice**

Following the scoping meeting, the NICE team used the source documents and conceptual model to work with members of the TEG, and develop draft quality statements within each theme, along with activities and measures for each statement.

These draft statements and measures were included in a topic briefing document and considered at the second meeting of the TEG. At this meeting, discussion and consensus techniques were used to amend and finalise the draft statements and measures that are included in this document.

### **3. Draft Statements**

This section lists the draft statements that were taken to TEG meeting 1, along with related activities and measures that could be used in practice to indicate that a statement had been achieved. Each statement also contained reference to the source guidance or evidence upon which it is based, and any other relevant considerations. Specific issues or points to be addressed in discussion are also noted in the text.

In advance of their second meeting, members of the TEG are asked to consider for each statement:

- Is the statement aspirational, or is it already common / usual practice?
- Are the activities and measures appropriate / sufficient?

Appendix A contains a checklist that TEG members used to guide their responses and comments on each statement in preparation for the meeting, including suggested changes and amendments. The TEG were also asked to comment on the order of the quality improvement statements, and on any areas for potential statements that they felt were missing.

**DRAFT QUALITY STATEMENTS CONSIDERED AT TEG MEETING 1 (May 2011)**

**Surveillance**

<p><b>Draft quality statement 1</b></p>	<p><b>Trusts should have a surveillance system in place to gather data and monitor HCAI, including mechanisms for rapid and appropriate response.</b></p>	<p><b>Comments (things for TEG to think about)</b></p>
<p><b>Source documents information</b></p>	<p>NAO p. 53, 54, 55                  DH (2010) p. 14, 34                  HCC (2007) p. 53, 54, 58                  BMA (2008) p. 14, 26, 29                  DH (2010) p. 14, 34</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that local data is collected to monitor infection rates and assess the risk of infection for each clinical unit/speciality by:                         <ul style="list-style-type: none"> <li>-Alert organisms</li> <li>-Alert conditions</li> <li>-Wound infection rates</li> </ul> </li> <li>b) Evidence that surveillance systems support rapid identification of cross-infection and/or increasing infection rates including outbreaks, for urgent action</li> </ul>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Suggested addition of surgical; orthopaedic; caesarean section; etc, High-risk unit e.g. ICU, SCBU, Transplant unit but felt these were covered by clinical unit/speciality</li> </ul>

	<ul style="list-style-type: none"> <li>c) Evidence that the trust has plans and protocols that may be used in the event of cross infection and / or increasing infection rates, that will ensure a coordinated response to outbreaks of HCAI, including mechanisms to ensure senior clinical and management engagement and allocation of sufficient resources</li>   <li>d) Evidence of local surveillance systems that monitor antimicrobial prescribing and consumption on a ward by ward basis.</li>   <li>e) Evidence of local surveillance system linking between hospital prescribing patient records and pathology and microbiology reporting systems.</li>   <li>f) Evidence that standardised trust data is examined alongside comparison data e.g. time trends, geographic trends, neighbouring Trusts, national data</li>   <li>g) Evidence that surveillance systems capture post discharge infections</li>   <li>h) Evidence that there is timely discussion of surveillance outputs by clinical units/specialities and the board with evidence of action plans and mechanisms in place to respond to changes in infection levels or incidents. (e.g. infection control meetings; public health involvement)</li>   <li>i) Evidence of data validation processes to ensure that data is accurate (important to work with evidence-based definitions of infection – usually guided by national surveillance bodies)</li> </ul>	
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	<p>j) Evidence that local surveillance programmes have specific objectives concerning the additional information trusts require to understand their risks of infection. These could be informed by:</p> <ul style="list-style-type: none"> <li>- Previous infection problems/outbreaks in the hospital/Trust</li> <li>- Information from the literature</li> <li>- Local intelligence about emerging problems in other Trusts</li> <li>- Advice from national agencies (HPA, DH)</li> <li>- Public Health - problems in the community (commissioners)</li> <li>- The Media</li> </ul> <p>k) Evidence that trusts review their surveillance programmes to ensure they are meeting their objectives</p> <p>Evidence that responsibilities for analysing, interpreting and communicating surveillance and monitoring data are clearly defined</p> <p><b>Supporting measures</b></p> <ul style="list-style-type: none"> <li>-Availability of surveillance outputs e.g. monthly reports.</li> <li>-Number of clinical units with accurate and up-to-date surveillance data available/Number of clinical units</li> </ul>	<p><b>Supporting measures</b></p> <p>TEG to suggest ways that the activities could be measured.</p>
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<p><b>Current practice</b></p>	<p>Care Quality commission report states that:</p> <p>84% of trusts confirmed that clinical teams received analyses of mandatory surveillance data. However, the frequency of this varied, with a third saying that information was only disseminated when required for a specific purpose.</p> <p>Only 25% of respondents said that all surveillance data was held on a bespoke infection control IT system, a further 14% held the mandatory data only, and 61% had no bespoke system.</p> <p>Seventy-two per cent of trusts told us that they had a wider planned surveillance programme that also recorded infections not included within the mandatory scheme.</p> <p>Many trusts (88%) told us that the availability of resources had been a factor in determining the development of their surveillance programme.</p> <p><b>Table 12: Bespoke infection control IT systems linked to other systems (68 respondents)</b></p> <table border="1"> <thead> <tr> <th></th> <th>% of respondents</th> </tr> </thead> <tbody> <tr> <td>Laboratory/pathology</td> <td>56</td> </tr> <tr> <td>Patient administration</td> <td>25</td> </tr> <tr> <td>Pharmacy</td> <td>7</td> </tr> <tr> <td>Clinical theatre/surgical data</td> <td>13</td> </tr> </tbody> </table>		% of respondents	Laboratory/pathology	56	Patient administration	25	Pharmacy	7	Clinical theatre/surgical data	13	
	% of respondents											
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	<p><b>Table 14: Internal analyses performed on mandatory surveillance data</b></p> <table border="1"> <thead> <tr> <th>Method of analysis</th> <th>% of respondents who said they were using this method</th> </tr> </thead> <tbody> <tr> <td>Trend analysis</td> <td>92</td> </tr> <tr> <td>Analysis by specialty</td> <td>87</td> </tr> <tr> <td>External benchmarking</td> <td>67</td> </tr> <tr> <td>Internal benchmarking</td> <td>57</td> </tr> </tbody> </table>	Method of analysis	% of respondents who said they were using this method	Trend analysis	92	Analysis by specialty	87	External benchmarking	67	Internal benchmarking	57		
Method of analysis	% of respondents who said they were using this method												
Trend analysis	92												
Analysis by specialty	87												
External benchmarking	67												
Internal benchmarking	57												
<p><b>Current indicators</b></p>	<p>Quality Improvement indicators:                  VSA03 – Incidence of <i>C.difficile</i>                  PS39 – Incidence of MRSA bacteraemia                  HC21 – Surgical site infections – orthopaedic                  Health and Social Care Act (2008) Criteria 1 and 5                  Care Quality Commission Core Standard C1a</p>	<p>Some of these are levers that may help people in measuring the statement not actual routinely collected metrics.</p>											
<p><b>Draft quality statement 2</b></p>	<p><b>Commissioners should require providers to put assurance systems in place that demonstrate how they are complying with good infection control practices e.g. clinical audit compliance, antimicrobial stewardship, root cause analysis, risk analysis</b></p>	<p>Unsure if this has been correctly interpreted this could be for example PCT placing requirements on secondary care setting.</p>											
<p><b>Source</b></p>	<p>DH (2010) P 17, 18</p>												

<b>documents information</b>		
<b>Routes to achieving statement</b>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that SLA/contracts contain targets/standards regarding HCAI and infection practice</li> <li>b) Evidence of systems in place to allow action to be taken if providers are not performing to required standards</li> </ul> <p><b>Supporting measures</b></p> <ul style="list-style-type: none"> <li>a) Number of contracts with demonstrable compliance with infection control practices/Number of contracts where infection control practices should be adhered to</li> </ul>	<p><b>Supporting actions</b></p> <p>b) comment that this is difficult for staff to do as often need Chief Executive level action. Should it stay in?</p>
<b>Current practice</b>	None identified	
<b>Current indicators</b>	<p>Health and Social Care Act (2008) Criteria 1</p> <p>Care Quality Commission Core Standard C4a</p>	

<b>Draft quality statement 3</b>	<b>Organisations should feed learning from HCAIs, audits and incidents into clinical governance processes</b>	
<b>Source documents</b>	Kings (2008) p. 19, 20	

<b>information</b>	HCC (2007) p. 58, 62	
<b>Routes to achieving statement</b>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that processes are in place for outcomes from HCAs and audits of HCAI key performance indicators are feed into clinical governance and risk management processes at the directorate/clinical unit level</li> <li>b) Evidence that there are mechanisms for learning to be shared among all relevant staff</li> </ul> <p><b>Supporting measures</b></p>	<b>Supporting measures:</b> TEG to suggest
<b>Current practice</b>	None identified	
<b>Current indicators</b>	<p>Quality Improvement indicators:</p> <p>NRLS1 –Consistent reporting of patient safety events</p> <p>NRLS2 – Timely reporting of patient safety events</p> <p>NRLS3 – Rate of reported patient safety events</p> <p>Care Quality Commission Core Standard C1a</p>	

<p><b>Draft quality statement 4</b></p>	<p><b>Compliance with infection prevention and control policies and procedures should be monitored at individual, team and trust level.</b></p>	
<p><b>Source documents information</b></p>	<p>DH (2008b) p. 11, 14, 17, 20</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that audits are undertaken to monitor compliance with policies and procedures and appropriate action/learning taken</li> <li>b) Evidence that systems are in place to communicate performance information in ways to change behaviour</li> <li>c) Evidence that any required changes as a result of monitoring of compliance are resourced appropriately</li> <li>d) Evidence that performance of contracts in relation to HCAI (where there is outsourced provision) is monitored</li> </ul> <p><b>Supporting measures</b></p> <ul style="list-style-type: none"> <li>a) Proportion of clinical staff who have attended study days on HCAI</li> <li>b) Proportion of doctors who have attended</li> </ul>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Comment from TEG - there may well be evidence of all sorts of audits taking place, but they do not provide a true account of what is really happening. In our Trust, infection control audits tend to go round in a circle; problems are identified; nothing happens; re-audit; same problems, etc. This destroys the morale and incentive of participating staff.</li> <li>c) Comment from TEG – How are these monitored? washer-disinfector rinse water processing – we have two separate providers.....does this include reference labs for typing?</li> </ul>

		<p><b>Supporting measures</b>                  Do the TEG think that these measures facilitate the statement or are these more for skilled workforce.                  TEG to suggest additional measures.</p>
<b>Current practice</b>	None identified	
<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 1	

<b>Draft quality statement 5</b>	<p><b>Infection prevention and control surveillance data, and progress towards trust objectives, should be reported by the Director of Infection Prevention and Control at every board meeting</b></p>	<p>This statement was initially a measure however feedback suggested that is something that wasn't routinely been done.</p> <p>Do all trusts have a DIPC should we replace DIPC with another term/title e.g. named lead?</p>
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		Is every board meeting the right frequency?								
<b>Source documents information</b>	HCC (2007) p. 6, 18  DH, (2010) p. 15									
<b>Routes to achieving statement</b>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence of standing item on board agenda of DIPC report on infection prevention and control.</li> <li>b) Evidence that the DIPC engages, influences and sets clear objectives and monitor healthcare associated infections within the trust which are discussed at board meetings</li> </ul> <p><b>Supporting measures</b></p> <p>Number of board meetings where DIPC report was agenda item/Number of board meetings in specified time period</p>	<p><b>Supporting measures</b></p> <p>What should the time period be?</p>								
<b>Current practice</b>	<p><b>Table 2: Reporting arrangements of directors of infection prevention and control (155 respondents)</b></p> <table border="1"> <thead> <tr> <th>Does the DIPC report directly to the chief executive and the trust board and not through any other officer?</th> <th>% of trusts</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>57</td> </tr> <tr> <td>No</td> <td>5</td> </tr> <tr> <td>The DIPC is a board member</td> <td>37</td> </tr> </tbody> </table>	Does the DIPC report directly to the chief executive and the trust board and not through any other officer?	% of trusts	Yes	57	No	5	The DIPC is a board member	37	
Does the DIPC report directly to the chief executive and the trust board and not through any other officer?	% of trusts									
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No	5									
The DIPC is a board member	37									

	<p><b>Table 24: Frequency with which the boards of trusts receive internal analyses performed on mandatory surveillance data</b></p> <table border="1"> <thead> <tr> <th></th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Monthly</td> <td>26%</td> </tr> <tr> <td>Quarterly</td> <td>40%</td> </tr> <tr> <td>Less frequently than quarterly</td> <td>6%</td> </tr> <tr> <td>Annually</td> <td>20%</td> </tr> <tr> <td>When required for a specific purpose</td> <td>5%</td> </tr> </tbody> </table>		Percentage	Monthly	26%	Quarterly	40%	Less frequently than quarterly	6%	Annually	20%	When required for a specific purpose	5%		
	Percentage														
Monthly	26%														
Quarterly	40%														
Less frequently than quarterly	6%														
Annually	20%														
When required for a specific purpose	5%														
<p><b>Current indicators</b></p>	<p>Health and Social Care Act (2008) Criteria 1</p>														

**Accountability**

<p><b>Draft quality statement 6</b></p>	<p><b>Organisational accountability for HCAs should be delegated to individual clinical areas/devolved units</b></p>	
<p><b>Source documents information</b></p>	<p>HCC (2007) p. 18</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b>                  Evidence that individual clinical areas are set (or set themselves) HCAI reduction objectives or limits.                   Evidence that HCAs are monitored on scorecards/business plans for clinical units/devolved units                   Evidence that clinical areas/devolved units respond appropriately to monitoring and produce and execute action plans when needed.                   Evidence that HCAs feed into devolved units clinical governance and risk management arrangements</p> <p><b>Supporting measures</b></p>	<p><b>Supporting measures:</b> TEG to suggest</p>

<p><b>Current practice</b></p>	<p><b>Table 4: Incorporation of objectives for the prevention and control of infection into directorate/divisional business plans</b></p> <table border="1"> <thead> <tr> <th></th> <th>% of trusts</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>17</td> </tr> <tr> <td>Some (less than 50%)</td> <td>34</td> </tr> <tr> <td>Most (50% or more)</td> <td>28</td> </tr> <tr> <td>All</td> <td>17</td> </tr> </tbody> </table> <p><b>Table 9: The groups for which trusts use measures to assess performance in the prevention and control of HCAI</b></p> <table border="1"> <thead> <tr> <th></th> <th>% of respondents</th> </tr> </thead> <tbody> <tr> <td>Directorate</td> <td>83</td> </tr> <tr> <td>Specialty</td> <td>68</td> </tr> <tr> <td>Estates/facilities</td> <td>66</td> </tr> <tr> <td>Ward manager</td> <td>64</td> </tr> <tr> <td>Executive director</td> <td>55</td> </tr> <tr> <td>Other nursing</td> <td>52</td> </tr> <tr> <td>Medical team</td> <td>46</td> </tr> <tr> <td>Other (includes contractors and 'modern matrons')</td> <td>13</td> </tr> </tbody> </table>		% of trusts	None	17	Some (less than 50%)	34	Most (50% or more)	28	All	17		% of respondents	Directorate	83	Specialty	68	Estates/facilities	66	Ward manager	64	Executive director	55	Other nursing	52	Medical team	46	Other (includes contractors and 'modern matrons')	13	
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<p><b>Current indicators</b></p>	<p>Health and Social Care Act (2008) Criteria 5</p>																													

<b>Draft quality statement 7</b>	<b>Individual and team performance management should include clear objectives for compliance with relevant HCAI policies and procedures.</b>	Is this statement needed – is it aspirational?
<b>Source documents information</b>	HCC (2007) p.26 DH, (2008a) p. 7, 8	
<b>Routes to achieving statement</b>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence of trust policies and procedures for individual staff roles in relation to HCAI accountability</li> <li>b) Evidence of clear responsibilities for infection prevention and control for each member of staff as defined in the Trusts infection prevention and control accountability framework</li> </ul> <p><b>Supporting measures</b> Audit of staff knowledge</p>	<p><b>Supporting actions</b></p> <p><b>Supporting measures</b></p>
<b>Current practice</b>	None identified	
<b>Current indicators</b>	None identified	

<p><b>Draft quality statement 8</b></p>	<p><b>Individual’s responsibility for the prevention and control of infection should be defined and enforced using contracts, PDPs, appraisals, performance objectives and reward and disciplinary procedures</b></p>	<p>Is this aspirational?</p>
<p><b>Source documents information</b></p>	<p>HCC p. 26                  BMA p. 32                  DH 2008a p. 9, 18                  DH 2008b p 11, 17</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence of clear objectives and targets for individual staff members in relation to infection prevention and control that are linked to Trust and Directorate HCAI objectives.</li> <li>b) Evidence of discussion of infection prevention responsibilities and skills at every staff appraisal.</li> <li>c) Evidence of infection prevention and control being monitored and acted on through appraisal systems.</li> <li>d) Evidence of learning and objective setting in response to HCAI performance at individual level</li> <li>e) Evidence of disciplinary procedures being enacted when individuals repeatedly do not fulfil their specified roles in relation to infection prevention and control</li> <li>f) Evidence that compulsory training compliance is monitored through annual appraisal and actions taken for non-compliance.</li> <li>g) Evidence that staff are provided with feedback and support on their performance in undertaking their duties in relation to infection prevention and control</li> </ul>	<p><b>Supporting actions</b>                  TEG feedback was to make these actions more specific – TEG to suggest ways of doing this.                  e) Is this too sensitive to include?</p> <p><b>Supporting measures</b>                  TEG to suggest</p>

	<p>h) Evidence of clear statements in all staff contracts regarding expectations and training requirements in relation to infection prevention and control.</p> <p><b><i>Supporting measures</i></b></p>											
<p><b>Current practice</b></p>	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="412 442 1512 512">Table 3: DIPC personal development plans (154 respondents)</th> </tr> <tr> <th data-bbox="412 512 1332 608">Has the DIPC's personal development plan been formulated to address any competency deficiencies?</th> <th data-bbox="1332 512 1512 608">% of trusts</th> </tr> </thead> <tbody> <tr> <td data-bbox="412 608 1332 663">Yes</td> <td data-bbox="1332 608 1512 663">34</td> </tr> <tr> <td data-bbox="412 663 1332 711">No</td> <td data-bbox="1332 663 1512 711">31</td> </tr> <tr> <td data-bbox="412 711 1332 759">No competency deficiencies identified</td> <td data-bbox="1332 711 1512 759">34</td> </tr> </tbody> </table>	Table 3: DIPC personal development plans (154 respondents)		Has the DIPC's personal development plan been formulated to address any competency deficiencies?	% of trusts	Yes	34	No	31	No competency deficiencies identified	34	
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Table 5: Inclusion of personal responsibility for compliance with policy and procedures for the prevention and control of infection in the job descriptions of staff (155 respondents)					
	Percentage of trusts including personal responsibility				
	Not included	Included in less than 50%	Included in more than 50%	Included in all	No response
Medical staff	42	30	8	19	2
Nursing staff	18	37	16	27	2
Other clinical healthcare workers	32	33	11	23	1
Non-clinical staff working in clinical areas	35	33	10	20	3

Table 8: Percentage of responding trusts where the prevention and control of infection is included in individual annual appraisals and an integral part of PDPs (155 respondents)					
	Not included	Included in in less than 50%	Included in more than 50%	Included in all	No response
Medical staff	34	46	10	6	4
Nursing staff	14	45	17	21	3
Other clinical healthcare workers	26	41	14	16	3
Non-clinical staff working in clinical areas	28	43	8	15	5
<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 6				

**Information/knowledge transfer**

<p><b>Draft quality statement 9</b></p>	<p><b>Trusts should ensure they provide high quality, accurate, accessible information on infections to staff, service users and visitors. Information should be developed in collaboration with local service user representatives.</b></p>	<p>Contradictory TEG feedback was received some suggestion that this should be done anyway and the excellence was around the quality of the information</p>
<p><b>Source documents information</b></p>	<p>DH, 2010 p. 22</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that up-to-date accurate information on infections and infection prevention is readily available for staff, service users and visitors in all areas of the trust</li> <li>b) Evidence that trusts ensure that patients and visitors are made aware of outbreaks of infection</li> <li>c) Evidence that information is available to patients and visitors on their roles and responsibilities in relation to infection prevention and control</li> <li>d) Evidence that information was developed involving service user representation</li> <li>e) Evidence that patients understand their infection risk and infection status</li> <li>f) Evidence of trust wide systems for capturing and embedding key learning from HCAI incidents and outbreaks</li> </ul> <p><b>Supporting measures</b></p> <ul style="list-style-type: none"> <li>a) Evidence of monthly ward/department infection rates feeding into Directorate/Trust reports</li> </ul>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>c) should we include staff in this?</li> </ul> <p><b>Supporting measures</b></p>

	a –c) Audit of patient notes for record of information sharing. Audit of available information in each clinical area e) Information should reference those involved in the development of it – can assess for service user representation	
<b>Current practice</b>	None identified	
<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 3 and 4	

<b>Draft quality statement 10</b>	<b>Trusts should have a protocol for collating and sharing information relating to patients with HCAI when referring, admitting, transferring, discharging and moving patients within and between health and social care providers.</b>	Some TEG feedback that this should be already being done – is this something that is routinely done? How is it best done?
<b>Source documents information</b>	DH, 2010 p. 15  DH, 2008b p. 18	
<b>Routes to achieving statement</b>	<b>Supporting actions</b> a) Evidence that there is a clearly defined process for HCAI related information sharing when referring, admitting, transferring, discharging and moving service users within and between health and adult social care facilities  b) Evidence that arrangements are in place for the sharing of HCAI related	<b>Supporting actions</b>  <b>Supporting measures</b>

	<p>information between providers within transfer documents and files.</p> <p>c) Evidence that HCAI transfer information is acted upon - patient management takes into account HCAI status.</p> <p><b>Supporting measures</b></p> <p>a) An agreed policy approved by all service providers</p> <p>b) Audit of relevant documents (and document control) of patients with HCAI. – relevant infection detailed and any isolation/management needs highlighted.</p>	
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<b>Current practice</b>	<b>Table 17: The extent of trusts' policies for managing beds</b>					
	Percentage of areas or units within the trust for which guidance is available					
			<b>None</b>	<b>50% or more</b>	<b>Less than 50%</b>	<b>100%</b>
	1	Written guidance about controlling infections, specifying the factors that determine a high risk of a patient being MRSA positive and when to segregate patients	2	3	12	84
	2	Local guidance describing the need for assessment of risks of infection (including MRSA) and segregation before or upon admission to A&E or any other medical or surgical emergency admission area	12	11	13	64
3	Written guidance about controlling infections when patients are moved between hospital wards and departments, such as A&E, X-ray, intensive care units, and other clinical areas	6	10	14	70	
4	Local guidance about controlling infections when considering the clinical need for and risk associated with transfers between hospitals (both into and out of the trust)	8	10	15	66	
<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 1					

<p><b>Source documents information</b></p>		<p>We couldn't find any direct evidence in the source documents</p>
<p><b>Draft quality statement 11</b></p>	<p><b>Trusts should ensure mechanisms are in place for feedback from staff, service users and their relatives and carers on infection prevention and control issues</b></p>	<p>This wasn't an original statement – was highlighted as the key aspect of a general communication statement so was reformed to be one on its own.</p>
<p><b>Routes to achieving statement</b></p>	<p><b><i>Supporting actions</i></b> Evidence that trusts act on concerns raised by staff, service users or their relatives and carers</p> <p><b><i>Supporting measures</i></b> Staff survey Complaints/PALS</p>	<p>TEG to expand this</p>

<b>Current practice</b>	<b>Table 23: Number of reports on prescribing data provided to clinicians in a year (155 respondents)</b>		
	<b>Number of reports</b>	<b>% of respondents</b>	
	0	39	
	1-2	25	
	3-4	15	
	5-6	4	
	7-8	0	
	9-10	2	
	11-12	12	
	Less than 12	3	
	No response	1	

Table 11: Prompts used by trusts to encourage their staff to report a HCAI incident	
Death from HCAI	
Serious illness due to HCAI – patients’ health may suffer more than would otherwise be the case, and may have increased lengths of stay, readmissions, returns to theatre or transfers to critical care	
Incorrect treatment	
Failure to communicate infectious status	
Delayed diagnosis of infection	
Contaminated blood sample	
Needlestick injury	
Failure to follow protocols/procedures	
Failure to follow policies and advice on hand hygiene	
Failure of staff to decontaminate their hands appropriately on a second occasion having already received a verbal warning	
Failure to follow policies or advice about isolation	
Failure to isolate patients owing to lack of isolation facilities	
Admission to closed bays/wards	
Transfer of patient for non-clinical reasons	
Failure to comply with standard operating procedures on the management of beds and their allocation, particularly when patients are transferred between beds or admitted	
Problems with aseptic technique/procedures	
Concerns regarding poor practice/technical competency	
Infected intravenous/intravascular line or urethra/urinary catheter	
Infected prosthesis/implant	
Infection in clean surgery	
Indwelling devices in situ and either no documentation or documentation that hasn’t been maintained properly	
High-risk MRSA patient whose pathway of care has been managed poorly	
Post-operative surgical site infection	
Reuse of devices designed to be used only once	
Contamination of equipment	
Any incident concerning the failure to decontaminate	
Unsafe/inappropriate clinical environment, or inadequate environmental decontamination	
New build or change of service without having sought advice on infection control	
Inappropriate acquisition of equipment	
Infected or infectious member of staff	
Unusual antimicrobials resistance; infection not responding to treatment	

<b>Current indicators</b>	Care Quality Commission Core Standard C7b?, C8a? C16	
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**Management/structures**

<p><b>Draft quality improvement statement 12</b></p>	<p><b>Trust senior management should prioritise and engage with the prevention and control of healthcare associated infections</b></p>	
<p><b>Source documents information</b></p>	<p>DH (2008a) p. 11, 12                  NAO (2007) p.37                  HCC (2007) p. 6, 19, 27-30, 32                  BMA(2008) p. 24</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence that the trust’s aims and objectives for HCAI are included in the corporate strategy</li> <li>b) Evidence of local arrangements for involvement with IPC activities by appointed DIPC, board-level ‘HCAI champions’ and senior managers and clinical staff</li> <li>c) Evidence that the board sets out a business case for IPC and allocates adequate resources for IPC</li> <li>d) Evidence that the board meeting agenda includes HCAI and current surveillance data as standing items</li> <li>e) Evidence of regular communication from the Chief executive to patients, visitors and staff on infection control objectives, responsibilities, outbreaks and achievements</li> <li>a) Evidence that IPC competencies are outlined as a requirement in job descriptions for the DIPC</li> <li>f) Evidence that the DIPC has sufficient time to carry out their duties and authority to affect change</li> <li>g) Evidence that the DIPC draws on support from both internal and external expertise</li> </ul> <p><b>Supporting measures</b>                  IPC included in the organisation’s Balanced Score Card.</p>	

	<p>Evidence that the board is updated on and responds to all HCAI outbreaks.                  Audit evidence of communication to patients, visitors and staff from the board Chief executive on infection control objectives, responsibilities, outbreaks and achievement.                  Evidence of formal identification of HCAI champions.                  Minutes of IPC and other planning meetings,                  JDs for key staff,                  Performance targets for trust board and key individuals,                  Evidence of exercising of major outbreak plans,                  Terms of reference (and attendance record) for key trust and partners at IPC and outbreak meetings</p>																									
<p><b>Current practice</b></p>	<p><b>Table 1: Members of the trust board who are designated 'champions' for the infection control programme</b></p> <table border="1"> <thead> <tr> <th></th> <th>% of respondents</th> </tr> </thead> <tbody> <tr> <td>Chief executive alone</td> <td>6</td> </tr> <tr> <td>Other executive director alone</td> <td>72</td> </tr> <tr> <td>Non-executive director alone</td> <td>1</td> </tr> <tr> <td>Chair alone</td> <td>1</td> </tr> <tr> <td>Chief executive and other executive director</td> <td>7</td> </tr> <tr> <td>Chief executive, other executive director and chair</td> <td>1</td> </tr> <tr> <td>Chief executive, other executive director and non-executive director</td> <td>2</td> </tr> <tr> <td>Other executive director and non-executive director</td> <td>6</td> </tr> <tr> <td>Other executive director and chair</td> <td>1</td> </tr> <tr> <td>All board members</td> <td>2</td> </tr> <tr> <td>Blank (no response)</td> <td>1</td> </tr> </tbody> </table>		% of respondents	Chief executive alone	6	Other executive director alone	72	Non-executive director alone	1	Chair alone	1	Chief executive and other executive director	7	Chief executive, other executive director and chair	1	Chief executive, other executive director and non-executive director	2	Other executive director and non-executive director	6	Other executive director and chair	1	All board members	2	Blank (no response)	1	
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	<p><b>Table 2: Reporting arrangements of directors of infection prevention and control (155 respondents)</b></p> <table border="1"> <thead> <tr> <th>Does the DIPC report directly to the chief executive and the trust board and not through any other officer?</th> <th>% of trusts</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>57</td> </tr> <tr> <td>No</td> <td>5</td> </tr> <tr> <td>The DIPC is a board member</td> <td>37</td> </tr> </tbody> </table> <p><b>Table 3: DIPC personal development plans (154 respondents)</b></p> <table border="1"> <thead> <tr> <th>Has the DIPC's personal development plan been formulated to address any competency deficiencies?</th> <th>% of trusts</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>34</td> </tr> <tr> <td>No</td> <td>31</td> </tr> <tr> <td>No competency deficiencies identified</td> <td>34</td> </tr> </tbody> </table>	Does the DIPC report directly to the chief executive and the trust board and not through any other officer?	% of trusts	Yes	57	No	5	The DIPC is a board member	37	Has the DIPC's personal development plan been formulated to address any competency deficiencies?	% of trusts	Yes	34	No	31	No competency deficiencies identified	34	
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<p><b>Current indicators</b></p>		<p>Would the whole of the Health and Social Act be applicable here as if they are prioritising and engaging?</p>																

**Skilled workforce**

<p><b>Draft quality improvement statement 13</b></p>	<p><b>Trusts should ensure that their workforce has the capacity and capability to deal with all aspects of infection prevention and control</b></p>	
<p><b>Source documents information</b></p>	<p>DH (2008a) p. 12                  NAO (2009) p. 13, 38, 39                  BMA (2008) p. 26                  HCC (2007) p.20, 22, 30, 31</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence of sufficient staffing levels in all clinical areas</li> <li>b) Evidence of an effective and multidisciplinary Infection Control Team</li> <li>c) Evidence of effective infection control Link practitioners in all clinical areas, with protected work time</li> <li>d) Evidence that each directorate has an appointed senior clinician to lead for 'local' infection control and prevention.</li> <li>b) Evidence that IPC duties and responsibilities are outlined as a requirement in job descriptions for each relevant staff position</li> <li>e) Evidence of suitable and sufficient supervision on measures required to prevent and control risks of infection at all management levels</li> <li>f) Evidence that the healthcare staff have sufficient time to carry out their responsibilities for prevention and control of infection</li> </ul> <p><b>Supporting measures</b>                  JDs for key staff</p>	<p>How could Trusts measure effective teams?                  If IPC is everyone's' responsibility, is a central team necessary ?</p> <p>Sufficient time - Should this be deleted?</p> <p>What supporting measures could provide the evidence?</p>
<p><b>Current</b></p>		

<p><b>practice</b></p>	<p>However, there is still potential for further exploiting the benefits of this role. Although 86% of trusts reported that they had link practitioners in at least 50% of clinical areas, only 23% of trusts reported that they had them in all areas. The National Audit Office suggested that “for link nurses to be effective, their coverage needs to be widespread across a trust, therefore trusts operating with only a few link nurses may not be realising the full potential of having a link nurse programme”<sup>21</sup> (page 15). This suggestion is backed up by our own findings: when we examined the relationship between incidence of infection and a trust’s coverage of link practitioners between January and March 2006, we found that lower rates of coverage were associated with higher rates of <i>C. difficile</i> associated disease (CDAD).</p> <p>Our findings indicate that most trusts need to review their compliance with the Hygiene Code in this area. Only 16% of trusts said that responsibility for compliance with policies and procedures for the prevention and control of infection was included in the job descriptions of all staff working in clinical areas, while 17% said that it was included in none. Medical staff comprised the group that was least likely to have such compliance mentioned in their job description. Some trusts told us that they had found that the Knowledge and Skills Framework<sup>25</sup> provided a useful tool to define individual responsibilities with regard to prevention and control of infection, for the staff groups to which it applied.</p> <p><b>From HCC report</b></p> <p>“We found that only 37 per cent of trusts had protected time for their link nurses.”</p>	
<p><b>Current indicators</b></p>	<p>None identified</p>	

<p><b>Draft quality improvement statement 14</b></p>	<p><b>Trusts have a skilled and competent workforce for infection prevention and control</b></p>	
<p><b>Source documents information</b></p>	<p>DH (2008a) p.14, 16                  DH (2008b) p.13, 15                  BMA (2009) p.25                  Kings (2008) p.10,12,16,17                  HCC (2007) p. 4, 6, 35-39</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions</b></p> <ul style="list-style-type: none"> <li>a) Evidence of a written, Board approved, policy on (induction and ongoing) IPC education and training requirements, with specifications for all staff that are informed by regular training needs analysis and audit information.</li> <li>b) Evidence of a written training strategy which underpins the policy on IPC education and training.</li> <li>c) Evidence that IPC training policies and resources are reviewed annually and updated regularly so that they are consistent with the national evidence base and the requirements of professional and occupational standards.</li> <li>d) Evidence that completion of mandatory IPC training is completed within a stated timeframe.</li> <li>e) Evidence that newly appointed/contracted staff have received compulsory training for IPC before they begin work</li> <li>f) Evidence of regular review of staff/contractor specialist infection prevention skills and competence to confirm it is sufficient to support the trust programme for infection prevention.</li> <li>g) Evidence of local arrangements to ensure relevant specialist infection prevention staff are compliant with national DH education and competence framework (IPS 2011)</li> <li>h) Evidence that staff are familiar with and competent in applying policies and procedures in the event of an outbreak</li> </ul>	<p>This is already mandated in the code, but without specified timeframe                  Rather than 'before they begin work', is '2 weeks' more realistic</p>

	<p><b>Supporting measures</b></p> <ul style="list-style-type: none"> <li>• Core policy and strategy for training of IPC staff, with regular reports to Board on progress of IPC related training.</li> <li>• Training policy</li> <li>• Minutes of Board meetings re policy approval</li> <li>• Training strategy implementation progress</li> <li>• Policy review dates</li> <li>• Audit data from policy, training standards, appraisals,</li> <li>• Annual programme, with evidence of implementation includes all key items</li> <li>• Audit of practice/policy</li> <li>• Audits of practice indicate high levels of practice compliance, demonstrating an educated workforce</li> <li>• Monitoring of training attendance/completion as KPI</li> <li>• Up to date TNA</li> <li>• DIPC report to Board</li> <li>• Reports to Infection Prevention Committee</li> <li>• Evidence of specialist workforce review</li> <li>• Specialist IPC staff PDPs include are compliant with IPS 2011</li> <li>• Evidence of spot check monitoring of standards, discussion with staff, staff surveys</li> <li>• Job descriptions, staff appraisals</li> <li>• Use of RCA to inform training requirements</li> <li>• Job plans for protected training – Drs and some other groups</li> <li>• Induction completion compliance (new and contractors) What standards should be set for staff employed on an occasional basis from a locum agency?</li> <li>• Regular monitoring of compliance to training standards through trust committee structure</li> <li>• Hand hygiene audits Perhaps a recommendation on frequency</li> <li>• Review of RCA findings for HCAI – to review compliance level</li> <li>• HII results for compliance</li> </ul>	
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<p><b>Current practice</b></p>	<p><b>Table 6: Ongoing training in the prevention and control of infection: updating and protected time</b></p> <table border="1" data-bbox="427 411 1337 919"> <thead> <tr> <th rowspan="2"></th> <th colspan="3">Percentage of trusts with an ongoing training programme which includes an update on policies and examples of good practice</th> <th rowspan="2">% where staff had protected time for ongoing training including HCAI prevention and control</th> </tr> <tr> <th>No programme</th> <th>Part of mandatory programme</th> <th>Part of non-mandatory programme</th> </tr> </thead> <tbody> <tr> <td>Medical staff</td> <td>11</td> <td>66</td> <td>22</td> <td>72</td> </tr> <tr> <td>Nursing staff</td> <td>1</td> <td>84</td> <td>15</td> <td>72</td> </tr> <tr> <td>Other clinical healthcare workers</td> <td>2</td> <td>77</td> <td>20</td> <td>68</td> </tr> <tr> <td>Non-clinical staff working in clinical areas</td> <td>11</td> <td>69</td> <td>18</td> <td>61</td> </tr> </tbody> </table> <p>Almost all trusts (99%) told us that they kept a record of attendance at both inductions and update training in the prevention and control of infection, and 95% said they did so for training in hand hygiene. However, when we asked whether relevant staff who had not attended training were contacted and new training dates arranged, 23% of trusts told us that this did not happen for induction training. This failing was even higher in other areas: 49% for training in hand hygiene and 41% for update of training.</p>		Percentage of trusts with an ongoing training programme which includes an update on policies and examples of good practice			% where staff had protected time for ongoing training including HCAI prevention and control	No programme	Part of mandatory programme	Part of non-mandatory programme	Medical staff	11	66	22	72	Nursing staff	1	84	15	72	Other clinical healthcare workers	2	77	20	68	Non-clinical staff working in clinical areas	11	69	18	61	
	Percentage of trusts with an ongoing training programme which includes an update on policies and examples of good practice			% where staff had protected time for ongoing training including HCAI prevention and control																										
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Non-clinical staff working in clinical areas	11	69	18	61																										

<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 6	
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**Environment and Technology**

<b>Draft quality improvement statement 15</b>	<b>Providers of estates management should consider HCAI in the development and implementation of policies</b>	<p>Statements 1 and 3 could be combined to consider policy, planning, design and maintenance together in a single recommendation /statement. As already identified, the Infection Prevention Team should be represented as part of a multidisciplinary team of professionals and health care personnel involved in the planning, design, construction and maintenance of the built environment</p> <p>The current draft has not addressed specifically the area of new technology. It may benefit from an additional statement to address the adoption of new technologies designed to reduce HCAI. This should include the process by which an organisation considers the use of new technologies, including an assessment of the strength of published evidence, a cost-benefit analysis, implementation plan, evaluation of outcomes etc in the context of an organisation-wide risk assessment / infection prevention plan</p>
<b>Source</b>	HC (2007) p. 39, 44, 48	

<b>documents information</b>	BMA (2009) p. 15 DH (2010) p. 9, 20 DH (2008a) p. 5, 7, 12, 21	
<b>Routes to achieving statement</b>	<p><b>Supporting actions:</b></p> <ul style="list-style-type: none"> <li>a) Evidence that health service providers agencies having direct or delegated responsibility for the delivery of estates management services across the health estate under their jurisdiction involve the infection control team (ICT) or other recognised source of appropriate expertise in the development of HCAI and infection prevention and control (IPC) policy</li> <li>b) Evidence that consideration is given to the ‘Management of risk’ with regards to the totality of the service provider’s health estate in all processes</li> <li>c) Evidence that estate management is considered and integrated into infection prevention and control routine processes</li> </ul> <p><b>Supporting measures:</b></p> <p>None reported</p>	<p>Bullet a) The link between ‘Estates Management Providers’ on the one hand, and the ‘Infection Control Team’ on the other, is not clear and could I think be made more explicit. At the end of day some entity within the service provider organisation has to ‘own’ the policy</p> <p><b>Supporting measures:</b> TEG to suggest</p>
<b>Current practice</b>	None Identified	
<b>Current indicators</b>	Care Quality Commission Core standard: C21 Health and Social Care Act (2008) Criteria 7	
<b>Draft quality impvement</b>	<b>Provide and maintain a safe, clean and appropriate healthcare environment</b>	

<b>statement 16</b>		
<b>Source documents information</b>	<p>DH (2010) p. 16-17, 19-22: Healthcare Commission (2007) p.72</p>	
<b>Routes to achieving statement</b>	<p><b>Supporting actions:</b></p> <ul style="list-style-type: none"> <li>a) Evidence of clear and defined policy for cleaning and decontamination including roles, responsibilities and accountability</li> <li>b) Evidence of the development and implementation of policies to provide accurate information on adequate, suitable and clean facilities, including: <ul style="list-style-type: none"> <li>• Availability of isolation facilities within and between the service provider agency’s own or service delivery related sites</li> <li>• Washroom facilities</li> <li>• Laundry facilities</li> </ul> </li> <li>c) Evidence that there is in existence an effective process for monitoring, maintaining and where necessary updating IPC policy and related procedures for HCAI prevention across the whole of the health estate for which the service provider agency has responsibility, including those policies and procedures that impact directly upon the overall or local configuration of that estate</li> </ul> <p><b>Supporting measures:</b></p>	<p><b>Supporting measures:</b> TEG to suggest</p>
<b>Current practice</b>	<p>NAO 2009: Initiatives have delivered benefits in terms of reductions in MRSA and <i>C. difficile</i>, and/or improvements in the hospital environment and in patient confidence which are likely to outweigh the cost</p> <p>NAO 2009: The Department’s Healthcare Associated Infection Improvement Team was set up in 2006 to provide support to hospital trusts and help them achieve</p>	

	<p>their contribution to the MRSA target. By the end of 2007, the team had completed its initial review, during which they offered help to all NHS hospital trusts. Support offered ranges from a three day visit including interviews with senior staff, observations of care audits and inspection of the environment on wards, to telephone advice.</p> <p>NAO 2009: The National Patient Safety Agency (NPSA) takes the lead on patient safety across the health sector. In relation to infection control it is responsible for the design, implementation and management of the Patient Environmental Action Team, the cleanyourhands campaign, and the development of the root cause analysis tool that the Department adapted for healthcare associated infections. Many healthcare associated infections meet the NPSA's definition of a patient safety incident, but very few trusts link their approach to healthcare associated infection with patient safety.</p> <p>NAO 2009: Patient Environment Action Teams (PEAT), established in 2000, assess hospitals' cleanliness on a self-assessment basis. The Teams consists of various staff including nurses, matrons, doctors, catering and domestic staff, estates managers, and executive and non-executive directors. They also include patients, patient representatives and members of the public. The Healthcare Commission (2007) found an association between PEAT cleaning scores and reduction in <i>C. Difficile</i> infections. The majority of trusts were carrying out PEAT inspections on a monthly basis (71 per cent). Standards of cleaning, measured through PEAT inspection scores, have improved since 2000, but cleaning is nevertheless the area where the Healthcare Commission has found the most breaches of the Hygiene Code to date. In an analysis of 51 unannounced inspections, 27 trusts did not comply with the duty that premises were suitable, clean and well maintained. Only one of these, however, was considered to be material, where there was a possible risk to patient safety</p> <p>NAO 2009: Poor quality environmental hygiene was identified as a key contributing factor to the failings at Stoke Mandeville and Maidstone and Tunbridge Wells</p>	
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	following outbreaks of <i>C. difficile</i> between 2003 and 2007	
<b>Current indicators</b>	Care Quality Commission Core Standard C21  Health and Social Care Act (2008) Criteria 7	

<b>Draft quality improvement statement 17</b>	<b>Trust should ensure there is consideration of HCAI in the planning and development process for the expansion, regeneration or reconfiguration of the health estate</b>	This statement replaces: <b><i>An effective infection prevention / control team</i></b>  <b>Structures:</b> <i>Evidence of local arrangements to provide a multidisciplinary service / team, that includes: xyz</i>
<b>Source documents information</b>		Statement based on the ‘LINK generated guidance’; current Estates Guidance – principally the Hospital Building Notes and other technical and procedural guidance published by the Department of Health  What is the reference(s) that has been utilised to develop this statement
<b>Routes to achieving statement</b>	<b>Supporting actions:</b> a) Evidence that IPC is considered in the planning and design of services and facilities provided, owned, occupied or accessed by health care service providers  <ul style="list-style-type: none"> <li>• Guidance on the possible implications of HCAI IPC for the strategic planning and design of services and facilities is sought in timely fashion following initiation of the project</li> </ul>	Does guidance in the 1 <sup>st</sup> bullet refer to the presence of internally generated guidance on implications?

	<ul style="list-style-type: none"> <li>• ICT or other recognised source of appropriate expertise can be available to advise in timely fashion on HCAI IPC issues as these might emerge during the detailed planning and design stages of the project</li> <li>• ICT or other recognised source of appropriate expertise can be made available in timely fashion to advise on HCAI IPC issues that might arise during procurement and construction stages of the project, and have the opportunity to inspect the works, as they proceeded</li> </ul> <p>b) Evidence that IPC is considered during the handover and operational commissioning of new or converted facilities and in the selection, installation and commissioning of equipment, and that ICT is consulted when planning and undertaking building maintenance projects</p> <p><b>Supporting measures:</b> None provided</p>	
<b>Current practice</b>		
<b>Current indicators</b>	<p>Health and Social Care Act Criteria 2 and 7</p> <p>Care Quality Commission Core Standard C21</p>	

### Trust Interface

<p><b>Draft quality improvement statement 18</b></p>	<p><b>Trusts should ensure that their discharge and transfer policy provides clear and concise guidance to staff and organisations on critical steps to minimise risks of cross infection when discharging or transferring patients .</b></p>	
<p><b>Source documents information</b></p>	<p>HCC (2007) p.67-74</p>	
<p><b>Routes to achieving statement</b></p>	<p><b>Supporting actions:</b></p> <ul style="list-style-type: none"> <li>a) Evidence of discharge and transfer of patients policy <i>(specifically/considered as part of wider policy?)</i></li> <li>b) Evidence of local arrangements for facilitation of discharge and transfer policy and its enforcement including: <ul style="list-style-type: none"> <li>• Accurate patient surveillance, monitoring and information transfer system including where appropriate use of IT and networked secure systems</li> <li>• Written guidance about controlling infections when patients are moved between hospital wards and departments, such as A&amp;E, X-ray, intensive care units, other clinical areas, community, care homes and ambulance services.</li> <li>• Local guidance about controlling infections when considering the clinical need for and risk associated with transfers between hospitals (both into and out of the trusts)</li> <li>• Isolation procedures and coordination between ICT, ward staff and bed managers to support effective facilities for isolating patients and complying with policies on bed management</li> <li>• Policies and procedures specifying the cleaning of each bed and bed area before next patient arrives</li> </ul> </li> <li>c) Evidence of information about infections and transfer/isolation</li> </ul>	<p>Do we need to outline the details of discharge and transfer policy ? If so it was felt that any policy should consider:</p> <p><u>Preparation:</u> Staff/Patient, Equipment, Environment, Medication</p> <p><u>Process:</u> Who, When, Where, How</p> <p><u>Receiving:</u> Staff/Patients Equipment, Environment, Medication</p> <p><u>Post Transfer:</u> Ditto</p> <p><u>Monitoring:</u> Ditto</p> <p><u>Audit</u></p> <p><u>Improvement</u></p>

	<p>arrangements clear in patients notes. Staff involved in discharge and transfer of infected patients are fully trained in IC techniques.</p> <p><b>Supporting measures:</b></p>	<p>Should the supporting actions of this statement overlap or have an aspect of compliance with <i>knowledge transfer and communications policy</i></p>
<p><b>Current practice</b></p>	<p><b>NAO 2009 (P.26):</b> Only 14 per cent of trusts have a local system. From July 2008, the Department asked hospitals to establish systems to identify patients re-admitted with a surgical site infection and this data will be used to adjust the rates reported to the mandatory scheme;</p> <p><b>NAO 2009 (p.44):</b> The focus of our study has been on the prevention, management and control of healthcare associated infections in hospitals, but many infections arise in other settings and only manifest themselves within hospitals. Conversely, patients are infected or colonised within hospitals but symptoms are not apparent until after discharge and potentially infections can arise outside of hospitals. The same systems and standards are not yet in place for community healthcare and some trusts (11 per cent of hospital trusts in our census) believe that this disparity is a barrier to improvement on infection rates</p> <p><b>HCC (2007) P.57:</b> As part of the Health Protection Agency’s national enhanced mandatory surveillance scheme, trusts now have to identify which MRSA blood-borne infections were diagnosed within the first 48 hours of a patient’s admission. Recent figures indicate that over a quarter of MRSA bacteraemia fall into this category, and there is a strong likelihood that these patients were already infected when they were admitted to hospital. As the source of admission is a field in the enhanced mandatory system, many trusts use the agency’s website to provide this analysis for their own patients. Of trusts responding to our questionnaire, 87% confirmed that they monitor or audit the source of admission of these patients.</p> <p><b>HCC (2007) P.57:</b> Patients may be discharged from a trust with an undiagnosed infection and then readmitted with it, yet 62% of trusts told us that they do not audit or monitor any readmissions caused by HCAI, and only 6% of trusts said that they</p>	

	<p>audit or monitor all such readmissions. An analysis against outcomes as part of this study found that these trusts that do not monitor had higher rates of MRSA. This suggests that many trusts do not currently actively monitor whether patients are being readmitted with infections, but only consider this possibility when they know they have a problem rather than act to prevent a problem.</p> <p><b>HCC (2007) P.58:</b> The National Audit Office found that between 50% and 70% of surgical wound infections were identified after a patient had been discharged, and said that because hospital stays were getting shorter this figure was likely to increase.</p> <p><b>HCC (2007) P.58:</b> The National Audit Office reported that only 21% of infection control teams had carried out any post-discharge surveillance since its 2000 report. And only 39% of the trusts responding to our questionnaire indicated that they were carrying out one or more forms of post-discharge surveillance. The most commonly used method was readmission monitoring, with 19% of trusts saying that they were conducting post-discharge surgical site surveillance specifying this method</p>	
<b>Current indicators</b>	Health and Social Care Act (2008) Criteria 1, 2, 3, 4, 7 and 9	

<b>Draft quality improvement statement 19</b>	<b>Trusts should ensure that local partners are engaged and consulted in the development of HCAI policy and guidance.</b>	<p>This statement is derived from a comment originally attached to ‘organisational structure’. The use of ‘partners’ is not clear. Does partners refer to HPA, Commissioners, Community NHS trust, Regulators – as there is mention of these partners elsewhere is this correct?</p> <p>Should this apply to transfer and</p>
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		discharge directly or is this a more general point about partnership working and trust interface and therefore a standalone statement <i>or</i> is this a separate theme <i>or</i> does this belong in another theme?
<b>Source documents information</b>		Statement derived from a comment on 'organisational structure' statement
<b>Routes to achieving statement</b>	<p><b>Supporting actions:</b></p> <p>Evidence of engagement of key local partners in ongoing development of trust HCAI policy and practice (e.g. through membership of IPC committees)</p> <p><b>Supporting measures:</b></p> <p>None suggested</p>	<p><b>Supporting measures:</b></p> <p>TEG to suggest</p>
<b>Current practice</b>	<p><b>HC 2007 P.80:</b> South Manchester University Hospitals NHS Trust (SMUHT) uses partnership working In partnership with the infection control team, a strategy has been developed to reduce the rates of <i>C. difficile</i> in the hospital. This includes an audit of <i>C. difficile</i> cases, looking at whether treatment involves using the appropriate antibiotics, reviewing the guidelines for antimicrobials based on the results of audits and evidence and the introduction of an integrated care pathway</p> <p><b>Kings Collage London 2008 p.22:</b> A recent Department of Health publication presented the results of a retrospective investigation into bed occupancy levels and rates of MRSA for the period 2001-4. This stated that if all else were equal, hospitals with higher occupancy levels had higher rates of MRSA. Specifically,</p>	

	<p>those hospitals with occupancy levels of 90% or over can expect a 10.3% higher MRSA rate, compared to trusts with an occupancy level of 85% or below. However, this report also suggests that the relationship between bed occupancy levels and rates of MRSA has diminished for the periods 2004-5 through to 2005-6. One explanation for this lessening effect may be the overall success of increased policy initiatives to combat HCAI.</p>	
<p><b>Current indicators</b></p>	<p>Health and Social Care Act (2008) Criteria 6, 9 and 4.</p>	

## **4.0 Developing the final document**

At their meeting in May 2011, the TEG considered this topic briefing paper, and discussed the draft quality improvement statements and supplementary information. A combination of group work and open discussion was used to gain consensus on final draft statements, measures and examples, and any outstanding issues were followed up with members by the NICE team after the meeting via email. The consultation version of the quality improvement guide was signed off by the chair, HPA and NICE in June 2011, and the consultation ran from 4<sup>th</sup> July – 9<sup>th</sup> August 2011.

During the consultation, stakeholders were invited to give feedback on the draft advice. At the same time, NICE commissioned research company GHK Consulting LTD to undertake field testing of the quality improvement statements. Summaries of findings from the consultation and field testing are published alongside this topic briefing.

The TEG meet once more in September 2011 to consider the findings from the consultation and field testing, and amend the advice. At this meeting, analysts and researchers presented summaries of consultation comments and field testing responses for each statement area, and the TEG were asked to discuss and agree amendments. Whole group discussion was used to achieve consensus, with chairs action used to decide issues where necessary. The final version of the advice was signed off by the Chair, the HPA and NICE in October 2011.

## **5. Equity considerations**

In constructing the draft quality improvement statements the NICE team identified some equity issues that should be considered not only on implementing the statements but also for the TEG to consider when further developing the advice.

- When trusts are developing information for service users, visitors, relatives and carers they should be in formats that are accessible to the target audience, this could include none-print and multiple languages. This also applies to publically available documents.

- When trusts are developing policy and guidance it should be sensitive and considerate with regard to the transfer of patients of the issues pertaining to age, different ethnic backgrounds, disability and gender.
- Trusts should consider the relative vulnerability of patients to different types of HCAI according to their age, ethnicity, disabilities, and health, and act accordingly.

An equity assessment has been completed for the full development process. This will be published alongside the other supporting documents for the quality improvement guide.

## **6. References**

Baxter et al Synthesising diverse evidence: the use of primary qualitative data analysis methods and logic models in public health reviews (REF to be confirmed)

Department of Health (2006) The Health Act 2006: code of practice for the prevention and control of healthcare associated infections. London: Department of Health

Department of Health (2008) The NHS in England: The operating framework for 2009/10. London: Department of Health

National Audit Office (2000) The management and control of hospital acquired infection in acute NHS trusts in England. London: National Audit Office

National Audit Office (2004) Improving patient care by reducing the risk of hospital acquired infection: a progress report. London: National Audit Office

## Appendix A - Checklist for quality improvement statements

<b>Statement number:</b>		<b>Completed by:</b>			
<b>Statement:</b>					
<b>Check statement level: Is statement aspirational, does it describe excellence / best practice?</b>					
Yes		No		Uncertain	
If uncertain, what are the issues? Log below:					
<b>Check statement content: Does it need to change?</b>					
Yes		No		Uncertain	
If uncertain, what are the issues? Log below:					
If yes, what change should be made?					
<b>Routes to achieving statement: List current set below</b>					

<b><i>Do the supporting actions require amendment – are there gaps, or do statement changes require changes here?</i></b>					
Yes		No		Uncertain	
If uncertain, what are the issues? Log below:					
If yes, what changes should be made?					
<b>Supporting Measures: List current set below:</b>					
<b><i>Do the supporting measures require amendment – are there gaps, or do statement / activity changes require changes here?</i></b>					
Yes		No		Uncertain	
If yes, what changes should be made?					