

Trust Board meeting 20 November 2008

TB2008.89

Subject	Screening of Elective Patients for MRSA Colonisation
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Purpose of paper	<p>It is a national requirement that Trusts should introduce screening for MRSA colonisation for elective patients by the end of March 2009 and for all emergency admissions as soon as is practicable before the end of March 2011. This case sets out the investment required to comply with the first requirement to introduce screening for elective patients.</p> <p>It has been estimated that 70,000 additional patients will need to be screened. Of these, 10,000 will be NOC patients, for which the ORH provides a laboratory service. This will have a significant impact on laboratory capacity requiring the recruitment of additional staff and refurbishment of microbiology space on Level 7. There will also be an impact on nursing time. A "worst case scenario" figure of £300k has been estimated for this, but a two month pilot will be carried out to calculate the impact more precisely and a report brought back to EB.</p>
Board Lead(s)	Dr James Morris, Medical Director
Background papers (if any)	None

Action/decision required	The Board is asked to approve the proposals for the introduction of screening of elective patients for MRSA colonisations, including the necessary expenditure.				
Key purpose	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border-right: 1px solid black; padding: 2px 5px;">Strategy</td> <td style="width: 25%; border-right: 1px solid black; padding: 2px 5px;"><u>Assurance</u></td> <td style="width: 25%; border-right: 1px solid black; padding: 2px 5px;">Policy</td> <td style="width: 25%; padding: 2px 5px;"><u>Performance</u></td> </tr> </table>	Strategy	<u>Assurance</u>	Policy	<u>Performance</u>
Strategy	<u>Assurance</u>	Policy	<u>Performance</u>		
Strategic Goal(s)	To be Hospitals of Choice (SG)				
Strategic Objective(s)	<p>To provide demonstrably excellent clinical outcomes and indicators of patient safety (S06).</p> <p>Reduce healthcare associated infection, meeting Government Targets (Business Objective 16b).</p> <p>To ensure that the development of platform services parallels and advances the strategy for clinical services, ensuring that platform services contribute to optimising the efficiency and customer care focus of the Trust (S04).</p>				

<p>Links to: Board Assurance Framework/ Trust Key Risks/Annual Health Check element(s)</p>	<p>All</p>
<p>Also considered by</p>	<p>Executive Board</p>
<p>Resource and financial impact</p>	<p>The full year effect revenue cost of the proposal based on 70,000 screens and including the £300k nursing contingency is £1,276,778 of which £84,564 will be charged to the NOC, leaving a recurrent cost of £1,192,214.</p>
<p>Consideration of legal/equality/diversity/engagement issues</p>	<p>The capital cost of the required works to Level 7 is £236,145 and the work needs to be carried out within this calendar year. This work is part of the wider CPA labs accreditation scheme for which there is an allowance in this year's capital programme.</p>
<p>Acronyms and abbreviations used</p>	<p>MRSA - methicillin-resistant Staphylococcus aureus.</p>

1. Strategic Context

Introduction of Requirement to Screen Patients for MRSA Colonisation

The 2008/09 NHS Operating Framework introduced a requirement for Trusts to introduce screening for MRSA colonisation for all NHS elective patients by the end of March 2009 and for all emergency admissions as soon as practicable within the next three years (from December 2007).¹

The normal habitat of *Staphylococcus aureus*, including Methicillin-resistant *Staphylococcus aureus*, is human skin, particularly in the nose, armpit and groin. A proportion of the population carry MRSA on their skin, i.e. are colonised, although being asymptomatic. Clinical infection with MRSA occurs either from the patient's own resident MRSA (if he or she is an asymptomatic carrier) or by cross-infection from another person, who could be an asymptomatic carrier or have a clinical infection. *Staphylococcus aureus*, whether methicillin-resistant or sensitive, can cause a wide range of infections, including boils and abscesses, wound infections, pneumonia and septicaemia. Death can result, depending on the strain involved and the susceptibility of the patient.

The Trust has a responsibility to keep its patients safe, including minimising the risks of healthcare associated infection (HCAI). This responsibility is formalised in a number of requirements, in particular:

- *The Code of Practice for the Prevention and Control of Healthcare Associated Infection* (Hygiene Code), published by the Department of Health under the Health Act 2006. Compliance with the Code is now inspected annually by the Healthcare Commission, with non compliance potentially leading to an Improvement Notice which would affect the Trust's reputation and may ultimately lead to the placing of the Trust on "special measures".
- Core Standards C4a, C4c and C21 of the *Standards for Better Health* relate to control and prevention of infection, decontamination and environment. Compliance with these contributes to Trust's Annual Health Check rating.

The Trust's success in preventing and controlling infection also has financial consequences, affecting:

- Contract income - in relation to MRSA the contract with Oxfordshire PCT requires the Trust to maintain the annual number of MRSA bloodstream infections at less than half the number in 2003/4. A penalty of £100k is incurred if this number is exceeded or a payment of £100k received if the trust is more than 5% below target.
- Insurance payments - The NHS Litigation Authority (NHSLA) takes the Trust's infection prevention and control processes into account when setting the level of its insurance premium.
- The Department of Health's publication *Going Further Faster* quotes a calculation by Guy's and St Thomas' NHS Foundation Trust which estimated that the prevention of an estimated 100 MRSA bacteraemias and 360 surgical site infections resulted in savings which included approximately 4,000 bed days and £1.4 m.

¹ The Operating Framework for the NHS in England 2008/09, Department of Health, December 2007

The Trust's application for NHS Foundation Trust status will also be affected by its success in meeting its MRSA target.

2. Proposal

The Department of Health's guidance on the introduction of screening for MRSA colonisation requires Trusts to make provision for the:

- Screening of patients
- Decolonisation of colonised patients
- Reporting of implementation of the requirement

Screening

MRSA screening is the microbiological testing of a sample taken from the potential carriage sites of a patient on or before admission. It is the process by which patients who are colonised with MRSA are identified. The Trust already screens patients who are at high risk of MRSA.

The ORH will also need to provide a laboratory service to test the samples taken at the NOC.

The implementation of the national requirements will require the screening of additional patients as follows:

Estimated No. of additional ORH patients who will require screening	60,000 ²
Estimated No. of patients (incl NOC)	10,000
Total	70,000

Nursing Implications

It will be necessary to agree an operational policy for the carrying out of MRSA screens. This will include obtaining consent and processing of the sample/request to the laboratory. It is estimated that 15 minutes of additional nursing time will be required per screen. A pilot will be carried out to ascertain the most efficient way of providing this input. The worst case scenario of the cost of this input is estimated at £300k. However, the pilot will report in 2 months and a further paper will be written for Board approval on this specific matter.

Laboratory Implications

The introduction of screening for 70,000 elective patients will have a significant impact on the microbiology lab and additional staff will be required to undertake the extra workload. These are detailed in Appendix A.

Work is required to the Microbiology laboratory space on Level 7 of the JR, both to provide enough space for the additional staff and testing and to obtain full CPA accreditation.

The refurbishment will take up to 6 weeks and must be carried out before the end of 2008 to allow sufficient preparation to meet the April 2009 screening deadline. The accommodation is insufficient to undertake the entire volume of expected screening for

² 56,000 actual patients for 2007/08 or 62,729 patients for 2008/09 projected on Month 5

full implementation by 1st April 2011 and is; therefore, an interim arrangement to meet the immediate deadline to comply with the national requirement for MRSA screening. The capital costs of the initial work are shown in the table below.

Capital Cost (including fees, VAT and contingency) £236,145

Decolonisation/Decontamination

The DH guidance states that patients who are found to be colonised with MRSA must then be actively decolonised/decontaminated. It is proposed that **all** elective patients are provided with a 200 ml bottle of a Clorexidine based product with which to wash, and instructions will be provided to the patient dependent on the result of their screen. Each bottle costs £2.

In addition, patients with a positive result will be given prophylactic antibiotics.

Reporting Requirements

Minimum requirement – processes in place to count the overall number of these MRSA screening tests completed as part of preparation for elective admission and the number of positive tests and compare these numbers against the actual total number of relevant admissions or attendees in the same period.

DH Monthly Return

Trusts have to record the aggregate number of tests undertaken on patients who should be screened and the numbers of admissions and attendances of elective patients who should be screened.

3. Financial Summary (fye)

	Resource Requirement (£)	
Capital		
Refurbishment of Level 7 Microbiology space	£236,145	
Total Capital	£236,145	
Revenue		
Pay		Subject to further paper to EB by December 2008
Nursing	300,000	
Labs (70,000 additional tests – £567,900 minus £135,658 current)	432,242	
Non Pay		
Labs (70,000 tests @ £0.90)	63,000	
Decontamination wash (70,000 @ £2.00)	140,000	
Antibiotics	175,000	
Subtotal	1,110,242	
Overheads @ 15%	166,536	
Total Revenue	1,276,778	
Less laboratory income from NOC	84,564	
Net Cost	1,192,214	

4. Implementation Plan

	2008				2009					
	October	November	December	January	February	March	April	May	June	July
Nursing		Advertisement of additional posts to support pre-admission process	Interviewing and appointment	Training of staff in new operational policies						
Patient and Public Involvement and Communication										
		Consultation with patients and the public	Finalisation of operational policies	Equality Impact Assessment	Communication of proposals and preparation of standard literature (information leaflets, consent forms etc)					
Liaison with NOC										
		Formal agreement								
Labs										
	Advertise for: 1 x Band 6 BMS	Interviews for: 1 x Band 6 BMS		In place and training	Advertise for: 1 x Band 4/TBMS	Interview for: 1 x Band 4/TBMS		In place and training		Review staffing if required
Staffing	1 x Band 4/TBMS 4 x Band 2	1 x Band 4/TBMS 4 x Band 2		1 x Band 6 BMS 1 x Band 4/TBMS 4 x MLAs	0.8 Band 2	0.8 Band 2		1 x Band 4/TBMS 0.8 Band 2		Advertise for: 1 x Band 6/7
	Prepare staff for change	Introduce Sunday afternoon working	Draw up new section staffing levels to reflect changes		Start new Sat/Sun working	Review evening and weekend working		Start later working if needed after review		Review working practices with staff
	Form work group									

Oxford Radcliffe Hospitals NHS Trust

	2008				2009					
	October	November	December	January	February	March	April	May	June	July
Equipment	Purchase: Incubator 2 x label printers 2 terminals 1 x printer server Benching/draws		Purchase: Bugbox 1x Network printer 2 x terminals 4 x bar code readers 10 x chairs		Purchase: 10 x discard bins 10 x racks					
Space	Commence work on refurbishment of Level 7 space	Prepare equipment room Add benching etc to enteric room	Completion of Level 7 refurbishment Move current MRSA section to enterics Re-locate resps and mycology Redefine mangement structure for sections.							
Workload					Check stocks	Adjust media	100% Elective	Monitor closely	Monitor closely	Monitor closely

5. When will the impact and intended effect be reviewed and reported on

The Planning Committee will receive a report to check that screening has been introduced in April 2009.

Mandatory reports will be submitted to the Department of Health.

6. Patient and Public involvement and communication

It will be important to consult patients and the public on the proposals. When the details have been finalised communication with patients and the public should be undertaken in advance of implementation. The advice of the Chief Nurse and Director of Communications is sought in this regard.

7. Equality Impact Assessment

It will be necessary to carry out an equality impact assessment in association with the patient and public consultation.

8. Recommendation to EB

EB is asked to approve the proposals for the introduction of the screening of elective patients for MRSA colonisations, including the necessary expenditure outlined above.

Derrick Crook
Lily O'Connor
7 October 2008