This document amends existing guidance on the Post Infection Review of MRSA cases. It is technical in nature and advises Regional Medical Directors and Directors of Nursing to play a role in the arbitration process in assessing MRSA cases. This version allows for case assignment to a third party.
Guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections from April 2014 (version 2)

First published: April 2014

Prepared by Patient Safety Domain, NHS England
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2. Executive summary

The purpose of this guidance is to support commissioners and providers of care to deliver zero
tolerance on MRSA bloodstream infections, as set out in the planning guidance *Everyone
counts: Planning for Patients 2013/14*.

The planning guidance sets out a requirement to institute a Post Infection Review in all cases
of MRSA bloodstream infection and the purpose of the review is to identify how a case
occurred and to identify actions that will prevent similar cases reoccurring in the future.

The outcome of the Post Infection Review will be to determine clinical learning and attribute
responsibility for MRSA bloodstream infections. It relies on strong partnership working by all
organisations involved in the patient’s care pathway, to jointly identify and agree the possible
causes of, or factors that contributed to, the patient’s MRSA bloodstream infection.

The guidance also supports the identification, data exchange and reporting of cases of MRSA
bloodstream infection to help Clinical Commissioning Groups (CCGs) and healthcare providers
conduct the Post Infection Review.

This document amends the current guidance on the Post Infection Review on MRSA
bloodstream infections, which was published in March 2013 and updated in March
2014. The amendment is in three respects.

The first part of the amendment provides for a role for Regional Medical Directors and
Regional Directors of Nursing in the arbitration process that may be convened in exceptional
cases, where the acute Trust or the CCG is unable to determine which organisation should be
assigned a case of MRSA bloodstream infection. In this instance, the relevant Regional
Director of Nursing, or the Regional Medical Director (or their designated nominee), will be
informed, and will convene a review panel to assess the evidence presented in the Post
Infection Review. The Regional Director of Nursing, or the Regional Medical Director (or their
nominees) will formally include the Director of Public Health (DPH) and other relevant medical
expertise within this panel. On reaching a decision about the case, the review will be signed off
by the Regional Director of Nursing or the Regional Medical Director (or their nominees). The
Regional Director of Nursing or the Regional Medical Director and the DPH (or their designated
nominees) can call on the assistance of CCGs, Director of Infection Prevention and Control
(DIPC), Public Health England (PHE), microbiological expertise and others as appropriate to
assist with the case.

The second part of the amendment covers an extension to the timescales for completing the
Post Infection Review process. An organisation to which a case is provisionally assigned
(either the acute Trust or CCG) will be the lead organisation responsible for completing a PIR
within 14 working days (instead of 7 working days) of being notified that a PIR is required.
Equally, the guidance now also provides more time to complete the arbitration process: the
result of the PIR panel will be reported within 28 working days (instead of 14 working days) of
the notification to the panel. The Regional Director of Nursing or the Regional Medical Director
and the DPH (or their designated nominees) can call on the assistance of CCGs, DIPC, PHE
microbiological expertise and others as appropriate to assist with the case.

These two amendments were included in the March 2014 update.
The third part of the amendment allows for the assignment of a case of MRSA bloodstream infection to a “Third Party” through the arbitration process lead by the Regional Director of Nursing or the Regional Medical Director (or their designated nominees) as described above. Third Party assignment provides an acknowledgement of the complex nature of MRSA bloodstream infections being reported which previously may have been allocated by default to providers or CCGs who were not involved in the patients care or who can provide a strong case following the Post Infection Review that there were no possible failings in patient care. Examples of cases which may be considered for Third Party assignment are provided in Annex 3.

The zero- tolerance approach to MRSA has been re- iterated in Everyone Counts: Planning for Patients 2014/15 to 2018/19 http://www.england.nhs.uk/wp-content/uploads/2013/12/5yr-strat-plann-guid-wa.pdf , which was published on 20th December 2013
Guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections from April 2014

**Status:** Best Practice

**Purpose:** The principal purpose of the Post Infection Review (PIR) guidance is to support commissioners and providers of care to deliver zero tolerance on MRSA bloodstream infections, as set out in the Planning Guidance *Everyone counts: Planning for Patients 2013/14*. The purpose of the PIR is to identify how a case of MRSA bloodstream infection occurred and to identify actions that will prevent it reoccurring.

**Audience:**

- Clinical Commissioning Groups (CCGs)
- Commissioning Support Units (CSUs)
- Providers.
3. Introduction
This guidance facilitates delivery of the NHS Commissioning Board’s zero tolerance MRSA objective set out in the NHSCB Planning Guidance Everyone counts: Planning for Patients 2013/14.

The Government considers it unacceptable for a patient to acquire an MRSA bloodstream infection (MRSA BSI) while receiving care in a healthcare setting. It has set healthcare providers the challenge of demonstrating zero tolerance of MRSA BSI through a combination of good hygienic practice, appropriate use of antibiotics, improved techniques in the care and use of medical devices as well as adherence to best practice guidance.

The zero- tolerance approach to MRSA has been re- iterated in Everyone Counts: Planning for Patients 2014/15 to 2018/19 http://www.england.nhs.uk/wp-content/uploads/2013/12/5yr-strat-plann-guid-wa.pdf, which was published on 20th December 2013.

4. The purpose of the Post Infection Review
A Post Infection Review (PIR) for all MRSA bloodstream infection cases from April 2013 forms part of the government strategy for achieving a “zero tolerance” to HCAI. The PIR must be undertaken on all MRSA BSI cases using the toolkit at Annex 1 to identify any possible failings in care and to identify the organisation best placed to ensure improvements are made. The toolkit will ensure consistency in approach and improve the quality of data provided. The PIR replaces the previous requirement to undertake Root Cause Analysis (RCA) for MRSA BSIs. RCAs may still be undertaken for other HCAIs (currently MSSA and E. coli BSIs and Clostridium difficile infections).

In view of the small numbers of MRSA bloodstream infections currently reported, it is expected that the number of Post Infection Reviews will be correspondingly small and thus not impose a significant burden on any individual organisation.

The PIR will be conducted by a multidisciplinary clinical team that will review the bloodstream infection event and identify the factors that contributed to it.

The PIR process will:
- help identify factors that may have contributed to a MRSA BSI case;
- help to identify any parts of the patient’s care pathway which may have contributed to the infection, in order to prevent a similar occurrence;
- help providers of healthcare and CCGs to identify any areas of non-optimal practice that may have contributed to the MRSA BSI;
- help to identify promptly the lessons learned from the case, thereby improving practice for the future;
- Identify the organisation best placed to ensure that any lessons learnt are acted on.

The PIR process requires strong partnership working by all organisations involved in the patient’s care pathway. This close collaboration will enable organisations to jointly identify and agree both the possible causes and any factors contributing to the patient’s MRSA BSI.
Where an MRSA BSI is identified, the PHE Data Capture System (DCS) will automatically and provisionally assign an organisation with the responsibility for leading the PIR process. This does not necessarily assume that the organisation was responsible for the BSI, but considers that they are best placed to lead and coordinate the PIR process.

If an MRSA BSI sample was taken from the patient on or after the third day of an admission to an acute Trust, (where the day of admission is Day 1), the acute Trust will be required to lead the PIR.

For all other MRSA BSI cases, the CCG responsible\(^1\) for the patient will be required to lead the PIR. *This will include in particular any patients not admitted at the time the specimen was taken, for example those in Accident and Emergency or outpatients.*

5. **What Clinical Commissioning Groups need to do**

For Clinical Commissioning Groups this guidance provides an opportunity to collaborate closely with the organisations involved in providing patient care, to jointly identify and agree the possible causes of, or factors that contributed to, the patient’s MRSA bloodstream infection. Clinical Commissioning Groups will lead the Post Infection Review in the circumstances set out in the illustration in section 8 below. They will be able to use the results of the Post Infection Review to inform the mandatory healthcare associated infections reporting system. See section 7 for further information.

6. **What providers need to do**

Providers of healthcare\(^2\) will be expected to follow the approach set out in this guidance on MRSA BSI to deliver the aspiration and ensure the infections become exceptional events (i.e. events that could not have been prevented).

To facilitate this process Public Health England will collate PIR summary question responses and provide access to the Data Capture System (DCS) for recording surveillance data relating to healthcare associated infections (HCAI).

7. **Reporting MRSA BSI**

Where an MRSA BSI has been identified, it is the responsibility of the organisation from which the sample originated to ensure that the full mandatory data set is recorded on the DCS (for example, in the case of a GP, the CCG is the responsible organisation and will involve any other provider organisation as necessary)\(^3\). The acute Trust hosting the laboratory that processes the sample will usually undertake the actual data entry. (In the case of a centralized laboratory used by several Trusts, that laboratory will have the facility to input on behalf of the appropriate Trust).

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1. The responsible CCG is the CCG of the GP Practice with which the patient is registered. If the responsible CCG cannot be determined (e.g. because the patient is not registered with a GP) the case will be assigned attributed based on the CCG where the patient is usually resident. If neither the GP nor residential addresses are available, the CCG attributed will be based on the location of the reporting Trust Headquarters.

2. For the purposes of the PIR, a “provider” is the legal entity with which commissioners contract and which is registered by CQC to provide certain regulated activities in certain settings.

3. Current guidance on reporting MRSA can be found on the PHE website.
Where the organisation from which the sample originated uses the services of private laboratories, that organisation should ensure the contract requires that the laboratories record the full mandatory dataset on the DCS.

8. Illustration

<table>
<thead>
<tr>
<th>If a patient was not an inpatient of an acute Trust (for example a GP or non-acute hospital took the sample):</th>
<th>PIR to be led by the CCG</th>
</tr>
</thead>
</table>

| If the patient was an inpatient in an acute Trust, and if the sample was taken on: |
| Day of admission: (Day 1) | PIR to be led by the CCG |
| Day of admission: Day +1 (Day 2) | PIR to be led by the CCG |
| Day of admission: Day +2 (Day 3) | PIR to be led by acute Trust |

The schematic diagrams attached at Annex 2 to the guidance explain this in more detail and outline:

- The method of determining who is responsible for carrying out the PIR
- Who is responsible for inputting and responding with the data to the PHE PIR team.

Additionally:
- The organisation with responsibility for conducting the PIR will be notified accordingly by PHE.
- If an acute Trust is leading the PIR the CCG with responsibility for the patient will also be notified that a PIR has been initiated;
- Similarly, if a CCG is leading a PIR then the trust who reported the case will be notified.

Organisations leading a PIR can call on the necessary multidisciplinary expertise. This will include, but is not limited to:

| The staff who provided care | Any other organisation recently involved (e.g. in the last two weeks) in the care of the patient |
| Local infection prevention and control (IPC) team | Director of Infection Prevention and Control (DIPC), or nominee. |
| The CCG responsible for the patient; | Public Health England (PHE) *in some circumstances* |
The CCG will also use the PIR information to demonstrate their adherence to good practice to NHS England with respect to patient safety under the mandate.

9. Assigning MRSA BSI cases
The organisation to which the case is initially provisionally assigned (either the acute Trust or CCG) will be the lead organisation responsible for completing a PIR within fourteen working days of being notified that a PIR is required. The PIR summary information (question 33 onwards in the toolkit) are the mandatory questions requiring a response to PHE. The responses to the summary questions should not contain any Patient Identifiable Information (PII).

The outcome of the PIR should establish the organisation to which the MRSA BSI should be finally assigned (either the acute Trust or CCG). The final assignment will identify the organisation best placed to ensure that any lessons learned are acted upon.

The head of the organisation (e.g. Chief Executive) or a designated nominee will need to record the “outcome” of the PIR, that is the set of summary fields and the agreed organisation to which the MRSA BSI will be finally assigned for surveillance purposes.

If the duly assigned organisation is the same as the organisation leading the PIR this will end the process.

If the duly assigned organisation is different from the organisation leading the PIR, a notification will be sent to the assisting organisation who will be provided a further two days to indicate whether they agree or disagree with the outcome of the PIR.

If an organisation fails to respond within the set time period, they will be finally assigned the case.

If the PIR suggests that there have been no possible failings in care and that neither the acute Trust or the CCG are best placed to ensure improvements are made then Third Party assignment may be considered as outlined in section 10.

10. Involvement of the Regional Medical Director or the Regional Director of Nursing
In exceptional cases, where the acute Trust or the CCG are unable to determine which organisation should be assigned a case of MRSA BSI, or where it is felt that a case should be allocated to a Third Party, the relevant Regional Medical Director or the Regional Director of Nursing (or their designated nominee) covering the responsible CCG, will be informed, and will convene a review panel to assess the evidence presented in the PIR. The Regional Medical Director or the Regional Director of Nursing (or their nominees) will formally include the Director of Public Health and other relevant medical expertise within this panel. On reaching a decision about the case, the review will be signed off by the Regional Medical Director or the Regional Director of Nursing (or their nominees). The result of the PIR panel will be reported within 28 working days of the notification to the panel, in instances where a decision has not been made within 28 working days, the case will be finally assigned to the organisation originally responsible for leading the PIR.
The Regional Medical Director or the Regional Director of Nursing and the DPH (or their designated nominees) can call on the assistance of CCGs, DIPC, PHE microbiological expertise and others as appropriate to assist with the case.

As part of their oversight remit, protecting public health under the new healthcare system, the Regional Medical Director or the Regional Director of Nursing (or their nominees) may wish to conduct regular audits of cases within their local areas, to ensure that the patients are being managed appropriately, that the PIRs are being conducted properly and that all is being done to reduce infections.

11. Reporting blood specimen contaminants
Contaminated blood cultures should continue to be reported as part of mandatory reporting on the Data Capture System (DCS) and the PIR should be completed indicating any agreed contaminants. In these circumstances the organisation at which the blood culture specimen was taken will be assigned the case as they are best placed to ensure that any lessons learned are acted upon.
12. The Key Points of the PIR process

The PIR process will:

- Enable organisations involved to understand the causes of the MRSA BSI;
- Establish where it happened;
- Establish why it happened;
- Establish what went well with the care given;
- Establish what could be improved;
- Understand the expectations and perspectives of all those involved;
- Generate insight into lessons learned, and
- Lead to greater awareness, changed behaviours and agreed improvements in care.

Successful use of this tool depends on the PIR:

- Being done quickly;
- Being open and honest;
- Being multidisciplinary, all professions and grades contribute as experts in their field;
- Being inclusive of all organisations involved in the provision of care including ‘Third Parties’ where possible;
- Yielding lessons that will be acted on to drive improvements in care,
- Being integrated into governance systems.

Communication with patients:

- When an MRSA BSI is identified, notify the patient (and/or family) promptly of the infection.
- Advise the patient that a PIR will be undertaken to understand why the infection occurred.
- In the case of an arbitration, to advise the patient that the Regional Medical Director or the Regional Director of Nursing (or their nominees) and the DPH in their region and PHE will be notified of all cases.
- Assure the patient of the confidentiality of the information gathered.
- Ideally share the PIR outcome/summary with the patient/family, as they may aid understanding and discussion of the process.
ANNEX 1:

MRSA BLOODSTREAM INFECTION: POST INFECTION REVIEW TOOLKIT
The purpose of this toolkit is to help staff conduct their post infection review in the case of an MRSA bloodstream infection*. Some sections may be more relevant than others, and staff are encouraged to exercise their discretion/clinical judgement in completing the form.

The PIR summary information to be recorded with PHE (question 33 onwards) must not contain any Patient Identifiable Information (PII).

<table>
<thead>
<tr>
<th>Organisation</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Site/Location where the specimen was taken</th>
</tr>
</thead>
<tbody>
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</table>

<table>
<thead>
<tr>
<th>Ward/area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Nature of incident*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of incident</th>
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</tbody>
</table>

* NOTE: Contaminants should continue to be reported as part of the mandatory reporting on the Data Capture System (DCS). Do not complete the full PIR for cases of contamination where there is clear evidence this is not a true MRSA bacteraemia. In such cases, the PIR process is not appropriate, but separate locally agreed procedures should be used to identify and address any issues that arise from the contamination (for example, if the patient was then subsequently inappropriately prescribed antibiotics). If the contaminated specimen was taken in an acute Trust, it must be assigned to that Trust. In all other cases, it must be assigned to the Clinical Commissioning Group (CCG). The summary information must be completed indicating an agreed contaminant.
1. Write a brief narrative of the incident, including likely source and any underlying clinical, social or behavioral factors of the patient, patient management, outcome.

INSERT INFORMATION HERE

A. CASE DETAILS

1. DCS Case ID

1.1 Name of patient (this information can only be accessed locally)

1.2 Date of Birth (DOB)  
1.3 Sex  
   SELECT M/F  

1.4 Date specimen was taken

1.5 Location where the specimen was taken

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* This number is a unique case identifier that the DCS automatically gives to every case of MRSA bloodstream infection input.
2. Please supply a ‘timeline’ for patient movement over the last 2 weeks (e.g. admission and discharge dates for inpatient stays, Outpatient or A&E attendances, GP attendances, attendances for dialysis or other therapy).

| INSERT INFORMATION HERE |

3. Contact with:

| o Nursing/residential care/sheltered housing? If so, for how long? |
| o Contact with respite care? If so, for how long? |
| o Continence clinic? If so, for how long? |
| o Podiatry/leg ulcer/diabetic foot clinic? If so, for how long? |
| o Other organisation relevant to the case If so, for how long |

4. Any medical conditions relevant to this case of MRSA bloodstream infection?

| INSERT INFORMATION HERE |

5. Other relevant co-morbidities

| INSERT INFORMATION HERE |

6. Likely outcome from this episode prior to the patient being infected with an MRSA BSI?

| INSERT INFORMATION HERE |
B. SCREENING FOR INFECTION/COLONISATION

<table>
<thead>
<tr>
<th>Question</th>
<th>Select YES/NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. For admitted patients, and in line with national MRSA screening guidance and your local protocols, was the patient eligible to be screened for MRSA colonisation prior to, on or during admission?</td>
<td></td>
</tr>
<tr>
<td>SELECT YES/NO</td>
<td></td>
</tr>
<tr>
<td>8. If so, were they screened?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>9. If yes, and the patient tested positive for MRSA colonisation, was decolonisation prescribed?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>10. Was the recommended decolonisation process followed by the patient?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>11. Please supply relevant screening and decolonisation history.</td>
<td>INSERT INFORMATION HERE</td>
</tr>
<tr>
<td>12. Was the patient aware of any previous MRSA colonisation/infection?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>13. Could any deficiencies in screening have contributed to the incident?</td>
<td>SELECT YES/NO</td>
</tr>
</tbody>
</table>
C. DEVICES USED IN RELATION TO PATIENT

14. Please list any devices used in a prior period relevant to this case in the events that led to the infection.

<table>
<thead>
<tr>
<th>Device</th>
<th>Date of insertion</th>
<th>Date of removal</th>
<th>In line with local policy, was the device:</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERT DEVICES USED HERE</td>
<td>DD/MM/YY</td>
<td>DD/MM/YY</td>
<td>Used appropriately? SELECT YES/NO</td>
</tr>
<tr>
<td>DD/MM/YY</td>
<td>DD/MM/YY</td>
<td>Correctly inserted? SELECT YES/NO</td>
<td></td>
</tr>
<tr>
<td>DD/MM/YY</td>
<td>DD/MM/YY</td>
<td>Correctly maintained? SELECT YES/NO</td>
<td></td>
</tr>
<tr>
<td>DD/MM/YY</td>
<td>DD/MM/YY</td>
<td>Correctly removed? SELECT YES/NO</td>
<td></td>
</tr>
<tr>
<td>DD/MM/YY</td>
<td>DD/MM/YY</td>
<td>Correctly removed? SELECT YES/NO</td>
<td></td>
</tr>
</tbody>
</table>

15. Please provide a summary of any deficiencies in device usage that may have contributed to this incident

INSERT INFORMATION HERE

D. ANTIMICROBIAL THERAPY

16. During the patient pathway under review, was the patient prescribed any antibiotics?

SELECT YES/NO

16a. If yes, which antibiotics were prescribed? (you may wish to consider noting details of the prescribers and the dates of the prescriptions)

INSERT ANTIBIOTICS PRESCRIBED
<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Was the appropriate antibiotic type prescribed?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>17a. Was the appropriate dosage prescribed?</td>
<td>SELECT YES/NO</td>
</tr>
<tr>
<td>17b. If no, could this have been a contributory factor for the MRSA BSI?</td>
<td>SELECT YES/NO</td>
</tr>
</tbody>
</table>
**E. SKIN INTEGRITY**

18. Did the patient have any breach in skin integrity (e.g. pressure sores/ulcers, leg ulcers, eczema)?  
**SELECT YES/NO**

18a. If there was a surgical wound, were any of the correct surgical processes not followed using optimal practice?  
**SELECT YES/NO/N/A**

18b. If a chronic wound, was it appropriately managed?  
**SELECT YES/NO/N/A**

18c. If a chronic wound, was it colonised with MRSA?  
**SELECT YES/NO/N/A**

19. Could any deficiencies in the management of skin integrity have contributed to the incident?  
**SELECT YES/NO**
### F. RISK FACTORS FOR TRANSMISSION

20. Is there any evidence of new colonisation by MRSA during the period of care that led to the current MRSA BSI?
SELECT YES/NO

21. Was the patient appropriately isolated?
SELECT YES/NO

22. Any other factors that may have contributed to transmission?
INSERT INFORMATION HERE

### G. HAND HYGIENE

23. Was there evidence of any deficiencies in hand hygiene compliance in the areas of the pathways of care during this period?
SELECT YES/NO

23a. If “YES”, please provide details.
INSERT INFORMATION HERE

### H. OTHER FACTORS

24. Were there any deficiencies in environmental or equipment cleaning during this period, and could these have contributed to this incident?
INSERT INFORMATION HERE

25. Were there any other factors (avoidable or unavoidable) relating to this patient’s overall management that could have contributed to the incident?
SELECT YES/NO
<table>
<thead>
<tr>
<th>25a. If “YES”, please provide details</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERT INFORMATION HERE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>26b. If “YES”, could these have been avoided?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELECT YES/NO</td>
</tr>
</tbody>
</table>

### I. ORGANISATIONAL ISSUES

<table>
<thead>
<tr>
<th>27. Were staff to patient ratios appropriate or at least in line with local agreement in the areas where this patient was managed prior to the incident?</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERT INFORMATION HERE</td>
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</table>

<table>
<thead>
<tr>
<th>28. Were there any specific issues with staffing capacity during the period prior to this incident?</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERT INFORMATION HERE</td>
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</table>

<table>
<thead>
<tr>
<th>29. Were there any likely deficiencies of training in infection control in the areas covered by the patient pathway of care?</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERT INFORMATION HERE</td>
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</tbody>
</table>

### J. GOVERNANCE ISSUES

<table>
<thead>
<tr>
<th>30. Is there evidence from any of the organisations responsible for the patient’s care:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Of formal and informal audits of relevant clinical practice being undertaken and used to drive improvement?</td>
</tr>
<tr>
<td>• Of processes in place to check effectiveness of clinical practice controls e.g. additional spot checks, use of safety thermometer, intentional walk rounds by matron/lead nurse/board member?</td>
</tr>
<tr>
<td>• That ownership of infection prevention and control is evident in individual staff members, teams and management structures and mandated within their governance structures and processes when undertaking PIR/RCAs/Serious Incidents?</td>
</tr>
</tbody>
</table>

| INSERT INFORMATION HERE                                                                                                          |
31. Is there evidence of infection control policies for the relevant issues identified and have these been reviewed in accordance with the organisation’s requirements?

INSERT INFORMATION HERE

32. Summary to inform development of action plan for learning outcomes

<table>
<thead>
<tr>
<th>Using the boxes below, please provide summary of factors A to J.</th>
<th>Were any of the factors contributing to the infection identified in this section?</th>
<th>Using the free text boxes below, please state whether the factors that contributed to the infection could have been prevented.</th>
<th>Recommended actions agreed to prevent recurrence.</th>
<th>If examples of sub-optimal practice have been detected, but did not contribute to this infection, please insert details here. Please indication what corrective action is being/has been taken.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed contaminant</td>
<td>Please insert “Y/N/DK”</td>
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<td></td>
</tr>
<tr>
<td>A - Case details</td>
<td></td>
<td></td>
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<tr>
<td>B – Screening for Infection/colonisation</td>
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</tr>
<tr>
<td>C – Devices</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>D – Antimicrobial therapy</td>
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<tr>
<td>E - Skin Integrity</td>
<td></td>
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<tr>
<td>F – Risk factors for Transmission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### K. STATEMENT OF GOOD PRACTICE

33. Are the patient and appropriate relatives/carers fully aware of this incident?

**SELECT YES/NO**

34. PLEASE SUMMARISE THE LEARNING OUTCOMES FROM THIS POST INFECTION REVIEW (using the free text box below)

Include details of Third Party assignment here

### L. AFTER CONDUCTING THE POST INFECTION REVIEW, THIS CASE SHOULD BE FINALLY ASSIGNED

**Assigned organisation is (please tick one box):**

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Trust</td>
<td>☐ No agreement between CCG and Trust</td>
</tr>
<tr>
<td>CCG</td>
<td>☐ Decision by the Panel if Case referred for arbitration</td>
</tr>
<tr>
<td>Third Party</td>
<td>☐ (select acute Trust, CCG or Third Party)</td>
</tr>
</tbody>
</table>
ANNEX 2:

PROCESS MAPS FOR POST INJECTION REVIEW
Who inputs the core dataset to the DCS?

Who takes the sample? Who takes the sample?

- Acute trust (whether inpatient, day case, A&E etc)
- GP (including cases in Nursing Homes, or taken by a nurse responsible to a GP)
- Non-acute hospital trust (e.g. Mental health trusts, community trusts)

Who processes the sample? Who processes the sample?

- Lab in acute trust taking sample
- Lab in another acute trust
- Private Lab not hosted by an acute trust
- Lab in an acute trust
- Private Lab not hosted by an acute trust
- Lab in an acute trust
- Private Lab not hosted by an acute trust

Who is responsible for ensuring data is input to DCS? Who is responsible for ensuring data is input to DCS?

- Acute Trust taking sample
- Acute Trust taking sample is responsible for ensuring data is input
- Acute Trust taking sample is responsible for ensuring data is input, probably by the acute trust
- CCG taking sample is responsible for ensuring data is input, probably by the laboratory via contract
- CCG taking sample is responsible for ensuring data is input, probably by the acute trust
- Provider taking sample is responsible for ensuring data is input, possibly by the acute trust
- Provider taking sample is responsible for ensuring data is input, possibly by the laboratory via contract

Who will actually enter the data on the DCS? (Alternatives) Who will actually enter the data on the DCS? (Alternatives)

- Acute Trust taking sample
- Acute Trust processing sample
- Acute Trust taking sample
- Private lab
- Acute Trust processing sample
- CCG
- Private lab
- CCG
- Acute Trust processing sample
- Provider taking sample
- Private lab
- Provider taking sample
MRSA BLOODSTREAM INFECTION (BSI): REPORTING ARRANGEMENTS

TIMELINE

- Case Provisional Assignment
- PIR initiation emails sent, next working day is first day of the PIR
- Lead organisation responds within 14 days
- Assisting organisation responds within 2 days
- DPH review panel to convene within 28 days

MRSA BSI confirmed by healthcare providers laboratory

Positive MRSA BSI result recorded on DCS. Provisional allocation to either Acute Trust or CCG

Positive specimen taken on or after day 3 – Provisionally assigned to the Acute Trust

Positive specimen taken on day 1 or day 2 – Provisionally assigned to the CCG

Trust leads PIR with assistance from CCG and other organisations as necessary

CCG leads PIR with assistance from Trust and other organisations as necessary

Local PIR undertaken by Lead organisation (i.e. Acute Trust or CCG)

Provisional assignment is confirmed. PIR process complete

Leading organisation does not agree with the provisional assignment

No agreement on the assignment of the case

Assisting organisation agrees to the case. PIR process complete

Arbitrator to convene a review panel and adjudicate (within 28 days). The panel can call on the Acute Trust, CCG or PHE to assist

The panel review outcome: MRSA BSI assigned to the original provisional assignment; the leading organisation

The panel review outcome: MRSA BSI assigned to the assisting organisation

The panel review outcome: MRSA BSI assigned to the organisation where the blood specimen was tested, as this was a contaminant case

The panel review outcome: MRSA BSI assigned to a Third Party

Arbitrator gives feedback/learning to local organisation on corrective measures to prevent recurrence. As part of good practice, Arbitrator will also be expected to carry out regular audits/QA of local decisions
ANNEX 3:
EXAMPLES OF THIRD PARTY ASSIGNMENT
Examples of Third Party Assignment

The following examples illustrate a change to the way MRSA bloodstream infections are assigned from April 2014. Currently, there are two categories for assigning cases: Trust assigned and CCG assigned. From April, there will be one other category – “Third Party” assigned cases.

This new category is designed to capture instances where, after arbitration by the review panel, the MRSA case could not legitimately be assigned to either the Trust or the CCG. Therefore, for the purposes of the published data on MRSA cases, these Third Party cases will not be assigned to either the Trust or the CCG.

NB: If the incorrect organisation has been attributed to a case via the Data Capture System due to incorrect information being entered onto the system or incorrect data on the Spine, then the data should be corrected. Such instances are not applicable to third party assignment.

EXAMPLE 1: Third Party Provider (England) Patient “A”

Background
A CCG in Berkshire commissions specialist services for Patient “A” from a London specialist provider. After a few days, the patient returns to Berkshire Trust and is found to test positive for MRSA bacteraemia. Since the sample was taken on the day of admission, the Post Infection Review is led by the CCG. During the Post Infection Review process it has been established that the patient had received no clinical care in Berkshire in the immediate period prior to admission and that it is most likely that the bacteraemia developed in Trust A. In view of these facts, the CCG feels that the case should not be assigned to them on the Data Capture System. The matter is, therefore, referred to the arbitration panel led by the Regional Medical Director and the Regional Director of Nursing.

Outcome
The arbitration panel agrees with the CCG and recommends that the case is assigned on the Data Capture System to a Third Party. In the interests of patient safety, the CCG in Berkshire (which commissioned the service) should inform the London provider to support clinical learning and minimise the risk of a reoccurrence.

EXAMPLE 2: Third Party Provider (other than England) Patient “B”

Background
Patient “B”, who is from, and registered in Wales presents at an acute Trust in Liverpool. The sample is taken on Day 2. The sample is positive for MRSA. Since the sample was taken on Day 2, the Post Infection Review is led by the CCG.

During the Post Infection Review it is established that there is no clinical learning for the Liverpool Trust or any Liverpool community providers relating to this case and it is most likely that the patient contracted the infection in an organisation in Wales. The Liverpool CCG feels it
should not be assigned to them on the Data Capture System. The case is sent to the arbitration panel for a decision. The panel agrees that the CCG should not be assigned this case because it is most likely that the patient contracted the infection in Wales, and is in fact, registered in Wales.

**Outcome**

The decision of the arbitration panel is that the case should, therefore, be assigned on the Data Capture System, to the Third Party. Where the identity of the Third Party is known, the organisation leading the PIR should inform the Third Party of the decision of the arbitration panel.

**EXAMPLE 3: (Intractable Cases) Patient “C”**

**Background**

Patient “C” presents at an acute Trust. The sample is taken on Day 3 and tests positive for MRSA. Since the sample was taken on Day 3, the Post Infection Review is led by the acute Trust.

During the Post Infection Review it is established that the case represents an intractable case of MRSA and the acute Trust believes it should not be assigned to them on the Data Capture System. The case is sent for arbitration. The arbitration panel, using its clinical and microbiological expertise agrees that the case represents an intractable case of MRSA.

**Outcome**

The case is assigned to a Third Party and the Trust is informed of the decision. It is the responsibility of the relevant Trust to assess what action is necessary in the light of the decision of the arbitration panel.

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1 For the purposes of this example, designating intractable cases of MRSA bloodstream infection is a matter for local clinical judgement, but could include cases where a thorough review of the notes shows a lack of patient compliance or a deep seated infection that cannot be treated because of co-morbidities or other patient related factors.