NHS
Doncaster
Clinical Commissioning Group

Surveillance, management and reporting of infections

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Approving Body	Quality & Safety Committee
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REVISIONS/AMENDMENTS SINCE LAST VERSION

Date of Review	Amendment Details
April 2014	The original PCT document has been revised to: • Reflect the Clinical Commissioning Group establishment including corporate logo. • Rename of Title • Add Post Infection Review process (PIR) for MRSA Blood stream infection (MRSA BSI) • Add Key performance indicators • MRSA Bacteraemia changed to MRSA blood stream infection (MRSA BSI) • Change Mandatory extended surveillance system (MESS) to Data Capture system (DCS) • Change Health Protection Unit to Public Health England (PHE)

CONTENTS

DEFINITIONS

Term	Definition
Surveillance	The systematic collection of data, its analysis and dissemination to facilitate appropriate action (DOH, 2003). This includes monitoring infections within the population in order to analyse and disseminate the information to improve practice.
Alert Organisms or conditions	Organisms or conditions identified in the laboratory and through clinical diagnosis which have the potential to give rise to outbreaks (Appendix D)
Notifiable Diseases	This is a legal term denoting diseases that must, by law, be reported to the 'proper officer' i.e. the Consultant for Communicable Disease Control (CCDC) (Appendix E)
DCCG	Doncaster Clinical Commissioning Group

Abbreviations

MRSA	Meticillin Resistant Staphylococcus Aureus
HCAI	Healthcare Associated Infection
HAI	Hospital acquired infection
CA	Community acquired
CDI	Clostridium difficile infection
SI	Serious Incident
PIR	Post Infection Review
RCA	Root Cause Analysis

POLICY

1. Policy Statement, Aims & Objectives

1.1. Healthcare associated infection (HCAI) and antimicrobial resistance pose a significant challenge to health and social care at all levels, nationally, regionally and locally.

1.2. For Clinical Commissioning Groups (CCG) there is an expectation that all commissioned healthcare providers continually increase standards of infection prevention and control to limit the incidence of HCAI.

1.3. A zero tolerance approach to Meticillin resistant Staphylococcus aureus blood stream infection (MRSA BSI) and a significant reduction of reported Clostridium difficile infection (CDI) are linked to better patient outcomes within Domain 5: Treating and caring for people in a safe environment; and protecting them from avoidable harm (Department of Health ,2013).

1.4. Nationally, all commissioned healthcare providers are required to meet Outcome 8 of the Care Quality Commission (CQC) Registration Requirements (CQC, 2009): Cleanliness and infection control. This outcome reflects the requirements the Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance (Department of Health (D.O.H, 2010).

1.5. DCCG is committed to complying with mandatory surveillance directed by Public Health England (PHE) in line with the Data Capture System (DCS) for recording surveillance data relating to healthcare associated infections (HCAI).

1.6. The purpose of this document is to provide guidance on the roles and responsibilities of all commissioned healthcare provider services involved in the surveillance and monitoring of HCAI's.

1.7. Summary reports of all mandatory surveillance data will be reported at the District Infection Prevention and Control Committee (DIPCC), Quality and Patient Safety meeting and within annual infection prevention and control and governing body reports.

1.8. The aims of this procedural document policy are:

- To ensure prevention and early detection of outbreaks of HCAI's and infectious diseases is undertaken in order to allow timely investigation, prevention and control
- To ensure that appropriate policies and procedures are incorporated within all commissioned healthcare provider services.
- To ensure compliance of national and local guidance on surveillance of HCAI's.

- To determine HCAI rates over a period of time to monitor and measure the effectiveness of prevention and control.

1.9. To ensure continuous improvement in risk management, the organisation has a range of key performance indicators (KPIs) which it uses for monitoring purposes:

No.	Key Performance Indicator	Method of Assessment
1.	Implement measures to reduce and control infection rates Reduction in MRSA bacteraemia as per national objective Reduction in cases of Clostridium difficile as per national objective	Monthly reporting from Data capture system – previously known as mandatory enhanced surveillance database (MESS) Monitoring of trajectories nationally set for MRSA BSI and C.difficile Post Infection Review panel and reports Production of quarterly monitoring report Annual Infection Prevention and Control report District Infection Prevention and Control Committee Report
2.	Maintain high standards of infection prevention and control by monitoring standards of commissioned healthcare provider services	Annual work plans presented at DIPCC Governing body report
3.	Monitoring of infection prevention and control training and education standards of commissioned provider services	Dashboard Annual work plans

1.10. This procedural document will be reviewed 3-yearly, and in accordance with the following on an as and when required basis:

- Legislative changes
- Good practice guidance
- Case law
- Significant incidents reported
- New vulnerabilities
- Changes to organisational infrastructure

2. Legislation & Guidance

2.1. The following legislation and guidance has been taken into consideration in the development of this procedural document:

- Department of Health (2010) The Health & Social Care Act 2008: Code of Practice for Health and Adult Social Care on the Prevention and Control of Infections and related guidance.
- Department of Health (2010) Essential Standards for Health: Outcome 8 Safeguarding and Safety (regulation 12): cleanliness and infection control
- NHS England (2014) Guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections from April 2014
- National Health Service Litigation Authority (NHSLA) risk management standards

3. Scope

3.1. This policy applies to those members of staff (IPCT) that are directly employed by NHS Doncaster CCG and for whom NHS Doncaster CCG has legal responsibility. For those staff covered by a letter of authority / honorary contract or work experience this policy is also applicable whilst undertaking duties on behalf of NHS Doncaster CCG or working on NHS Doncaster CCG premises and forms part of their arrangements with NHS Doncaster CCG

4. Accountabilities & Responsibilities

4.1. Overall accountability for ensuring that there are systems and processes to effectively manage procedural documents lies with the Chief Officer. Responsibility is also delegated to the following individuals:

Chief Nurse	Has delegated responsibility for: • Leading the development, review and approval of clinical procedural documents. • Leading the development, review and approval of safeguarding procedural documents.

Procedural Document Authors	• Are responsible for ensuring procedural documents remain up to date and in line with relevant legislation and guidance. Procedural Document Authors are also responsible for ensuring new / reviewed procedural documents are sent through the appropriate approval process.
Commissioned Healthcare Provider organisations	Responsibility of commissioned healthcare provider organisations is to ensure all staff (including all employees, whether full/part time, agency, bank or volunteers) are: • Complying and adhering to all infection prevention and control procedural documents of their respective organisations. • Undertaking appropriate infection prevention and control educational and training programmes

5. Dissemination, Training & Review

5.1. Dissemination

5.1.1. The effective implementation of this procedural document will support openness and transparency. NHS Doncaster CCG will:

- Ensure all staff and stakeholders have access to a copy of this procedural document via the organisation's website.

5.1.2. This procedural document is located in the suite Clinical Policies. A set of electronic Procedural Documents are available via the organisation's website. Staff are notified by email of any new or updated procedural documents.
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5.2. Training

5.2.1. The commissioning IP&CT will be offered relevant training commensurate with their duties and responsibilities.

5.3. Review

5.3.1. As part of its development, this procedural document and its impact on staff, patients and the public has been reviewed in line with NHS Doncaster CCG's Equality Duties. The purpose of the assessment is to identify and if possible remove any disproportionate adverse impact on

employees, patients and the public on the grounds of the protected characteristics under the Equality Act.

5.3.2. The procedural document will be reviewed every three years, and in accordance with the following on an as and when required basis:

- Legislatives changes
- Good practice guidelines
- Case Law
- Significant incidents reported
- New vulnerabilities identified
- Changes to organisational infrastructure
- Changes in practice

5.3.3. Procedural document management will be performance monitored to ensure that procedural documents are in-date and relevant to the core business of the CCG. The results will be published in the regular Governance Reports.

PROCEDURE

1. Mandatory Surveillance

1.1. Surveillance provides information by identifying infected patients, determining the site of infection and ascertaining factors that contribute to HCAI's. This data involves the calculation of the rate of infection and monitors infection trends with respect to time, place and infection site.

1.2. The information obtained from surveillance enables appropriate infection prevention and control interventions and contributes to evaluating their efficacy. Feedback from surveillance also forms the basis of infection prevention and control interventions, education and policy development.

1.3. Healthcare associated infections such as MRSA and Clostridium difficile pose particular challenges in both acute and community settings. For healthcare provider organisations surveillance of these organisms requires working collaboratively with Consultant Medical Microbiologists and Acute and Community Infection Prevention and Control teams (IP&CTs).

1.4. To determine the source and acquisition of all HCAI's; and aid data collection and reporting of healthcare associated infection (HCAI) surveillance case definitions have been identified (Appendix A).

2. Types of Mandatory Surveillance

2.1 Meticillin Resistant Staphylococcus aureus Bloodstream Infection (MRSA BSI) (Appendix B)

- A Post Infection Review (PIR) for all MRSA bloodstream infection cases forms part of the government strategy for achieving a "zero tolerance" to HCAI.(NHS England, 2013)

- 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.

- Information regarding the suspected MRSA BSI , inclusive of patient information, source and risk factors are obtained by relevant infection prevention and control teams.

- 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 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.)

- An organisation to which a case is initially provisionally assigned (either the acute Trust or CCG) will be the lead organisation responsible for completing a PIR within 14 working days of being notified that a PIR is required.

- A post infection review of the case ,with key representatiatives, will be undertaken to determine if it was unavoidable or avoidable (lapse in care). Information from this review will be collated within 14 day and recorded on the data capture system.

- Clinicians, nursing staff and allied health care professionals are required to assist with the PIR within a given time frame, where required

- Action plans are devised to address any recommendations required to enhance clinical practice.

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

- Where the PIR cannot determine who the responsible organisation are, or, are unable to decide the root cause, the arbitration process will be used. The Regional Medical Director / Regional Director of Nursing together with the Director of Public Health will convene a panel to make the decisions on behalf of the assigned organisation

3. Clostridium difficile infection (CDI) (Appendix C)

- Information regarding suspected community acquired CDI cases, where there is commissioned healthcare provider involvement e.g. district nursing, is obtained from the acute trust.

- Information regarding suspected community acquired CDI cases, where there is no healthcare provider input, is obtained from the performance team at DCCG via the data capture system.

- A **r**oot cause analysis (RCA) is undertaken for all CDI cases which intends to look at the patient journey where there has been a significant episode requiring investigation.

- This may include the patient's placement throughout hospital admission, procedures undertaken, and records of their care, source and other contributing factors.

- Within the community setting review of GP or care interventions by other healthcare providers e.g. district nursing, community matron will be undertaken.

- Root cause analysis therefore will be undertaken by the appropriate community infection prevention and control teams.

- This information is collected, in the form of a HCAI data collection form and shared with DBHFT Acute Trust - Consultant Microbiologist. This includes completion of an antibiotic data form.

- Clinicians, nursing staff and allied health care professionals are required to assist with the RCA within a given time frame, where required

- Each case will be presented at a Post Infection Review panel held monthly to determine if it is deemed unavoidable or avoidable (lapse in care)

- Action plans are devised to address any recommendations required to enhance clinical practice.

4. Alert Organism And Conditon Surveillance

4.1. The microbiology department and PHE has a responsibility for informing all infection prevention and control teams of alert organisms and conditions as identified in Appendix D that may potentially cause outbreaks of infection and / or are identified as multi resistant organisms.

4.2. Each organisation will receive daily situation reports informing them of outbreaks of infection from PHE

5. Notifiable Diseases

5.1 The statutory notification of infectious diseases (NOIDs) is the responsibility of all registered medical practitioners and laboratories to ensure notifiable diseases, as identified in Appendix E, are reported to the "proper officer" - Consultant for Communicable Disease Control (CCDC) based at the local PHE office. (D.O.H, 2010)

5.2 The purpose of this notification is to enable the prompt investigation, risk assessment and response to cases of infectious disease and contamination that present a significant risk to human health. It also provides data for use in the epidemiological surveillance of infection and contamination. (D.O.H, 2010).

6. Serious Incident Reporting

6.1. It is the responsibility of all healthcare provider organisations to report all outbreaks of infection, suspected or confirmed, as a serious incident. This includes any healthcare associated infection which has significantly contributed to serious harm or death and of which is recorded in part 1of the death certificate.

Appendix A

Healthcare Associated Infection (HCAI) Surveillance Case Definitions

Surveillance

Surveillance is an essential component of infection prevention and control (DH/PHLS, 1995). High quality information on infectious diseases, healthcare associated infection and antimicrobial resistant organisms is essential for monitoring progress, investigating underlying causes and applying prevention and control measures (DH, 2003a).

Mandatory surveillance is undertaken as part of a national surveillance scheme and DCCG aims to comply with all requests for Mandatory Surveillance of Healthcare-associated Infection in accordance with the requests made by Public Health England.

Healthcare associated infections such as MRSA BSI and C.difficile infection pose particular challenges in both acute and community healthcare settings. Surveillance of these organisms require working collaboratively with the Consultant Microbiologist; and acute and community infection prevention and control teams.

To aid data collection and reporting healthcare associated infection case definitions are as follows:

Healthcare associated infections (HCAI) refer to infections that occur as a result of contact with the healthcare system. This includes care provided in the patient's own home, general practice, nursing and residential care homes and care in acute hospitals.
The term has been used in recognition to the increasing complex procedures that are undertaken outside hospitals. Previously, when most complex healthcare was hospital based, the term hospital acquired infection was used.

Hospital acquired infection (HAI) (also known as nosocomial infection) refers to an infection that develops in a patient 48 hours or more after admission to a hospital.

Community acquired infection (CA) is generally any infection that a patient has when they come into hospital or which occurs within the first 48 hours of admission. In this case, it is assumed that the patient was already incubating the infection, which they acquired in the community prior to admission.

Appendix B

MRSA

Acute/ Provider Acquired

- Not previously documented as infected or colonised, first detected more than 48 hrs after admission or within 48 hrs of discharge from an hospital setting

Community Acquired (CA)

Patient fulfils all the following criteria and CA MRSA definition supported by laboratory findings.

- No previous hospitalisation, dialysis or surgery
- Non Nursing or residential home client
- No permanent indwelling catheter or percutaneous device e.g. suprapubic catheter, PEG

MRSA Blood stream Infection (BSI)

Blood stream infection is defined as the presence of bacteria in the blood stream. This is a life threatening sepsis that can lead to death if not diagnosed and treated effectively. Patients who have MRSA blood stream infection will need to be managed in a general hospital. Surveillance and reporting of MRSA bloodstream acquisitions has been mandatory for all NHS Trusts since 2001.

A post Infection review must be undertaken on notification from the PIR HCAI team

Post Infection Review (PIR)

A post infection review will be required on notification of MRSA BSI and conducted by a multidisciplinary clinical team that will review the bloodstream infection event and identify the factors that contributed to it.

The organisation to which the MRSA BSI case is initially assigned (either the acute trust or CCG) will be the lead organisation responsible for completing a PIR within 14 days of the date of assigning.

The outcome of the PIR should establish the organisation to which the BSI should be finally assigned.

The final assignment will identify the organisation best placed to ensure that any lessons learned are acted upon.

The final assignment must be logged on the DCS within 14 days of the initial assigning.

In Summary 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.

Appendix C

Clostridium difficile Infection (CDI)

NB Classification of an episode of CDI is 28 days, with day 1 being the date of specimen collection.

Acute / Provider

- Patient shows symptoms of having the infection after 72 hrs following admission to hospital facilities or
- Up to 12 weeks following date of discharge from hospital

Indeterminate Onset of New Isolate (IO)

- Patient who does not fit the above criteria for exposure setting but has been discharged / transferred between > 3 days and 12 weeks from the same or another acute / provider hospital

Community Acquired

- Patient with onset of symptoms within community setting or less than 72 hrs following admission to a hospital facility.
- (No acute or provider admission within the last 12 weeks)

Relapse

- Recurrence of symptoms 2 weeks after cessation of treatment (PHE, 2013)

Recurrence of infection

- Occurs in 20 % of pts treated with either metronidazole or vancomycin
- Recurrence of symptoms after 1 month of previous C. difficile episode

Serious Incident (SI)

It is the responsibility of all healthcare provider organisations to report all outbreaks of infection, suspected or confirmed, as a serious incident. This includes any healthcare associated infection which has significantly contributed to serious harm or death and of which is recorded in part 1of the death certificate.

Appendix D
Alert Organisms / Conditions

- Meticillin resistant Staphylococcus aureus / (MRSA) blood stream infections
- Clostridium difficile Infection
- Cryptosporidium
- Blood borne Viruses
- Glycopeptides resistant enterococci (GRE)
- Group A beta haemolytic streptococci
- Penicillin Resistant Streptococcus pneumoniae
- Multi Resistant coliforms –
    - E. coli
    - Acinetobacter
    - Enterobacter cloacae
    - stenotrophomonas maltophilia,
    - Extended spectrum beta lactamase producers (ESBLs)
- Chicken pox/shingles (Herpes zoster)
- Creutzfeldt jakob Disease (CJD)
- Campylobacter
- Diphtheria
- Cholera
- Dysentery
- Food poisoning
- Influenza
- Measles
- Meningitis
- Meningococcal septicaemia
- Mumps
- Norovirus
- Paratyphoid Fever
- Poliomyelitis
- Pyrexia of unknown origin with history of foreign travel
- Rotovirus
- Respiratory Syncytial
- Rubella
- Salmonella
- Scabies
- Scarlet Fever
- Severe soft tissue infections
- Suspected Legionellosis
- Tuberculosis
- Typhoid/ Paratyphoid
- Viral Haemorrhagic fevers
- Viral Hepatitis
- Whooping cough

Appendix E
Table of Notifiable Organisms

In some instances 'alert' conditions are classed as notifiable diseases .This a legal term denoting diseases that must, by law, be reported to the 'proper officer' e.g. the Consultant for Communicable Disease Control (CCDC), Public Health England , based in Sheffield. Notification books are kept on all community hospital wards and General Practitioner premises. It is the responsibility of the physician in charge of each case to make the notification.

Acute encephalitis
Acute meningitis
Acute poliomyelitis
Acute infectious hepatitis
Anthrax
Botulism
Brucellosis
Cholera
Diphtheria
Enteric fever (typhoid or paratyphoid fever)
Food poisoning
Haemolytic uraemic syndrome (HUS)
Infectious bloody diarrhoea
Invasive group A streptococcal disease and scarlet fever
Legionnaires' Disease
Leprosy
Malaria
Measles
Meningococcal septicaemia
Mumps
Plague
Rabies
Rubella
SARS
Smallpox
Tetanus
Tuberculosis
Viral haemorrhagic fever (VHF)
Whooping cough
Yellow fever

(Health Protection Legislation (England) Guidance 2010)

References

Care Quality Commission (2010) Care Quality Commission: Guidance about compliance Essential standards of quality and safety. http://www.cqc.org.uk/sites/default/files/media/documents/gac_-_dec_2011_update.pdf

Department of Health (2012) Mandatory Health Care Associated Infection Surveillance: Redevelopment of the HCAI Data Capture System (MESS) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214978/dh_134577.pdf

Department of Health (2010) Health Protection Legislation (England) Guidance 2010 http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114589.pdf

Department of Health (2010) The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216227/dh_123923.pdf

Department of Health (2013) The NHS Outcomes Framework 2013/14 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf

Public Health England (2013) Updated guidance on the management and treatment of Clostridium difficile infection. Crown Copyright, London www.gov.uk/phe@PHE_uk