MRSA: National developments, Progress, Challenges and Targets

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# The MRSA challenge - 2007

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Responsibility for HCAI

Clinicians
  - **Safe patient care**
  - Diagnosis
  - Treatment
  - Prevention
  - Control

Board/CEx/DIPC
  - Corporate environment
  - Make it happen

Government/DH
  - Set standards
  - Ensure priority
  - Monitor outcome
  - **Legislation**
  - **Performance management**
Reducing HCAI....

Change the mindset

From:

1) create a system to deliver specialist clinical care
2) take measures to prevent infection

To:

1) create a safe environment for patient care
2) deliver specialist clinical care within that environment
Getting Ahead of the Curve - 2002

Priorities identified

- HCAI
  - bacteraemia (MRSA, GRE)
  - *C. difficile* associated diarrhoea
  - surgical site infection

- Tuberculosis

- Blood-borne & sexually transmitted viruses (and others!)

- Antimicrobial resistance
And then

POLITICS

(and the media hype)
HCAI 2003 - 04

- Winning Ways - December 2003
  - Strategy for HCAI

- NAO Report - July 2004
  - Critical of slow progress

- Towards Cleaner Hospitals and Lower Rates of Infection - July 2004
  - Action plan
MRSA Target

‘Halve MRSA infections by 2008’
- MRSA bacteraemia
- Baseline 2003-04; Start date April 2005
- Monthly returns
- 3-monthly publication from Jan 2007
- Monthly submission and DH/SHA review

Depends upon mandatory surveillance being accurate and timely – CEx sign-off
Monthly MRSA bacteraemia figures August 06 to July 07

Actual

Trajectory
MRSA bacteraemia projections – July 2007

3 monthly rolling average MRSA levels
April 2005 to July 2007
in comparison with trajectories, final target and projection based on assumption of continuation of linear trend since January 2006

- linear trend since Jan 06
- 3 mthly rolling average
- final target 321 per month
- 50% trajectory
- normal trajectory (58% reduction)
MRSA reporting

- Timeliness
  - CEO lock down
  - Data entry in time
  - Use voluntary screen to record info to focus effort

- Extenuating circumstances
  - Duplicates
  - Repeats in untreatable patients
  - Responsible Trust (eg, renal satellite units)
What do the data tell us?

- Men >65 yrs are 43% of MRSA bacteraemias
  - (15% of all admissions nationally)
- 80% of MRSA bacteraemias are in emergency admissions
  - (37% of total admissions)
- 35% have been in hospital during the previous month
- Length of stay over 7 days increases risk
- 10% of MRSA bacteraemias come from nursing homes
  - 17% for pre-48 hour cases.
- 30% diagnosed in first 48hrs
  - but 65% of these patients have touched health care setting in recent past
- Risk factors
  - 14% - chronic wounds
  - 14% - central lines; 10% peripheral lines
  - 8% pneumonia
How do we change bad habits?

Management
  - emphasis on infection control

Enhanced surveillance (HPA)
  - MRSA & *C. difficile*

Clinical practice protocols

Cleanliness and hygiene
  - hand hygiene
  - environmental cleaning

Training

Targets and performance management
Management priority & responsibility

- **HCAI**
  - *NOT* just the Infection Control Team
  - Trust Board
  - Chief Executive
  - Clinical ownership
  - **ALL STAFF**

- **DIPC is the focus**
  - Responsibility
  - Authority – clinical and managerial
  - Resource allocation
WW Action area 6. Management and organisation

Chief Executive’s responsibilities

– Core part of Clinical Governance and Patient Safety programmes

– Promote low levels of HCAI

  Ensure actions are taken

– Aware of legal responsibilities to identify, assess and control risks of infection

– Appoint Director of Infection Prevention and Control
DIPC role

- Senior management – Board/CEx report
- Professional credibility
  - Special expertise
- Reporting line for ICT
- Policy implementation
- Performance management
- Resource allocation
- A champion & a manager!!
Providing the tools

- *Clean your hands* campaign
- PEAT inspections for cleanliness
- *Saving Lives & Essential Steps*
- Root Cause Analysis tool
  - bacteraemia-specific version – Sept 2006
- MRSA screening advice - October 2006

……..and now……..
…..legislation

Health Act 2006
– Statutory Code of Practice
– Compliance assessed by the Healthcare Commission
  Annual healthcheck
  120 unannounced spot checks
  Improvement notices
Health Act 2006 – Code of Practice

- 11 core duties
  - Management, Organisation and Environment
  - Clinical Care Protocols
  - Healthcare Workers
    - Training in Infection Control
    - Own health protection

Policy components & references to support compliance

SL assessment revision to reflect CoP
‘Saving lives’ toolkit

Two components

– Self assessment tool –

  now revised to reflect CoP core duties

– 7 High Impact Interventions (Care Bundle approach)

  - plus guidance notes
High Impact Interventions (revised June 2007)

1. Central venous catheters
2. Peripheral line care
3. Dialysis catheters
4. Surgical site management
5. Urinary catheters
6. Ventilator management
7. *Clostridium difficile*
SL Guidance

- October 2006
  - MRSA screening

- June 2007
  - Blood Culture protocol
  - Antimicrobial prescribing framework

- September 2007
  - Isolation and cohorting
MRSA screening – October 2006

- Guidance to NHS Trusts
- Focus on own high-risk groups
  - Elective orthopaedic, cardiovascular, neurosurgery – pre-admission
  - Emergency surgery – elderly orthopaedic/trauma?
  - All elective surgery?
  - ICU & HDU admission and weekly
  - Renal dialysis
  - Admissions from other hospitals, healthcare settings
  - All emergency admissions?
Screening and decolonisation

Screening methods
- Swab, direct plating on chromogenic agar
- Swab, into selective broth, then plate
- Rapid tests, eg PCR etc

Decolonisation regimen
- MRSA positive
- All initially; stop on negative result?
- All, irrespective of screening?

Isolate patient *if possible*
Environmental hygiene

- Hospitals should be clean!
- Role of matrons & ward sisters
- Routine cleaning
  - Hand-contact areas
- Enhanced cleaning in infected areas
  - Use of disinfectants
- Deep cleaning after discharge of infected patient
- Cleaning of the bed and bed space
- Medical equipment
Training

- BMJ eLearning
  - *C. difficile* video CPD module
- DoctorsNet
  - CPD module
- Dialogue with
  - Undergraduate Deans
  - *Tomorrow’s Doctors* review group (GMC)
  - Royal Colleges
  - Postgraduate Deans
Target performance management

DH Task Force
- Reviews MRSA bacteraemia and *C. difficle* figures
- Monitors programme activities
- Identifies Trusts for SL reviews and visits

SHA performance managers
- Monthly review of Trust performance

PCT commissioners
Improvement programme

- National Performance Improvement Network (PIN)
  - Meets 3 times a year
- Saving Lives self assessment reviews
- Improvement visits
  - DH team; 2-day interviews
  - Develop local action/recovery plan
  - Support implementation
Summer 2007

- **Saving Lives** issue 2 (June)
  - *C. difficile* care bundle updated
  - Antimicrobial prescribing – best practice
- **Improvement Team** (formerly MRSA)
  - Double funding (and size!)
  - Extend remit to *C. difficile*
- **DIPC** – review
  - Antimicrobial framework
Antibiotic policy - prevention

- Restrict use of broad spectrum agents
- Promote aminoglycosides (gentamicin etc)
- Reasons for prescribing recorded
- Stop dates – review by pharmacists
- Prophylaxis – single dose
- Audit, training and review
- Role of Antimicrobial Prescribing Team/Committee
Announcements Sept-Oct 2007

- National CD target - 30% reduction by 2011
- CMO PL on Death Certification
- Deep cleaning (PM)
- Matrons & Clinical Directors report to Boards quarterly
- Dress code – bare below the elbow
- MRSA screening - universal
  - Electives by 2008; emergencies a.s.a.practicable
- Isolation and cohorting guidance
- Regulator powers: fines and ward closures
Dress code (mainly for doctors)

- Bare Below the Elbow (BBE)
  - Short sleeves
  - No wrist watch
  - No wrist or hand jewellery (except plain wedding band)

- *Sleeves/cuffs and jewellery are impediments to hand hygiene and aseptic procedures*

- No ties (except bow ties) – *they are readily contaminated and not washed!*
- No white coats!
- Scrubs where appropriate, eg, theatre, ICU/HDU, A&E
A wake-up call........

- We must no longer accept these infections as ‘normal’

- Patients
  - Can be very ill
  - Can die
  - Stay in hospital longer
  - May need major surgery

- Significant NHS resources can be better used
Goal (Government/DH) - use

- Political imperative
- Measurement
- Target setting
- Professional support
- Performance management AND
- Legislation

To change human behaviour (clinical & managerial) to

- Overcome the challenge of MRSA