Reversing the Trend
a. Changing services and practice

Martin Kiernan
Nurse Consultant, Prevention and Control of Infection
Southport and Ormskirk NHS Trust

martin.kiernan@nhs.net
There are two main issues

- Acquisition of MRSA
  - Preventing transmission leading to colonisation
  - Occurs in Hospital and Community

- Acquisition of bacteraemia
  - Not all MRSA patients experience bacteraemia
  - MRSA does not spontaneously generate in the bloodstream

- What is the trigger event that facilitates bacteraemia?
How does RCA Help?

- Improvement is impossible without it
- Target actions must be aimed at something
- Needs ‘buy-in’ from the whole team
  - Sometimes more difficult in non-acute hospital settings
RCA helps to look for the holes
Screening of all Patients admitted from Nursing Homes

Patient Listed as admitted from own home yet had been in respite for 3 weeks
Screening all admissions to Trauma Ward

Patient admitted to medical ward as “off her legs”
MRSA Decolonisation

No decolonisation as MRSA status unknown
Intraoperative Prophylaxis

Inappropriate prophylaxis given
RCA helps to ensure it doesn’t happen again
### Sustainable Change

- Introduction of new care plan with compulsory removal or replacement at 72 hrs

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E / L / N</th>
<th>E / L / N</th>
<th>E / L / N</th>
<th>E / L / N</th>
<th>E / L / N</th>
<th>E / L / N</th>
</tr>
</thead>
<tbody>
<tr>
<td>In use Y / N</td>
<td>In use Y / N</td>
<td>In use Y / N</td>
<td>In use Y / N</td>
<td>In use Y / N</td>
<td>In use Y / N</td>
</tr>
<tr>
<td>Score</td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
</tr>
<tr>
<td>Flush Y / N</td>
<td>Flush Y / N</td>
<td>Flush Y / N</td>
<td>Flush Y / N</td>
<td>Flush Y / N</td>
<td>Flush Y / N</td>
</tr>
<tr>
<td>Initials</td>
<td>Initials</td>
<td>Initials</td>
<td>Initials</td>
<td>Initials</td>
<td>Initials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CANNULAE TO BE REMOVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>E / L / N</td>
</tr>
<tr>
<td>In use Y / N</td>
</tr>
<tr>
<td>Score</td>
</tr>
<tr>
<td>Flush Y / N</td>
</tr>
<tr>
<td>Initials</td>
</tr>
</tbody>
</table>

- Has a Doctor been asked to review the Cannulae Site?
  - Y □ N □

- Has Cannulae been removed?
  - At 72 hours Y □ N □
  - Less than 72 hours Y □ N □

- If less than 72hrs, Why?
  - Not required □
  - Medication stopped □
  - Dislodged/out □
  - Phlebitis □
  - Extravasation □

- Cannulae Re-sited Y □ N □
  - Date .................. Time .................
  - Place of Insertion ......................
  - Name ...................................
  - By Whom .................... Signature
  .....................................
What do we do?

- Seek and destroy
  - Screening
    - All NH patients
    - All admissions to
      - ITU/CCU/HDU
      - Trauma/orthopaedic/vascular wards
    - All planned surgery
  - Isolation of all MRSA carriers
Source of MRSA 2007 (%)

Nursing home 40%  
Community 20%  
Hospital 20%  
Other Hospital 10%  
Other 10%
IT can help

- PAS/Pathology system flagged to spot readmitted positives
  - 96% correctly isolated on admission, 100% the next day
- Information dept tell us daily
  - Known positives who are in
  - Planned admissions
  - Patients attending OPD
  - Readmitted patients
  - And monthly the numbers in each nursing home
Isolation

- Challenging!
- Wards have min 4 single rooms
  - 2 wards have 8 ensuite rooms
  - Effective loss of Ormskirk Isolation facilities
- Impact of increased screening for MRSA
- Need for close liaison with bed managers
  - Strain on IC on-call service
- Need for side room assessed 2x daily
- Use of Trust intranet
Current situation

- Only case since 18th July was a patient who acquired MRSA in a nursing home and had infected chronic wounds
  - 106 days since last Hospital-acquired case
MRSA

- Local publicity does not always meet the highest journalistic standards
  - ‘Target’ 3, cases 6
- Do the public recognise this?
Conclusion

- Pool of colonised is increasing
  - Spread in the community in families, etc
- The acute Trust is challenged to prevent patients admitted with MRSA from acquiring bacteraemia
- Better to prevent people acquiring MRSA in the first place
My 3 Tips

- Screening
- Treatment
- Detection