Antimicrobial Pharmacist Ward Rounds

A national review of practice

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Keep Antibiotics Working
<table>
<thead>
<tr>
<th>Antimicrobial ward rounds - NHS Scotland</th>
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<tr>
<td>Number of NHS Scotland boards audited</td>
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<td>Number of <strong>boards</strong> where antimicrobial pharmacist takes part in the antimicrobial ward rounds</td>
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<tr>
<td>Number of <strong>hospitals</strong> where antimicrobial pharmacist takes part in the antimicrobial ward rounds</td>
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Frequency of ward rounds

Minimum frequency of an antimicrobial ward round at each hospital

- Weekly: 8
- Twice weekly: 3
- Fortnightly: 2
- Three times weekly: 1
What patients are targeted for antimicrobial reviews?

• Alert antimicrobials
• Complicated infections
  – Staph aureus Bacteraemia,
  – Gram –ve bacteraemia
  – *C. difficile* infection
• Gentamicin and vancomycin
• OPAT
• Orthopaedics
• HDU/ITU
• Consultant referrals and reviews
Follow-up

- Check HEPMA to confirm interventions have been actioned
- Document recommendations in case notes and/or ‘pharmacy ward view system’. Antimicrobial pharmacist alerted if recommendations not acted upon
- Review on next antimicrobial ward round
- Discuss with ward clinical pharmacist and ask them to follow up
- Antimicrobial pharmacist visits ward to follow up
- Interventions acted on at time of ward round
  - Clinical team
  - Ward round team
Recording of interventions

- Database
- ICNET
- Paper records
- TRAK
- EXCEL spreadsheet
- Nil
Barriers to conducting antimicrobial pharmacist ward rounds

• Availability of Consultant microbiologists/ID and/or antimicrobial pharmacists

• Time;
  – Preparing for
  – Conducting
  – Following up post ward round

• Staff engagement
Successful Initiatives

Microbiologist/Pharmacist ward round, NHS Ayrshire and Arran

- Weekly Consultant Microbiologist and Antimicrobial Pharmacist
- All patients on the HEPMA ‘Alert (restricted) Antimicrobials’ report are reviewed
- Pre-ward round checks:
  - Culture and sensitivity reports, U+Es, FBCs
  - Previous antimicrobial treatment histories
  - Potential interactions/dosage adjustments/renal function
- Wards visited to review the targeted patients and speak to the clinicians to discuss treatment plans and give advice
- HEPMA checked to see if advice taken
Types of interventions

Total Intervention Ayr

- Successful/Advice Taken: 63
- Unsuccessful/Advice Not Taken: 13
- Successful/Advice Taken: 28
- Unsuccessful/Advice Not Taken: 2
- Successful/Advice Taken: 64
- Unsuccessful/Advice Not Taken: 233
- Successful/Advice Taken: 18
- Unsuccessful/Advice Not Taken: 2

University Hospital Ayr
NMP Bacteraemia Rounds, NHS Tayside

- NMP’s (nurse/pharmacist) were introduced into the existing bacteraemia service
- Released capacity within the ID medical team for complex patients
- NMP’s reviewed all gram –ve bacteraemias 2 days per week.
  - Patients highlighted by micro to team
- Patient consultation carried out and interventions/advice compared with ID recommendation
- Concordance of NMP and ID clinical decision making/ prescribing was 94%
  - only 2 patients requiring escalation for specialist ID review
- Poster accepted at BSAC March 2019
Antimicrobial Pharmacist ward rounds, NHS A+A

• 208 patients August 2017 – April 2018 (University Hospital Crosshouse)
• Up to 10 patients per week reviewed
• Report listing all patients prescribed gentamicin emailed daily
• Target patients on gentamicin;
  – > 4 days
  – Unverified
  – On wards with less robust pharmacist cover
  – Medic support- surgical

Success rate of pharmacist interventions

Successful 95%
Unsuccessful 5%
Future work...

• Evolving role of infection specialist teams
  – NMP led
  – Clinical teams vs NMP prescribing

• National projects
  – Duration ward rounds- start stopping antibiotics?
  – Penicillin allergy?
Questions?