Epidemiology of healthcare associated BSI in Scottish acute care hospitals

Prevalence of HA-BSI (n=60)

- 0.5% in acute adult inpatients
- HA-BSI accounted for 11.0% of all HAI

Patients with HA-BSI

- 46.7% female
- 53.3% male
- Median age: 62.5 years
- 49.2% had life limiting or end of life prognosis

Specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>56.7%</td>
</tr>
<tr>
<td>Surgery</td>
<td>28.3%</td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td>8.3%</td>
</tr>
<tr>
<td>Intensive Care</td>
<td>6.7%</td>
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</tbody>
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Antimicrobial prescribing

- 1.2% prescribed for treatment for all HA-BSI*

- Most commonly prescribed for treatment of HA-BSI
  - Flucloxacillin
  - Vancomycin
  - Temocillin

Characteristics of BSI

- 13.3% of HA-BSI were present on admission to hospital
- Causative Microorganism:
  - S. aureus: 22.6%
  - E. coli: 17.7%
  - E. faecium: 8.1%
  - S. epidermidis: 6.5%
  - E. faecalis: 6.5%
  - Other: 38.7%

Antimicrobial prescribing

- Sources of BSI:
  - Vascular catheterisation: 33.3%
  - Unknown origin: 16.7%
  - Urinary tract infection: 13.3%
  - Other infection (e.g. meningitis, osteomyelitis, etc.): 11.7%
  - Not recorded: 10.0%
  - Digestive tract infection: 15.0%

Vascular catheterisation

- 3 in 4 patients with HA-BSI had a CVC or PVC in situ prior to onset
- 39.3% of all patients in acute hospitals had a CVC or PVC in situ at the time of survey

* - Data relating to antimicrobial prescribing was based on clinical diagnosis of infection for the purpose of treating the patient. The other data relates to healthcare associated infection that met an epidemiological case definition.