Older People Are Not All The Same
lessons from a major trauma database

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Trauma in Older People
Methods

• TARN database
  • Trauma receiving hospitals in England and Wales
    • June 2013 to May 2015
  • All adult patients (≥ 65 years)
    • Age cohorts: 16-64; 65-74; 75-84 & ≥85 years
• Variables
  • Demographics (age, gender)
  • Clinical (comorbidities)
  • Injury (injury mechanism, severity and pattern)
  • Mortality
    • Crude and risk-adjusted
<table>
<thead>
<tr>
<th></th>
<th>16 – 64 years</th>
<th>65 – 74 years</th>
<th>75 – 84 years</th>
<th>≥85 years</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40780 (69.4%)</td>
<td>7303 (53.4%)</td>
<td>8067 (42.1%)</td>
<td>5826 (31.2%)</td>
<td>61976 (56.2%)</td>
</tr>
<tr>
<td>Female</td>
<td>17957 (30.6%)</td>
<td>6367 (46.6%)</td>
<td>11090 (57.9%)</td>
<td>12838 (68.8%)</td>
<td>48252 (43.8%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charlson Comorbidity Index</th>
<th>16 – 64 years</th>
<th>65 – 74 years</th>
<th>75 – 84 years</th>
<th>≥85 years</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>41014 (69.8%)</td>
<td>6997 (55.2%)</td>
<td>7524 (41.7%)</td>
<td>5921 (33.8%)</td>
<td>61456 (60.7%)</td>
</tr>
<tr>
<td>1 to 5</td>
<td>9138 (15.6%)</td>
<td>3914 (30.9%)</td>
<td>6651 (36.9%)</td>
<td>7096 (40.4%)</td>
<td>26799 (26.5%)</td>
</tr>
<tr>
<td>6 to 10</td>
<td>1521 (2.6%)</td>
<td>1253 (9.9%)</td>
<td>2823 (15.7%)</td>
<td>3276 (18.7%)</td>
<td>8873 (8.8%)</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>1373 (2.3%)</td>
<td>514 (4.1%)</td>
<td>1038 (5.8%)</td>
<td>1250 (7.1%)</td>
<td>4175 (4.1%)</td>
</tr>
</tbody>
</table>
Mechanism of Injury

- Falls <2m
- Falls >2m
- RTC
- Other

63% 79% 89%

65 – 74 years 75 – 84 years ≥85 years
Discussion

Older trauma patients

• Not all the same
  • Demographic differences
    • (gender)
  • Premorbid clinical condition
    • Charlson comorbidity index
  • Mechanism of injury
    • Falls < 2m predominate in the oldest patients
  • Mortality
    • Significant increase with age

Need to re-assess our thinking

• 2 groups of older patients:
  • Old but healthy
  • Old and frail

• More research is needed:
  • What affects outcome?
  • Managing heterogeneity?
  • What is frailty/how to measure it?
  • What about ‘functional’ outcomes?
Questions?