Pre-operative geriatric medicine clinic: Audit and service evaluation

Dr. David Scholes
Royal Liverpool and Broadgreen University Hospitals NHS Trust, UK
CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report
Drivers
Background

• Royal Liverpool University Hospital

• Regional centre for several surgical subspecialties
  - HPB, vascular, upper GI, urology

• Aim to set up geriatric medicine clinic to review frailest patients being considered for surgery - predominantly orthopaedic, vascular and colorectal

• Set up August 2016
Referral Criteria

- Elective surgery
- Assessed routinely by anaesthetic pre-op nurses
- Edmonton Frailty Score (EFS)
  - EFS ≥ 7 for general/vascular
  - EFS ≥ 10 for orthopaedics
# Edmonton Frail Scale

<table>
<thead>
<tr>
<th>Frailty domain</th>
<th>Item</th>
<th>Score 0</th>
<th>Score 1</th>
<th>Score 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>Imagine this pre-drawn circle is a clock. Place the numbers in the correct positions, then place the hands to indicate a time of 10 past 11</td>
<td>No errors</td>
<td>Minor errors</td>
<td>Other errors</td>
</tr>
<tr>
<td>General health status</td>
<td>In the past year, how many times have you been admitted to hospital?</td>
<td>0</td>
<td>1-2</td>
<td>&gt;2</td>
</tr>
<tr>
<td></td>
<td>In general, how would you describe your health?</td>
<td>Excellent, very good or good</td>
<td>Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>Functional independence</td>
<td>With how many of the following activities do you require help: meal preparation; shopping; transportation; telephone; housekeeping; laundry; managing money; taking medications?</td>
<td>0-1</td>
<td>2-4</td>
<td>5-8</td>
</tr>
<tr>
<td>Social support</td>
<td>When you need help, can you count on someone who is willing and able to meet your needs?</td>
<td>Always</td>
<td>Sometimes</td>
<td>Never</td>
</tr>
<tr>
<td>Medication use</td>
<td>Do you use five or more different prescription medications on a regular basis?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At times, do you forget to take your prescription medicines?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>Have you recently lost weight such that your clothing has become looser?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mood</td>
<td>Do you often feel sad or depressed?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Continence</td>
<td>Do you have a problem with losing control of urine when you don’t want to?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Functional performance</td>
<td>Timed Up and Go test (Box 4)</td>
<td>0-10 seconds</td>
<td>11-20 seconds</td>
<td>&gt;20 seconds, patient unwilling or requires assistance</td>
</tr>
</tbody>
</table>

Total (final score is the sum of column totals out of 17)

Scoring: 0-5 = not frail; 6-7 = apparently vulnerable; 8-9 = mild frailty; 10-11 = moderate frailty; 12-17 = severe frailty
Method

• Retrospective analysis August 2016-April 2017
• 47 electronic case-notes reviewed
• Nature of intended surgery
• Whether or not met criteria
• Geriatrician input and alterations to management
Referrals by Age

患者年龄分布

- 年龄范围 69-94 岁
- 中位年龄 80 岁
- 最大群体为 71-80 岁

适当性评估

 Appropriateness of referrals by age

<table>
<thead>
<tr>
<th>Quartiles</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>年龄</td>
<td>&lt;76</td>
<td>76-79</td>
<td>80-85</td>
<td>86+</td>
</tr>
<tr>
<td>数量</td>
<td>10</td>
<td>13</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>符合 EFS 的数量</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>符合 EFS 的百分比</td>
<td>70</td>
<td>46</td>
<td>59</td>
<td>57</td>
</tr>
</tbody>
</table>

NICE, FRANCE - SEPTEMBER 20/22, 2017
Main source of inappropriate referrals was patients awaiting orthopaedic surgery (35% inappropriate)

Didn’t preclude geriatric intervention
Geriatrician Review

• 43% of all patients referred failed to meet EFS criteria (20 patients)

• In 14 geriatrician input still suggested alteration to management (70%)

• This figure was only 63% in “appropriate referrals”
Surgical Outcome

• 33% underwent surgery by time of audit

• Waiting time from pre-op 3->263 days, median 27 days

• 4 deaths
Discussion

• Limited utility of EFS in this setting

• Prone to error and fails to identify patients in whom geriatric intervention might prove beneficial

• Disproportionate number of older people inappropriately referred

• Policy change to “clinical concern” rather than EFS
Acknowledgements

- Dr. Nadine Carroll
- Dr. Mark Johnston
- Dr. Aude Gatignol
- Sister Jackie Timperley

Thank you