Innovations in Inpatient Care

*Older patients*

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2009

• “Eliminate Preventable Harm”
  • 15 bed Geri unit
  • 10+/year falls with injury
  • Delirium factor

Delirium:
• 20% of patients ≥ 65
• 50% of high risk patients
• Risk of death at 1 year 30-50%
• Preventable
• Treatable
• * Underecognized *

1. Identify and prevent delirium
2. Prevent functional decline

GRACE
global risk assessment & care plan for elders

Multidisciplinary
Standardized
Broadly Supported
<table>
<thead>
<tr>
<th>Optimal</th>
<th>Usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Avoid Bed Rest</td>
<td>• Fear patient will fall</td>
</tr>
<tr>
<td>• Don’t use “bad” meds</td>
<td>• Burden on Staffing</td>
</tr>
<tr>
<td>• Recognize delirium</td>
<td>• Many MD/RNs lack expertise</td>
</tr>
<tr>
<td></td>
<td>• Tough to recognize</td>
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<td>• Confusion just happens</td>
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</table>
Get patients out of bed

Build upon existing Beers warning system

Educate

Make it easy to do the right thing at the right time

Optimal

• Avoid Bed Rest: Patients will fall

• Don’t use Burden onStaffing

• Recognize delirium

Usual

• Burden on Staffing

• Many MD/RNs lack Beers warning system

• Educatemakes it easy to do the right thing at the right time
2009 – Inclusive Planning for GRACE-AC

Quality Leaders

Geriatrics

Hospital Medicine

Nursing

Software Developers

Patient perspective

Pharmacy
GRACE-AC – What is it, really?

• **Multiple** changes to computer systems with embedded decision support
  • CPOE - default orders, analgesic/antipsychotic screens
  • Nursing Initial Patient Assessment (IPA) - care plan, delirium screen
  • Unit Dashboard - Green G, prompts/reminders

• **Bedside checklist**
  • Prompts for delirium screening every 24 hours
  • Reminders for delirium prevention strategies
<table>
<thead>
<tr>
<th>Outcome indicators (patients ≥ 80 yrs)</th>
<th>Mean pre-GRACE (SD)</th>
<th>Mean post-GRACE (SD)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Triggers (per 1000 pt days)</td>
<td>22.53 (3.60)</td>
<td>24.4 (4.10)</td>
<td>0.207</td>
</tr>
<tr>
<td>Triggers for acute change in consciousness (per 1000 pt days)</td>
<td>1.53 (1.01)</td>
<td>3.03 (1.13)</td>
<td>0.01*</td>
</tr>
<tr>
<td>30-day Readmission</td>
<td>19.73 (2.25)</td>
<td>14.42 (4.32)</td>
<td>&lt;0.005*</td>
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<td>LOS</td>
<td>3.7 (0.20)</td>
<td>3.7 (0.21)</td>
<td>0.588</td>
</tr>
<tr>
<td>% Antipsychotic use</td>
<td>11.25 (2.07)</td>
<td>10.12 (1.66)</td>
<td>0.129</td>
</tr>
<tr>
<td>Falls (per 1000 pt days)</td>
<td>3.03 (1.91)</td>
<td>3.19 (1.96)</td>
<td>0.810</td>
</tr>
</tbody>
</table>
Triggers for acute change in consciousness per 1000 pt days in elderly pts aged 80 yrs and above
30 day readmission rate in elderly patients aged 80 yrs and above

Pre-GRACE
Post-GRACE

Months
Ongoing Challenges

• Knowledge gap: Delirium may be recognized yet MDs don't know how to respond or underestimate the importance
• Incorporating bedside checklist into routine care
• Understanding true impact with number of other initiatives that are ongoing to improve care of patients hospital-wide
Parachutes reduce the risk of injury after gravitational challenge, but their effectiveness has not been proved with randomised controlled trials.