A UT Southwestern Hospital Elder Life Program:
HELP to Reduce Delirium in the Hospital

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Abstract

- America is aging, with an estimated 57.6 million older adults

- Quality geriatric care is complex, with challenges including polypharmacy, geriatric syndromes, frailty, and cognitive impairment

- Hospitalized older adults are at high risk for delirium, which has many adverse outcomes; 30-40% of cases of delirium can be prevented with interventions, such as those by the Hospital Elder Life Program (HELP)

- Through UTSW HELP, student volunteers will learn to communicate effectively with geriatric patients while helping to reduce delirium and functional decline
Objectives

**Hospital**

- Implement evidence-based interventions for delirium prevention as standard of care
- Optimize the patient experience
- Expand upon the collaborative relationship between UTSW and UT Dallas

**Student**

- Expose students to geriatric care prior to their formal in-hospital medical training
- Emphasize the importance of understanding the intricacies of caring for the elderly
- Provide students with opportunities to interact directly with patients
Delirium

• ↑ morbidity and mortality
• Functional and cognitive decline
• SNF
• PTSD
• Caregiver burden

Background Information
### Background Information

<table>
<thead>
<tr>
<th>Reference</th>
<th>Results Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wang 2019</td>
<td>Modified HELP program (t-HELP), with family involvement at its core, proven to reduce post-operative delirium (2.6% vs. 19.4%) and shorten length of stay (12.2 days vs. 16.4 days)</td>
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<tr>
<td>Hsieh 2018</td>
<td>Significant reductions in delirium incidence, odds ratio 0.47, 42% reduced rate of falls</td>
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<tr>
<td>Hsieh 2015</td>
<td>44% reduced delirium incidence, 64% reduced risk of falls, 5% lower risk of institutionalization post-discharge</td>
</tr>
<tr>
<td>Rubin 2011</td>
<td>23% reduced delirium incidence, decreased hospital length of stay by .7 days</td>
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<tr>
<td>Chen 2011</td>
<td>17% reduced delirium incidence</td>
</tr>
<tr>
<td>Inouye 2009</td>
<td>2% reduction in falls</td>
</tr>
<tr>
<td>Caplan 2007</td>
<td>32% reduced delirium incidence, decreased hospital length of stay by 4.3 days, reduced institutionalization by 23%, decreased falls by 13%, decreased sitter use by 314 hours</td>
</tr>
<tr>
<td>Rubin 2006</td>
<td>15% reduced delirium incidence, decreased hospital length of stay by .3 days</td>
</tr>
<tr>
<td>Inouye 2000</td>
<td>18% reduction in cognitive decline, 19% reduction in functional decline</td>
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<tr>
<td>Inouye 1999</td>
<td>5% reduced delirium incidence</td>
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<tr>
<td>Hshieh (2018) <em>American Journal of Geriatric Psychiatry</em></td>
<td>Savings of $1,600 to $3,800 per patient in hospital costs; $16,000 per person-year in long-term care costs</td>
</tr>
<tr>
<td>Rubin FH (2011) <em>Journal of the American Geriatrics Society</em></td>
<td>&gt;$7.3 million per year savings in hospital costs (&gt;1000 savings/patient)</td>
</tr>
<tr>
<td>Caplan GA (2007) <em>Internal Medicine Journal</em></td>
<td>$121,425 per year savings in sitter costs, decreased delirium incidence</td>
</tr>
<tr>
<td>Inouye (2006) <em>Journal of the American Geriatrics Society</em></td>
<td>Enhances patient satisfaction and improves nursing job satisfaction, serves as training resource, improves public relations and community outreach</td>
</tr>
<tr>
<td>Leslie DL (2005) <em>Journal of the American Geriatrics Society</em></td>
<td>$9,446 per person-year in nursing home costs</td>
</tr>
<tr>
<td>Rizzo JA (2001) <em>Medical Care</em></td>
<td>$831 savings per person-year in hospital costs</td>
</tr>
</tbody>
</table>
Specific Aims

- **Hospital aims:**
  - Reduce delirium rates
  - Reduce length of stay
  - Optimize patient satisfaction scores

- **Student educational aims:**
  - Improve knowledge regarding foundational geriatric topics
  - Improve attitudes regarding older adults
  - Improve students’ comfort with caring for hospitalized older adults
Project Plan

- Student Volunteers
  - 29 undergraduates
  - 14 pre-clerkship medical students

- Delirium Prevention
  - Interventions on 12 Blue
  - Track patients receiving interventions

- Monthly lectures and workshops
  - Geriatric topics
  - Reflect on patient experiences
Application of What You Learned at LEAD

- Importance of time management and organization
- Utilization of different types of leadership styles
- Necessity of delegation of tasks
- Value of coaching as a leader
## Proposed Annual Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Program Coordinator (salary + fringe)</td>
<td>$100,000</td>
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<tr>
<td>National HELP Dues</td>
<td>$1,000</td>
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<tr>
<td>Uniforms</td>
<td>$500</td>
</tr>
<tr>
<td>Digital Scheduling Platform</td>
<td>$468</td>
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<tr>
<td>Guest Lectures</td>
<td>$500</td>
</tr>
<tr>
<td>Statistical Support</td>
<td>$600</td>
</tr>
<tr>
<td><strong>Total estimated budget</strong></td>
<td><strong>$103,068</strong></td>
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Innovation and Significance

- Provides UTSW with a nationally recognized, well-validated, comprehensive, patient-care program
  - Expand UTSW Center of Excellence as it pertains to geriatrics

- Encourages interdisciplinary education and care
  - Future expansion to allied health and nursing schools

- Robust hands-on geriatrics educational opportunity
  - “Unless action is taken immediately, the healthcare workforce will lack the capacity (in both size and ability) to meet the needs of older patients in the future.”
    - IOM (National Academy of Medicine)
References

3. https://www.hospitalelderlifeprogram.org/
8. Retooling for an Aging America: Building the Health Care Workforce, Institute of Medicine, 1 (The National Academies Press 2008).