Using Home Health to Provide Acute Care at Home for Seniors as an Alternative to Hospital Admission

**Research Collaborators**

UC San Diego Health System

AccentCare

**Background**

Improving emergency department (ED) health services to better match the needs of older adults can be accomplished by providing additional disposition options. When seniors experience an acute change in health, options are often limited to calling 911 or going directly to the ED, which often results in a hospitalization. For complex seniors, there is a risk that limited disposition options carry a risk of cascading to hospital acquired complications. Because 70 percent of admissions for older adults originate in the ED, we sought to introduce an ED-based disposition option for treatment within the comfort and safety of home.

**Aim Statements**

1. **Create new processes**
   for transitioning eligible seniors from the ED to home-based acute care while avoiding hospitalization.

2. **Evaluate Home Health**
   ability as an existing Medicare benefit to rapidly respond to the home for seniors following an ED visit.

**Research Methods**

Research activities and approach:

1. 15-month prospective cohort study using quality improvement principles;
2. Partnered with Medicare-certified home health agency to have specially selected RNs to provide same day start of care post ED visit;
3. Developed home-based order sets, communication channels (including secure text messaging) and EHR access for the entire care team; and
4. ED revisits, hospitalizations, home health visits and total reimbursement for the care episode (ED plus home health) were analyzed.

**Results and Conclusions**

1. Pilot process of transitioning seniors from the ED to receive home health care successfully developed and deployed;
2. A total of 70 patients received an average of seven home visits over approximately three days;
3. High satisfaction among patients, family and care providers, especially with text messaging which offered near real-time interaction with fellow care team members and physicians;
4. Costs are significantly lower to Medicare for reimbursement for home health versus a hospitalization; and
5. Numbers of ED revisits and hospitalizations were not unexpected with 15 ED revisits and 4 hospitalizations.

**Variables N=70**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Value</th>
<th>Range</th>
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<tbody>
<tr>
<td>Men</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Age &gt; 65 years</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>62</td>
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<tr>
<td>Avg. # RN visits per patient</td>
<td>6</td>
<td>1-25</td>
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<tr>
<td>Avg. # PT visits per patient</td>
<td>1</td>
<td>0-10</td>
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<tr>
<td>Avg. home health payment per patient</td>
<td>$1615</td>
<td>$130-$3915</td>
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<td>Avg. ED payment per patient</td>
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<td>$430-$8640</td>
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**Top five most frequent home health primary diagnoses**

- Cellulitis
- Pneumonia/Bronchitis
- Pyelonephritis/UTI
- CHF
- Neutropenic Fever

**Medicare post-acute, 21%**

**Medicaid, 40%**

**Other, 18%**

**Out-of-pocket, 15%**