Improving End-of-Life Care by Reducing Avoidable Hospitalizations of NH Residents

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- Why try to reduce hospitalizations?
- How many are avoidable?
- What are the incentives?
- What can we do to reduce avoidable hospitalizations, related morbidity, and unnecessary expenditures?
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Hospitalization of Nursing Home Residents

- Common
- Expensive
- Often traumatic to the resident and family
- Fraught with many complications of hospitalization (e.g. deconditioning, delirium, incontinence/catheter use, pressure ulcers, polypharmacy)

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Hospital Readmissions within 30 days from SNFs are Common

- Of ~1.8 million SNF admissions in the U.S. in 2006, **23.5% were re-admitted to an acute hospital within 30 days**

- Cost of these readmissions = **$4.3 billion**

Mor et al. Health Affairs 29 (No. 1): 57-64, 2010
Hospital Readmissions within 30 days from SNFs are Common

- Of 10,825 discharges of Medicare fee-for-service patients age 75+ discharged from a community hospital in south Florida, 3,301 (30%) went to a SNF, and 597 (18%) of these SNF admissions were readmitted to the hospital within 30 days.
  - Of the 597 readmitted to the acute hospital within 30 days, 201 (34%) were readmitted within 7 days or less
- Most common diagnoses:
  - CHF
  - Pneumonia
  - Other infections


A Tale of Three Siblings

- Sara
- Sadie
- Sam
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**Sara**

92 years old

- Hospitalized for a lower respiratory infection
- Cardiology evaluation resulted in catheterization
- Fell and fractured her hip related to sedation from the procedure

**Sadie**

96 years old

- Hospitalized for urinary infection and dehydration
- Re-hospitalized 7 days after discharge for recurrent urinary infection and dehydration
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Sam
101 years old

- Hospitalized for the 4th time in 2 months for aspiration pneumonia related to end-stage Alzheimer’s disease
- Transferred to hospice on the day of admission

As many as 45% of admissions of nursing home residents to acute hospitals rated as inappropriate

- In 2004 in NY, Medicare spent close to $200 million on hospitalization of long-stay NH residents for “ambulatory care sensitive diagnoses”
Grabowski et al, Health Affairs 26: 1753-1761, 2007
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CMS Special Study Awarded to the Georgia Medical Care Foundation

- 18 month project (7/06 – 1/08)
- Develop and pilot test tools and strategies to reduce potentially avoidable acute hospitalizations of nursing home residents

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Mary Perloe APRN-BC, GNP - Project Coordinator, GMCF
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Gerri Lamb, PhD, RN – Professor, School of Nursing, Emory University
Adam Atherly, PhD – Associate Professor, School of Public Health, Emory University
Jeff Hibbert, PhD – Data Analyst/Statistician, GMCF

Expert Panel – 10 members

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CMS Special Study Results

Of 200 hospitalizations, an expert clinician panel rated 2/3 as potentially avoidable

<table>
<thead>
<tr>
<th>Hospitalization Rate Homes</th>
<th>Was the Hospitalization Avoidable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Definitely/Probably YES</td>
</tr>
<tr>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>LOW</td>
<td>59%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>68%</td>
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Ouslander et al: J Amer Ger Soc 58: 627-635, 2010
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**CMS Special Study Results**

- The most common admitting diagnoses for hospitalizations rated as potentially avoidable were consistent with “Ambulatory Care Sensitive” Dxs

<table>
<thead>
<tr>
<th>Hospital Admitting Diagnosis</th>
<th>Frequency (N = 105)</th>
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<tbody>
<tr>
<td>Cardiovascular (mainly CHF and chest pain)</td>
<td>22 (21%)</td>
</tr>
<tr>
<td>Respiratory (mainly pneumonia and bronchitis)</td>
<td>21 (20%)</td>
</tr>
<tr>
<td>Mental Status Change/Neurological</td>
<td>13 (12%)</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>11 (11%)</td>
</tr>
<tr>
<td>Sepsis/Fever</td>
<td>8 (8%)</td>
</tr>
<tr>
<td>Skin (cellulitis, infected wound or pressure ulcer)</td>
<td>8 (8%)</td>
</tr>
<tr>
<td>Dehydration and/or metabolic disturbance</td>
<td>7 (7%)</td>
</tr>
<tr>
<td>Gastrointestinal (bleeding, diarrhea)</td>
<td>7 (7%)</td>
</tr>
<tr>
<td>Musculoskeletal pain and/or fall</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Other (adverse drug effect, surgical consult)</td>
<td>2 (2%)</td>
</tr>
</tbody>
</table>

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**Improving End-of-Life Care by Reducing Avoidable Hospitalizations of NH Residents**

**CMS Special Study Results**

- Expert panel members rated improving quality of care for assessing acute changes, more involvement of primary care MDs and/or NPs/PAs, ability to do stat lab tests and IV fluids, improved advance care planning, and providing less futile care as important in reducing avoidable hospitalizations

**Factors**

- Better *quality of care* would have prevented or decreased severity of acute change
- One *physician visit* could have avoided the transfer
- Better *advance care planning* would have prevented the transfer
- The same *benefits* could have been achieved at a lower level of care
- The resident’s overall condition limited his ability to *benefit* from the transfer

**Resources Needed**

- **Physician or physician extender** present in nursing home at least 3 days per week
- Exam by **physician or physician extender** within 24 hours
- **Nurse practitioner** involvement
- **Registered nurse** (as opposed to LPN or CNA) providing care
- Availability of **lab tests** within 3 hours
- Capability for **intravenous fluid** therapy

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What are the incentives?

- Reducing hospitalizations from NHs will be challenging due to lack of infrastructure, on-site clinical support, and incentives to manage residents without transfer
- Current incentives all favor hospitalization

What are the Incentives for Providers?

Physician reimbursement

- Hospital reimbursement
- Qualification for skilled nursing facility stay
- Liability
- Patient and family preferences

NH Infrastructure
Improving End-of-Life Care by Reducing Avoidable Hospitalizations of NH Residents

Institute of Medicine/CMS
STEEEP Goals for Quality Care
(Safe, Timely, Effective, Efficient, Equitable, Person-Centered)

Guidelines
Tools

Infrastructure Support
Incentives

Healthcare Organization Characteristics and Infrastructure

Reduced Avoidable Acute Care Transfers

↓ Morbidity  ↓ Costs  ↑ Quality

What Can We Do?

- Financial incentives
  - Bundling
  - P4P
- Regulatory incentives
  - Address assessment of acute change in condition and advance directives in the survey process
- Limit liability
- Educate patients and families about realistic expectations and advance care planning
- Improve NH infrastructure
  - Workforce
  - Ancillary services
- Guidelines and tools for every day clinical practice
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INTERACT II
Interventions to Reduce Acute Care Transfers

- Care Paths
- Communication Tools
- Advance Care Planning Tools

http://interact.geri.org

Revised tools based on CMS pilot study
Supported by a grant from the Commonwealth Fund

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Using the INTERACT® Tools in Every Day Work in the Nursing Home

http://interact.geri.org

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**Sara**
92 years old

- Lower respiratory infection could have been managed in the NH, avoiding the cardiac cath and hip fracture

**Sam**
101 years old

- Advance care planning should have led to a palliative or comfort care plan, or hospice before recurrent hospitalizations occurred