



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

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

- 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?





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

### 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)



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

### 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



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

### 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**



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

### A Tale of Three Siblings

- Sara
- Sadie
- Sam



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

**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



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

**Sadie**

*96 years old*

- Hospitalized for urinary infection and dehydration
- Re-hospitalized 7 days after discharge for recurrent urinary infection and dehydration



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

**Sam**

*101 years old*

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



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

### How Many Hospitalizations are Avoidable?

- As many as 45% of admissions of nursing home residents to acute hospitals rated as inappropriate  
*Saliba et al, J Amer Geriatr Soc 48:154-163, 2000*
- 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*



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

### 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

**Joseph G. Ouslander, MD**, Clinical Consultant, GMCF, Professor of Medicine and Nursing, Emory University

**Mary Perloe APRN-BC, GNP** - Project Coordinator, GMCF

**JoVonn Hughley, MPH** - Evaluation Specialist, GMCF

**Tracy Rutland, MBA, MHA** – Quality Improvement & Education Specialist

**Linda Kluge RD, LD, CPHQ** – Nursing Home Project Manager, GMCF

**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**




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

### CMS Special Study Results

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

	Was the Hospitalization Avoidable?	
	Definitely/Probably YES	Definitely/Probably NO
<b>Medicare A</b>	69%	31%
<b>Other</b>	65%	35%
<b>HIGH Hospitalization Rate Homes</b>	75%	25%
<b>LOW Hospitalization Rate Homes</b>	59%	41%
<b>TOTAL</b>	<b>68%</b>	<b>32%</b>

Ouslander et al: J Amer Ger Soc 58: 627-635, 2010



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

### CMS Special Study Results

- The most common admitting diagnoses for hospitalizations rated as potentially avoidable were consistent with "Ambulatory Care Sensitive" Dx's

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



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



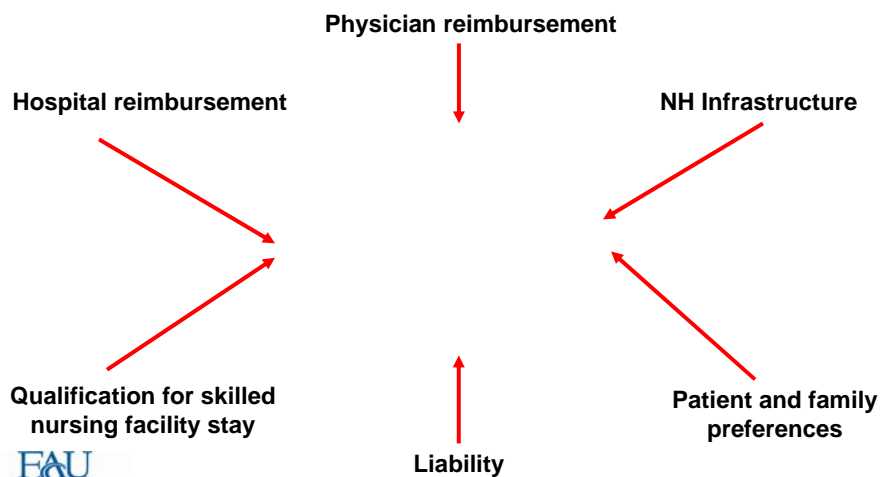
### What are the incentives?

- 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**

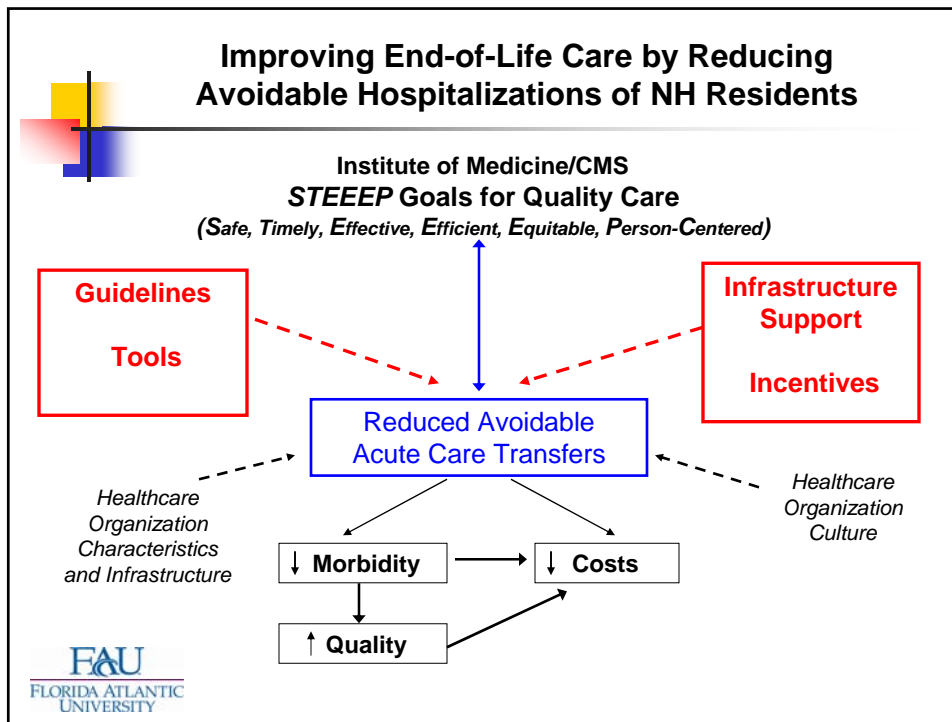
## Improving End-of-Life Care by Reducing Avoidable Hospitalizations of NH Residents



### What are the Incentives for Providers?







- ## Improving End-of-Life Care by Reducing Avoidable Hospitalizations of NH Residents
- ### 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
- FAU  
FLORIDA ATLANTIC UNIVERSITY

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# INTERACT II

Interventions to Reduce Acute Care Transfers

Care Paths

Communication Tools

Advance Care Planning Tools

<http://interact.geriu.org>

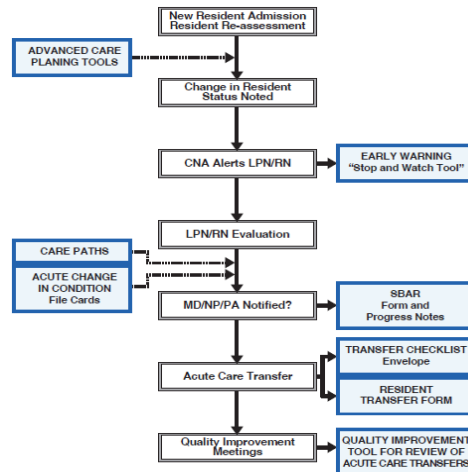


Revised tools based on CMS pilot study  
Supported by a grant from the Commonwealth Fund

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



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





### EARLY WARNING TOOL

**"Stop and Watch"**

If you have identified an important change while caring for a resident today, please circle the change and discuss it with the charge nurse before the end of your shift.

Name of Resident \_\_\_\_\_

**S**eems different than usual  
**T**alks or communicates less than usual  
**O**verall needs more help than usual  
**P**articipated in activities less than usual

**A**te less than usual (Not because of dislike of food)  
**N**  
**D**runk less than usual

**W**eight change  
**A**gitated or nervous more than usual  
**T**ired, weak, confused, or drowsy  
**C**hange in skin color or condition  
**H**elp with walking, transferring, toileting more than usual

Staff \_\_\_\_\_

Reported to \_\_\_\_\_

Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time \_\_\_\_\_



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

**Sara**

*92 years old*

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



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

**Sam**

*101 years old*

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