

# SNF Rehospitalization Reduction 2019 Update

Albert Riddle, MD, CMD, HMDC

Riddle Medical LLC

April 26, 2019

# Calculating the Bonus/Penalty

- Look at readmission rate in calendar year 2017 and compare it to calendar year 2015.
- The total number of readmissions include those readmitted after discharge from the SNF but still within 30 days of readmission from the hospital.

# Rationale for Reducing SNF Readmissions

- **Patient Safety:** Avoiding Hazards of Hospitalization
- **Quality of Care:** Reducing Preventable Readmissions may be a partial indicator of clinical quality in a SNF
- **Patient Satisfaction**
- **Facilitation of Eventual Successful Transitions Back to Community**
- **Reducing Unnecessary Expenditures**
- **Public Policy:** Penalties for SNF as of 10/1/18 (range from 2% cut to 1.6% increase with points earned for prior year's readmission rate and degree from improvement from 2 years prior rate)
- **It's the Right Thing** – to the degree it is safe and appropriate, reducing readmissions is a good thing to do
- **Potential Conflict** – How does reducing hospitalizations and re-hospitalizations impact your antimicrobial stewardship activities?

# Current Status: Fiscal 3019

- 14,959 Skilled Nursing Facilities Rated for Facility Value Based Purchasing Program
  - 73% Penalized
  - 27% received a bonus
  - Only 3% received the maximum 1.6% bonus
  - 20% received the maximum 2% penalty
- SNF's on average got worse at managing readmissions the longer they were in the program
  - The average risk-standardized readmission rates for SNF's increased by 4% in calendar year 2017 compared to calendar year 2015 – WHY?

# WHY?

- Possible Reasons

1. SNF's are facing higher pressures from providers to shorten length of stay.
2. Changing pool of patients admitted for post-acute care.
3. Pending pressure: In PDPM the SNF will receive decreased payments over the course of a patient's stay depending upon the reason for admission.

# What's Coming

**SNFPPR (30-Day SNF Potentially Preventable Readmission Measure) may replace SNFRM (SNF Readmission Measure)**

**Within SNF Stay, the SNFPPR measure will focus on:**

- 1) Inadequate management of *chronic conditions*
- 2) Inadequate management of *infections*
- 3) Inadequate management of *other unplanned events*
- 4) Inadequate *injury prevention*

In **post-SNF period**, the SNFPPR measure focuses on the first 3 above which **could be minimized with adequately planned, explained, and implemented post-discharge instructions and establishment of appropriate follow up ambulatory care.**

# Is a Rehospitalization a Potentially Preventable Hospitalization (PPH)?

## *Impact of Triggers*

### **Potentially Preventable Triggers:**

- Pneumonia
- CHF
- UTI
- COPD or asthma
- Dehydration
- Infected pressure ulcers
- Cellulitis

# What are NFs Doing to Reduce Potentially Avoidable Hospitalizations?

*Survey distributed to 236 nursing facilities in 7 states during 2015*

- 101 responded (43% response rate)
- 95% had introduced new policies and procedures intended to hospitalizations

*Practices introduced included:*

- Hospitalization rate tracking (93%)
- Standardized communication tools for RN-to-MD alert (79%)
- Change in Condition alerts (71%)
- Clinical Protocols (68%)
- Post-hospitalization analysis (65%)
- Telemedicine or other electronic communication (39%)
- Adding an APN (38%)

Daras *et al.* JAMDA 18 (2017) 442-444.



# NON-PREVENTABLE AND PREVENTABLE FACTORS AFFECTING READMISSION RATES FROM SNF TO HOSPITAL

SNF Rehospitalization Reduction  
2019 Update

# Factors Affecting Risk/Rates of Readmissions

## Non-preventable/ Potentially Manageable

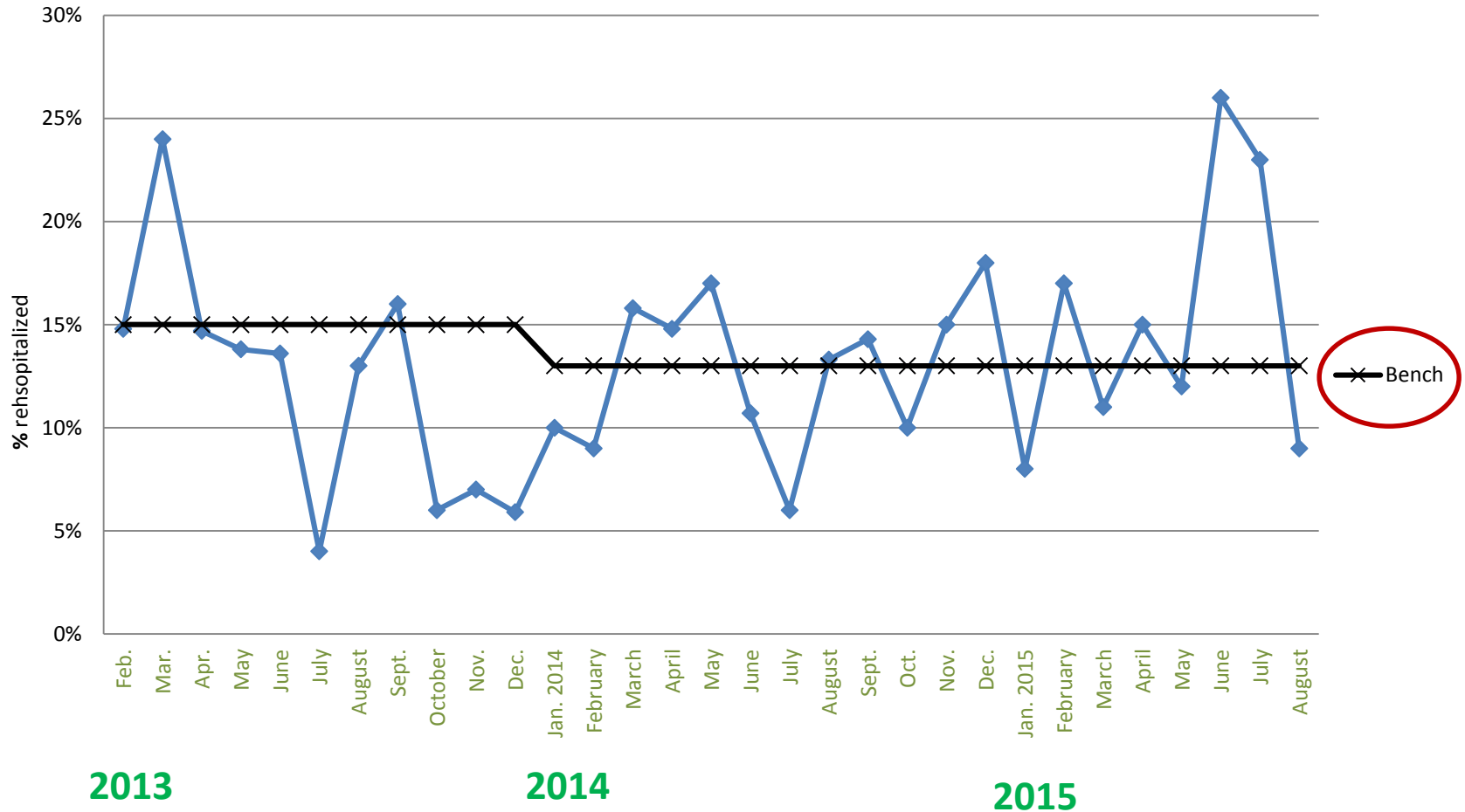
- Case Mix – Acuity, Complexity, Multimorbidity
- Clinical Features of Individual Cases
- Goals of Care & Patient/Family Dynamics

## Preventable (“Manageable”)

- Processes of Care – Admission, COC, Discharge
- Quality of Clinical Care in SNF
- Coordination of Care in SNF
- Proactive Advance Care Planning (ACP)

# Case Mix Affects Med A Readmission Rate? Month to Month Variation in One Facility

Percent of Med A Admissions rehospitalized within 30 days



# Case Mix Affecting a Facility's Readmission Rate

## A Case Study

In Year 1, a facility has a case mix including 30% elective arthroplasty cases. Due to external market factors beyond its control, the proportion of elective arthroplasty cases drops to 10% in Year 2.

The 30-day readmission rate in Year 1 is 10%.

In Year 2 it rises to 16%.

**Did clinical quality at the Facility worsen or was the outcome related to the percent of arthroplasty cases?**

# Reducing SNF Readmission Rates

## Patient Admitting Diagnosis May be a Primary Driver

- Overall SNF 30-day Rehospitalization Rate: **23.5%** (2006)<sup>1</sup>
- Disease-specific rates: All 30-day Rehospitalizations - CMS<sup>2</sup>

	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>
MI	18.6%	18.5%	17.7%
CHF	23.3%	23.2%	22.5%
Pneumonia	17.7%	17.6%	17.3%
<b>Hip/Knee</b>	<b>5.4%</b>	<b>5.3%</b>	<b>5.2%</b>

<sup>1</sup>Ouslander J. *NEJM* 2011;365:1165-67

<sup>2</sup>CMS Hospital Quality Chartbook 2013

# Clinical Features of Individual Cases: Non-Preventable Factors in Readmission Risk

**Delirium During Post acute NH Admission:** retrospective cohort study of all US NH admissions age 65+, 2011-2014 (n=5.588 mill)

Delirium present on admission to SNF 4.3%

	<u>30-day RR</u>	<u>30-day Mortality</u>	<u>DC Home by 30 days</u>
<b>Delirium</b>	21.3%	16.3%	26.9%
<b>No delirium</b>	15.1%	5.8%	52.5%

Kosar *et al.* JAGS 65:1470-1475, 2017.

# Clinical Features of Individual Cases: Non-Preventable Factors in Readmission Risk

## Pre-Hospital Functional Impairment as Marker of Cost in PAC for 1 year after hospital discharge

“Functional impairment outperforms comorbidity in predicting outcome of acute care such as readmission . . . .”

“**Functional impairment** is associated with **greater Medicare costs for postacute care** and may be an unmeasured but important marker of long-term costs that cuts across conditions. . . .”

“Considering costs attributable to comorbidities, only three conditions were more expensive than **severe functional impairment** (lymphoma, metastatic cancer, paralysis).”

Greysen *et al.* JAGS 65:1996-2002, 2017.

**Translation to PDPM risk  
with change of focus away  
from rehabilitation?**

# Preventable or Not Preventable?

## Functional Impairment at SNF Discharge and PPH

- Retrospective cohort study, Medicare FFS, 2013-2014
- Relationship of function at SNF DC to risk (Odds Ratio) of PPH (n = 693,808)

<b>Function</b>	<b>Odds Ratio (most dependent to least dependent)</b>
Mobility	1.54
Self-care	1.50
Cognition	1.12

Middleton A, *et al.* JAMDA 19 (2018):348-354.



# Take-Aways on Delirium, Functional Impairment, and Risk of Readmission

- Global clinical findings such as delirium and functional impairment are perhaps in some cases more likely tipoffs to increased risk of readmission than medical diagnoses alone.
- When we see a Post-Acute patient with delirium or severe functional impairment at SNF admission, we need to focus more than usual on good clinical care and appropriate strategies that reduce rehospitalizations and improve function.
- **Action Plan**
  - More frequent medical assessments?
  - More frequent VS and labs if pertinent?
  - More aggressive mobilization and socialization?
  - Proactive medication reduction?

# Is a Rehospitalization a Potentially Preventable Hospitalization (PPH)? What CMS Thinks

## **Potentially Avoidable Re-hospitalizations:**

- Pneumonia
- CHF
- UTI
- COPD or asthma
- Dehydration
- Infected pressure ulcers
- Cellulitis

# Scope of the Problem:

## Potentially Preventable (PPR) Cause Most SNF Readmissions

MedPAC data shows that **5 potentially preventable** conditions accounted for **78% of all 30-day SNF rehospitalizations** –

- **CHF**
- **Respiratory infection**
- **UTI**
- **Sepsis**
- **Electrolyte imbalance.**

Mor et al. *Health Affairs* 2010;29(1):57-64

## Different Question: Was ***THIS*** rehospitalization preventable?

- Requires review of both from SNF and Hospital chart; medical director should review
- Should identify root cause of readmission
- Don't restrict to the CMS list of avoidable diagnoses
- Should look for whether there were any clinical clues to give sufficient advance warning of the eventual cause for the readmission and opportunity to intervene so as to head off the need for readmission

# **STRATEGIES TO REDUCE REHOSPITALIZATIONS FROM SNF**

SNF Rehospitalization Reduction  
2019 Update

# Seven Strategies for Reducing Readmissions from SNF (P.J.)

1. **Measure, Track, Analyze, Report All Hospitalizations**
2. **Collaborate Externally:** Enhance Communication with Referring Hospital prior to/at Admission, with specialists and local ER if applicable during SNF stay, and with receiving providers (HH, PCP, Specialists) at SNF Discharge; Preferred SNF Provider Networks
3. **Train Nursing Staff** to recognize, assess, and communicate to MD when resident has a change of condition (e.g., INTERACT)
4. **Promote Excellence in Clinical Geriatric Care in the PA/LTC setting**
5. **Treat the Treatable Conditions in the SNF**
6. **Promote Advance Care Planning and discussions regarding goals of care, Appropriate Hospice/ Palliative Care**
7. **Provide greater physician and APN presence in the PA/LTC setting**

# **STRATEGY 1**

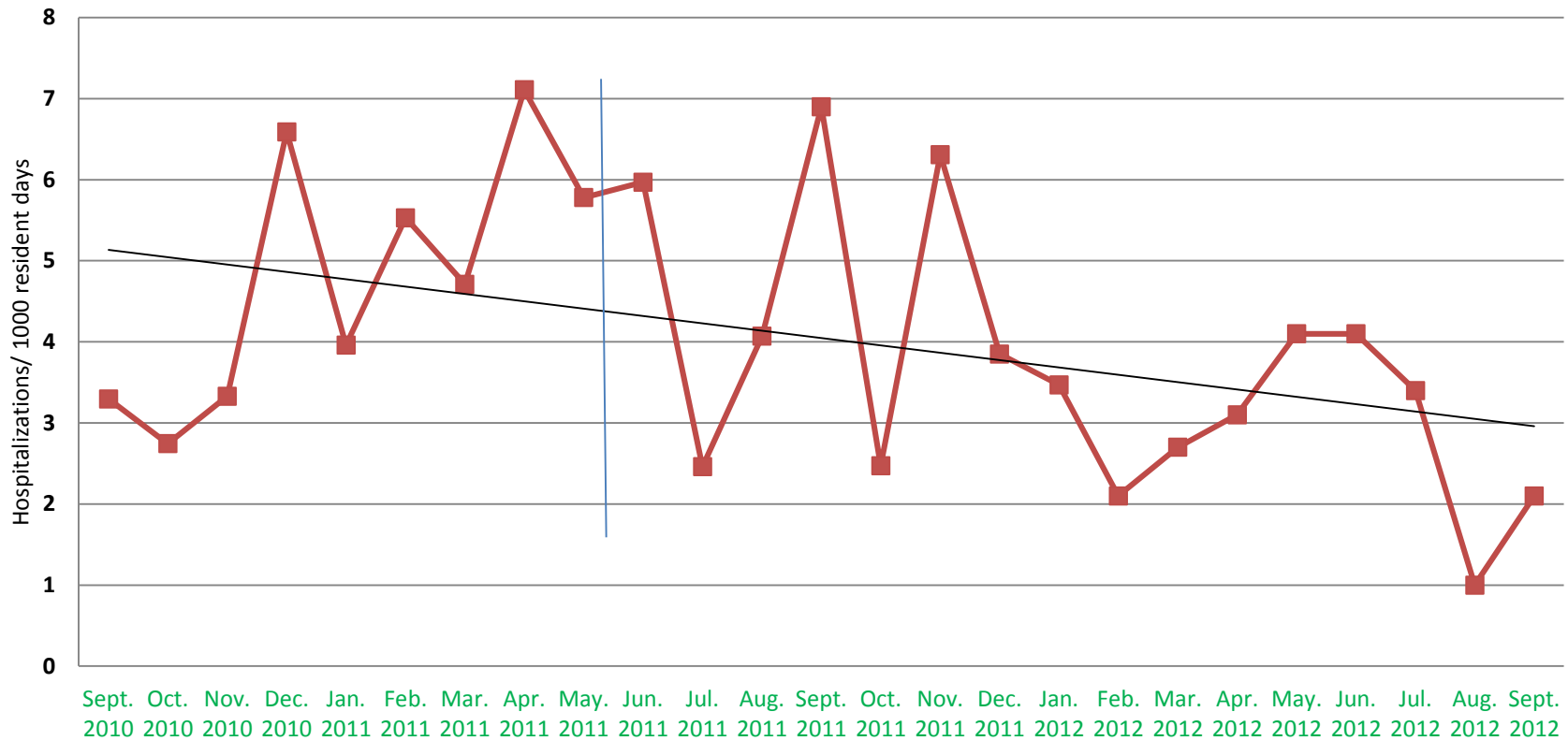
**MEASURE, TRACK, ANALYZE AND REPORT ALL  
HOSPITALIZATIONS**

# Strategy 1: Measure, Track, and Analyze Rates

## A Facility's Hospitalization Rate over 2 Years

Facility B: Hospitalizations/ 1000 Resident Days

(vertical line, May 2012 indicates start of hospitalization review committee)





# Strategy 1: Measure, Track, and Analyze Rates

## Findings and Interventions

Findings: Facility observed high and rising rate

### Interventions:

- **Weekly hospitalization IDT review meetings** (Admin, DON, Med Director, floor nursing staff)
- **Weekly INTERACT Webinar training for nursing staff x 12 weeks**

### Staff Comments:

- Meetings **broke a mindset** away from a reflexive call to doctor requesting ER transfer
- Developed a **more analytic approach** (first do an assessment!)
- **INTERACT** training helped **change the nursing culture**; defined a new, clear set of expectations for RN
- **Collaboration with local hospital on a CHF protocol** also helped.

# **A SNF Facility is Able to Accomplish Significant Reduction in Hospitalization and Rehospitalization Rates**

**Hospitalization Rate – Year 1: 5.15    Year 2: 3.24**

**30-day Rehosp Rate – Year 1: 34%    Year 2: 16.5%**

**Turnaround** in hospitalization rates corresponded with the initiation of the IDT hospitalization review meeting and INTERACT training.

## **STRATEGY 2**

**COLLABORATE EXTERNALLY**

## **Strategy 2: Collaborating Externally – External Partners of SNFs in Post-Acute Care**

- Referring Hospital(s), especially primary hospital
- ER
- Consulting Specialists
- PCP
- Home Health; Palliative Care; Hospice

## **Strategy 2: Collaborate Externally** through the Life Cycle of a PAC Admission

- Prior to and at SNF Post-Acute Admission
- During Post-Acute SNF Stay
- At SNF Post-Acute Discharge

# Strategy 2: Collaborate Externally in Smaller and Bigger Ways

## **“Micro”-collaboration**

- Case screening pre-discharge: can he/she rehab? Is he/she stable?
- Case management in SNF: external consultant visits; ER trips
- Warm handoffs at SNF DC: communicate to PCP, specialty, Home Healthcare (include ER transfers for warm hand-offs)

## **“Meso”-collaboration (informal)**

- SNF-Hospital collaborative working group: focus on better transfers

## **“Macro”-collaboration (more formal)**

- Hospital-SNF Preferred Provider Networks
- Bundled Payment Projects
- ACOs

## **Strategy 2: Collaborate Externally** Prior To Admission/at Admission – Impact of Hospital LOS: Is patient ready for SNF?

### **“Factors Associated with Early Readmission Among Patients Discharged to Post-Acute Care Facilities”**

- HCUP Databases in California, Massachusetts, Florida 2011
- Compared Readmissions Day 0-7 with Day 8-30
- N = 81,173 30-day readmissions
- **Early readmissions:** older, white, urban, fewer comorbidities, more prior hospitalizations, less had Medicare payer
- **Longer hospital LOS associated with lower risk of early readmission**  
(OR 0.74 if LOS 4-7 days, 0.60 if LOS 8 or more days)

Horney C *et al.* JAGS 65:1199-1205, 2017

## **Strategy 2: Micro-Collaborate Externally**

Prior To Admission/at Admission – Is patient ready for SNF?

- SNF Admissions and SNF DON can pre-screen PA Admits
- If questions about clinical stability or appropriateness arise, DON can discuss with Medical Director
- Medical Director can suggest additional steps for DON to ask from hospital to insure clinical stability prior to discharge
- NOT “cherry-picking”! Rather it is seeking “right-timing” of transfer from hospital into SNF (impacted by current number of empty beds)



## **Strategy 2 – “Meso-”Collaboration:**

### **Benefits of a SNF-Hospital Collaborative Working Group**

**CASE:** Post-Acute patient arriving from Hospital A to SNF A in febrile septic shock, requiring immediate bounce back to ER; happened 3-4 times over 2 year period. Common to all cases was lack of documented Vital Signs within 8-12 hours prior to discharge.

**SNF RN and Medical Director** met multiple times with **Hospital Collaborative working group on SNF transfers** and recommended Hospital **require set of Vital Signs within 2 hours of actual discharge**. Once implemented (after 1-2 years of discussion), no such further cases occurred at SNF A over next 5-10 years.

## Strategy 2: Collaborate Externally During SNF Stay

- Know when and where your Post-Acute patient is going out for specialist consultation or ER evaluation
- If appropriate call specialist ahead of time to alert them to specific issues in care that you are aware of that they may not
- Raise questions or make suggestions (e.g., is it time to reduce the loading amio dose to maintenance? BP is labile, OH interferes with therapy; should we reduce Lisinopril?)
- Obtain specialist or ER note after visit
- If ER transfer need during Post-Acute stay, call intake nurse and/or ER MD to communicate clearly the intent of transfer and whether hospitalization can be avoided
- CASE: ER visit for CHF; 1 dose IV Lasix clears it; return to SNF

## Strategy 2: Collaborate Externally at SNF Discharge

- Create an impactful SNF DC Summary which is communicated on day of DC to post-SNF providers (PCP, specialists, Home Healthcare)
- Why was the patient in hospital? Why was SNF Post Acute care necessary?
- Describe clinical course during Post-acute SNF stay – significant clinical events, changes in meds and reason, abnormal tests needing F/U; frame with your succession of visits
- Order at least the first set of labs with Home Healthcare at the time you deem best clinically (usually at first Home Health visit)
- Make clear the plan for F/U visits, labs, tests, procedures; make the handoff proactive for patient safety.

# Strategy 2: Coordination and Collaboration of Care at SNF Discharge – Project RED

- One Boston SNF, **524 consecutive pre-intervention discharges, 100 post-intervention discharges**
- **Intervention: Reengineered Discharge**, a hospital discharge tool adapted for the NH discharge setting
- **Components:** F/U appointments and labs; plan for follow up of pending tests; organize services and equipment; medication review and plan; teach a written d/c plan; patient education re diagnosis; assess patient understanding of plan and response to problems; ***transmit discharge summary to receiving clinician.***
- **RESULT: reduction of 30-day post-SNF readmission 18.9% to 10.2%**

Berkowitz R. et al. *Project ReEngineered Discharge (RED) Lowers Hospital Readmissions of Patients Discharged from a Skilled Nursing Facility.* JAMDA 2013;14:736-740.

# Collaborative Action Points

- Get involved with your local hospital(s)
- Encourage hospital to work collaboratively with SNFs
- Discuss issues affecting SNF rehospitalizations with all providers involved in care of your patients
- Talk to providers at hospital – hospitalists, ER staff, surgical staff
- Identify high risk patients and give best possible care
- Form or join a LTC alliance in your area
- Identify and implement best practices to reduce readmissions

Haimowitz D. *Caring for the Ages* March 2017. 18(3);14-15.

## **STRATEGY 3**

**TRAIN SNF NURSING STAFF TO**

**ASSESS AND REPORT CHANGE OF CONDITION**

# Strategy 3: Train SNF Nursing Staff to Assess and Report Change of Condition

## INTERACT IV

### Tools to assist staff

- Early Warning Signs for Nursing Aides
- SBAR Format for RN Assessment
- Transfer Form
- Hospitalization QI Review Tool to retrospectively assess avoidability of a transfer to hospital
- Transfer Log
- Advance Care Planning training

## **Training SNF Nurses to Assess and Report Change of Condition. It's 3 AM and the phone rings. Which nurse do you want?**

**Nurse Ratchet: “Doctor, Mrs. Jones woke up short of breath. I put oxygen on her and she feels better. Should I call 911?”**

**Nurse Nightingale: “Doctor, Mrs. Jones awoke SOB. Her O2 sat was 86% on RA. I put oxygen on at 2L and her sats are now 90-91%.**

**She was admitted 5 days ago from the hospital after an admission for CHF. She came to us on Lasix 20 mg daily. She also takes lisinopril and metoprolol.**

**Her pulse is 90 and regular, BP 140/80, R 24. She has a few rales at her lung bases. I notice she has gained 5 lbs since admission.”**

**“Would you like for me to give her some extra Lasix and monitor her vitals for the next several hours?”**



# Strategy 3: INTERACT Studies on Reducing NH Hospitalizations

- INTERACT interventions **reduced:**
  - **hospitalizations by 50%**
  - **avoidable hospitalizations from 77% to 49%**

Ouslander et al. *J Amer Med Dir Assoc* 2009;10:644-652.
- INTERACT II **reduced hospitalizations in engaged NHs** in FL, NY, and MA by **24%**.

Ouslander et al. *JAGS* 2011;59:745-753

# Proven Benefits of Utilizing INTERACT Tools

- **Raised awareness of avoidable hospitalizations**
- **Chart reviews help staff discover alternatives to calling for hospital transfer**
- **Reduced readmissions from a high-rate SNF\***
- **INTERACT has not been shown to reduce readmissions from a low-rate SNF**
- **Reduced preventable hospitalizations at the SNF with the lower rates**
- **Staff Turnover at the SNF in clinical and administrative leadership limits the implementation and effectiveness of INTERACT initiatives**

Meehan et al. *JAMDA* 2015;16:648-653

# Strategy 3: INTERACT Training Research Update

## Degree of Implementation Matters

- Trial Design
  - Randomized study of SNF grouped based upon whether or not they used INTERACT tools (Intervention & Control groups)
  - 200 SNFs
  - 12 month period of observation
- Those that **increased their use of INTERACT tools**, whether in the intervention or control group, had
  - 11.2% reduction in all-cause hospitalizations
  - 18.9% reduction in potentially avoidable hospitalizations
  - No difference in 30-day readmissions (19-20%)

Huckfeldt *et al.* JAGS 2018. DOI: 10.1111/jgs.15476

## **STRATEGY 4**

**PRACTICE AND PROMOTE EXCELLENCE IN**

**CLINICAL GERIATRIC CARE IN**

**POST-ACUTE CARE**

# Strategy 4: Clinical Excellence

## OIG Report 2014 - Quality of Care in SNF

- **22% of SNF residents experienced lasting harm (“adverse events”) in PA episode; 11% temporary harm**
- **Annualized cost to US of these events is \$2.8 billion**
- **Of these more than half were sent to hospital**
- **59% of these AEs were considered preventable by reviewers**
- **37% of AEs related to medication (66% preventable)**
- **37% of AEs related to ongoing resident care (57% preventable)**
- **26% of AEs related to infection (52% preventable)**

<http://oig.hhs.gov/oei/reports/oei-06-11-00370.pdf>. Accessed 9/20/15.

# Importance of Med Review on SNF Admission

## Antipsychotic Medication Management

“Don’t assume just because the hospital decided to sedate a patient with an **antipsychotic**, that the patient still needs it when he or she comes to our homes. These medications – like **all medications (especially proton pump inhibitors, sliding scale insulin, and blood thinners)** – should be carefully **evaluated on a case-by-case basis and discontinued whenever the risks and burdens of the medications seem to outweigh benefits**, in the context of that individual patient.”

- Steinberg K, ed. note. *Caring for the Ages* 17(9):2016;14

# Interventions Based on the OIG Report

1. Clearly a set of low hanging fruit
2. Extensive pharmacy review of medications needs to be done on day of admission to SNF
3. Are drugs likely to cause delirium, orthostasis, syncope and falls, bleeding or interaction with warfarin, constipation, hypoglycemia from excessive antidiabetic drugs?
4. Remove unnecessary GU catheters
5. Add probiotics for those on antibiotics
6. Awareness of diarrhea and prompt testing for *C. difficile*
7. Prophylaxis for DVT in appropriate patients
8. Monitor for *and respond to signs of* dehydration

Morley J. JAMDA 2014(15):305-306

# Strategy 4: Practice Clinical Excellence in Post-Acute and Long Term Care

- Visit early and often!
- Gather data from EMR BEFORE admission if possible
- Contact POA-Proxy on first visit
- Review all medications for indication and possible Deprescribing
- Manage anticoagulants proactively; frequent INR to stability
- Monitor Antibiotic interactions with warfarin
- Select rational target BP for older adults (BP in hospital rarely done standing; orthostatic hypotension and labile BP common in SNF; look at RANGE of BP rather than isolated reading. BP drugs often can/should be reduced early in SNF stay if hypotension occurring).



## **Strategy 4: Practice Clinical Excellence in Geriatric Care in PA/LTC**

- **Follow weight! Use EMR to find prior baseline weight;** follow weight in CHF and in CVA patient with poor intake
- **Beware hyperkalemia in CKD with ACEI/ARB, and/or spironolactone**
- **Screen for frailty; treat vitamin D and protein deficiency; consider checking Vit D level/B12/TSH if not recent**
- **Eliminate unnecessary PPI prescribing (C diff risk)**
- **Test for C diff - if diarrhea; Good Handwashing/Isolation/Inf Control**
- **Monitor other labs as appropriate (e.g., CBC if on heparin)**
- **Make rehab the priority, but expect functional decline before functional improvement (1<sup>st</sup> week)**
- **Balance need for opioids with avoidance of side effects**
- **Begin discharge planning early, with interdisciplinary team and family involvement**

# Strategy 4: Practice Clinical Excellence in Geriatric Care in PA/LTC

## The Top 2 Offenders

### Anticoagulants

- Warfarin & INR Issues
  - Time in therapeutic range
  - Request for INR too frequently
  - Failure to do INR
  - DVT & Multiple moving pts
- NOAC
  - Age and Renal Function
  - Management of complications

### Insulin/ Oral Hypoglycemics

- Changing caloric intake with recovery from acute illness
- Impact of oral corticosteroids
- Sliding scale issues
- Failure to follow evidence supported changes in insulin doses

# **Strategy 4: Excellence in Clinical Care in SNF**

## **Avoid/Recognize and Treat Hyponatremia**

### **Some Common Potential Causes of Hyponatremia in SNF – “The Ubiquitous Hyponatremigenic Soup of PA/LTC”**

- Tendency of older adults to SIADH
- Opioids
- SSRIs
- Diuretics (Contraction Alkalosis)
- Older generation oral hypoglycemics
- Dehydration or fluid overload
- Nausea
- Infrequent lab monitoring (Especially during the initial week)

# STRATEGY 4: Retrospective Analysis of Hospitalizations for Avoidability

Small Group CASE Review & Analysis

“Was Hospitalization Preventable?”

## **Case Examples**

# CASE 1 – Dehydration

A 90 y.o. patient is discharged to the SNF after a 5-day hospitalization for a fall and small ICH. The PCP visits the patient on day 4.

Labs done on SNF day 5: Na 148 (up from 137 at transfer) and BUN/Cr 54/1.5 (up from 21/0.9). No intervention is ordered.

On day 6 the patient is more lethargic and unable to follow simple commands, resulting in hospitalization with Na 164, BUN/Cr 77/1.9 and a UTI.

***Was this rehospitalization preventable?***

# CASE 2 - Dehydration

An 87 year old man is transferred to the SNF 1 week after a AAA repair. Among his many meds are chlorthalidone which he takes for HTN, and furosemide for CHF. SNF MD does admission exam on day 2 at SNF. BUN/creat 25/1.1.

Patient has poor appetite on day 5. He is down 3 lbs from last hospital weight. BUN/creat 33/1.4. On day 6 BUN/creat 41/1.7. On day 7 MD “notes” elevated BUN/creat. No change in treatment orders.

On Day 8 BUN/creat 49/2.2. Weight is down 8 lbs from last hospital weight. MD orders Lasix to be held. Later that day patient is readmitted with grogginess and dysarthria, which resolves completely overnight after IV hydration in the hospital.

***Was this rehospitalization preventable?***

# **STRATEGY 4: Clinical Excellence in PA/LTC**

## Consensus on Proper Treatment of Initial CDI

### **IDSA and SHEA JAMA Clinical Guideline (2018)**

- DX: use only unformed stool, or use a testing algorithm
- **For INITIAL CDI: use vancomycin or fidaxomicin rather than metronidazole**
- Pooled sensitivity from 2 RCT:
  - Vancomycin 81.1%, Metronidazole 72.7%
- For 1<sup>st</sup> Recurrence of CDI: Use different regimen (if vanco used initially, use tapered-pulse vanco or fidaxomicin)
- Consider Fecal microbiota transplant for 3<sup>rd</sup> or greater episode  
Gupta A *et al.* JAMA 320(10):1031-1032;2018. (9/11/18)

# CASE 3 – Recognizing Infection

85 year old woman was admitted to the SNF after hospitalization for syncope associated with poor PO intake.

Rehab course was uneventful but slow, as intake remained borderline for her needs. **On SNF Day 21, she developed a scattered erythematous rash and fever to 100.2.** Tylenol was given but there was no record of a nursing assessment or call to MD. The next nursing note was **2 days later, when at 9 AM the nursing aide reported the patient was c/o feeling cold, shaking, and having LLQ abdominal pain.** Temp was 98.3 but **RR 48 and deep.** MD was called and patient was admitted to hospital with diagnosis of sepsis.

***Was this readmission preventable, possibly preventable, or not?***



# STRATEGY 4: Clinical Excellence in PA/LTC – Can Sepsis be Detected in NH Prior to Need for Transfer?

- Retrospective chart reviews of 236 NH hospitalizations
- 59/236 had sepsis; assess various tools (qSOFA, SIRS, 100-100-100 criteria, temp 99.0, 100.2) at 0-12 and 13-72 hrs PTA
- 26-34% of cases lacked complete VS documentation
- **Most sensitive, 0-12 hr: 100-100-100 (79%), T > 99.0 (51%)**
- **Most specific, 0-12 hr: T>100.2 (93%), qSOFA (88%), SIRS (86%), T>99.0 (85%)**
- **NHs need better systems to monitor residents whose status is changing**

Sloane P *et al.* JAMDA 19 (2018):492-496.

## **STRATEGY 4: Clinical Excellence in PA/LTC – Tools for Detecting Sepsis in NH Prior to Need for Transfer**

### **qSOFA (quick Sepsis Related Organ Failure Assessment)**

- RR  $>$  or  $=$  22/min: 1 point
- Altered mentation: 1 point
- SBP 100 mm or less: 1 point

### **“100-100-100” Criteria**

- T  $>$  100
- HR  $>$  100
- SBP  $<$  100

see Reyes *et al.* JAMDA 19 (2018):465-471.

# Is Hospitalization for Sepsis Always Preventable?

## Case 4: Precipitous GU Sepsis

An 87 year old man with advanced dementia and Parkinson's was very alert with 100% appetite this AM. By noon he is weak, lethargic, unable to eat lunch. BP is 88/44, T 99.3; other VS WNL. The day before he ate 100% of his meals. He had a routine CBC yesterday to monitor his clozapine which he takes for delusional disorder; the WBC was 7.9K. An IV is started to administer fluid while workup is obtained; BP rises. Five hours later he spikes to 101 and again drops BP to 85/47. He is transferred to ER. Hospital workup reveals Proteus UTI and bacteremia, WBC of 29.8K. He is in ICU to receive pressors for septic shock and recovers over several days. Ultrasound imaging reveals tiny nonobstructing stones in one kidney, otherwise negative. He returns to NH one week later.

# Infection Prevention

**As residents age, they can become more vulnerable to infections due to changes in their bodies such as**

- Breaks in the skin.
- Wounds.
- Trouble chewing, swallowing, and drinking.
- Impaired mobility.
- Loss of bladder and bowel control.
- Mental status changes/impairments.
- Medical conditions such as lung disease and diabetes.
- Inability to clean their hands or take a deep breath when asked.

# Infection Prevention

## **Health care workers can reduce the risk of infection by:**

- Cleaning hands with an alcohol-based hand rub or soap and water
- Wearing gloves and other personal protective equipment per facility policy.
- Keeping the environment clean and properly disinfecting surfaces and medical equipment.
- Handling waste safely.
- Avoiding touching your face.
- Covering mouths and noses when sneezing or coughing.
- Not coming to work when sick.
- Staying up to date on all recommended vaccinations.
- Practicing standard precautions for all residents.

## ***Help residents play a role in reducing risk of infection by encouraging them to:***

- Clean hands before meals and after bathroom activities.
- Cover their mouths and noses when sneezing or coughing.
- Maintain personal hygiene, including oral care.
- Take all recommended vaccines.
- Eat healthy foods.
- Drink an adequate amount of water and other liquids.
- Get enough rest.

# Beware Adverse Effects of PPIs in PA/LTC

PPI use is associated with higher risk of incident CKD in a population-based cohort - Lazarus B et al. JAMA IM2016;176:238-46

## Adverse Effects of PPI

- CKD
- AKI – interstitial nephritis (2.5-3x)
- Hypomagnesemia
- C Diff colitis
- Pneumonia
- CV events through reduction in platelet inhibition
- Fractures through reduced intestinal calcium absorption

Schoenfeld A, Grady D. JAMA IM 2016;172-174.

## **Strategy 4: Reducing Readmission Risk by Good Clinical Care – Case 5**

An 84 year old woman is rehabbing 1 week after a L hip fracture treated with ORIF. She had some postop nausea and vomiting and has not eaten well since. She feels weak and is not engaging well in therapy.

For her pain she is using hydrocodone/acetaminophen 5/325, 6-8 tabs daily. She has a h/o HTN, mild depression, DM II, and peripheral neuropathy. In addition to the narcotic, her meds include HCTZ, glyburide, and paroxetine.

Which medication(s) may be contributing to her lack of energy?

## **STRATEGY 5**

**TREAT THE TREATABLE CONDITIONS IN THE SNF**



## Strategy 5:

### Treat the Treatable Conditions in SNF: Pneumonia Data from a Randomized Clinical Trial

- 680 residents 65 and older in Ontario
- Randomized to treatment with clinical pathway in NH vs. usual care
- 10% of the treatment group (34/327) were hospitalized
- 22% of the usual care group (76/353) were hospitalized (p=.001)
- Mortality was 8% in treatment group vs. 9% in usual care (p=.23)
- Treating pneumonia in the nursing home can reduce hospitalizations

Loeb M. *JAMA* 2006;295:2503-2510.

# Other Conditions Treatable in the Nursing Home: (Strategy 5)

- Dehydration without shock
- Congestive Heart Failure without respiratory failure
- Urinary Tract Infection without sepsis
- Other Infections without Sepsis (or early sepsis?)
- COPD exacerbation
- Diabetes Mellitus out of control
- New atrial fib in some cases
- Others? Neutropenic fever?

## **STRATEGY 6:**

**PROMOTE ADVANCE CARE PLANNING,**

**APPROPRIATE HOSPICE CARE**

# Strategy 6: Promote Advance Care Planning

## A Randomized Controlled Trial

- **RCT of 205 NH residents in 3 NHs**
- Participants had to be those whose goals of care, preferences and need for palliative care made them appropriate for hospice
- Intervention was a structured interview involving residents and surrogate decision makers
- Intervention residents were more likely to enroll in hospice within 30 days (20% vs 1%) and in follow up (25% vs 6%).
- **Intervention residents also had fewer acute care admissions (0.28 vs 0.49;  $p=.04$ )**

Casarett D et al. *JAMA* 2005;294:211-217

# Strategy 6: Advance Care Planning

Systematic Review of Literature (13/4654 articles met criteria)

ACP Interventions in the 13 Articles included:

- Educational programs (5)
- Introduce or evaluate a new ACP form (5)
- ACP program with Palliative Care initiative (2)
- Effect of DNR Order on Medical Treatment of Resp infection(1)
  
- **ACP decreased hospitalization rates by 9-26%**
- ACP was **not associated with increased mortality** in the 2 studies that measured it
- There is a **dearth of RCT in the field of Advance Careplanning**

Martin et al. JAMDA 17 (2016):284-293

# Effect of the Goals of Care Intervention for Advanced Dementia (RCT) – Hanson et al.

- 302 residents with advanced dementia and decision makers
- 22 nursing homes
- INTERVENTION: Goals of Care video decision aid plus structured discussion with NH providers

## OUTCOME MEASURES:

3 Months – Perceived quality of communication, family report of concordance of goals with clinicians, and treatment consistent with preferences

9 Months – Family ratings of symptom management and care, palliative care domains in care plans, MOLST completion, and hospital transfers

Hanson L et al. JAMA Int Med. 2017;177(1):24-31

# Effect of the Goals of Care Intervention for Advanced Dementia (RCT) - Results

- Better quality of communication
- Better end of life communication
- No difference in goal of care concordance at 3 months
- Better goal of care concordance at 9 months
- No difference in treatment consistent with preferences, symptom management, or quality of care
- **Treatment group had more palliative care content in care plan, more MOLST orders, and half as many hospital transfers**
- **No difference in survival at 9 months**

Hanson L et al. JAMA Int Med. 2017;177(1):24-31

# Strategy 6: Flags and Tips for Having The Hospice Conversation in PA/LTC

**A “Flag”** (from recurrent hospitalizations to PA to Hospice in AL): End-stage ischemic cardiomyopathy. **“Do I have to go back to the hospital if I get sick again?”**

**Clinical Pearl:** Consider asking the patient with multiple readmissions **if the last hospitalization helped them, hurt them, or made no difference.**

**With family:** **“Would you be surprised if your loved one were to pass away sometime in the next 12 months?”**

see Conversation Project [www.TheConversationProject.org](http://www.TheConversationProject.org)



# Strategy 6: Advance Care Planning – A Process, not an Event

- Identify appropriate decision makers first, including a capacity assessment of the patient first
- Will often require many conversations along the course of a PA/LTC stay
- Listen well, reflect back to patient or POAHC what you are hearing. Identify patient's goals of care, preferences.
- Take it in bits that are manageable for the key stakeholders to process to make your efforts effective and of value to all
- Document and use 99497, 99498 codes properly to make your efforts productive as well as to represent your patient's preferences and best interests

# **STRATEGY 7**

**PROVIDE GREATER PHYSICIAN AND  
APN PRESENCE IN SNF PA/LTC**

# Scope of the Problem: MD “MIA” High Risk Patients not Being Seen

- **50%** of those readmitted did not see a primary care provider in NH between their hospitalizations.
- **67.3%** of those readmitted will have *multiple readmissions*.
- The **2-year mortality for multiple readmittees** doubles from 15% to **30%**.

Oakes et al, *Clinics in Geriatric Medicine*. 2011;27(2):259-271.

# Strategy 7: Increase Dedicated Physician/APN Time in SNF

- **Life Care Centers:** Reduced SNF Readmissions from **40% to 15% in 1 year** by placing an **MD full-time in each facility**.  
Lourde. *Provider* Feb 2012; 22-33.
- **NH residents in Texas with PCP who devoted <5% of their clinical effort (measured by Medicare billings) to NH care were at 52% greater risk of potentially avoidable hospitalization than those whose PCP devoted 85% or more of their clinical effort to NH care.** Kuo, *JAGS* 2013;61:1750-1757.

# Strategy 7: Managing Medical Complexity at SNF Discharge Requiring MD

81 year old man with HTN, a fib, CAD, LVEF 15%, AICD, multiple hospitalizations:

1. 5 months ago, 7 days for dehydration and GU sepsis;
2. 3 days later for CHF exacerbation; SNF rehab
3. 4 months ago for 6 days for PUD, C diff colitis; lengthy SNF rehab
4. Now, 5 day acute stay for PNA, resp arrest, PEA in ER, intubation, ICU stay, extubated, made DNR, then **SNF rehab for 31 days**. 140 lbs on SNF admission, diuresed to 125, low BP so ACEI held; ideal weight determined to be 120-130.

*How best should we hand off this man to PCP?*

*What is his life expectancy?*

# Strategy 7: Increase APN Presence

“Successfully Reducing Hospitalizations of Nursing Home Residents: Results of The Missouri Quality Initiative” (MOQI)

- One of 7 sites in US; 16 Missouri NHs
- Data over 3 years
- Full-time APRN embedded in each NH
- Improved QMs
- Reduced Hospitalizations by 30%
- Reduced PPH by 45.2%
- Overall Medicare Spending reduced by 10.4%

Rantz M et al. JAMDA 2017;18:960-966; also JAMDA 2018;19:541-550.

# Summary

- Hospitals and SNFs are motivated to **reduce SNF rehospitalizations.**
- Many readmissions from SNF are **potentially preventable**
- **Reducing readmissions will avoid hazards of rehospitalization**
- **Collaboration with external partners will improve care processes and may reduce readmissions**
- **Improved nursing assessment and communication will reduce readmissions at SNFs with high rates.**
- **Advance care planning is likely to be effective**
- **Physician/APN/PA engagement and on-site presence are essential to reducing avoidable readmissions by giving good clinical care**
- **CASE MIX is the primary driver of readmission rates and will therefore be a limiting factor in RR reductions in SNFs.**

# Summary of Challenges Facing Providers

- Inappropriate hospital discharge
- Lack of advanced directives and goals of care
- Polypharmacy
- Lack of CHF protocols
- Under-recognition of early symptoms
- Over-recognition of acuity
- Fear of litigation
- Poor communication at interface of hospital and NH
- Patient and family preferences.



# Medication Error Report

## New Admission

DRUG: Prednisone tapering

MEDICATION ERROR: 2 tapering schedules had the same dates. Patient received 45 mg instead of the 40 mg scheduled.

MEASURES TO PREVENT SIMILAR INCIDENTS: Medications with tapering schedules should be checked, using the triple check system described in the policy and procedure manual, for review of date accuracy.

# Medication Error Report

## New Admission

DRUG: N/A

MEDICATION ERROR: Order for bladder scan and straight cath if greater than 350 cc was not entered into PCC. Actual order should have been written as, “Monitor urine output using bladder scan every 8 hours. Straight cath if volume > 350 cc.

MEASURES TO PREVENT SIMILAR INCIDENTS: Triple check of admission orders per facility policy.

# Medication Error Report

## New Admission

DRUG: Several

MEDICATION ERROR: Medication not given because they were not entered correctly and completely into the electronic orders. By the time the error was discovered, the resident had been transferred to the hospital.

MEASURES TO PREVENT SIMILAR INCIDENTS: Triple check of admission orders per facility policy.

# Policy & Procedure

## Admissions

1. Admissions will notify the nursing office, nursing unit, and admission nurse that an admission is pending.
2. Reception will notify the Interdisciplinary Team when the paperwork is ready and in all folders.
3. Upon arrival, the resident will be brought to the assigned room by the ambulance or ambulette service.
4. Staff will orient the resident to his/her room and provide emotional support as needed.
5. Vital signs are to be taken on admission and every shift for three days, then weekly.
6. All nursing assessments will be completed by the admissions nurse. These assessments include Braden Scale, Fall assessment, wandering assessment, skin assessment, and behavior assessment.
7. Admission nurse will screen all new admissions for pneumonia and influenza immunization and obtain necessary signatures.
8. The admissions nurse will notify the attending physician and verify orders written on transfer form.

