



## **Geriatrics (MDA) Readmission Reduction Project**



**UNC**  
INSTITUTE FOR HEALTHCARE  
QUALITY IMPROVEMENT

Maureen Dale, Project Lead

- Core Team:** Faculty Laura Hanson | **Co-Lead** Ben Blomberg | **Project Manager** Sabrina Vereen |
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- Clinical Team and Advisors:** Jan Busby-Whitehead (Sponsor), Ronald Davis, John Downs, Margaret Drickamer,
  - John Gotelli, Marvin McBride, Fabienne McClellan, Shana Ratner (IHQI Faculty Advisor), Stephanie Stout, Mark Toles

# Risk Factors for Readmission =Multifactorial



## **Motor and Cognitive Functional Status** Are Associated with 30-day Unplanned Rehospitalization Following Post-Acute Care in Medicare Fee-for-Service Beneficiaries

Addie Middleton, PhD, DPT<sup>1</sup>, James E. Graham, PhD, DC<sup>1</sup>, Yu-Li Lin, MS<sup>2</sup>, James S. Goodwin, MD<sup>3</sup>, Janet Prvu Bettger, ScD<sup>4</sup>, Anne Deutsch, RN, PhD, CRRN<sup>5</sup>, and Kenneth J. Ottenbacher, PhD, OTR<sup>1</sup>

## **Functional Impairment** and Hospital Readmission in Medicare Seniors

S. Ryan Greysen, MD, MHS, MA<sup>1</sup>, Irena Stijacic Cenzer, MA<sup>2,3</sup>, Andrew D. Auerbach, MD, MPH<sup>1</sup>, and Kenneth E. Covinsky, MD, MPH<sup>2,3</sup>



Journal of  
HOSPITAL MEDICINE

[www.journalofhospitalmedicine.com](http://www.journalofhospitalmedicine.com)

ORIGINAL RESEARCH

## Risk Factors for Potentially Avoidable Readmissions due to **End-of-life Care Issues**

Jacques Donzé, MD, MSC<sup>1,2\*</sup>, Stuart Lipsitz, SCD<sup>1,2</sup>, Jeffrey L. Schnipper, MD, MPH<sup>1,2,3</sup>

# Therefore **Multimodal** Approaches Work Best

September 2017

## **Effects of an Intervention to Reduce Hospitalizations From Nursing Homes**

### A Randomized Implementation Trial of the INTERACT Program

Robert L. Kane, MD<sup>1</sup>; Peter Huckfeldt, PhD<sup>1</sup>; Ruth Tappen, EdD, RN<sup>2</sup>; [et al](#)

## **Reduction of 30-Day Postdischarge Hospital Readmission or Emergency Department (ED) Visit Rates in High-Risk Elderly Medical Patients Through Delivery of a Targeted Care Bundle**

Bruce E. Koehler, MPH<sup>1</sup>  
Kathleen M. Richter, MS, MFA, ELS<sup>1</sup>  
Liz Youngblood, RN, MBA<sup>2</sup>  
Brian A. Cohen, PHARM, MS<sup>3</sup>  
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## **Project ReEngineered Discharge (RED) Lowers Hospital Readmissions of Patients Discharged From a Skilled Nursing Facility**

[Randi E. Berkowitz, MD](#)  [Zachary Fang, BS](#), [Benjamin K.I. Helfand, MSc](#), [Richard N. Jones, ScD](#), [Robert Schreiber, MD](#), [Michael K. Paasche-Orlow, MD, MA, MPH](#)

# Project Alignment with UNCCMC FY18 Org Goal

**Aim Statement:** Reduce 30-day readmissions of vulnerable elders from the MDA service by **5%<sup>1</sup>** using evidence-based strategies that address key components of transitions in care delivery by 6/30/18

## Project Baseline

**30-Day Readmissions for MDA = 19.67%**

Source: August 2017 transitions dashboard, all Transitions patients (low, mod, high)

Publisher: Performance Improvement and Patient Safety (PIPS)



*Target patient population* – Our target patient population is patients  $\geq 65$  years old discharged from MDA with particular focus on a high risk subset of patients who are either a) discharged to a skilled nursing facility (SNFs) or b) identified as a Transitions patient.

# 1

# Reducing Patient Harm: Deleterious Effects of Hospitalizations on Older Adult Patients

## Hazards of Hospitalization of the Elderly

Morton C. Creditor, MD

### Loss of Independence in Activities of Daily Living in Older Adults Hospitalized with Medical Illnesses: Increased Vulnerability with Age

*Kenneth E. Covinsky, MD, MPH,\*† Robert M. Palmer, MD, MPH,§ Richard H. Fortinsky, PhD,|| Steven R. Counsell, MD,|| Anita L. Stewart, PhD,† Denise Kresevic, RN, PhD,# Christopher J. Burant, MA,\*\* and C. Seth Landefeld, MD\*†*

### The Illness Is Bad Enough. The Hospital May Be Even Worse.

Older patients are particularly vulnerable to “post-hospital syndrome,” some experts believe, and that may be why so many patients return.

By PAULA SPAN



2

# Train Next Cohort of Geriatric Fellows

Leadership Development in Patient Safety, Quality Improvement, and Care Innovations

## STATE OF THE GERIATRICIAN WORKFORCE

Geriatricians are physician experts in pioneering advanced illness care for older people, with a focus on championing interprofessional teams, eliciting personal care goals, and treating older people as whole persons.

As we live longer, access to a geriatrics-trained workforce will be key to ensuring we can contribute to our communities for as long as possible. **According to the Health Resources & Services Administration, which tracks data on the workforce we need as we age, the supply of geriatricians is projected to increase modestly between 2013 and 2025 but demand will grow more steeply.**

Research shows that 30% of people 65-years-old and older need care from a geriatrician, and that each geriatrician can care for up to 700 patients. This translates to a larger demand for geriatricians—both nationally and region by region across the U.S.

### FAST FACTS

Older Adult  
Population  
(2018)

**49.2M**

Certified  
Geriatricians  
(2017)▲

**6,910**

Full-Time Practicing  
Geriatricians  
(2013)★

**3,590**

# Developing QI Interventions

1. How do we reduce readmissions in medically complex older adults?
2. What were the primary reasons patients were being readmitted?
3. What were the contributing factors?



# PDSAs on Root-Cause Analysis

## Geriatrics MDA Reasons for Readmission Form (Pilot)

Patient Identifier (MRN):

Readmission Date:

Reviewer: *MCD*

PCP:

Discharging MD:

Readmitting MD:

Readmitted From: *home w HH*

Was the readmission due to (Choose one):

- New Problem
- Same problem (nonresolution from index admission)
- Complication of the same problem as index admission or complication of therapy
- Disease recurrence or progression

Factors Leading to Readmission (Select all that apply, and indicate if actionable)

Inpatient			Actionable
1	<input type="checkbox"/>	Ultimate <b>Diagnosis not apparent</b> on index admission	<input type="checkbox"/>
2	<input type="checkbox"/>	Prior admission <b>did not fully treat</b> medical condition	<input type="checkbox"/>
3	<input type="checkbox"/>	Prior admission did not fully address <b>needs in regards to functional impairments</b>	<input type="checkbox"/>
4	<input type="checkbox"/>	Prior admission did not fully address <b>needs in regards to cognitive impairments</b>	<input type="checkbox"/>
5	<input type="checkbox"/>	Prior admission did not adequately address <b>advance care planning and goals of care. (true but didn't lead to readmission?)</b>	<input type="checkbox"/>
6	<input type="checkbox"/>	Prior admission did not provide <b>accurate medication list at discharge.</b> (missing, unclear, or conflicting)	<input type="checkbox"/>
7	<input checked="" type="checkbox"/>	Prior admission did not provide <b>adequate discharge instructions</b> to the patient or caregiver (missing, unclear, or conflicting). <i>no weight gain instructions</i>	<input checked="" type="checkbox"/>
8	<input type="checkbox"/>	Prior admission did not provide <b>adequate follow-up information for the post-acute care team</b> (including contact info for inpatient team.)	<input type="checkbox"/>
9	<input type="checkbox"/>	Prior admission did not include caregiver training in the discharge process.	<input type="checkbox"/>
10	<input type="checkbox"/>	<b>Follow-up appointment</b> not timely or not scheduled.	<input type="checkbox"/>
Outpatient			
11	<input type="checkbox"/>	Did not address outlined follow-up issues in discharge summary	<input type="checkbox"/>
12	<input type="checkbox"/>	Did not receive/review discharge summary.	<input type="checkbox"/>
13	<input checked="" type="checkbox"/>	Escalation of care by outpatient provider.	<input type="checkbox"/>
14	<input checked="" type="checkbox"/>	Ineffective / Flaws in outpatient management strategies <i>held lasix</i>	<input type="checkbox"/>

37

Patient	Actionable	
15 <input checked="" type="checkbox"/>	Declined recommended services or disposition (SNF/HH), or left AMA.	<input type="checkbox"/>
16 <input type="checkbox"/>	Did not pick up or take medications prescribed at discharge.	<input type="checkbox"/>
17 <input type="checkbox"/>	Did not follow medication changes or medical recommendations made at discharge. <input type="checkbox"/> Did not adhere (note reason if possible) <input type="checkbox"/> Could not adhere due to health literacy or access	<input type="checkbox"/>
18 <input type="checkbox"/>	Inappropriate use of Emergency Department resources	<input type="checkbox"/>
19 <input type="checkbox"/>	Inappropriate use of Emergency Department resources	<input type="checkbox"/>

### Intrinsic Factors

20 <input checked="" type="checkbox"/>	Patient with serious illness with frequent unavoidable decompensations.	<input type="checkbox"/>
21 <input checked="" type="checkbox"/>	Patient with barriers to outpatient social support.	<input type="checkbox"/>
22 <input checked="" type="checkbox"/>	Barriers to outpatient medical support.	<input type="checkbox"/>

### System Issues

23 <input type="checkbox"/>	Inadequate transition communication at index discharge (could be addressed in interview).	<input type="checkbox"/>
24 <input type="checkbox"/>	Post-acute care did not receive/review DC summary in time.	<input type="checkbox"/>
25 <input type="checkbox"/>	Patient needing a higher level of care at discharge (would also indicate if they did not meet criteria in index admission.)	<input type="checkbox"/>
26 <input type="checkbox"/>	Patient exhausted available resources in their current level of care.	<input type="checkbox"/>

Comments on Actionable Items (By whom?):

Disposition of (this) readmission hospitalization:

- Home
- Home with HH
- Home with hospice
- Inpatient hospice
- SNF
- Deceased
- Other

ACO patient (based on presence of Value Care Banner in Epic)?  Yes  No

One Item That Contributed Most to Readmission:

*20*

OPEN COMMENTS (optional):

Want a closer look? Please refer to your handout



# Building On Last Year's Progress

MODELS OF GERIATRIC CARE,  
QUALITY IMPROVEMENT, AND  
PROGRAM DISSEMINATION

## Handing Off the Older Patient: Improved Documentation of Geriatric Assessment in Transitions of Care

*Ben A. Blomberg, MD, Rebekah C. Mulligan, MD,  Stephen J. Staub, MD, Laura C. Hanson, MD, MPH, Margaret A. Drickamer, MD, and Maureen C. Dale, MD*

**Journal** of the  
**American Geriatrics Society**

  
**AGS** Geriatrics  
Healthcare  
Professionals  
Leading Change. Improving Care for Older Adults.

# By the Numbers

**Intervention Quality Assurance, Training, and Stakeholder Feedback**

Documentation Quality | Oct 17 – Apr 18

**309 chart audits**

Readmissions Case Reviews | Nov 17 – Mar 18

**45 RCA reviews**

Readmissions RCA Team

**Avg of 7-person team –  
geriatrics attendings,  
fellows, and QI project  
manager**

Readmissions Monthly RCA Review Sessions

**Avg Session Time =  
60 – 90 min**

PCP Interviews | Jan 18 – Apr 18

**10+ PCP Interviews**

Documentation Training Sessions | Nov 17 – Apr 18

**Over 30+ MDA Housestaff  
Trained Monthly**

# Geriatric Comprehensive Assessment

## HPI:

is a 79 y.o. woman with past medical history of atrial fibrillation, T2DM, HTN, and pulmonary hypertension who presents with diffuse abdominal pain, intermittent nausea, and lethargy. She was diagnosed with pulmonary hypertension by echocardiography and diuresed to a suspected dry weight of 138 lbs in her recent admission. She was discharged with lasix 40 mg bid in weight based dosing, but has not required this due to her weight being persistently 138 pounds. Yesterday, it dropped suddenly at home to 132 pounds. She has also had several days of worsening oral intake, with one episode of vomiting after eating prepared tuna on a cracker. She has become less interactive with her caregivers and is not walking or participating in activities. She has also begun to complain of abdominal pain. She persistently has tarry-appearing stools.

In the emergency department, she was given basic labs, 500 mL NS bolus, levofloxacin/metronidazole, and CT a/p with contrast.

[Want a closer look? Please refer to your handout](#)

## Cognitive Assessment

<b>Delirium Assessment:</b> On discharge, the patient did not show evidence of delirium. The patient did have symptoms of chronic severe dementia on discharge.	<b>CAM (Confusion Assessment Method):</b> <i>A Positive CAM is define by the presence of:</i> <div style="text-align: center;"><div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Acute Onset or Fluctuating Course</div><p style="text-align: center;">+</p><div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Inattention</div><p style="text-align: center;">+</p><div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Disorganized Thinking <i>OR</i> Altered Consciousness</div></div>
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**Other cognitive assessment:** The patient scored 6/30 Saint Louis University Mental Status Exam (SLUMS). This is consistent with the diagnosis of dementia.

## Functional Assessment

<u>ADLs:</u>	<u>IADLs:</u>
<b>Feeding:</b> Independent <b>Dressing:</b> Requires Assistance <b>Ambulation:</b> Requires Assistance <b>Toileting:</b> Requires Assistance <b>Bathing:</b> Dependent	<b>Using the phone:</b> Requires Assistance <b>Shopping:</b> Dependent <b>Meal preparation:</b> Dependent <b>Medication mgmt:</b> Dependent <b>Managing finances:</b> Dependent <b>Housework:</b> Dependent <b>Transportation</b> (driving or navigating public transit): Dependent

**Living situation:** Patient lives in her niece-in-law's home with niece-in-law, and nephew.

**Changes in ADLs during hospitalization:** The patient had episodes of delirium that interfered with her ADLs. She is at baseline per her family

**Assistive devices:** Walker

**Additional services recommended at discharge:** SNF

# Pre-Discharge Medication Reconciliation by Pharmacist

## Pharmacy Discharge Medication Reconciliation Note

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Discharge medication reconciliation has been completed for [redacted] by a pharmacist on 04/09/18.

### Noteworthy Medication Changes:

Stopping apixiban due to bleeding.  
Stopping metoprolol due to lower HR.  
Decreasing furosemide to once a day.

Starting acetaminophen for pain.  
Starting sucralfate for melena.

### Medication related barriers:

None. Being discharged to SNF.

### Suggested monitoring for outpatient follow-up:

Heart rate. H&H.

# D/C Summary: Geriatric Comprehensive Assessment

**\*\*GERIATRIC ASSESSMENT:** is a 79 y.o. woman with past medical history of atrial fibrillation, T2DM, HTN, PVD, and pulmonary hypertension who presented with diffuse abdominal pain, intermittent nausea, and lethargy. The patient has significant dementia, pulmonary hypertension and broadly distributed vascular disease. Chronic bowel ischemia and dementia likely contribute to reduced food intake. Continued GI bleeding after cessation of anticoagulation concerning, but the patient is neither a surgical candidate nor a candidate for scope to further evaluate given danger of hypoxia and hypercarbia in setting of pulmonary hypertension. The patient would benefit from assistance with ADL/IADLs and rehab to maintain or perhaps improve function. She has been delirious sporadically throughout her stay and will continue to be at risk of this. Regular volume assessment and appropriate titration of Lasix dosing will be key to avoid additional hospitalizations.

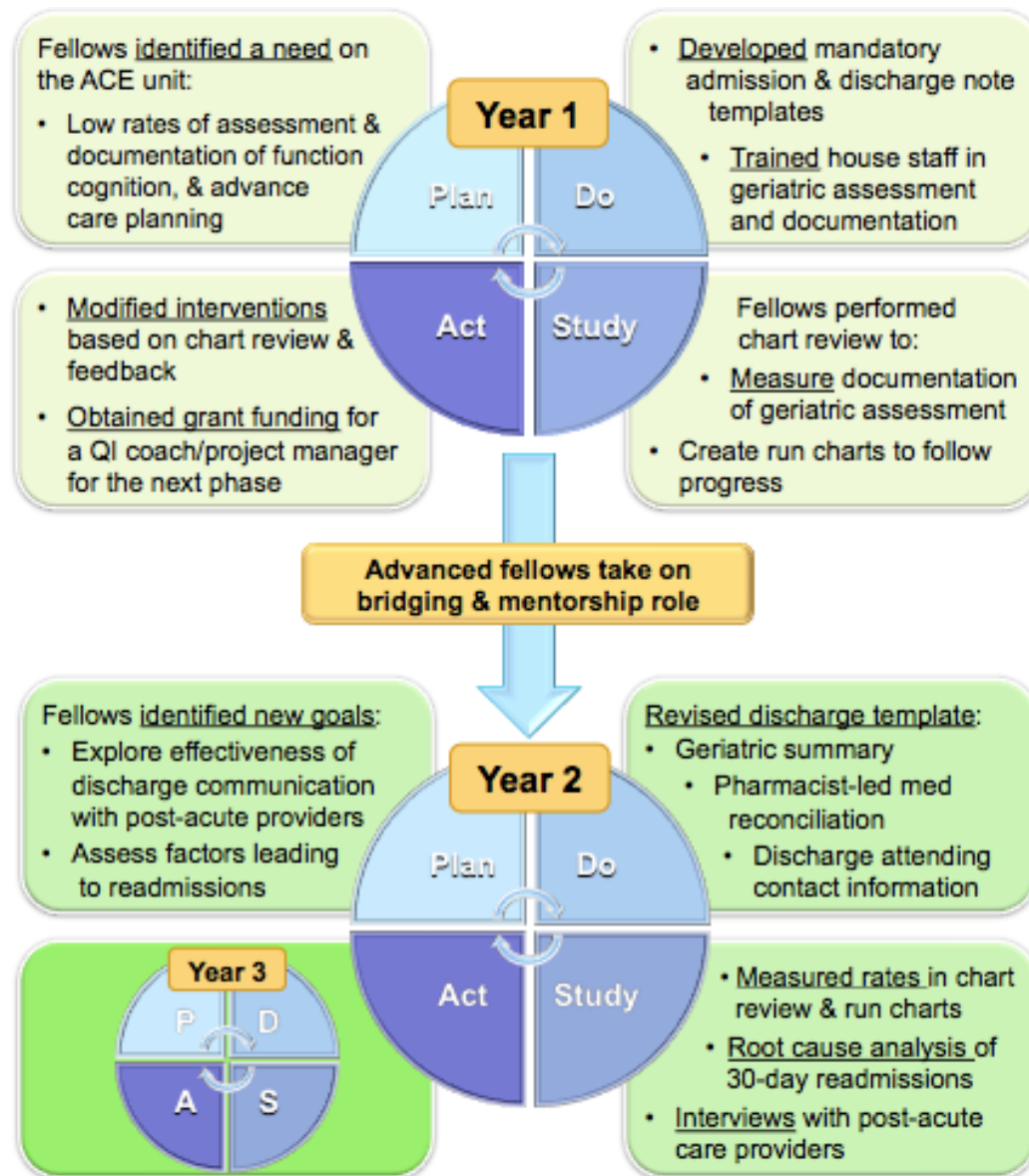
*\*Refer below for the patient's functional / cognitive assessments, and advance care planning\**

Want a closer look? Please refer to your handout

Lessons  
Learned

# Lesson #1: Sustainability

## Build a Program of Continuous QI Curriculum





# Lesson #2: Identify Impactable Readmissions

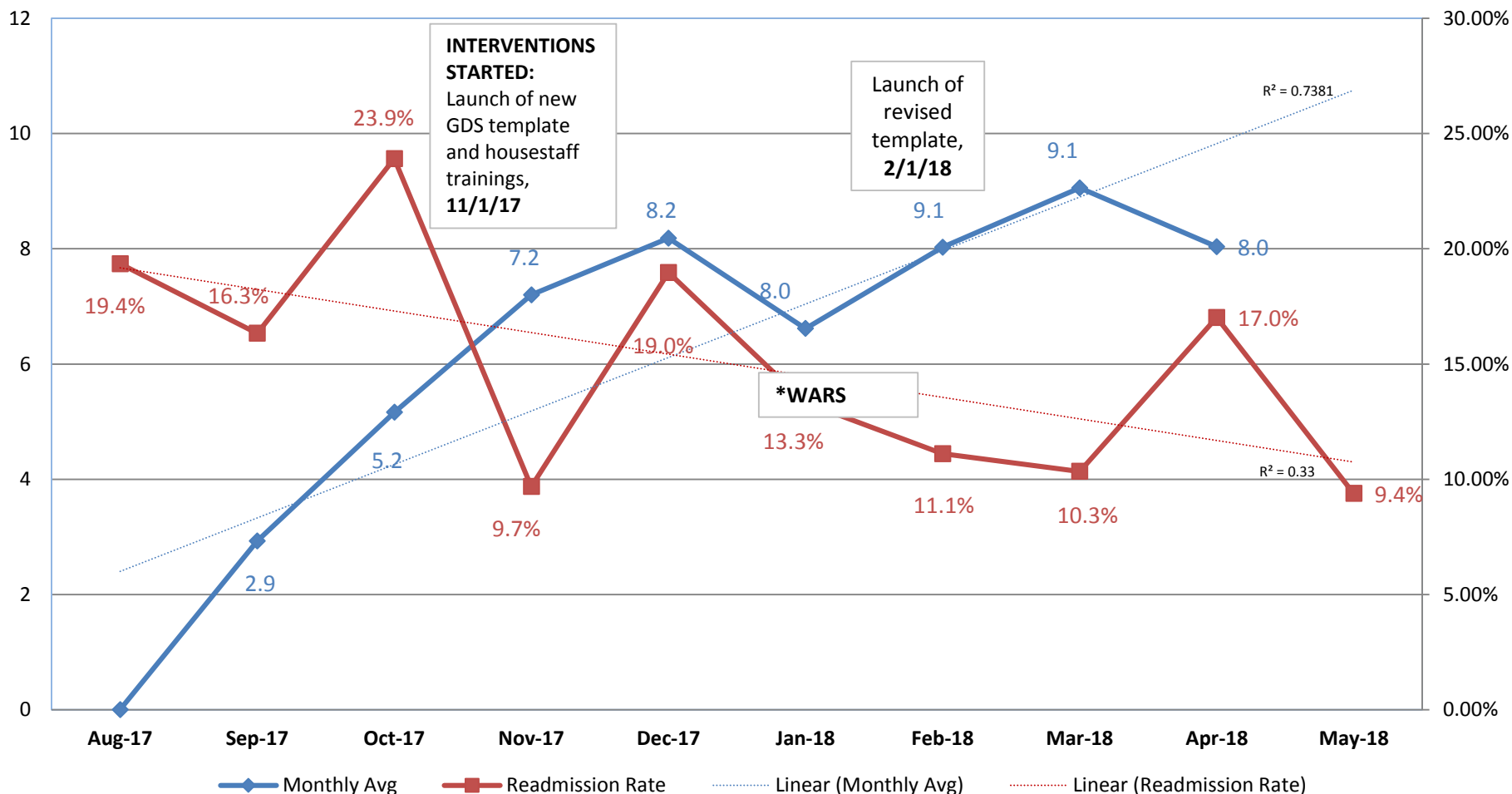
## Most frequent = Unavoidable Decompensations

### Ranking of *primary* factors in readmissions

Item	Contributing factor	Count
20	Serious illness with frequent unavoidable decompensations	22
1	Ultimate diagnosis not apparent on index admission	6
15	Patient declined recommended services or disposition (e.g., SNF, HH)	3
17a	Patient did not follow discharge medication changes or recommendations	3
13	Outpatient provider escalated care.	2
14	Ineffective outpatient management	2
7	Team gave inadequate discharge instructions to patient or caregiver.	2
18	Inappropriate use of emergency department	1
25	Patient needed higher level of care at discharge.	1
2	Team did not fully treat medical condition.	1
6	Team did not provide accurate medication list at discharge.	1
3	Team did not fully address needs re: functional impairments.	1
4	Team did not fully address needs re: cognitive impairments.	1
9	Team did not include caregiver training in the discharge process.	1
26	Patient had exhausted available resources in current level of care.	1

# But we still were able to show improvement!

## MDA Average Geriatric Discharge Summary (GDS) Quality Composite Score\* and Readmissions Rate (%), by month



\*Average Geriatric Discharge Summary (GDS) quality composite score max = 12 points

Assessed documentation for presence and level of completion of cognitive and function assessments, functional checklist, CAM, code, ACP.

# KEY TAKEAWAYS + NEXT STEPS

# Key Takeaways +Next Steps

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- 1. Continue to develop a multi-year CQI curriculum**
- 2. Feedback is important!**
- 3. Root Cause Analysis = greater insight regarding patient experience and care processes, which led to more targeted improvement efforts**

# Thank You!



**Core Team:** ISP Scholar | Maureen Dale **Faculty** Laura Hanson | **Co-Lead** Ben Blomberg |  
**Project Manager** | Sabrina Vereen

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Shana Ratner (IHQI Faculty Advisor), Stephanie Stout, Mark Toles

**Partners** | MDA/Hillsborough Care Teams | PIPS & IHQI Teams | PCPs and Post-Acute Partners |

&

All of our patients & their families!