NYSPFP Preventable Readmissions Initiative Webconference:
Identifying High-Risk Patients and Appropriate Interventions

February 4, 2014

A partnership of the Healthcare Association of New York State
and the Greater New York Hospital Association
# Agenda

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NYSPFP Readmissions Pilot Project

- **Goal**: To reduce readmissions and examine key processes in the care delivery system for every patient on admission, throughout the hospital stay, and at discharge.

- **Aim**: To assist hospitals in identifying their strengths and weaknesses so they can make thoughtful decisions about how to improve patient care and readmission prevention work and spread those findings and successes hospital-wide.
Project Description – Three-Phased Approach

Phase 1: On Admission
- Identify patients on admission who are at risk for readmission.
- Assemble a team to address interventions that will mitigate risk.

Phase 2: During the Hospital Stay
- Prepare patient and caregiver for discharge.
- Conduct ongoing patient reassessment to identify new or changing risk factors.
- Ensure systems for multidisciplinary communication, coordination, planning and evaluation.

Phase 3: At Discharge
- Ensure patient and family/caregiver are fully prepared for post hospital phase.
- Provide timely and thorough communication to post hospital providers.
## Phase 1 Timeline

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Patient Readmission Risk Assessment

Mark V. Williams, MD, FACP, MHM
Professor & Vice Chair, Department of Internal Medicine
Director, Center for Health Services Research
University of Kentucky
Rehospitalizations among Patients in the Medicare Fee-for-Service Program

Stephen F. Jencks, M.D., M.P.H., Mark V. Williams, M.D., and Eric A. Coleman, M.D., M.P.H.

- 1 in 5 Medicare patients rehospitalized in 30 days
- Half never saw outpatient doc
- 70% of surgical readmissions
  - chronic medical conditions
Risk Factors

- Patient Factors
  - Poor safety climate and lack of teamwork
  - Poor quality care and lack of standardization
  - Poor communication

- Outpatient Recovery
- Rehospitalization
Trends in Length of Stay and Short-term Outcomes Among Medicare Patients Hospitalized for Heart Failure, 1993-2006

Héctor Bueno; Joseph S. Ross; Yun Wang; et al.


- Observational study of 6,955,461 Medicare FFS hospitalizations for HF; 1993 and 2006, with 30-day f/u.
  - Mean age = 80
  - 52% Htn, 38% DM, 37% COPD
- LOS 8.8 days down to 6.3
- Discharges to SNF increased from 13% to 20%
- Discharge to home decreased from 74% to 67%
- 30 day readmission increased from 17.2% to 20.1%
- Post-discharge mortality increased from 4.3% to 6.4%
- In-hospital mortality declined from 8.5% to 4.3%
- 30-day mortality declined from 12.8% to 10.7%
Derivation and validation of an index to predict early death or unplanned readmission after discharge from hospital to the community

Carl van Walraven MD, Irfan A. Dhalla MD, Chaim Bell MD, Edward Etchells MD, Ian G. Stiell MD, Kelly Zarnke MD, Peter C. Austin PhD, Alan J. Forster MD

- **Length of stay**
- **Acuity of the admission**
- **Comorbidity of the patient**
- **Emergency department use**
  - C statistic 0.684
  - CMAJ April 2010;182
JAMA Systematic Review in 2011 of validated readmission risk prediction models

Kansagara et al. JAMA 2011; 306:1688-98

“Most current readmission risk prediction models that were designed for either comparative or clinical purposes perform poorly.”
Flip a Coin?

- Using retrospective administrative data, models predicting readmission
- During hospitalization
  - c-statistic of 0.56 to 0.72
- At discharge
  - c-statistic of 0.68 to 0.83
- Functional and social variables improve discrimination
Multiple Factors

- Hospital Organizational Factors
  - Socioeconomic Factors
    - Education
    - Income
    - Medicaid Participation
  - Postdischarge Environment
    - Usual Source of Care (USOC)
    - Assistance to See USOC
    - Marital Status
    - Living Alone
    - Self-Management Ability
    - Unmet Functional Needs
    - Dwelling Type
- Hospital Care
  - Health Status
    - Acute Illness
    - Chronic Morbidity
    - Functional Status
    - Cognitive Status
- Other Hospital Characteristics
- Early Readmission
  - Demographics
    - Age
    - Gender
    - Race/Ethnicity
    - Geographic Location
Risk Calculator

Readmission Risk Calculators
Select a Reason for Initial Hospitalization:

- Heart Attack
- Heart Failure
- Pneumonia

www.readmissionscore.org
Medicare $\geq 65$

Readmission Risk Score for Heart Failure

This readmission calculator is based on a statistical model developed from chart abstracted data. It is intended for use with patients age 65 and older.

**DEMOGRAPHICS**
- **Age**: [ ] years
- **Sex**: [ ] Male, [ ] Female

**PRESENTATION**
- **In-hospital Cardiac Arrest**: [ ] Yes, [ ] No, [ ] N/A

**HISTORY**
- **Diabetes**: [ ] Yes, [ ] No, [ ] N/A
- **Heart Failure**: [ ] Yes, [ ] No, [ ] N/A
- **Coronary Artery Disease**: [ ] Yes, [ ] No, [ ] N/A
- **Prior PCI**: [ ] Yes, [ ] No, [ ] N/A
- **Aortic Stenosis**: [ ] Yes, [ ] No, [ ] N/A

- **On admission**
- **Diagnostics**
- “…based on a statistical model developed from chart abstracted data…”
The 8P’s from Project BOOST©

- Prior hospitalizations
- Problem meds / Polypharmacy
- Psychological
- Principal Dx (Cancer, DM, COPD, HF, CVA)
- Poor health literacy
- Patient support lacking
- Physical Function (i.e. phrailty)
- Palliative care
Prior hospitalizations

Number of Hospitalizations, previous 12 months

Readmission Rate (%)
Emergency Hospitalizations for Adverse Drug Events in Older Americans


- Warfarin – 33%
- Insulin – 14%
- Anti-platelet agents – 13%
- Oral Hypoglycemics – 11%
Psychological

Consider both a history of major depressive disorder as well as depressive symptoms

- Amotivational state
- Cognitive slowing
- Sleep and appetite disturbances
- PHQ-2 and PHQ-9

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<th>Over the past 2 weeks, how often have you been bothered by any of the following problems?</th>
<th>Not At all</th>
<th>Several Days</th>
<th>More Than Half the Days</th>
<th>Nearly Every Day</th>
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<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>
Principle Diagnosis

- Malignancy
- Diabetes Mellitus
- COPD
- Heart Failure
- Stroke

Medicare reimbursement penalty applied to HF, AMI, Pneumonia readmits beginning with events 10/2011 (FY 2012), subsequently COPD, THA, TKA will be added FY2015
A Requirement to Reduce Readmissions
Take Care of the Patient, Not Just the Disease

Mark V. Williams, MD

Heart failure hospitalization

Days 0-3
Percentage of all readmissions, 13.4

Days 0-7
Percentage of all readmissions, 31.7

Days 0-15
Percentage of all readmissions, 61.0

JAMA
The Journal of the American Medical Association
Polypharmacy

- No solid evidence as to what represents “poly”
- Used to be 5 or more medications
- Anecdotally, experts now say 9 or more
Poor Health Literacy

- Validated measurement tools are cumbersome
- Experts recommend avoid screening
- *Teach back* method
  - Interactive communication
  - Assesses learner understanding
  - Allows educators to address learning gaps in real time
Patient Support Lacking

- Quality of home care
- Transport to follow up appointments
- Assistance with accessing appropriate medical help or other services
Palliative Care

- Addressing goals of care and palliative needs provides patient-centered care
- Side effect yields reduction in undesired hospital admissions.
Pilot Tracking Tool

- Medications
- Barriers
  - Psychosocial
  - Financial
- Clinically Complex
- Limited Understanding
- Nutrition
- • Mental Health/Substance Abuse
  • Palliative Care

Documentation Supporting Care
Revolving Door of Readmissions
Questions?

Mark V. Williams, MD, FACP, MHM
Professor & Vice Chair, Dept. of Internal Medicine
University of Kentucky
mark.will@uky.edu

Principal Investigator, Project BOO
BOOST@hospitalmedicine.org
www.hospitalmedicine.org/BOOST
Phase 1 Flow Chart

Patient is admitted or transferred into Readmission Pilot unit

Designated team member completes hospital high-risk assessment and/or NYSPFP “Any risk” checklist

Does the patient have risk factors for readmission?

Yes

Refer patient to the appropriate team member(s) needed to mitigate risks and/or prepare discharge plan. (obtain MD order when needed)

Develop nursing care plan and daily goals for nursing’s role in patient education and preparation for discharge to mitigate risks.

Repeat assessment throughout hospital stay to identify and address any changes

NO
Phase 1 Planning and Preparation

- Ensure executive leadership support and engagement

- Select **at least one** high-acuity, medically complex unit to conduct pilot activities (e.g., Med/Surg unit)

- Identify a unit champion and team members:
  - Include hospitalists, staff RNs, discharge planners, case management, social work, PT/OT, respiratory therapy, pharmacy, nutrition, executive patient services
  - Confirm roles, responsibilities, and accountability
  - Engage unit-level leadership
  - Determine the staff responsible for mitigating risks during the pilot

- Discuss the pilot with staff *at all levels* on the selected unit and throughout the hospital
Measurement Tips

- **Eligibility criteria:** All patients who are admitted or transferred into the pilot unit during the two-week Phase 1 observation period should be included.

- **Data collection and tracking:** Utilize NYSPFP forms and/or your hospital’s internal tracking tools to manage and monitor pilot activities.
  - Agree on methods and tools for team communication-consider incorporation into existing whiteboards or rounding efforts.
  - Establish real-time feedback mechanism of tracking activities.

- **Monitoring readmissions:** NYSPFP recommends identifying, completing a chart review—*and interviewing*—patients who are readmitted within 30 days after being discharged from the pilot unit.
  - Work with IT department to develop a new report, if necessary.
Phase 1 Patient Tracking Sheet: Identifying High-Risk Factors for Readmission

Preventable Readmissions Initiative
High-Risk Factors for Readmission

Medications
- Polypharmacy (more than 5 medications)
- High Risk Medications

Psychosocial Barriers
- Patient lives alone
- Patient lacks caregiver support
- Requires assistance for activities of daily living
- Requires home care or LTC services/equipment
- Environmental challenges at home (i.e., stairs)

Financial Barriers
- Uninsured
- Limited or no medication coverage
- Post hospital care placement or services
- Affordability of food and basic goods

Clinically Complex (e.g., Multiple Chronic Disease or Treatments)
- Requires extensive education
- Requires extensive coordinated care across the continuum
- Disease management
- Requires specialty services

Limited Patient Understanding and/or Health Literacy
- Having a disability
- Language barriers
- Hearing, vision, speech limitations
- Health literacy limitations
- Cognitive problems
- Very young or very old

Nutritional Limitations
- Diet restrictions
- Fluid management
- History of non-adherence

Mental Health or Substance Abuse History
- Currently in treatment for mental health/substance abuse issues
- Previously received treatment for mental health/substance abuse issues

Palliative Care
- Currently receiving palliative care services
- Potentially eligible for palliative care services

For more information on mitigating high-risk factors for readmission, please see Appendix C of the NYSPPF Readmissions Resource Guide (https://www.nysppf.org/Materials/NYSPPF_Readmissions_Resource_Guide.pdf)
# Phase 1 Patient Tracking Sheet (cont’d)

**New York State Partnership for Patients**

**Preventable Readmissions Initiative**

Mitigating Risk Factors for Readmission

Patient Tracking Sheet: Pilot Phase I

---

**Patient Name:**

**Medical Record #:**

**Date Patient Admitted/Transferred to Unit:**

**First Risk Assessment Completed (check one):**
- [ ] Within 24 hours
- [ ] Within 48 hours
- [ ] More than 48 hours after admission
- [ ] No Record

**Identified Patient Caregiver (check one):**
- [ ] Yes
- [ ] No

**Caregiver Contact Information:**

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**Patient Location Prior to Unit Admission/Transfer:**
- [ ] ED
- [ ] Critical Care
- [ ] Home
- [ ] SNF
- [ ] Physician Office
- [ ] Other

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<tr>
<th>RISK FACTOR(S) IDENTIFIED</th>
<th>DISCIPLINES RESPONSIBLE FOR ADDRESSING THE RISK (OPTIONAL: PURPOSE OF REFERRAL)</th>
<th>WAS A TIMELY REFERRAL MADE TO THE RESPONSIBLE DISCIPLINE? (YES/NO)</th>
<th>WAS THE RISK FACTOR ADDRESSED AS PLANNED? (YES/NO)</th>
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To help identify patient’s risk for readmission, please see next page for a complete list of high risk factors.
Next Steps


- Select at least one pilot unit.

- Begin discussing the pilot hospital-wide, gather feedback from staff at all levels.

- Meet with management from other units to explain the pilot goals and objectives.

- Schedule a multidisciplinary team meeting to discuss successes, challenges, lessons learned and next steps following Phase 1 of the Pilot Project.
Tools and Resources

Appendix B. NYSPFP Readmission Action Plan Worksheet

Please complete the following grid as a guide for developing your work plan. List activities related to your team’s strategy for implementing this initiative in your hospital and achieving your stated goals. Assign team member roles, target objectives, and timeframes. Be as specific as possible.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>TIMEFRAME</th>
<th>FEEDBACK/PROGRESS REVIEW PROCESS</th>
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<td></td>
<td></td>
<td></td>
<td>Over the next month</td>
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<td>Over the next six months</td>
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<td></td>
<td></td>
<td></td>
<td>Over the next year</td>
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Role of the NYSPFP Project Manager

- **Project Support**
  - Address questions from the team
  - Assist with unit identification
  - Participate in team meetings and discussion of outcomes
  - Clarify the use of tools and resources
  - Assist with identifying next steps
Next Webinar:

- Mitigating Risk Factors for Discharge Planning on Admission
  - Tuesday, February 18, 2014 at 1:00 pm