Minicourse Objectives

- Discuss key drivers of rehospitalization rates and how national data compare to state/regional findings
- Identify high-leverage changes to begin to reduce rehospitalizations in a state/region
- Describe desirable characteristics of a multi-stakeholder quality initiative that crosses traditional organizational and service boundaries

Setting the Stage

- Which of your organizations are:
  a) Actively working on reducing readmissions?
  b) Studying and planning work on readmissions?
  c) Watching and waiting for now to see what will come out of DC?
- If working on readmissions:
  — What’s your hospital’s motivation for prioritizing this?
- If studying and planning:
  — What information would be helpful to accelerate your work?
- If watchful waiting:
  — What are your concerns and cautions?

Setting the Stage

- Do you know your hospital’s 30 day readmission rates?
  a) Yes - track and monitor
  b) Yes - we know readmission rates but for certain conditions
  c) Now we do because of Hospital Compare data
  d) No - trying to establish what to measure/include/exclude
  e) No - not high on our priority list at this time
Decreasing 30-day Avoidable Rehospitalizations in a State or Region

22nd Annual National Forum on Quality Improvement in Health Care
December 6, 2010 Orlando, Florida

Minicourse Agenda

<table>
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<th>Session</th>
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<tr>
<td>8:30 – 8:45AM</td>
<td>Welcome</td>
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<tr>
<td>8:45 – 9:45AM</td>
<td>A Quality Effort at the Heart of System Redesign</td>
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<tr>
<td>9:45 – 10:00AM</td>
<td>Break</td>
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<tr>
<td>10:00 – 11:15AM</td>
<td>IHI’s Approach in STAAR</td>
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<td>11:15 – 12N</td>
<td>Case Studies (2)</td>
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<td>12N – 12:45PM</td>
<td>Lunch</td>
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<td>12:45 – 1:45PM</td>
<td>Case Studies (3)</td>
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<td>1:45 – 2:30PM</td>
<td>Panel Discussion</td>
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<tr>
<td>2:30 – 2:45PM</td>
<td>Break</td>
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<tr>
<td>2:45 – 4:00PM</td>
<td>State Leadership Discussion</td>
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</tbody>
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Reducing Avoidable Rehospitalizations:
A quality effort at the heart of system redesign

Amy E. Boutwell, MD MPP
Director of Health Policy Strategy
Co-Principal Investigator, STAAR Initiative
Institute for Healthcare Improvement

Roadmap

- Rehospitalizations: Why all the attention? Why now?
- Epidemiology: 2010 update on the evidence
- Community-based efforts: why states or regions?

Overall Summary

- Rehospitalizations are frequent, costly and many are avoidable;
- Successful pilots, local programs and research studies demonstrate that rehospitalization rates can be reduced;
- Individual successes exist where financial incentives are aligned;
- Improving transitions state-wide requires action beyond the level of the individual provider; systemic barriers must be addressed;
- Leadership at the provider, association, community, and state levels are essential assets in a state-wide effort to improve care coordination across settings and over time.

Why all the attention?
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“The Billion Dollar U-Turn”

- Frequent
  - 17.6% of all Medicare hospitalizations are 30d rehospitalizations
- Costly
  - $12B in Medicare spending, est. $25B across all payers annually
- Actionable for improvement
  - 76% potentially avoidable
  - Heart Failure, Pneumonia, COPD, Acute MI lead the medical conditions
  - CABG, PTCA, other vascular procedures lead the surgical conditions
- Performance highly variable
  - Medicare 30-day rehospitalization rate varies 13-24% across states
  - Variation greater within states

Estimates of Cost of Readmissions

- Medicare: $18 Billion spent on 30-day rehospitalizations annually
- Massachusetts all-payer: 30day rehospitalizations accounted for 377,000 hospital days = $577M annually
- Pennsylvania: 57,800 readmissions costing $2.5 Billion in charges and 350,000 hospital bed days
- OMB readmission reductions could save Medicare $26 Billion/10y

Recent Timeline 2007-2009

- MedPAC June 2007 and 2008 reports highlight avoidable rehospitalizations as an area of poor quality, recommend data reporting and payment reform;
- May 2008 NQF endorsement of 5 outcome measures for care transitions;
- June 2008 Florida becomes first state to publically report potentially preventable rehospitalization rates and launch state wide effort to improve;
- August 2008 CMS launch of Care Transitions contracts in 14 communities, with the specific aim of improving transitions and care coordination across the continuum to reduce rehospitalizations;
- November 2008 The National Priorities Partnership announced 6 priority areas for the United States, including care coordination and reducing 30 day readmissions;
- February 2009 Obama Administration highlights avoidable rehospitalizations as an area of poor quality, and recommends paying hospitals a flat fee for a hospitalization and the 30 days of follow-up care

Low-Hanging Fruit!

- Commonwealth Fund State Scorecard on Health System Performance. June 2009
- Estimates of Cost of Readmissions
  - Medicare: $18 Billion spent on 30-day rehospitalizations annually
  - Massachusetts all-payer: 30day rehospitalizations accounted for 377,000 hospital days = $577M annually
  - Pennsylvania: 57,800 readmissions costing $2.5 Billion in charges and 350,000 hospital bed days
  - OMB readmission reductions could save Medicare $26 Billion/10y

Affordable Care Act 3025

- Performance improvement incentive
  - FYI 2013 (October 1 2012)
  - Hospitals with higher than expected CMS 30-day rehospitalization rates subject to penalty
  - Initially, 3 conditions (AMI, HF, PNA)
  - Initially, sliding scale penalty up to 1% of total Medicare charges
- Number of conditions will increase
  - Hospital compare all-cause risk adjusted for AML, PNA, CHF
  - Under review PCI (stents)
  - In development: stroke, elective hip & knee
  - Planned: CABG, COPD, other vascular
- Magnitude of penalty will increase to 3%

ACA: Section 3026

- “Community-Based Transitions Care Program”
  - 5-year program projected to start in 2011
  - Provide funding to eligible entities that provide improved care transition services to high-risk Medicare beneficiaries
  - Eligible entities
    - Community-based organization
    - Arrangements with hospitals
    - Priority to applications partnering with AAA agencies
    - Priority to underserved, rural communities
Other CMS Initiatives

• CMS Center for Innovation
  — Very interested in readmissions
  — Central concept — NOT JUST THE WORK OF HOSPITALS
  — First major initiative will be state based improvement of care coordination for dual-eligible beneficiaries

• 10th Scope of Work
  — Almost certainly will include care transitions national theme
• Value-based purchasing
• Bundled services

Take-Aways

• In past 2 years, rapid changes in concept of readmissions, and levers to improve care
• Predominant focus is on multi-sector nature of improvement
• Payment reform will be one of several key components
• Payment reform by itself won’t “solve” readmissions

Medicare Rehospitalizations

• 2007 Medicare data analysis finds:
  — 20% beneficiaries are re-hospitalized at 30 days
  — 35% are re-hospitalized at 90 days
  — 67% are re-hospitalized or deceased at 1 year

• Among medical patients re-hospitalized at 30 days:
  — 50% no bill for MD service between discharge and re-hospitalization

• Among surgical patients re-hospitalized at 30 days:
  — 70% were rehospitalized with a medical DRG

Epidemiology of rehospitalizations: 2010 update on evidence

Medicare Rehospitalizations

• 24% of 30-day rehospitalizations were to another hospital
• These rates are very different for different conditions
  — 20% of rehospitalizations after HF, COPD, PNA are to another hospital
  — 40% of rehospitalizations after rehabilitation, psychosis, cardiac surgery and stroke are to another hospital

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2009 State Scorecard Summary of Health System Performance

State Variation: Hospital Admissions Indicators

National Cumulative Impact if All States Achieved Top State Rate

Medicaid and Private Rehospitalizations

- 10% readmission rate among adults 21-64 (non-OB)
- Males had higher readmission rates than females by 20%
- Medicaid readmission rates higher than commercial (10.7% v 6.3%)
- Rates increase with age
- Rates increase with number of comorbidities

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2000-2006 CMS analysis of 30d readmissions from SNFs:
• rates increased 30% in 6 yrs
• Overall rate: 23.5% (15-28%)
• NH residents: 26.8% (17-32%)

Health Affairs January 2010


Florida Rehospitalization Rates

• FLA 30 day rehospitalization rates, range and targets
  – HF: 13.3% (9-21%) target -8% (40% reduction)
  – AMI: 12.8% (8.6-21.5%) target -6.5% (50% reduction)
  – PNA: 7.5% (2.2-25.1%) target -4% (47% reduction)
  – CABG: 12.6% (2.5-18.8%) target -8% (37% reduction)
  – Hip replacement: 5.7% (1-20%) target -2.5% (54% reduction)

http://collab.fha.org/

Measurement

• There is no uniform measurement for readmissions
  – Hospitals, public data agencies, commercial payers, Medicare, researchers all measure and analyze readmission rates, but wide variation in definitions
  – Readmission v. rehospitalization
  – Timing (15, 30, 90+ days)
  – Condition specific v. all cause
  – Potentially preventable
  – Exclusions (trauma, burns, malignancy, AMA, etc)
  – CMS, Pacificare, UHC, 3M PPR, system-specific
• Measurement systems matter: they are not just different ways of measuring the same thing
• Is same-hospital readmission rate a good surrogate for all-hospital rehospitalization rate? (Krumholtz 2010)


Decreasced LOS and Cumulative Hospitalized Days Despite Increased Patient Admissions and Readmissions in an Area of Urban Poverty

• Temple University; 1991-2004

Results:
• Admissions increased 117/mo to 455/mo (p<0.001)
• Mean LOS decreased from 8.7 to 4.9 days (p<0.001)
• 1-year readmissions increased from 42.3% to 49.5% (p=0.045)
• Mean cumulative LOS decreased from 15.8 to 12.5 days; p=0.031

A note on measuring readmissions

Update on Evidence:
Continuity and Risk Prediction

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Continuity: Discharge Documentation

- Does performance on the CMS measure of “discharge planning,” provision of written discharge instructions for heart failure patients, correlate with 30 day readmission rates?
- No association between performance on the chart-based measure and readmission rates among patients with CHF (readmission rates among hospitals performing in the highest quartile vs. the lowest quartile, 23.7% vs. 23.3%; P = 0.54)


Continuity: Early Follow-Up

- Heart Failure patients cared for at hospitals with higher rates of routine early follow up (within 7 days) had lower rates of readmissions
  - Even those hospitals with early follow-up had high rates of readmissions – 20%
- COPD patients who had a follow-up visit had a significantly reduced risk of an ER visit (HR, 0.86; 95% CI, 0.83-0.90) and readmission (HR, 0.91; 95% CI, 0.87-0.96)
- Patients lacking timely PCP follow-up were 10 times more likely to be readmitted (21% vs. 3%, P=0.03)


Predicting Risk of Readmission

- 32% of inpatients in an urban readmissions study (RED) screened positive for depression:
  - The unadjusted 30-day readmission rate was 56/100 for depressed patients compared with 30/100 for non-depressed patients CI, 1.90 (1.51-2.40)
- Urban academic center analysis of >10,000 admissions:
  - Factors associated with 30-day readmission included: Black race, inpatient use of narcotics and corticosteroids, cancer (with and without metastasis), renal failure, CHF, weight loss
  - Did not find association with discharge day of week

van Walraven, Dhalla, Bell et al. Derivation and validation of an index to predict early death or unplanned readmission after discharge from hospital to the community. CMAJ. 2010;182(6):551-7.


Continuity: Established Relationship

- Increased preadmission physician continuity was independently associated with a decreased risk of urgent readmission (HR 0.94 [95% CI, 0.91-0.98])
- Patients were twice as likely to report problems if their PCP was unaware of the hospitalization (31% PCP aware, vs. 67% PCP not aware, P<0.05)


Predicting Risk of Readmission

- Boston 6 AMCs >10,000 patients
  - Factors associated with 30-day readmission or death included: Insurance status, Marital status, Having a PCP, Charlson score, SF12 physical component score, >1 admissions within the last year, Current LOS > 2-days
  - A cumulative risk score of ≥ 25 points identified 5% of patients with a readmission risk of 30%
- Ontario 11 Community Hospitals >10,000 patients
  - LOS (L)
  - Acuity of the admission (A)
  - Charlson comorbidity score (C)
  - Emergency department use (measured as the number of visits within 6 months before admission) (E)
  - LACE index scores ranged from 0 (2% expected risk of readmission or death within 30 days) to 19 (43.7% risk)


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Provider Based Initiatives

- Florida Hospital Association Collaborative to Reduce Readmissions
  - 90 hospitals, 2 years (2008-2010)
  - Goals to reduce readmissions for certain conditions by 40-50%
  - Locally adapt best practices through quality improvement approach
- Project BOOST
  - 35 hospitals across US
  - BOOST toolkit, mentoring, adopts quality improvement approach
- ACC/IHI H2H
  - Approximately 1200 enrolled
  - Coleman Care Transitions Coaches trained in >240 settings

Community Based Initiatives

- CMS Care Transitions Program
  - 14 communities, 3 years (part of 9th SOW 2008-2011)
  - Locally adapt best practices, many adopting the Care Transitions Intervention
- STAAR (STate Action on Avoidable Rehospitalizations)
  - 4 states (MA, MI, WA, OH), 4 years (2009-2013)
  - >80 hospital based cross-continuum teams
  - Locally adapt best practices, diagnose and mitigate systemic failures
  - Address systemic barriers

14 QIO Care Transitions Communities

Approach of the STAAR Initiative:
- Provide technical assistance to front-line teams of providers working to improve the transition out of the hospital, the reception into the next setting of care with the specific aim of reducing avoidable rehospitalizations and improving patient satisfaction with care

AND
- Create a state-based, multi-stakeholder initiative to concurrently address the systemic barriers to improving care transitions, care coordination over time (policies, regulations, accreditation standards, etc)

STAAR Initiative

Improve the transition out of the hospital
- Cross-continuum teams
- Collaborative learning
- State-based mentoring and quality improvement infrastructure

Support state-level, multi-stakeholder initiatives to address the systemic barriers
- State leadership coordinating, aligning, convening
- State-level data and measurement
- Financial impact of reducing readmissions
- Engaging payers
- Working across the continuum
- Other leadership, policy, regulatory levers
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STAAR Collaborative:
Optimize the transition for all patients

The state is the unit of intervention

STAAR Initiative
State Action on Avoidable Rehospitalizations

1. Measure all-cause 30-day readmission rate
2. Form a cross-continuum team
3. Cross-continuum team reviews longitudinal, cross-setting story of 5 recently readmitted patients

STAAR Initiative Key Changes

1. Enhanced Assessment of Patients: why does the patient/caregiver/SNF/outpatient provider think caused readmit?
2. Enhanced Teaching and Learning: change focus from what providers tell patients to what patients/caregivers learn
3. Real-time Communication: timely, clinically meaningful information exchange with opportunity for clarification
4. Timely Post Acute Care Follow-Up: clinical contact (call, home health visit, office visit) within 48h or 5 days depending on risk

STAAR State Level Strategy

- **Hospital-level**
  - Improve the transition out of the hospital for all patients
  - Measure and track 30-day readmission rates
  - Understand the financial implications of reducing rehospitalizations

- **Community-level**
  - Engage organizations across continuum to collaborate on improving care, partner with non-clinical community based services, address lack of IT connectivity, clarify who “owns” coordination, engage patient advocates
  - Ensure post-acute providers are able to detect and manage clinical changes, develop common communication and education tools

- **State-level**
  - Develop state-level population-based rehospitalization data
  - Convene all payer discussions to explore coordinated action
  - Link with efforts to expand coverage, engage patients, improve HIT infrastructure, establish medical homes, contain costs, etc.

*Elements of the STAAR Initiative*
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Michigan STAAR Portfolio of Projects
- TICKET to RIDE
- DCARR
- ReWaRD

Massachusetts STAAR Portfolio of Projects
- Care Transitions Forum
- State Strategic Plan on Care Transitions
- Division of Health Care Finance and Policy PPR Committee
- HCQCC Expert Panel on Performance Measurement
- Quality inspectors trained in elements of a good transition
- Standard transfer forms between all settings of care
- Hospital requirement to form patient/family advisory councils
- MOLST (Medical Orders for Life Sustaining Treatment)
- INTERACT (Interventions to Reduce Acute Care Transfers)
- Medical home demonstrations; new applications coordinate training on principles of optimal transitions with STAAR
- Partnership with AAA agencies to join cross continuum teams

MA STAAR Hospitals

STAAR Cross Continuum Partners

Multi-payer Medical Home Sites

INTERACT Nursing Homes

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MOLST Sites

Aging Services Access Points (AAA)

All MA Care Transitions Initiatives

Address Systemic Barriers

Financial Impact of Reducing Readmissions

- Few hospitals have examined the financial implications of reducing readmissions—either in the current payment climate or in any number of future states.
- Understanding current reality will allow more informed examination of the impact of proposed payment reforms regarding readmissions and proactive engagement in shaping the transition to creating value across the continuum.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
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<tbody>
<tr>
<td>State Data</td>
<td>MA - Division of Health Care Finance and Policy Steering Committee</td>
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<tr>
<td></td>
<td>MI - Multi-payer collaboration to run standard reports</td>
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<tr>
<td></td>
<td>WA - Quarterly rehospitalization reports to all WA hospitals</td>
</tr>
<tr>
<td>Financial Impact</td>
<td>STAAR partnered with 16 CFOs to understand financial impact of rehospitalization in current payment climate. Created roadmap, issue brief, manuscript, webinar.</td>
</tr>
<tr>
<td>Engaging Payers</td>
<td>Understand which specific challenges in delivering optimal care at transitions are amenable to action by payers in short term.</td>
</tr>
<tr>
<td>Working Across Continuum</td>
<td>Evolution of hospital-based cross continuum teams to community-based. The “STAAR Effect”, Care Transitions Map in MA, Detroit CARR. Standard information elements of all transitions; standard forms</td>
</tr>
<tr>
<td></td>
<td>“Cross continuum team is most transformative concept in STAAR to date”</td>
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</table>
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STAAR Financial Impact Analysis Roadmap

1. Calculate the all-cause 30 day readmission rate for the hospital and the percentage of the average daily census due to readmitted patients.
2. Partner Financial Lead with Clinical Lead and review the personal, clinical, and financial story of one (or more) recently readmitted patient(s).
   - Calculate revenue, expenses, and margin.
   - Analyze clinical/operational insights from this story
3. Conduct a financial analysis on a sample set of readmissions for a select time period (1 month, 12 months, etc).
   - Analyze characteristics of this sample set (payer mix, LOS, conditions, outliers, etc)
   - What is the average direct and total margin per readmitted patient in this sample?
4. What financial variables does your hospital consider when examining the impact of readmissions?
   - Revenue, expenses, direct costs, indirect costs, variable costs, fixed costs, etc.
   - How does your organization define direct, indirect, fixed and variable costs?
5. How do readmissions to your hospital, today, influence your hospital’s bottom line?
6. If you were to successfully reduce readmissions by 10%, 30%, 50%, which costs would be influenced and which costs would remain fixed?
7. What is your hospital’s ability to influence (reduce) fixed costs? In the near and long term?
8. Is there latent demand in your hospital service area? Would you expect to keep volume stable if readmissions decreased? What would happen to ED visits? Observation stays?
9. What is your hospital’s ability to influence (reduce) fixed costs? In the near and long term?
10. Is there anything that your hospital will do differently as a result of this analysis?

Lessons on State Level Engagement

- State-based approach allows:
  - Common framing of issue, common language
  - Inventory complementary efforts across state
  - Aligning efforts encourages, elevates, sustains action
  - State strategy to systematically work through
  - No surprises - transparent intent and plan
  - Leverage regulatory, licensure, other policy levers

Summary

- Rehospitalizations are frequent, costly, and actionable for improvement
- Working to reduce rehospitalizations focuses on improved communication and coordination over time and across settings
  - With patients, families, caregivers, and
  - Between clinical providers and
  - Between the medical and social services (e.g. aging services, etc)
- Working to reduce rehospitalizations is one part of a comprehensive strategy to promote appropriate utilization of health care
- Act on multiple levels – the hospital, the community, and the state level to design a robust strategy to accelerate state wide change

STAAR Initiative

STate Action on Avoidable Rehospitalizations

Resources:
1. STAAR How-to Guide: Creating an Ideal Transition Home
2. STAAR Guide for Field Testing: Creating an Ideal Transition to the Office Practice
3. STAAR Guide for Field Testing: Creating an Ideal Transition to a Skilled Nursing Facility
4. Applying Early Evidence and Experience in Front-Line Process Improvements to Develop a State-Based Strategy: The STAAR Initiative
5. The STAAR Initiative: A Survey of the Published Evidence
6. The STAAR Initiative: A Compendium of 15 Promising Interventions
7. The STAAR Initiative: A Tool for State Policy Makers
8. STAAR Issue Brief: Data and Measurement
9. STAAR Issue Brief: The Financial Impact of Readmissions on Hospitals
10. STAAR Issue Brief: Working Together in a Cross-Continuum Team

Available at www.ihi.org/STAAR

Break
9:45AM – 10:00AM

IHI’s Approach to Reduce Avoidable Rehospitalizations

Pat Rutherford MS, RN
Vice President, IHI
Co-Principal Investigator, STAAR Initiative

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Rebecca’s Story

Rebecca Bryson lives in Whatcom County, WA and she suffers from diabetes, cardiomyopathy, congestive heart failure, and a number of other significant complications; during the worst of her health crises, she saw 14 doctors and took 42 medications. In addition to the challenges of understanding her conditions and the treatments they required, she was burdened by the job of coordinating communication among all her providers, passing information to each one after every admission, appointment, and medication change.

http://www.ihi.org/IHI/Topics/PatientCenteredCare/PatientCenteredCareGeneral/ImprovementStories/PursuingPerfectionReportfromWhatcomCountyWashingtononPatientCenteredCare.htm

Rebecca’s Story

Rebecca said if she were to dream up a tool that would be truly helpful, it would be something that would help her keep her care team all on the same page. Bryson described typical medical records as being “location or process centered, not patient-centered.” She also describes how difficult it can be for patients to navigate a large health care system. Rebecca summarizes her experience in this way – “Patients are in the worst kind of maze, one filled with hazards, barriers, and burdens.”

http://www.ihi.org/IHI/Topics/PatientCenteredCare/PatientCenteredCareGeneral/ImprovementStories/PursuingPerfectionReportfromWhatcomCountyWashingtononPatientCenteredCare.htm

Continuum of Care for Heart Failure Patients

The Challenge

- Potentially preventable rehospitalizations are prevalent, costly, burdensome for patients and families and frustrating for providers
- No one provider or patient can “just work harder” to address the complex factors leading to early unplanned rehospitalization
- Problem is exacerbated by a highly fragmented delivery system in which providers largely act in isolation and patients are usually responsible for the own care coordination
- Most payment systems reward maximizing units of care delivered rather than quality care over time

Readmissions: Health Care Reform Provisions

- Up to 3% cut to all DRGs for readmissions over expected
- Up to 1% in FY 2013, 2% in FY 2014, not to exceed 3% in 2015 and beyond
- Initially AMI, CHF, Pneumonia
  - Expands to COPD, CABG, PTCA, and other vascular conditions in 2015
- 10 year savings: $7.1 B

The proposed prospective payment system begins October 1, 2012 (FY 2013)
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Opportunities

- Rehospitalizations are **frequent, costly and many are avoidable**;
- Successful pilots, local programs and research studies demonstrate that rehospitalization rates can be reduced;
- Individual successes exist where financial incentives are aligned;
- Improving transitions state-wide requires action beyond the level of the individual provider; systemic barriers must be addressed;
- **Leadership at the provider, association, community, and state levels are essential assets** in a state-wide effort to improve care coordination across settings and over time.

STAAR Initiative: Two Concurrent Strategies

1. Provide technical assistance to front-line teams of providers working to **improve the transition out of the hospital and into the next care setting**
   - Actively engage hospitals and their community partners in co-designing processes to improve transitions
   - Provide coaching by content experts and facilitate collaborative learning with the goals of creating exemplary cross-continuum models in each state and identifying high-leverage changes in each care setting
   - Develop quality improvement expertise and content experts to mentor others

STAAR Initiative: Two Concurrent Strategies (cont.)

2. Create and support **state-based, multi-stakeholder initiatives** to concurrently **examine and address the systemic barriers** to improving care transitions, care coordination over time.
   - State leadership, steering committees, key allies, aligning initiatives
   - Technical assistance to “staff” challenges in framing the issue, designing strategy, scanning for developments in best practice/policy
   - Specific focus areas: understanding the financial impact of success, aligning payment to support high leverage interventions, developing state rehospitalization data reports

What have we learned to date in the STAAR Initiative?

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Varying Degrees of Will

- Hospitals
  - strategic goal (aligned with health care reform and integrated approach to care: “right thing to do”)
  - avoidance of reimbursement penalties
  - watchful waiting
- Primary Care and Specialists
  - aligned with the goals of the Patient-Centered Medical Home demos
  - cardiologists generally engaged in developing comprehensive heart failure care models
- Home Care
- Skilled Nursing Facilities
- Area Agencies on Aging

30-day All-cause Readmission Rates

<table>
<thead>
<tr>
<th>Clinical Conditions</th>
<th>Top Performers</th>
<th>US National Average</th>
<th>What is your readmission rate?</th>
<th>At risk for reimbursement penalties?</th>
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<tbody>
<tr>
<td>Heart Failure</td>
<td>17.3%</td>
<td>24.73%</td>
<td>???</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Heart Attack</td>
<td>15.2%</td>
<td>19.97%</td>
<td>???</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>13.6%</td>
<td>18.34%</td>
<td>???</td>
<td>Yes / No</td>
</tr>
</tbody>
</table>

Source: The Commonwealth Fund’s website Why Not The BEST? derived from Medicare’s Hospital Compare database
www.whynotthebest.org

Strategic Questions for Executive Leaders

- Is reducing the hospital’s readmission rate a strategic priority for the executive leaders at your hospital? Why?
- Do you know your hospital’s 30-day readmission rate?
- What is your understanding of the problem?
- Have you assessed the financial implications of reducing readmissions? Of potential decreases in reimbursement?
- Have you declared your improvement goals?
- Do you have the capability to make improvements?
- How will you provide oversight for the collaborative, learn from the work and spread successes?

Cross Continuum Teams

- One of the most transformational changes in the STAAR Collaborative
- Reinforces that readmissions are not solely a hospital problem
- Need for involvement at two levels:
  1) at the executive level to remove barriers and develop overall strategies for ensuring care coordination
  2) at the front-lines – power of “senders” and “receivers” co-redesigning processes to improve transitions of care
- New competencies in partnering across care settings will be a great foundation integrated care delivery models (e.g. bundled payment models, ACOs)

Diagnostic Reviews

- Recommend that teams complete a formal review of the last five readmissions every 6 months (chart review and interviews)
- Members from the cross continuum team hear first-hand about the transitional care problems “through the patients’ eyes”
- Engages the “hearts and minds” of clinicians and catalyzes action toward problem-solving
- Opportunities for learning from reviewing a small sampling of patient experiences are innumerable
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Putting a Human Face on the Problem: James’ Story

James, a 68 year old gentleman, lives at home with Martha, his wife of 48 years. He was admitted to the hospital with shortness of breath and diagnosed with pneumonia and underlying onset of heart failure. He and Martha were instructed on new medications and diet before discharge and asked to see his physician in the office in two weeks. A few days after returning home, Martha reminded James to schedule his visit to the physician’s office, but James had difficulty reaching the scheduler. Finally, he was able to set up a visit for three weeks later.

James didn’t mention to Martha that he took the three-day supply of Lasix the hospital sent home with him but never filled his prescription; he felt better and thought the expense unnecessary. When he noticed swelling in his legs, he didn’t want to bother the “busy doctor” and dreaded the ordeal of calling the office again.

Transformation is Needed

• Traditional focus on discharging patients > facilitating transitions in care & a shift from handoffs to handovers (senders & receivers co-design the processes)
• Focus on what clinicians are teaching > focus on what is the patient learning
• Health care has an effect on ~10% of health outcomes > shift from the focus on the immediate clinical needs to a focus on the whole person and their social needs
• Patient is the focus of the care team > patient and family members are essential members of the care team
• GPS location team > Cross Continuum Team with a focus on the patient’s experience over time

Reducing Avoidable Hospitalizations and Reducing 30-day Rehospitalizations

Reducing Avoidable Hospitalizations

• Health insurance coverage
• Established with a provider
• Lifestyle/behaviors (alcohol, tobacco, accidents, obesity)
• Patient seeks care early (preventing delays until condition is severe)
• Evidence based care for chronic illness
• Receipt of preventive care

Reducing 30-day Re-hospitalizations

• Evidence based inpatient care
• Error-free inpatient care
• Enhanced patient/family education and coaching on self-management
• Appropriate referral for home care
• Written discharge instructions, with health literacy principles
• Accurate medication “reconciliation”
• Timely post-acute follow up
• Patient knows who to call

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Promising Approaches to Reduce Avoidable Rehospitalizations

- Improved transitions out of the hospital for all patients
  - Project RED
  - BOOST
  - IHI’s Transforming Care at the Bedside and STAAR Initiative
  - Hospital to Home “H2H” (ACC/IHI)

- Supplemental transitional care after discharge from the hospital
  - Care Transitions Intervention (Coleman)
  - Transitional Care Intervention (Naylor)

- Enhanced ongoing management for high risk patients
  - Evercare Model
  - VNSNY Home Care Model
  - Heart failure clinics
  - Intensive care management from primary care or health plan

Number of Process Changes Related to the 4 Key Changes

Key Changes to Achieve an Ideal Transition from Hospital to Home

1. Perform an Enhanced Assessment of Post-Hospital Needs
2. Provide Effective Teaching and Facilitate Learning
3. Provide Real-Time Handover Communications
4. Ensure Post-Hospital Care Follow-Up
1. Perform an Enhanced Assessment of Post-Hospital Needs

- Most teams think that they are already doing this -- but have gained new insights from completing the Diagnostic Reviews
- Family caregivers and community providers are an important source of information about home-going needs of patients
- Completing a comprehensive assessment requires additional time (roles and responsibilities need to be designated and standard work processes need to be developed)
- Many are embedding questions from the Diagnostic Review into admission assessment for patients who have an unplanned admission to the hospital

Diagnostic Review Questions

Patients and Family Caregivers:
What do you think caused you to be readmitted to the hospital?
Did you see a physician in his/her office before you came back to the hospital? If not, why not?
Has anything gotten in the way of your taking your medicines?
How do you take your medicines and set up your pills each day?
Describe your typical meals since you got home.

Care Team Providers in the Community:
What do you think caused this patient to be readmitted?

2. Provide Effective Teaching and Facilitate Learning

- Clinicians readily embrace Ask Me 3 and Teach Back techniques to enhance patient and family caregiver education
- Many hospitals have spread the Ask me 3 and Teach Back competencies to all nursing staff and include these competencies in the yearly competency certification process
- There is value in planning multiple teaching sessions with patients and family caregivers
- There is a need for uniform and patient-friendly teaching materials in all clinical settings for the common clinical conditions

3. Provide Real-Time Handover Communications

- There are a vital few critical elements of patient information that should be available at the time of discharge to community providers ("senders" and "receivers" agree upon the information and design reliable processes)
- Written handover communication for high risk patients is insufficient; direct verbal communication allows for inquiry and clarification
- Consider designing standardized handover forms for the community, region or state
- Written care plans for patients and family caregivers should use clear, user-friendly formats for describing care at home
4. Ensure Post-Hospital Care Follow-Up

- Recommend that patients that are high-risk for a readmission be seen within 48 hours (either in an office visit or a home care visit); there is not consensus about how soon patients need to be seen after discharge from the hospital.
- In general, it is a challenge to schedule appointments with office practices, as needed.
- Follow-up phone calls give caregivers the opportunity to reinforce education and assess self-care knowledge through the use of Teach Back; often patients are receiving multiple calls.
- Need a much deeper understanding of how best to meet the needs of high-risk patients – front-loaded home care visits, office practice appointments within 48 hours, supplemental transitional care by APNs or RNs or intensive care management through primary care or health plans?

When are patients being readmitted?

- Initial readmissions spike within 48 hours of discharge.
- 66% of readmissions occur within 15 days.

Completing the Transition into Care Settings within the Community

<table>
<thead>
<tr>
<th></th>
<th>Office Practices</th>
<th>Home Care</th>
<th>Skilled Nursing Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide timely access</td>
<td>Reconcile meds</td>
<td>Reconcile meds</td>
<td></td>
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<tr>
<td>Reconcile meds and plan of care</td>
<td>Reinforce self-care plan</td>
<td>Reconcile meds and plan of care</td>
<td></td>
</tr>
<tr>
<td>Coordinate care with other community clinicians</td>
<td>Communicate as indicated with primary care provider and specialists</td>
<td>Provide timely consultation when patient’s condition changes</td>
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</tr>
</tbody>
</table>

Supplemental Transitional Care or Intensive Care Management for High-risk Patients

- 750 community-dwelling adults 65 years or older admitted to the study hospital with 1 of 11 selected conditions.
- Intervention:
  - Tools to promote cross-site communication.
  - Encouragement to take a more active role in their care.
  - Guidance from a “transition coach”.
- Resulted in lower rehospitalization rates at 30d and 90d.
- Reduced odds of rehospitalization by about 40%.
- Reduced hospital costs at 180d from $2500 to $2000.
- Care Transitions Intervention adopted in over 150 settings.

Coleman Eric A; Parry Carla; Chalmers Sandra; Min Sung-Joon. The care transitions intervention: results of a randomized controlled trial. Archives of internal medicine 2006;166(17):1822-8.
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Transitional Care Model

- Nurse Practitioners provide inpatient assessment
- NPs review medications and goals
- Design and coordinate care with patients and providers
- Attend first post discharge MD office visit
- Direct home care for 1-3 months
- Conduct home intervals

Results:
- Decreased the total number of rehospitalizations at 6 months by 36% (37% v. 20%, p<0.001)
- Decreased average total cost of care by 39%

IHI’s Recommended Changes

- Improved Existing Care Processes
  - Transition to Home
  - Customized Discharge Plan
    - Enhanced Assessment
    - Teaching and Learning
  - Community Care Activated
    - Office Visit
    - Home Care (as needed)
    - Social Services (as needed)
    - Skilled Nursing Facility Services
  - Supplemental Care for High Risk Patients
    - Transitional Care Models
    - Intensive Care Management

- Added Costs for these Additional Care Services

More Effective Interventions


30-day All-cause Readmissions for HF Patients

- Average of last 6 months: 10.9%

# of Patients with HF that were Readmitted within 30 Days

Springfield 4 Cardiac Short Stay

34 bed acute care unit specializing in caring for heart failure and short stay cardiac patients

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Springfield 3M

34 bed acute care nursing unit specializing in caring for general medical populations

STAAR Trek: New Frontiers

- Clinical condition-specific interventions
  - mostly for heart failure patients
  - all patients experience fragmented care
  - sequential spread to patients with high-risk clinical conditions is not practical
- Adding staffing resources (in hospitals, home care, office practices)
  - not a scalable solution
  - need to remove waste and inefficiencies from front-line clinicians’ daily work and reliably integrate new competencies and best practices into routine care processes

30-day All-Cause HF Readmissions

Percent All-Cause 30-Day Readmissions for HF Patients

Number of All-Cause 30-Day Readmissions for HF patients

30-day All-Cause Hospital Readmissions

CMS Prospective Payment System

Beginning on or after October 1, 2012 (FY 2013), payments for hospitals paid under the inpatient prospective payment system will be reduced based on each hospital’s ratio of payments for actual risk-adjusted readmissions to payments for expected risk-adjusted readmissions.

Initial clinical conditions:
- Heart failure
- AMI
- Pneumonia
- Frequent co-morbidities: COPD, stroke, diabetes, renal failure, congestive heart failure, malignancy

Complexity of Chronic Disease Management

- Over half of 30-day readmissions are for the same MDC
- 70% of 30-day readmissions are for a different diagnosis

Proportion of 30-Day Readmissions with Same Diagnosis or Major Diagnostic Category (MDC)

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Similar Approach Likely Applicable to Other Chronic Diseases

- COPD Admission Reduction
- COPD Readmission Reduction
- Asthma Admission Reduction

Initial Population of Focus

- Select a high-risk population
- MDC and DRGs are useful in tracking data to assess population trends
- Case-finding is often difficult and time-consuming
- Hard for front-line clinicians to have several different processes for different patient populations
- Relevancy for proposed reimbursement changes for patients with HF, AMI and Pneumonia

- Select one or two pilot units where readmissions are frequent
- Recommended changes are generally easier to implement for all patients
- Will require individual tracking of patients using medical record numbers to assess progress
- Many front-line staff are experiencing QI initiative overload

Accelerating Progress and Quick Wins

- Select 2 pilot units or a high-risk population
- Consider adding an APN(s) or case manager(s) to implement and/or oversee the initial implementation of the recommended changes
  - Implement the 4 key changes to improve transitions to home
  - Initiate supplemental case transition support and/or intensive care management for high-risk patients
- Spread recommended changes that have been successfully implemented as soon as is reasonable
  - Will likely need to eliminate waste and inefficiencies from the routine work of front-line clinicians and staff to reliably implement improvements

Spread from Pilot Units to Clinical Departments to Entire Hospital

- Redesigning care processes to improve transitions for all patients

Why redesign work on med/surg units?

- Nurses spend 31-44% of their time in direct patient care activities
- Nurses experienced an average 8.4 work system failures per 8-hour shift
  - Medications
  - Orders
  - Supplies
  - Staffing
  - Equipment
- Nurses spend 42 minutes of each 8-hour shift resolving operational failures
- …and we are experiencing a nursing shortage!!!

Why redesign work on med/surg units?

Finding the Waste: Spaghetti Diagram

Transforming Care at the Bedside

TCAB Goal: Nurses spend 60% of their time in direct patient care
- Eliminate waste in (hunting and gathering, inefficiencies and re-work, workarounds, etc.)
- Nurses’ time is reallocated to direct patient care activities that create value for patients and family members
  - Customization of care to meet needs and preferences of patients
  - Creating an “Ideal Transition Home”
  - Enhanced Assessment
  - Patient Teaching using Teach Back and Ask Me 3
  - Customized home care plans
  - Arranging Follow-up

Redefining and Redesigning Hospital Discharge to Enhance Patient Care: A Randomized Controlled Study
Richard B. Balaban, MD, Joel S. Weissman, PhD,6,7, Peter A. Samuel, BS, and Stephanie Woolhandler, MD
JGIM 2008

- User-friendly patient discharge form, emailed to PCP
- Telephone outreach from a PCP nurse post-discharge
- 4-part combined endpoint “undesirable outcome”
  - No outpatient f/u within 21 d (15% v. 41%)
  - Readmission w/in 31 d
  - ED visit w/in 31 d
  - Failure by PCP to complete recommended outpatient w/u
- 25% intervention v. 55% control had ≥1 undesirable outcome
- Effect on rehospitalization alone not significant

Visiting Nurse Service of NY

- Focus on the first 30 days of a patient’s transition from one care setting to another aimed at reducing the number of hand offs
- Include all settings: referrer (hospital, hospitalist, discharge planners) VNSNY Care Teams, the primary MD and patient/family, community, LTC setting
- Create efficient and effective processes for embedding transitional care practices into daily work.

Front-line Improvement Team: Testing Changes and Designing Reliable Processes

- Start by focusing on one of the key changes
- Identify the opportunities/failures/successes in the current processes and select a process to work on
- Conduct iterative PDSA cycles (tests of change)
- Specify the who, what, when, where and how for the process (standard work)
- Understand common failures to redesign the process to eliminate those failures
- Use process measures to assess your progress over time (aim is to achieve > 90% reliability)
- Implement successful changes

Success of Teach Back

The TB method requires that a patient demonstrate understanding of 67% (2/3) - 75% (3/4) of the information to be considered correct or acceptable.
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What can be done, and how?

There exist a growing number of approaches to reduce 30-day readmissions that have been successful locally

Which are high leverage?
Which are scalable?

Success requires engaging clinicians, providers across organizational and service delivery types, patients, payers, and policy makers

How to align incentives?
How to catalyze coordinated effort?

Engaging Payers

• Payers are motivated to reduce avoidable rehospitalizations
• Individual payer efforts have some limitations
  — Mostly focus on pre-discharge preparation
  — History of strife between payers and providers
  — Difficulty recruiting providers to these efforts
  — Eligibility for supplemental services for high-risk patients
• Myriad payer-based discharge planning and care coordination services create chaos at provider level. How can interests be aligned and coordinated?
• Discrepancies between what providers get paid for and what is needed for care

Scale-up of Interventions to Improve Transitions and Reduce Avoidable Rehospitalizations

Categories of Innovativeness*

Leadership and Policy Levers

Innovators 2.5%
Early Adopters 13.5%
Early Majority 34%
Late Majority 30%
Laggards 11%


Case Studies

Baystate Medical Center
Sinai Grace Hospital

STAAR Collaborative
Jan Fitzgerald MS, RN, CPHQ
Director of Quality

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Baystate Medical Center
- 680 bed tertiary care referral center (~1M)
- Flagship of Baystate Health
- 42 k admissions/year
- Annual surgical volume: 29,043
- Western Campus of TUFTS
- Member CoTH, 9 residency programs/244 PGs
- 1200 member medical staff, 206 faculty MDs
- Level 1 Trauma Center
- IHI Mentor Hospital (SCIP/AMI/HF/HAPU/VTE)
- Magnet facility – re designated 2010

STAAR Collaborative Aims
- Reducing re-hospitalizations was selected as a clinical quality and patient safety organizational goal for 2010
- Threshold: Implement a standardized discharge process for heart failure patients
- Target: Decrease heart failure re-hospitalizations by 15%
- Maximum: reduce heart failure re-hospitalizations by 30%
- Makes business sense to be proactive in light of:
  - Upcoming changes regarding healthcare
  - Throughput and capacity issues
  - Right thing to do for patients & families

BMC STAAR Collaborative Team
- Deb Hawkes RN - Unit Manager Splfd 3 Onc
- Laurie Kaeppel RN / Rosemary Rudloff RN - Splfd 3 M
- Carol Morrison RN – S4 Case Manager
- Brenda Krumholz RN – S3 M Case Manager
- Bonnie Geld MSW - Director Care Management
- Deb Meyer RN - Assistant Director Medical Nursing PCS
- Carlo Real RN / Jodi Kashouh RN - Split 4 Short Stay Cardiology
- Gini Staubach RN - Assistant Director Critical Care & Cardiology PCS
- Ann Maynard RN - Director ED
- John Santoro MD - Vice Chair, Chief Emerg Svcs
- Surinder Yadav MD - DHO / Attending Hospitalist
- Carol Richardson MD - Associate Med Director Hospital Medicine
- Mihaela Stefan MD – Hospitalist/Director Med Consult Service
- Donna Borah RN Director Hospital Medicine Program
- Ruth Odgren RN President BVNA&H
- Aaron Michelucci PharmD, Assistant Director, Clin Pharm
- Regional Western Mass Cross Continuum Partners
- Jan Fitzgerald MS, RN, CPHQ - Director Quality

Diagnostic Findings
- Lack of standardization
  - Admission process
  - Rounds
  - DC visit by physician to recap/clarify
  - Patient education
    - Content
    - Use of teach back; key points
    - Communication to post DC provider
    - Report, Information, 1:1, PCP
- Passive follow-up
  - ask pts to make appointment rather than make appointment
- “Risk assessment” for readmission not done

Implementing Process Improvement

How to start
Clinical champions ready, willing, and eager

PI Centered Care
SCIENCE Evidence based practice

GAMET PLAN
Reliability principles
Interventions to provide failure-free care over time
COACH (Quality)
- Provide support - Measurement

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Changes Implemented

- Assessment of high risk:
  - Readmission
  - Discharge needs (by HCM/RN)
- Enhanced discharge preparation:
  - Focused teaching to patient and family caregivers
- Pt Education Redesign:
  - Ask Me 3, Teach-back, medication management
- Structured/organized Multidisciplinary Rounds:
  - "Care Coordinator" role

Enhanced Admission Assessment for Post-Discharge Needs

- A standardized assessment is done on admission by RN and hospital case manager
- List of current meds is collected on every patient to expedite the hospital reconciliation process
- Plan is customized and started to meet each patient and their family members’ needs. It is reviewed and revised based on the course of the illness and care while the patient is in the hospital

Heart Failure Zones

Teach-Back Note

Nursing Identifies: Primary Learner_________________

Primary Language_________________

Please enter above information in CIS, via RN to RN communication.

Patient education on importance of:
2,000 mg or less Na restriction daily (500 mg a meal x3 meals, 250mg a snack x2 snacks daily; give restriction form) with % teach back

Reading labels with patient (give pre-printed nutrition labels)

"Why salt is harmful to patients with HF" and teach no salt shaker with % teach back.

1500 cc Fluid Restriction daily (which is equal to 48 oz daily or 6)8oz cups) (give pre-printed restriction form) with % teach back.

Multidisciplinary Rounds for HF Patients

- MDR care/table top rounds
- MD/RN/Coordinator/HCM/PharmD/Rehab/Clin Nutrition
- Focus: what missing? how are we doing?
  - Discharge Plan (does it fit and make sense?)
  - Discuss weight difference daily
  - Fluid balance (goal is to match)
  - Core measures => EF; if <40% ACE/ARB; detailed DC Instructions
  - O2 needs
  - Diuretic Therapy (IV/PO)
  - Teach back %
- Issues (i.e. nursing concerns/EOL/$$)
- At risk for readmission?
  - Needs in the community setting according to assessment (teach back and gaps)
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### Changes Implemented

- **Physician education/interventions:**
  - Zone/geographical model
  - Conferences/MDR/Tracer/Standardized DC encounter

- **Post DC Follow up (standardized):**
  - “Call back”
  - Subsidized VNA Home visits (Telehealth, protocols)
  - Appointments for office visits made before discharge
  - Follow up Clinics

### Post Discharge Follow-Up for HF Patients

- Automatic VNA follow up day after discharge
- Call back 1-2 days after DC
- Reviews discharge notes/summaries and contacts patient
  - Read the last teach-back note to see level of understanding
  - Ask patient if they have F/U MD appt/plan
  - Medication management
  - “Ask Me Three”
  - Heart failure specific education (what are they doing at home?)
- Document Teach-Back’s => gaps for other providers to view and follow up on
- Know HIGH RISK READMITS, and collaboratively strategize to make them successful

---

### Patient-Centered Care Planning at the End of Life

- **Early referral => end of life care**
  - Resource to start difficult conversation
  - Consistent face

- **Education to physician partners**
  - “Sooner rather than later”
  - NYHA class 4…too late

- **Palliative care team**
  - Approved and to be implemented
  - Documentation of true end of life decision making increase to 70%

### Patient-Centered Medical Home

- Physician practices strengthen the patient / physician relationship
- Promote coordinated care and long term healing relationships
- Provide comprehensive primary care
  - **Personal physician:** ongoing relationship for continuous and comprehensive care
  - **Physician directed practice:** physician leads team of non-physician care providers that take responsibility for all ongoing care
  - **Whole person orientation:** provide or arrange for all care: acute, chronic, preventive, end of life.
  - **Care is coordinated and integrated** across the health care system including community-based services
  - **Quality and Safety:** Evidence based medicine, clinical decision support, continuous quality improvement, patient engagement, IT
  - **Enhanced Access:** open scheduling

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### Partnership Meetings

**Cross Continuum**  
**Regional Meetings**

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**STAAR**

Presentation to the Patient  
Family Advisory Council

What can we do to help???
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Springfield 4 Cardiac Short Stay
- 34 bed acute care unit specializing in caring for heart failure and short stay cardiac patients
- Aim: BMC will reduce the readmission rate for HF patients on S 4 by 30% (22%-16%) by October 31 2010

Springfield 3M
- 34 bed acute care nursing unit specializing in caring for general medical populations
- Aim: BMC will decrease all 30-day readmissions for medical patients on Springfield 3M by 30% (16% to 11%) by October 2010

Barriers and Breakthroughs
- Slow to start; tentative as to how much autonomy to redesign processes
- “Patient centered” (really?)
- Hampered by past experiences (micro-management)
- New leadership and mind set
- Positive feedback and freedom
- Support to try anything
- First hints of success
  - Energized teams
  - Willing to do more

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Effective Leadership & “Boards on Board”

- Senior Leadership
  - Keep readmissions on the front burner; annual measurable goals
  - Active (How’s our work on re admissions going?)
  - Be visible and supportive
  - Message is crisp and consistent
- Clinical Leadership
  - Visible (walk rounds)
  - Active (How’s our work on re admissions going?)
- Model desired behaviors

Ongoing Focus of Work

- Sustain the energy and interest
- Change mind set from DC to transition
- Timely communication between clinicians at times of transfer
- Revised post DC report
- Standardized DC note/ DC Checklist
- Improved knowledge transfer
  - Key few vs. numerous many
- Spread “MDR”
  - In pilot on several units
- Care coordinator model requests
- Spread redesigned patient education model
- Follow up (transition) Clinics

Burden of Heart Disease for Racial and Ethnic Minorities

- Blacks have a higher heart disease death rate than whites or Hispanics.
- Blacks have a higher prevalence of cardiac disease than whites or Mexican Americans.
- Mexican Americans are more likely to have higher cholesterol than whites or blacks.
- Blacks and Mexican Americans are more likely than whites to be diagnosed with diabetes.

Keys to Success

- Persistence and reinforcement/high visibility
- Senior leader support
- Multidisciplinary cooperation & collaboration
  - Accurate, timely and relevant data
  - Communicate – flexibility
- Right people
- Willing to try changes and take a risk
- Develop reliable systems (strive for 10⁻² >90%)
  - Incorporate into workflow
  - Make changes easy => transparent => meaningful

Make The Right Thing The Easy Thing

Comparison of Cities with High Percent of Racially and Ethnic Minorities

- Blacks and Hispanics

Sources:
- Centers for Disease Control and Prevention, Heart Disease and Stroke Statistic. This data are aged-adjusted death rates per 100,000 persons. This data is for residents of black and Hispanic.
- American Heart Association, Heart Disease and Stroke Statistics – 2004 Update.
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MI STA*AR Collaborative Aims

SGH goal is to decrease HF readmissions by 20% from baseline and then spread to other disease entities.

Initial focus on HF patients. Baseline readmission rate for patients with HF is 33.2%. Target readmission rate is 26.57%.

MI STA*AR Collaborative Aims

Sinai Grace Hospital will implement interventions that:

• Improve self-management of chronic diseases by patient or caregiver
• Improve post-discharge follow-up
• Improve coordination of care between providers and across the continuum of care by promoting seamless transitions from the hospital to home, skilled nursing care, home health care or other providers to prevent avoidable readmission to the hospital
• Improve medication reconciliation and management

Why is the MI STA*AR Collaborative strategic to your organization?

• Patient Satisfaction
  Patient should be the focus of the full team from admission to post transition out of the hospital. That would be ideal patient centered care. Each TX plan is individualized with the patient being the most important member of the team.

• Quality
  Evidence based care is pivotal to the outcome of the health of the patient. As ACO’s are developed, the care of the patient will no longer stop at the hospital doors and we must find a way to partner with the PCP, the SNF, and the Home Care agencies that will be part of our ACO.

• Financial
  CMS changes in the reimbursement formula for unplanned admissions will be present in the next two years that will impact the reimbursement (revenue) to the hospital.

• Market Share
  Establishing significant partnering relationships with our patients through regular scheduled calls should help us be their Hospital of choice.

• It’s The Right Thing To Do!
Enhanced Admission Assessment for Post-Discharge Needs

- Case Manager in ED identifies patients & starts assessment and plan of care with family while patient is being admitted from the ED.
- Information placed in ECIN for next care management staff.
- SW and Case Managers use ECIN risk assessment tool report is placed in chart.
- Welcome folder given to each patient on admission which includes information pertaining to their discharge; as information is gathered during the patients stay, it is placed in the folder for the patient to take at discharge and to PCP office visit.
- Checklist of DC needs is placed on the front of the patient chart on admission that is completed during the patient’s stay.
- Heart Failure Rounds are made 3x week with MI STA*AR NP, bedside RN, Case Manager and Social Worker.
- Admitting Nurse identifies HF patients and begins teaching.

Enhanced Teaching and Learning

- Bedside RN identifies the learner upon admission and this corroborated by the MI STA*AR team on HF rounds; check list is updated.
- New educational materials were developed for heart failure (booklet, a magnet with the heart failure zones, and a calendar).
- Materials kept at the unit level and given to the patient upon admission & placed in welcome folder throughout the teaching process.
- Bedside RN taught during unit roll-outs how to do teach back and were checked off on the process by nursing leadership and MI STA*AR NP.

Enhanced Teaching and Learning

% of patients who can recite 3/4 teaching points prior to DC
% of patients that can recite 3 / 4 points of learning after Discharge
% of patients that can recite 75% of self-care during the post-discharge call
% of patients who answered 4 or 5 on a Likert Scale of 5 during post-discharge calls – “How ready were you for discharge?”

Patient and Family-Centered Handoff Communication Discharge

- Med rec on Admission & discharge is a responsibility of housestaff/residents or the Hospitalist; recent EMR upgrade has improved system.
- Any physician that is credentialed through the DMC has access to the DMC and SGH EMR; physician can view the entire EMR from their office.
- Hospitalist groups sends faxes of the DC record to the patients’ physicians in the outpatient setting.
- SW transmits information to the SNF and Home Care through ECIN.
- EMR DC paperwork and med rec accompany the patient.
- Every two months meetings now happening between the SW/Case Manager area SNF & Home Care staff to discuss issues and improve communication.

Handover Communications

EMR Upgrade
Post-Acute Care Follow-Up

- Prior to discharge NP and CIP place patient data into computer and Corporate Call Center makes appointment with PCP office for 2-4 days post DC for all Heart Failure admissions; this information automatically fills into the EMR generated discharge instructions
- All HF patients are followed up with a phone call at days 3, 8, 14, and 25 by Mi STA*AR NP
- Teach back is reinforced, medications are checked and patient is checked to see if they have seen their PCP post-discharge
- After one month the patient is handed off along with scripting to the corporate call center nurse who tests their knowledge on a bi-monthly phone call
- If any issues arise a copy of the patients answers are emailed to the Mi STA*AR NP for closer follow up

Status of Changes tested or implemented in Home Care, SNF, Office Practice

- If Patient has no insurance and needs to see a Licensed Independent Practitioner (MD/DO/PA/NP)
  - Patients are referred to SGH Primary Care Clinic and either followed by NP or resident in training
- Increased Tele-monitoring with VNA with loop back reporting on patients
- Partnered with GLHP, Molina, Omnicare (three managed care Insurance Vendors with challenging patient populations) to have at least one home care visit for all admitted patients.
- Patient is a HMO patient and can not get into see his non-DMC PCP within 5 days of DC.
  - Patients are seen on SGH PCP clinic and referred back to their PCP with written note. Compiled a list of acceptable medications for each HMO.

Other Changes Implemented

- Initiated Healthy Heart Support Club (Feb 2009).
- Began Scripting SBAR formatted Discharge Tool with SNF
- Local SNF close to hospital partnered with SGH Mi STAAR team & opened a SNF 30 day stay Cardiac Rehab unit that incorporates the 4 pillars from IHI/Mi STA*AR
- Ticket to Ride Transfer form to SNF and LCH, Rehab, and Home Care being inputted to DMC EMR for better communication.
- Dinner Meeting MGM Casino April 2010 where 150 physicians attended and Mi STA*AR aims, SGH process and data presented.
- Dinner meeting in November 2010 with National Physician Expert on “Transitions in Care” and group of private 12-15 PCPs in community
- Provide transportation for patients to follow-up appointments

30-day All-Cause HF Readmissions

**Percent All-Cause 30-Day Readmissions for HF Patients**

30-day All-Cause Hospital Readmissions

**Percent All-Cause 30-Day Readmissions for HF patients**
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Limitations and Barriers to Success

- Limited staff to follow up post-discharge. Process is staff intensive.
- Problems identifying which patient needs Home Care.
- Struggle making physician appointments. Need to make it process dependent and not person dependent.
- No insurance or under insured populations who can not afford medications.
- Lack of cell phones/land lines by patients to contact them at home.
- Open Physician Staffing and no EMR in their office. Busy office practices without adequate means to interact with hospital staff and carry on transitions in out-patient setting.
- White Boards not used consistently in patients rooms to enhance communication and learning.
- Need to identify high risk CHF and other high risk patients earlier during admission.

Key Lessons Learned

- Small, rapid changes make big differences.
- It is acceptable to quickly abandon a process that looked good on paper but does not work in practice.
- New programs need to be embraced from top leadership and the commitment communicated to everyone including the physician network.
- One phone call to the patient at home post-discharge can change the patients outcome and prevent a readmission.
- Phone calls post-discharge to homes need to be front-loaded in first few weeks to decrease readmissions.
- Even if the team applies all the principles for a successful transition due to many social, medical, psychological issues patients will return within 30 days.
  - It may take more than one hospital stay for interventions to work.
  - Don’t give up.

Lunch
12:00N – 12:45PM

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Case Studies

Evergreen Hospital Medical Center
UCSF Medical Center
St. Luke’s Hospital

STAAR Collaborative Project Aims

- Reduce 30-day rehospitalization rates for Evergreen Hospital heart failure patients by 10% by end of 2011
- Improve the patient experience by achieving 95% or greater for HCAHPS questions 19 and 20 by end of 2011

STAAR Collaborative Project Structure

Executive Sponsor
Jeff Tomlin, MD

Physician Champion
Mark Vossler, MD

Clinical Champion
Nancy Bartholomew, ARNP

Steering Committee

Project Leader
Kathy Schoenrock

Enhanced Admission Assessment

Effective Teaching & Enhanced Learning

Patient Family Centered Handoff Communication

Ensure Post Hospital Follow Up Care

Evergreen Hospital Medical Center

Clinical Champion: Nancy Bartholomew, ARNP
Project Leader: Kathy Schoenrock, MHA

Why is STAAR Strategic?

- As a district hospital Evergreen is committed to improving the quality of life for Heart Failure patients in the population we serve.
- The project provides a replicable integrated care model in support of the 2009-2011 strategic goal to... fully develop an integrated care approach to manage the growing number of chronic care patients.
- Healthcare Reform demands creative solutions to fragmentation and waste in the system – avoiding preventable rehospitalizations is key.

Cross-Continuum Heart Failure Team

Evergreen Heart Failure Program

- Mature multidisciplinary team
- Unique Cardiac Enhancement Center
- Integrated care across the continuum
- Clear goals aligned with STAAR
Cardiac Enhancement Center

- ARNP manages care with strong Medical Director partnership
- Addresses barriers to optimal wellness
- Focuses on education and self care/monitoring, reinforcing at each visit
- Aggressive treatment and ready access for worsening symptoms
- Post discharge visits arranged by HF RNs during hospital stay

CEC Outcome Measures

- 6 Minute Walk Test
- Minnesota Living with Heart Failure Questionnaire
- Beck Depression or PHQ 9
- Ejection Fraction

Enhanced Admission Assessment

- Process of assessing patient’s needs is currently a multidisciplinary process with input from nursing, therapies, social work and physician.
- Nursing currently collecting data, primarily in ED and completed on the nursing units, pre-anesthesia clinic or FMC
- Risk is not assessed. Variety of disciplines assess for discharge needs.
- Discharge plan of care is multidisciplinary process including input from nursing, therapies, social work and physician.

Enhanced Teaching and Learning

- Education is currently done by Heart Failure Nurse Educators. Currently only HF Nurse Educators are utilizing teach back method during inpatient education episodes and follow up phone calls after discharge. Process will be developed to have bedside RN reinforce materials covered by HF Nurse Educators, utilizing the teach back method.
- Current packet of materials includes large amount of written information that can be overwhelming to some patients and families. We plan to implement a standardized teach back process for education of heart failure patients. Education materials will be standardized, using plain language and targeted to patient’s current health status. Process for patient education will be broken down into smaller segments.
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Successful Teachback
Education currently done by Heart Failure Nurse Educators

Patient and Family-Centered Handoff Communication at Discharge

- Discharging MD in partnership with discharging RN and Pharmacy initiates discharge medication list. Discharging RN reviews list with patient.
- Follow up calls by HF RN shows confusion and incomplete information re: discharge medications. If patient is readmitted, list does not always reflect complete reconciliation from previous discharge.
- Discharge planners coordinate handoff information to skilled facilities and to home care agencies. Discharge Summary is automatically faxed once transcribed to PCP listed on patient profile in Cerner. Patients following up with CEC have handoff communication by HF RN. Medication Reconciliation form mailed to PCP by Pharmacy within 3-4 days.
- Patient/families given standard education packet by HF RN, process in place for standard instructions to all appropriate care providers. HF RN documents in Cerner

Post-Acute Follow-Up Processes

HF Nursing Interactions/Interventions:
- Patients/caregivers taught (inpatient)
- Repeat teaching (inpatient)
- Schedule appointments before discharge for CEC clinic and Cardiology
- Outpatient follow up phone calls
- Medication errors or misunderstanding identified (outpatient call)
- Signs/symptoms that need reporting (outpatient call)
- Referrals to Evergreen & Outpatient Services

Progress for Post Acute Care Follow-up Appointments

- Expanding reach of post acute care follow-up appointments by setting appointments for all provider types:
  - Small tests of change in November
  - Pilot Go-Live December
- ARNP providing home visits serving patients who are too ill to travel to provider appointment post discharge.
  - Pilot Go-Live November 9th

Follow-up Phone Calls Improve Heart Failure Management

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Leadership Activities and Learning
• Competing priorities continue to be a challenge
• Infusion of IHI and WSHA support has been essential to keep focus on STAAR
• Deeper understanding throughout the organization that Healthcare Reform means better coordination of care and reduction of avoidable readmissions

Barriers & Breakthroughs
• Hospitalists led “RED” trial occurring simultaneously – met with key players to understand the plan, how we can support and align the work.
• Challenge to get the organization to view Heart Failure focus as a “proof of concept” to be spread throughout the organization rather than an isolated initiative.

Related Organizational Teams
• Medication Reconciliation Project
• Medical Home Collaborative
• CPOE Implementation
• Lean Initiative

Lessons Learned
• Advantage of patient advisors on the team
• Benefits of value stream mapping exercise
• Value of an intact collaborative team
• Initial chart review of 5 readmissions very valuable
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Next Steps

• Fully define process and outcome measures for the four teams
• Keep the teams moving and their work integrated

Leadership Team

• Karen Rago, RN, MPA, FAAMA, FACCA
  — Executive Director Service Line Administration
• Maureen Buick, RN, MS
  — Director, Nursing Education/Performance Improvement
• Eileen Brinker, RN, MSN
  — Heart Failure Discharge Coordinator
• Maureen Carroll, RN
  — Heart Failure Discharge Coordinator

Cross Continuum Team Members

Teresa De Marco MD, Cardiologist; Michael Crawford, MD, Cardiologist; Neil Gupta MD, Michelle Mourad, MD; Steve Pantilat MD, Palliative Care Director; Jill Howie-Esquivel RN, PhD School of Nursing; Pat Sparacino RN, PhD, School of Nursing; Melody Mellor RN, MS, Case Manager; Barbara Maury RN, NP, UC Home Care Manager; Marian Devereux, RD, Dietician; Heather Leicester, Statistician; Carla Graf, RN, CNS; Elise Hazelwood, RN, CNS; Diane Testa, Kindred SNF District Manager; Teresa Alison, MD, Jewish Home SNF Geriatrician

Project Aims

• Reduce 30-day all-cause readmissions of heart failure patients (65 years and older) by 30%
  — 2006: 22.5%
  — Goal: 16%
• Reduce 90-day all-cause readmissions of heart failure patients (65 years and older) by 30%
  — 2006: 45.2%
  — Goal: 31%

Why is reducing readmissions strategic for UCSF?

• UCSF is committed to improving patient care in both the inpatient and outpatient setting
• Medical Center Support through a multidisciplinary Readmissions Task Force to focus on systemic improvements to reduce all readmissions
• Increasing bed capacity for patients requiring specialty care
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IHI's Four Pillars: Creating an Ideal Transition Home

- Enhanced Admission Assessment for Post-Discharge Needs
- Enhanced Teaching and Learning
- Patient and Family-Centered Handoff Communication
- Post-Acute Care Follow Up

...and Communication is the Foundation

Enhanced Admission Assessments

- Completed by nurses within 24 hours of admission - used to trigger referrals
- Unreliably completed 2010 - 78% completion
- In-services provided to nursing staff with minimal improvement
- Multiple problems identified from nursing survey

Enhanced Assessment

- Completed by nurses within 24 hours of admission - used to trigger referrals
- Unreliably completed 2010 - 78% completion
- In-services provided to nursing staff with minimal improvement
- Multiple problems identified from nursing survey

Enhanced Teaching and Learning

- Identify the primary learner and include family in teaching
- Redesigned educational binder -- health literacy concepts, four languages, patient advisory group input
- Teach Back works -- as Teach Back scores improved, readmission rates decreased
- Nurses on pilot units have completed Teach Back competency

Inpatient Teach Back

The Teach Back method requires that a patient demonstrate understanding of 67% (2/3) - 75% (3/4) of the information to be considered correct or successful.

Real-Time Handover Communications

- Medication Reconciliation
  - Increasing Pharmacist consults on discharge
  - New patient friendly medication tool
  - Electronic discharge summary starting soon
- Email notifications to inpatient team, case manager, consultants, HF clinic, home care RNs, SNF and PCP on admission
  - Creates a “Virtual Care Team”
  - Time consuming but valuable
  - Unites the entire team working on transition of care
- Discharge summaries completed within 14 days of discharge (down from 30 days)
Post Acute Care Follow-Up

- Follow-up calls
  - Within 72 hours of discharge and by 30 days
  - Teach Back to review four main points
  - Follow up appointment verified
  - Valuable time to trouble-shoot
- Home care encouraged for all HF pts.
- Heart Failure Clinic NPs visits for high risk pts.
- GeriTraCCC Program
  - Home visits by a Geriatrician within 24-48 hours post discharge for high risk patients

Follow-up Appointments

HF Core Measures

- University of California San Francisco Medical Center
- Compliance with Heart Failure Core Measures - Pilot units
- 1st time at 100% since 2002

Disposition Data

- Hospice 3%
- Expired 5%
- Home Alone 5%
- SNF/Rehab 15%
- Home w/ Fam 33%
- Non UCHC 20%
- UCHC 17%

30-day Readmissions

- Average for past 12 Months ≤ 17.5%
- Goal: 16%
  - 10% reduction

Number of 30-day Patient Readmissions

- Number of patient readmissions cut in half
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Cross Continuum Team

- Monthly Readmission Task Force
  - focus on barriers, plan of action, systemic changes
- Heart Failure Team
  - every other month multidisciplinary team meet to discuss progress, plans, and updates
- Outpatient Team
  - HF Coordinators, HF clinic NPs, GeriTraCCC MD meet to review high risk patients
- Skilled Nursing Facility Liaison
  - meet weekly with HF Coordinators

Additional Improvements

- Development of Palliative Care Program
  - Goals of Care Discussions
  - Palliative care consults
  - Palliative training for staff at UCSF, Home Care, and SNF
- Data collections system developed to identify trends and drive change
- Culture changes
  - Discharge processes, focus on heart failure and readmissions
  - Bridging of gaps, greatly increased communication and team work

Leadership Activities and Learning

- Executive Leader:
  - Promotes HF Program and opens doors
  - Assists with overcoming barriers
  - Reviews Financial Implications of Heart Failure Program
  - Develops Business Case for sustainability
- Day-to-Day Leaders:
  - Daily interventions with patients in hospital
  - Ensuring appropriate consults
  - Coordinates discharge support
  - Post-discharge calls
  - Data collection and analysis
  - Coordinates out-patient program

Barriers Encountered

- Different systems on different units – initiated standardized systems for the HF program patients (heart failure folders, discharge checklist, white boards, daily weights, sticker program)
- Misconception of Palliative care – reluctance of physicians to order palliative care consults; it is often thought of as request for hospice care, through continued education the palliative care team consults have increased
- Follow up Appointments – often difficult to schedule a F/U apt within one week of discharge; now promoting F/U apt with PCPs and have seen improvement; high-risk patients now able to schedule appointment with NP in clinic immediately post discharge.
- Discharge Process – Unreliable (Med reconciliation, lack of coordinated communications, variability of processes on units, utilization of Teach Back, ordering consults and services needed)

Breakthroughs

- Cohesive committed Heart Failure Team
- Physician involvement
- Improved communication
- Increased palliative care consults
- Outpatient program developed
- GeriTraCCC program- MD house-calls for high risk patients
Lessons Learned

- Collaboration with IHI – essential start and guidance throughout process
- Building a relationship and trust is key – takes time; patients with HF and other chronic diseases require more than simply teaching (must get patient “buy in”)  
- Importance of Palliative Care & goals of care discussions
- Power of patient story to learn from and drive change
- Results are not immediate -- takes time to show improvement
- Teach Back works -- focus on Health Literacy necessary
- Senior Leadership support is essential
- Communication, communication, communication

Next Steps

- Further development of Outpatient Program
  - Classes provided in clinics for patients
  - In-services for staff at SNF, home care agencies
  - Palliative care education
- Upgraded computer systems- EPIC, System wide E-Discharge summary
- Standardized Palliative care consults
- Tele-monitoring component

The Power of the Patient Story

Improving Transitions and Reducing Avoidable Rehospitalizations

Peg M. Bradke, RN, MA
St. Luke’s Hospital, Cedar Rapids, Iowa

St. Luke’s Hospital
Member of Iowa Health System

- Private hospital – Cedar Rapids, Iowa
- Affiliates in the Iowa Health System
- Licensed for 500 Beds with more than 17,000 admissions
- Thomsen Reuter Top 100 Heart Hospital – 3 years
- Thomsen Reuter Top 100 Hospital -3 years
- Magnet Designation 2009
- The Joint Commission Disease-Specific Certification for Heart Failure since 2008; Stroke since 2006; Chest Pain Accreditation 2010

Project Aims

- St. Luke’s Hospital will reduce 30-day all-cause readmissions for patients with heart failure by 20% (current rate 18%) by December 2010 using IHI’s recommended changes. LOS for patients with HF will be decreased by 0.5 days by December 2010.
- St. Luke’s Hospital will implement IHI’s recommended changes to improve transitions in care after discharge from the hospital for patients with pneumonia and COPD.
Why is reducing avoidable rehospitalizations strategic for St. Luke’s Hospital?

- It is part of our mission -- “To give the care we would like our loved ones to receive.”
- It represents goals that are aligned with health care reform -- providing better value for decreased costs.

Heart Failure Team

- Formed in 2001
- In February 2006, St. Luke’s joined the RWJF/IHI TCAB Collaborative with a focus on improving discharge processes and reducing avoidable rehospitalizations
- Initial focus was on the heart failure population with the goal of creating an “ideal” transition to home
- Developed reliable processes to ensure compliance with CMS Core Measures

Heart Failure Team Members

- Peg Bradke, Chair, Heart Care Svcs.
- Ann Beem, 3-Center
- Janet Ervin, Home Health
- Terri Grantham, Cardiac Outcomes
- Sue Halter, Cardiac Outcomes
- Susan Johnson, Resp & Crit Care Assc.
- Sherrie Justice, Perf. Improvement
- Carmen Kinade, Med-Surg Nursing
- Linda Kleinick, Med Soc Svcs
- Cindy Linder, Pharmacy
- Kelly Mahoney, Resp & Crit Care Assc.
- Jennifer Markley, ED
- Mary McAdoo, 3-Center
- Julia Peterson, Cardiac Rehab
- Diane Pfeler, 5-East
- Kelly Potebaum, 5-East
- Amy Schweer, Cardiologists, PC
- Sandy Sheehy, VNA
- Lori Townsend, Perf. Improvement
- Jean Walker, VNA
- Jean Wasterbeck, Living Center West
- Robin Wheeler, Living Center West
- Deb Woods, Internists PC
- Sharan Zimmerman, Pulm, Rehab
- Jennifer Markley, ED
- Dr. Todd Noreuil is the Heart Failure Medical Director

Heart Failure Continuum of Care

- Standardized care through order sets
- Patients identified via BNP daily reports
- Teaching
  - Utilizing Universal Health Literacy Concepts
  - Enhanced teaching materials
  - Teach Back
- Touch points
  - Home Care - care coordination visit 24 to 48 hours post discharge
  - Physician office visit in three to five days
  - APN - follow-up phone call on seventh day post discharge
  - Outpatient Heart Failure clinic
  - Collaboration with cardiology office Heart Failure Clinic

Enhanced Admission Assessment

- During Admission Assessment the patient and family are asked “Who would you like to have present when we provide your discharge information?
- Information added to the whiteboard.
- RN and physician do medication reconciliation. At times the pharmacy or physician offices need to be called to get additional information. If the patient is a home care patient the home care agency is called to get the current list of medications.
- Referral to Palliative Care for patient with advanced stages of disease. The referrals have increased from less than 5% to over 20%.

Enhanced Admission Assessment

- Bedside report to involve the patient and family caregivers as partners in their care. Daily discharge huddle is facilitated daily with the RN caring for the patient, the charge nurse, and unit-based case manager
- Daily goals are reviewed and written on the white boards in each room, providing the opportunity to review the plan for the day, anticipate discharge needs, and determine what it will take to get the patient home safely.

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Enhanced Teaching and Learning

- The patient education materials facilitate the use of Teach-back and the same material are used across the continuum, in the hospital, with home care, long term care settings and the heart failure clinic.
- Teach-back, the process of asking patients to recall and restate in their own words what they have been taught, was incorporated at the patient’s bedside, during the 24-48 hour post-discharge follow-up visit by Home Health and in the seventh day post-discharge phone call to the patient.
- Patients and families are given a 12-month calendar for Heart Failure.
- Patient teaching flowsheets is set up to address teachback and assure the documentation and utilization of the technique.

Heart Failure Magnet

**Signs of Heart Failure**

If you have one or more of these symptoms:

- Weight gain of 3 pounds in 1 day or more in 1 week
- More shortness of breath
- More swelling of your feet, ankles, legs or stomach
- Feeling more tired – no energy
- Dry hacking cough
- Harder to breathe when lying down
- Chest pain

Call doctor at

Heart Failure Zones

**GREEN ZONE**

All Clear  This zone is your goal

- No shortness of breath
- No weight gain more than 2 pounds (it may change 1 or 2 pounds some days)
- No swelling of your feet, ankles, legs or stomach
- No chest pain

**YELLOW ZONE**

Caution  This zone is a warning

- You have a weight gain of 3 pounds in 1 day or a weight gain of 5 pounds or more in 1 week
- More shortness of breath
- More swelling of your feet, ankles, legs or stomach
- Feeling more tired. No energy
- Dry hacking cough
- Dizziness
- Feeling uneasy, you know something is not right
- It is harder for you to breathe when lying down. You are needing to sleep sitting up in a chair

**RED ZONE**

EMERGENCY

Go to the emergency room or call 911 if you have any of the following:

- Struggling to breathe. Unrelieved shortness of breath while sitting still
- Have chest pain
- Have confusion or can’t think clearly

Low Sodium Eating Plan

2000mg Sodium

Eat Less Added Salt

Low Sodium Eating Plan

Eat Less Added Salt
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Successful Teach-Back Rate
August 06 – July 10

Real-time Handover Communications

- Medication Reconciliation is a joint physician and nurse accountability. The physician is provided a report at discharge to reconcile home medication list with those in hospital. The nurse puts the reconciled list in the patient’s discharge instructions.

- All Patients going home are offered a care coordination visit with Home care in the first 24-48 hours after discharge. The home care does a certified content visit including medication reconciliation.

Real-time Handover Communications

- St. Luke’s partnered with the hospital’s home care agency (VNA) and two long-term care facilities to standardize and enhance the quality of the handoff communication process using a standardized form.

- Provided education for home care and long-term and skilled care RNs and CNAs on HF and continuity process. CNAs often observe symptoms.

- Provided the receiving nursing home facilities with the patient education packet.

Attending MD During Hospitalization
(Nov 07 – Jul 10)
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Discharge Status (Nov 07- Jul 10)

Post-Acute Care Follow-Up

- At 7-9 days the hospital Advanced Practice Nurse conducts a follow-up phone call. During this call the APN uses the same teach-back questions used in the hospital to determine the patient and/or caregiver understanding of the critical self-care instructions.
- Partnership with physicians’ offices resulted in redesign of scheduling HF visits to allow office visits within 3 to 5 days for all patients with HF.
- The Cross Continuum Team continually makes improvements by aggregating the experiences of the patients, families and caregivers. Readmissions are monitored and failures are reviewed by the Cross Continuum Team to assess opportunities for improvement.

Number of Days after Discharge Patients are Readmitted

Patients with Follow-up Appointment Scheduled

30-Day All-Cause Readmissions (HF Patients)

# of Readmissions (HF patients)

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Transition to Home Patient Satisfaction
Aug 06 – Jul 10

Question asked on 7 day f/u phone call:
Are there any questions or concerns on your
Discharge instructions? Was anything missing?

Cross Continuum Team

• Meets every other week
• Reviews readmission to assess cause and possible future interventions.
• Reviews process and outcome measures
• Provides oversight compliance with CMS Core Measures

Leadership Activities and Learning

• Executive Leader facilitates reports to Senior Leaders and Board
• Day-to-Day Leader manages bi-weekly Transition to Home Meetings and assures ongoing testing and implementation of changes and monitors results

Barriers and Breakthroughs

• Limitations of the electronic medical record to capture and transmit information.
• Access to physician offices for follow-up visits.
• Complexity of patients with multiple co-morbidities
• Challenges to completing reliable medication reconciliation

Lessons Learned

• Importance of engaged executive leaders
• Explicit focus on patient and family-centered work
• Front-line clinicians and staff involvement in developing process improvements
• Physician engagement
• Cross Continuum Team – power of relationship building and collaboration
• Importance of understanding patients’ home environment
• Impact of Information Technology
• Stories are as important as the data

Panel Discussion

Baystate Medical Center
Sinai Grace Hospital
Evergreen Hospital Medical Center
UCSF Medical Center
St. Luke’s Hospital

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State Leadership Discussion

MA State Leaders
Paula Griswold and Pat Noga

MI State Leaders
Nancy Vecchioni and Sam Watson

WA State Leaders
Sharon Eloranta and Carol Wagner

Break
2:30PM – 2:45PM

Amy E. Boutwell, MD, MPP (aboutwell@ihi.org)
Pat Rutherford, RN, MS (prutherford@ihi.org)
Co-Principal Investigators, STAAR Initiative
Institute for Healthcare Improvement

http://www.ihi.org/IHI/Programs/StrategicInitiatives/StateActiononAvoidableRehospitalizations/STAAR.htm