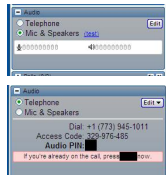**Wrestling Readmissions to the Mat: Evidence and Efforts**
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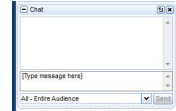**Wrestling Readmissions to the Mat: Evidence and Efforts**
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Wrestling Readmissions to the Mat:
Evidence and Efforts

Part 3: What Works in Readmission Reduction:
How Hospitals Have Improved Performance

Presented by: **Improvement Science Research Network**
Co-sponsored by: **RHP 6 Readmission Collaborative**

UT HEALTH SCIENCE CENTER

Moderator

Kathleen R. Stevens, RN, EdD, FAAN
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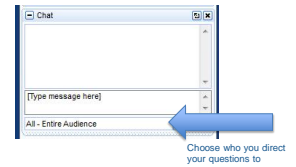
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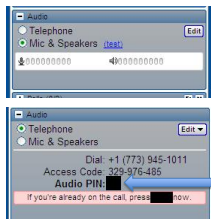
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WHAT WORKS IN READMISSIONS REDUCTION

HOW HOSPITALS HAVE IMPROVED PERFORMANCE

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Amanda Brewster
November 18, 2015

Readmissions

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- Almost **16% of Medicare patients** are readmitted within 30 days (all-cause).
  - Costly for system, patients

- CMS penalties: 3% of Medicare reimbursements in 2015.
  - HF, AMI, pneumonia, knee/hip replacement, COPD
  - In 2015, **77% of eligible hospitals** will receive some penalty

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Risk-Standardized Readmission Rate

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- RSRR
- Based on Medicare claims data; excludes elective admissions for staged procedures.
- Adjusts for:
  - Age
  - Sex
  - Comorbidities

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How to reduce readmissions?

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- Some complex interventions work **in trials.**

- Little evidence on which **program elements** consistently reduce readmissions because most trials test bundles (Hansen, 2011).

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Poll Question 1

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POLL Question #1

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Some hospitals have reduced readmissions: how did they do it?

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Prospective survey
- Large sample (478 hospitals)
- Statistical relationship between:
  - Take up of strategies
  - Change in RSRR

Qualitative study
- Small sample (10 hospitals)
- Understand process and context of strategy change at hospitals where RSRR decreased or increased.

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Prospective survey

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Participating collaboratives

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STate Action on Avoidable Rehospitalizations

H2H
HOSPITAL-TO-HOME

Recommended approaches:
1. Post-hospital follow up
2. Assessment of post-hospital needs
3. Patient education
4. Real time handover communications

Recommended approaches:
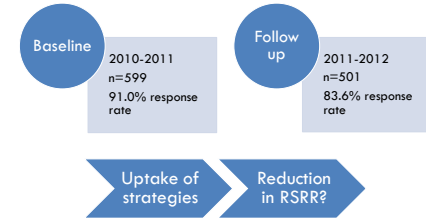1. Post-hospital follow up
2. Medication Management
3. Patient education

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Methods

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- At two time points, hospitals reported whether they performed various practices recommended for readmissions reduction.

- At same time points, we used Medicare data to calculate RSRR for each hospital.
  - Heart failure – used as indicator condition

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Methods (cont)

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Baseline — 2010-2011 n=599 91.0% response rate

Follow up — 2011-2012 n=501 83.6% response rate

Uptake of strategies

Reduction in RSRR?

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9 strategies examined

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	2010-11	2011-12
1. Partnering with **other hospitals** in the local area to reduce readmissions	O	✓
2. Tracking % of patients **discharged with a follow-up** appointment already scheduled within 7 days	O	✓
3. Tracking % of patients **readmitted to another hospital**	O	✓
4. **Estimating risk** of readmission in a formal way and using it to guide clinical care during hospitalization	O	✓
5. Having electronic medical record or web-based forms in place to facilitate **medication reconciliation**	O	✓
6. Using teach-back techniques for **patient and family education**	O	✓
7. At discharge, providing patients with heart failure **written action plans** for managing changes	O	✓
8. Regularly **calling patients** after discharge to follow up on post-discharge needs	O	✓
9. Discharging patients with an outpatient **follow-up appointment already scheduled**	O	✓

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Analysis

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- Weighted linear regression to estimate associations between:
  - Take-up of individual strategies and changes in RSRR
  - Number of strategies taken up and changes in RSRR

- Adjusted for:
  - Hospital characteristics (region, size, teaching status, urban location, ownership, multihospital affiliation)
  - Participation in STAAR vs H2H

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Question 2

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POLL Question #2

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Results

- Uptake of only one strategy was associated with RSRR reduction.
  - Discharging patients with **follow-up appointment** scheduled.

- Hospitals that took up **any 3 or more strategies** had significantly greater reductions in RSRR compared with hospitals that took up only 0-2 strategies.
  - **93 different combinations** of strategies

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Number of strategies and reduction in readmission rates

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Implications

- Not one size fits all.

- Improvement seems to require a critical mass of changes, tailored to local circumstances.

- But maybe the **organizational context** in which strategies are implemented matters too?

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Qualitative study

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Organizational context

- How strategies are implemented, culture, background
- Known to affect other hospital outcomes
  - AMI (Curry 2011, Bradley 2012)
  - Surgical outcomes (Gittell 2000, Young 1997)
  - Patient satisfaction (Meterko 2004)
- Influence on readmissions reduction unknown

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Poll Question 3

POLL Question #3

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Objectives

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- Examine hospitals where RSRR performance notably **improved or worsened.**

- Understand **how** high performing hospitals improved
  - Changes to clinical practice
  - Changes to organizational context

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Qualitative research

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- Systematic collection, organization, interpretation of textual information

- Uses inductive approaches to generate novel insights into phenomena that are difficult to measure quantitatively

- Good for:
  - Understanding complex processes
  - Explaining quantitative findings
  - Learning about nuance of interpersonal relationships, culture

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Sample

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- Hospitals that participated in **STAAR initiative**
  - MA, MI, WA
  - Ran from 2009-2013

- Hospitals where **RSRR had improved or worsened**
  - Heart failure – indicator condition
  - >1 percentage point increase or decrease in RSRR

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Data collection

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- 10 hospital site visits (April - October 2014)
  - 7 where RSRR improved (mean ↓2.4 % points)
  - 3 where RSRR worsened (mean ↑2.0 % points)

- 2-3 experienced qualitative interviewers on each site visit
  - Semi-structured interview guide with probes
  - What did hospital do to try to reduce readmissions during study period?

- Site visits until theoretical saturation
  - No new information emerging from additional sites

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Hospitals

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Table 2.1: Description of study hospitals

Hospital ID	Performance Change	No. of Beds	Teaching Status	No. of Interviewees
1	Improved	200-300	Non-teaching	5
2	Improved	500+	Teaching	7
3	Improved	200-300	Teaching	5
4	Deteriorated	100-200	Teaching	7
5	Deteriorated	500+	Non-teaching	9
6	Improved	100-200	Non-teaching	18
7	Improved	100-200	Non-teaching	9
8	Improved	100-200	Non-teaching	10
9	Deteriorated	300-400	Non-teaching	4
10	Improved	100-200	Non-teaching	8

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Interviewees

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Table 2.2: Roles of interviewees

Administration	23	**Physicians**	14
Analyst	3	Emergency Medicine	1
Director / Manager	4	Geriatrics	1
President / Vice President / CMO / CNO	8	Hospital Medicine	6
Leaders of Partner Organizations (SNFs, physician organizations, elder services)	8	Palliative Care	2
		Primary Care	1
Case Management	12	Quality Improvement	3
Analyst	1	**Quality Management**	12
Case manager	2	Analyst	3
Director / Manager	9	Director / Manager	9
Nursing	12		
Nurse	9	**Total**	82
Director / Manager	3		
Nutrition, Pharmacy, Respiratory Care, Social Work	9		
Clinician	4		
Manager	5		

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Analysis

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- Constant comparative method

- Strategies employed by each hospital
  - 18 strategy codes x 10 hospitals
  - Strategies = what staff reported doing to reduce readmissions

- Compared high / low performing hospitals

- Representative quotes to illustrate themes

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Results

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- High and low performing groups both used recommended clinical practices.

- High performers targeted organization too.

- Four specific approaches distinguished high performers
  1. Collaboration across departments/ disciplines
  2. Working with post-hospital providers
  3. Learning and problem solving
  4. Senior leadership support

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Poll Question 4

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POLL Question #4

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In-hospital clinical practices

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In-hospital clinical practices	# hospitals applying practice	
	RSRR improved (n=7)	RSRR deteriorated (n=3)
Follow up appointments at discharge	6 / 7	3 / 3
Medication management	5 / 7	2 / 3
Phone call after discharge	6 / 7	2 / 3
Risk of readmission / using in care	4 / 7	2 / 3
Patient education / teach-back	6 / 7	3 / 3

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1. Collaboration across departments/ disciplines

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High Performing Hospitals
- Extensive efforts to span disciplinary / departmental boundaries.
- Dedication to effective multidisciplinary rounds.

[We have] daily multi-disciplinary rounds in the inpatient units, where we're really working hard to do careful coordinated discharge planning…absolutely every day. They are attended by doctors, and nurses, and case managers, and social workers, and pharmacists, and physical therapists, and respiratory therapists, and occupational therapists.
-- Physician, Hospital 3

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1. Collaboration across departments/ disciplines

42

High Performing Hospitals
- Extensive efforts to span disciplinary / departmental boundaries.
- Dedication to effective multidisciplinary rounds.

Low Performing Hospitals
- Barriers to communication within hospital.
- Crossing departments - challenge to readmissions reduction.

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2. Working with post-hospital providers

`43`

High Performing Hospitals

- Systematic, in-depth collaboration with post-hospital providers.
- Hospitals shared data and expertise.

> When I think about the depth of our work together, it was a remarkable process. We got to know nurses here in the hospital. We listened to each other's perspectives…
> -- SNF Administrator, Hospital 6

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2. Working with post-hospital providers

`44`

High Performing Hospitals

- Systematic, in-depth collaboration with post-hospital providers.
- Hospitals shared data and expertise.

Low Performing Hospitals

- Relationships less well developed.

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3. Learning and problem solving

`45`

High Performing Hospitals

- Extensive application of learning and QI techniques
- Treated obstacles and failures as normal parts of improvement

> [We use an] iterative process – if it's not working, why is it not working? Then what are you doing differently the following time to try something different? It's not just stopping and saying, okay, our hands are up here. It's always going back.
> -- Administrator, Hospital 7

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3. Learning and problem solving

`46`

High Performing Hospitals

- Extensive application of learning and QI techniques
- Treated obstacles and failures as normal parts of improvement

Low Performing Hospitals

- Did not emphasize learning and problem solving techniques
- Some structural impediments to learning

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4. Senior leadership support

`47`

High Performing Hospitals

- Concerned with readmissions to improve patient care.
- Directed additional resources to readmissions reduction.

Low Performing Hospitals

- Commitment from senior leaders not emphasized by interviewees.
- Responding to fines, pressure from umbrella systems.

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Limitations

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- Fewer interviewees at hospitals with declining performance.

- Could only analyze readmissions reduction strategies that interviewees discussed.

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Summary: qualitative findings

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- Four specific strategies distinguished high performers:
  1. Collaboration across departments/ disciplines
  2. Working with post-hospital providers
  3. Learning and problem solving
  4. Senior leadership support

- More support for idea that a single set of clinical practices will not work everywhere.

- Learning / problem solving techniques help tailor selection and application of strategies to local needs.

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What works?

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Prospective survey
- Adding specific strategies generally not associated with improvement.
- Adding critical mass of strategies (3+) was.
- Perhaps needed mix depends on context.

Qualitative study
- Clinical practice changes may be necessary but not sufficient.
- Investment in figuring out what works for particular setting.
- Engaging broad cross-section of hospital & post-hospital partners.

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Acknowledgements

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