Evidence-Based Strategies to Manage Readmissions

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Objectives

• Nature and Burden of Readmissions
• Best practices for reducing readmissions
• Strategies and tools
• Research in progress
POLL

Are there ‘good’ readmissions and ‘bad’ readmissions?
Classification of Readmissions

<table>
<thead>
<tr>
<th>Planned Readmission</th>
<th>Related to Initial Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>A planned readmission for which the reason for readmission is related to the reason for the initial admission.</td>
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</table>

<table>
<thead>
<tr>
<th>Unplanned Readmission</th>
<th>Related to Initial Admission</th>
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<td>An unplanned readmission for which the reason for readmission is related to the reason for the initial admission.</td>
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</table>

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>A planned readmission for which the reason for readmission is not related to the reason for the initial admission.</td>
<td></td>
</tr>
</tbody>
</table>

An unplanned readmission for which the reason for readmission is not related to the reason for the initial admission.

Source: American Hospital Association.
30-DAY READMISSION RATES TO U.S. HOSPITALS

Healthcare Cost and Utilization Project (HCUP) data from 2010 provide the most comprehensive national estimates of 30-day readmission rates for specific procedures and diagnoses.* Examples include:

**By Procedure**

Nearly one in five patients with these common procedures was readmitted:
- 23% Amputation of lower extremity
- 19% Heart valve procedures
- 19% Debridement of a wound, infection, or burn

Nearly one in three patients with these less frequent procedures was readmitted:
- 29% Kidney transplant
- 29% Ileostomy and other enterostomy

**By Diagnosis**

Nearly one in four patients with these common diagnoses was readmitted:
- 25% Congestive heart failure
- 22% Schizophrenia
- 22% Acute and unspecified renal failure

Nearly one in three patients with these less frequent diagnoses was readmitted:
- 32% Sickle cell anemia
- 32% Gangrene
Readmission Rates by Payer

Medicaid and Medicare patients have a higher percentage of readmissions than other payers

- **Procedure:** Amputation of lower extremity
- **Diagnosis:** Congestive heart failure

<table>
<thead>
<tr>
<th>Payer</th>
<th>Readmission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>26%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>30%</td>
</tr>
<tr>
<td>Medicare</td>
<td>22%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>25%</td>
</tr>
<tr>
<td>Privately Insured</td>
<td>17%</td>
</tr>
<tr>
<td>Privately Insured</td>
<td>20%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>13%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>17%</td>
</tr>
</tbody>
</table>

*Readmissions were for all causes and did not necessarily include the same procedure or diagnosis as the original admission (index stay).*

Source: HCUP Statistical Briefs #153 and #154: [http://www.hcup-us.ahrq.gov/reports/statbriefs/statbriefs.jsp](http://www.hcup-us.ahrq.gov/reports/statbriefs/statbriefs.jsp)
On average, 1 in 5 Medicare beneficiaries discharged from the hospital is readmitted within 30 days.
Readmissions Matter

• Patient and Family Burden
• Cost
• ISRN Priorities
POLL

What will you do in your day tomorrow? (action plan)
Hospital Readmission Reduction Program (HRRP)

• Brief overview
  – The HRRP is a reimbursement penalty approach for general acute care hospitals that have readmissions deemed “excess” by CMS
    • Began fiscal year 2013 (October 1, 2012)
    • Reduction is capped at 1% in 2013, 2% in 2014 and 3% in 2015 and beyond
    • Reductions apply to total DRG reimbursement
      – But readmissions deemed excess are determined using 3 specific conditions endorsed by the National Quality Foundation (NQF)
        » Acute Myocardial Infarction
        » Heart failure
        » Pneumonia

Reimbursement Penalties

- 2,211 American hospitals received reimbursement penalties for high readmission rates
  - Together they will forfeit about $280 million in Medicare funds over next year
- According to Medicare, 2 out of 3 hospitals evaluated failed to meet its new standards for preventing 30 day readmissions.
- \[(\text{penalty rate up to 1\%}) \times (\text{total Medicare reimbursement/yr}) = \text{lost revenue}\]

Re-hospitalizations among patients in the Medicare Fee-for-service Program

New England Journal of Medicine
Stephen F. Jencks, MD, MPH, Mark Williams, MD and Eric A Coleman, MD MPH.

Abstract

• I in 5 Medicare beneficiaries are readmitted within 30 days
  – Which equates to 2.3 million patients
• National cost of over $17 Billion
• Half of patients readmitted had no physician contact
• 70% of surgical readmits were for chronic medical conditions.
• Potentially 40% of all Readmissions are preventable (?)
Avoidable Readmissions

• A review was done on 34 studies published between 1966 and 2010 looking at readmissions that were deemed avoidable
  – Found: 24% were deemed avoidable

Carl Van Walraven, MD MSc, Carol Bennett, MSc, Alison Jennings, MA, Peter C. Austin, PhD, Alan Forster, MD MSc. Proportion of hospital readmissions deemed avoidable: a systematic review. April 19-11 vol183 no. 7 E391-E402
POLL

What activity has the greatest impact on readmission rates?
POLL

When Discharge Planning done?

a. Before admission
b. Upon admission
c. During hospitalization
d. At discharge
e. Post discharge
Really, when is Discharge Planning done? (barriers to DP)
Best Practices for Managing Readmissions

• Evidence
• Tools
• Strategies
Stevens Star Model of Knowledge Transformation

1. Discovery Research
2. Evidence Summary
3. Translation to Guidelines
4. Practice Integration
5. Process, Outcome Evaluation
Conclusion
A comprehensive transitional care intervention for elders hospitalized with heart failure increased the length of time between hospital discharge and readmission or death, reduced total number of rehospitalizations, and decreased healthcare costs, thus demonstrating great promise for improving clinical and economic outcomes.
Transitional Care of Older Adults Hospitalized with Heart Failure: A Randomized, Controlled Trial

Mary D. Naylor, PhD, Dorothy A. Brooten, PhD, Roberta L. Campbell, PhD, Greg Maislin, MS, MA, Kathleen M. McCauley, PhD, and J. Sanford Schwartz, MD
Star Model – POINT ??

38 Studies
Seven themes were identified:
1. intra- and interdisciplinary communication
2. systems and structures
3. time
4. role confusion
5. care continuity
6. knowledge
7. invisibility of the staff nurse role in discharge planning
An integrated review of the literature on challenges confronting the acute care staff nurse in discharge planning

Jane M Nosbusch, Marianne E Weiss and Kathleen L Bobay

Aims and objectives. This integrative review presents and synthesises previous research investigating practices, perceptions and experiences of bedside staff nurses relative to hospital discharge planning.
Star Model – POINT ??
Traditionally, efforts to reduce readmissions have focused on hospitals, but it is becoming clear that many factors along the care continuum influence readmissions. These innovative projects are taking a broader view of care transitions, and implementing a variety of interventions aimed at reducing readmissions.
Nurse assessment of low discharge readiness was associated with a six- to nine-fold increase in readmission risk.

Patient self-assessment was not associated with readmission.

Neither was associated with ED visits.
Validation of Patient and Nurse Short Forms of the Readiness for Hospital Discharge Scale and Their Relationship to Return to the Hospital

Marianne E. Weiss, Linda L. Costa, Olga Yakusheva, and Kathleen L. Bobay
Project RED

✓ Facilitated by discharge advocate
✓ Telephone reinforcement provided
✓ Pharmacist follow-up
✓ Main focus for transitional care
✓ Decrease readmission rate
PRACTICE INTEGRATION – POINT 4
8P’s Risk Scale

- Problems with medications
- Psychological: depression or who have a history of depression
- Principal diagnosis: cancer, stroke, diabetic complications, COPD, or heart failure.
- Physical limitations: frailty, deconditioning, limitations in activities of daily living
- Poor health literacy: understanding of their care plan as demonstrated by their inability to complete “Teach Back” successfully
- Poor social support: caregiver, social isolation.
- Prior hospitalization: Unplanned hospitalization 6 months prior
- Palliative care: advanced or progressive serious illness
• 8P’s Risk Scale (identify, Mitigate, Communicate)
• General Assessment Preparedness
• Patient Preparation to Assess Situations Successfully-PASS (post DC) (PASS)
• Teach back
• Interprofessional rounds
• Medication reconciliation
• Follow up phone calls
• Follow up appointment
Star Model – POINT ??

Outlines four steps:
1. Current state of readmissions
2. Improvement opportunities
3. Action plan of strategies
4. Monitor progress

- Identifies interventions that have been successful
- 3 stages of the care continuum: during hospitalization, at discharge, and post discharge
EVIDENCE-BASED RECOMMENDATIONS—POINT 3
TOOLS FOR PRACTICE INTEGRATION—POINT 4
2014 UPDATE
WHAT’S NEW IN THIS EDITION?
• Readmission penalty information updated
• The most recent Medicare FFS readmission rate information added
• Warm hand-offs communication
• Care givers included
• Patient simulation center
• Training for SNF staff members
• Updated HRET/CMS recommended measures
• Sample readmissions dashboard
EVIDENCE-BASED RECOMMENDATIONS—POINT 3
TOOLS FOR PRACTICE INTEGRATION—POINT 4
August 2014
This guide was developed over a 2-year period using quality improvement methodologies to identify:

• Clinical case for improvement.
• Similar and distinct transitional care needs of the population.
• Adaptations to existing best practices.
• New or expanded strategies not contained in the existing body of toolkits on best practices for reducing readmissions.
EVIDENCE-BASED RECOMMENDATIONS—POINT 3
TOOLS FOR PRACTICE INTEGRATION—POINT 4
EVIDENCE-BASED RECOMMENDATIONS—POINT 3
TOOLS FOR PRACTICE INTEGRATION—POINT 4
RHP6 Readmissions Learning Collaborative

**Gap Analysis-Reducing Readmissions (GARR)**

Team Members: Kathleen R. Stevens, Frank Puga, Christopher Bonnet

Primary Contact: Kathleen R. Stevens, RN, EdD, FAAN  
Professor, Improvement Science Research Network  
Stevensk@uthscsa.edu  
(210) 567-1480
Readmission Reduction Strategy

• Determine ‘gaps’ between local practice and best (evidence-based) practices --first step toward reducing readmissions

• The Gap Analysis-Reducing Readmissions (GARR) was built from 3 sets of best practices known across the nation.
GARR AIM

An evidence-based assessment
Enables comparison of an agency’s readmission reduction program to practices known to be effective
  – identify areas of success
  – target underutilized actions to further reduce readmissions
Evidence Base for the GARR

Items and format for the GARR were drawn from a variety of notable evidence-based/best practice recommendations. The GARR captures all recommendations from these sources.


Evidence-Based Recommendations—POINT 3
Tools for Integrating into Practice—POINT 4
Approach

• Provide a survey that detects the gap between current practices and best practices
  – Broadly describe readmission practices across RHP 6
  – Determine the utility and feasibility of GARR as a benchmarking strategy

• Connect identified needs with available tools for filling the gaps in the readmission reduction program

• Reassess the gap at regular intervals
**GARR-3 Sections, 18 clusters, 41 Actions**

**Table 1: During Hospitalization**
- Risk screen patients and tailor care
- Establish communication with PCP, family, and home care
- Use “teach back” to educate patient about diagnosis and care
- Use interdisciplinary/multidisciplinary clinical team
- Coordinate patient care across multidisciplinary care team
- Discuss end-of-life treatment wishes

**Table 2: At Discharge**
- Implement comprehensive discharge planning
- Educate patient/caregiver using “teach back”
- Schedule and prepare for follow-up appointment
- Help patient manage medications
- Facilitate discharge to nursing homes with detailed discharge instructions and partnerships with nursing home practitioners

**Table 3: Post-Discharge**
- Promote patient self-management
- Conduct patient home visit
- Follow up with patients via telephone
- Use personal health records to manage patient information
- Establish community networks
- Use tele-health in patient care

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GARR-18 clusters, 41 Actions
<table>
<thead>
<tr>
<th>Strategies</th>
<th>How often are these strategies utilized in your work area/unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Risk screen patients and tailor care</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Actions:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Proactively determine transitional care needs and respond to patient readmission risks.</td>
<td></td>
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<tr>
<td>2. Tailor patient care based on evidence-based practice, clinical guidelines, care paths, etc...</td>
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<tr>
<td>3. Accurately reconcile medications at admission, at any change in the level of care.</td>
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<tr>
<td>4. Identify and respond to patient needs for early ambulation, early nutritional interventions, physical therapy, social work, etc...</td>
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</tr>
<tr>
<td><strong>Sum:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B. Establish communication with PCP, family, and home care</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Actions:</strong></td>
<td></td>
</tr>
<tr>
<td>5. Assure the PCP serves as a core team member of the patient care delivery team.</td>
<td></td>
</tr>
<tr>
<td>6. Inform the family or home care agency of patient care process and progress.</td>
<td></td>
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<tr>
<td>7. Utilize a standardized method of communicating to other organizations such as SNFs.</td>
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<tr>
<td><strong>Sum:</strong></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Actions</td>
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<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>C. Promote patient self-management</td>
<td>8. Use “teach-back” to educate patient about diagnosis and care.</td>
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<td></td>
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<tr>
<td></td>
<td>9. Assure that a clinician is educating the patient about their diagnosis during hospitalization.</td>
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<tr>
<td>D. Discuss end-of-life treatment wishes</td>
<td>10. Discuss terminal and palliative care plans across the continuum.</td>
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<td></td>
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<tr>
<td>E. Use interdisciplinary/ multidisciplinary clinical team</td>
<td>11. Assure the team includes complex care management, hospitalists, an SNF physician, case managers, PCPs, pharmacists, and specialists.</td>
</tr>
<tr>
<td></td>
<td>12. Assure the team includes bilingual staff and clinicians (where needed).</td>
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<tr>
<td>F. Coordinate patient care across a multidisciplinary care team</td>
<td>13. Use an electronic health records to support care coordination.</td>
</tr>
<tr>
<td></td>
<td>14. Use a transitional care nurse (TCN) (or similar role) to coordinate care.</td>
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Weighted Sum _________
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<tr>
<td>1. Proactively determine transitional care needs and respond to patient readmission risks.</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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<tr>
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<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
</tr>
</tbody>
</table>

$\text{Sum: } _____ \div 4 = _____ \times 1 = _____$
E. Use interdisciplinary/multidisciplinary clinical team

**Actions:**

11. Assure the team includes complex care management, hospitalists, an SNF physician, case managers, PCPs, pharmacists, and specialists.\(^d\),\(^e\),\(^8\)

12. Assure the team includes bilingual staff and clinicians (where needed).\(^d\),\(^e\),\(^4\)

\[\text{Sum: } \frac{\text{_____}}{2} = \text{_____} \times 2 = \text{_____} \]

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F. Coordinate patient care across a multidisciplinary care team

**Actions:**

13. Use an electronic health records to support care coordination.\(^d\),\(^e\)

14. Use a transitional care nurse (TCN) (or similar role) to coordinate care.\(^d\)

\[\text{Sum: } \frac{\text{_____}}{2} = \text{_____} \times 3 = \text{_____} \]

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**Weighted Sum** _________
GARR Scoring Sample Item

How often are these strategies utilized in your work area/unit?

**Q. Establish community networks**

*Actions:*

39. Develop public/private partnerships to meet patients’ needs.\(^{b,d,e,8,9,10}\)

40. Possess up-to-date knowledge of capabilities of post-acute and community providers, including support services*.\(^{b,e,8}\)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*Sum: 5 ÷ 2 = 2.5*  

*Weighted Score: 3 x 2.5 = 7.5*  

**Total Score**  
**Average Action Rating**  
**Weighted Score**
**GARR-18 clusters, 41 Actions**

GARR is a tool to support implementation of EBP – POINT 4
RHP6 Readmissions Learning Collaborative

Gap Analysis-Reducing Readmissions (GARR)

Team Members: Kathleen R. Stevens, Frank Puga, Christopher Bonnet

Primary Contact: Kathleen R. Stevens, RN, EdD, FAAN
Professor, Improvement Science Research Network
Stevensk@uthscsa.edu
(210) 567-1480
Field Tested-Early Stages

Gap Analysis for Reducing Readmissions (GARR)

(Circle the logo you like best)

“Putting some teeth in readmissions programs”
Preliminary Pilot

• 3 sites used the GARR
• February 26\textsuperscript{th}
• Completed the GARR
  – Formed a team of at least 3 managers/clinicians and indicate consensus of opinion.
  – For each item, rated “how often” used in your facility, multiply the rating by the weight indicated in the colored box and sum the weighted scores at the end of each of the 3 categories.
• Telephone interviews: Enthusiastic
What’s Next?

Specific Aims. The aims of this pilot project are to

• Develop an evidence-based measurement tool for clinical and operational use in assessing gaps between local practices and best practices in a healthcare facility’s readmission program, to be called Gap Analysis-Reducing Readmissions (GARR) tool.

• Establish the GARR’s reliability, validity, and utility as a quality measurement tool across RHP2 and RHP6

• Determine the correlation of GARR scores with the facility’s readmission rates over time.

Multisite study -- Improvement Science Research Network
2017 Vision for the ISRN

Success of the Improvement Science Research Network (ISRN) is built on a shared vision which takes into account the unique knowledge needs in healthcare delivery science across our wide array of ve

More...

TeamSTEPPS® 2.0

TeamSTEPPS® is a teamwork system designed for healthcare professionals that is powerful solution that improves patient safety within your organization. Learn more by clicking here. More...

TeamSTEPPS® Master Training Workshop

Are you a Health Professional or Educator who wishes to improve patient safety through interprofessional teamwork? The Center for Advancing Clinical Excellence and the Improvement Science Research Network is hosting a...
ISRN Mission: *To advance the scientific foundation for quality improvement, safety and efficiency through transdisciplinary research addressing healthcare systems, patient-centeredness, and integration of evidence into practice.*

- Unique infrastructure for conducting improvement research—a *collaboratory for research*

- Network Studies conducted across multiple sites

- NINR/NIH-supported network infrastructure for healthcare delivery improvement research
Stakeholder Priorities

- Stevens & Ovretveit, 2013
- www.ISRN.net
Coordination and Transitions of Care

This category emphasizes strategies for improving care processes in specific clinical conditions, to ensure good care coordination and transitions of care.

Priority Topics: Evaluate strategies and methods to ensure coordination and continuity of care across transitions in given clinical populations; test and refine methods of handoffs and other strategies to ensure safe, effective, and efficient transitions in given clinical populations.

Examples of Improvement Strategies and Research Issues: Interprofessional team performance, medication reconciliation, discharge for prevention of early readmission, patient-centered care, and measurement of targeted outcomes.
ISRN Steering Council

Heidi King, MS, FACHE, BCC, CMC, CPPS  
TRICARE Management Activity
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U Texas Health Science Center San Antonio
Vivian Low, MPH, BSN, RN-BC, FPCNA  
El Camino Hospital
Gail Mallory, PhD, RN, NEA-BC  
Oncology Nursing Society
Jack Needleman, PhD, FAAN  
UCLA School of Public Health
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CPSYCHOL, CSCI, MIHM  
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University of Alabama Birmingham
Lily Thomas, PhD, RN, FAAN  
North Shore-Long Island Jewish Health System
Anita Tucker, MSc, MA, DBA  
Brandeis International Business School
Kathleen R. Stevens, RN, EdD, FAAN  
U Texas Health Science Center San Antonio
### ISRN 2017 Vision

**What do we want to evolve in 3 years as a result of our actions?**

<table>
<thead>
<tr>
<th>Vital Research Portfolio</th>
<th>Active Research Associates/Robust Infrastructure</th>
<th>Viable Business Model</th>
<th>Expanded Academic-Practice Capacity</th>
<th>Recognized Leader in Improvement Science</th>
</tr>
</thead>
</table>
| Stakeholder priorities to guide research portfolio | Wide range of involvement
- Network PIs
- Site PIs
- Affiliates as repeat researchers
- Students as PIs | Sustainable resources
Rapid response revenue model guided by stakeholder priorities | Education resources for improvement and implementation research | Brand as global industry leader in improvement |
| Demonstrated impact of research results | Respected research network infrastructure | Maximized resources through routinized (repeatable) studies, customized studies, products | Definition of synergy between improvement research and implementation research | Strategic alliances
- International expansion |
| Changed practice outcomes in 2 areas | Infrastructure and process to facilitate research | Robust business model
- Core Lab
- Test bed
- Participation fee | Multiple education venues
- Definition of competencies
- Summit-350 attendees by 2017
- Web seminars
- Blogs, annotated bibliographies, white papers | Multisite research network used by IHI, AONE, STTI, AACN, Academy Health, others |
| Multiple Network studies-5 by 2017 | Membership model reflective of research network paradigm | Recognized and funded by NIH/AHRQ/Private foundations | |
| Databases for secondary analysis of micro/macro system questions | |

Version 2-24-15
# Network Study Pipeline

<table>
<thead>
<tr>
<th>Study</th>
<th>Priority</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAR-2</td>
<td>B-Micro system D-Macro system</td>
<td>REPORTING: Phase 1 data analysis completed in 14 hospitals. 20,000+ data points gathered and analyzed.</td>
</tr>
<tr>
<td>STAR-2++</td>
<td>B-Micro system D-Macro system</td>
<td>DATA COLLECTION: Phase 2 data analysis across 12 hospitals; 3rd collaborative forming</td>
</tr>
<tr>
<td>Medication Errors and Cognitive Load</td>
<td>B-Micro system D-Macro system</td>
<td>REPORTING: Data analysis completed, reporting in progress.</td>
</tr>
<tr>
<td>Preventable Readmissions</td>
<td>A-Transitions in Care</td>
<td>IN DEVELOPMENT: Pilot complete. Network study and investigative team in development.</td>
</tr>
<tr>
<td>Workforce Stress</td>
<td>B-Micro systems D-Macro system</td>
<td>IN DEVELOPMENT: Pilot data collection in progress.</td>
</tr>
<tr>
<td>“Your Study Here”</td>
<td>A, B, C, or D</td>
<td>You are invited to design a Network Study for launch across our 200+ member network.</td>
</tr>
</tbody>
</table>


ISRN Acknowledgements

This work was supported by FUNDING

• National Institute of Nursing Research-Grand Opportunities ARRA
  • 1RC2NR011946-01
  • 3RC2NR011946-01S1
  • 3RC2NR011946-01S2
• RWJF INQRI grant ID: 63510
• National Center for Research Resource Clinical and Translational Science Award UL1RR025767

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PEOPLE

• Thanks to ISRN Coordinating Center team for their essential support.
• Thanks to ISRN associates who form the ISRN and Network Study Research Collaboratives.
• Thanks to the ISRN Steering Council who saw the ISRN on a “blank page.”
POLL

What will you do in your day tomorrow? (action plan)