Making Your Research More Robust with Implementation Science

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Today’s presentation

• Define implementation science and discuss the importance of evaluating process changes during EBP/research studies.

• Discuss the method used for applying the Consolidated Framework for Implementation Research (CFIR) to integrate implementation science in a multisite research study

• Summarize the facilitators and challenges of implementing unit-level clinical research from site principle investigator interviews
Implementing New Innovations in EBP and Research

It worked at other hospitals

No Change in outcomes

Some people did it, some didn’t
What Is Implementation Science?

The study of methods, interventions, and variables that promote uptake and use of research and other evidence-based practices by organization with the goal of improving health care quality.

The goal of implementation science is to investigate the translation of research into practice through evaluation of methods, interventions, and variables that influence adoption and sustainability of evidence-based practices.

(Newhouse et al. 2013; Titler et al. 2007)
Implementation Science Research

Research on implementation addresses the level to which health interventions can fit within real-world public health and clinical service systems.

(http://www.fic.nih.gov/News/Events/implementationscience/Pages/faqs.aspx)
# Formative Evaluation

<table>
<thead>
<tr>
<th>Pre-Implementation</th>
<th>Implementation</th>
<th>Post-Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEVELOPMENTAL</strong></td>
<td><strong>IMPLEMENTATION</strong></td>
<td><strong>INTERPRETIVE</strong></td>
</tr>
<tr>
<td>Determinants of current practice-gap analysis</td>
<td>Integrity of the intervention</td>
<td>Key stakeholders experiences</td>
</tr>
<tr>
<td>Barriers and facilitators to practice change and adoption</td>
<td>Exposure to intervention</td>
<td>Stakeholders belief that project was success</td>
</tr>
<tr>
<td>Perceived utility of the project</td>
<td>Intensity of intervention</td>
<td>Perception of stakeholders relative to meaning of statistical findings</td>
</tr>
<tr>
<td><em>(Stetler et al. 2006)</em></td>
<td><strong>PROGRESS-FOCUSED</strong></td>
<td>Case study data</td>
</tr>
<tr>
<td>Prototype toolkit</td>
<td>Monitor indicators of progress</td>
<td></td>
</tr>
<tr>
<td>Use data to inform need for modification of strategy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Readiness Evaluation and Discharge Interventions (READI)

First Magnet® sponsored multisite study with 34 Hospitals
Used both formative and summative evaluation methods
<table>
<thead>
<tr>
<th>Study Units</th>
<th>Phases</th>
<th>Baseline 4 months</th>
<th>Phase 1 4 months</th>
<th>Phase 2 4 months</th>
<th>Phase 3 4 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>Baseline</td>
<td>Discharge Readiness Assessment protocol using RN-RHDS</td>
<td>Patient Informed Discharge Readiness Assessment - RN-RHDS - PT-RHDS</td>
<td>- RN-RHDS - PT-RHDS Discharge Action Guide</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Baseline control</td>
<td>Concurrent control</td>
<td>Concurrent control</td>
<td>Concurrent control</td>
<td>Concurrent control</td>
</tr>
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**READINESS FOR HOSPITAL DISCHARGE - PATIENT FORM**

The answers you provide will assist your nurse in preparing you for discharge.

This information will be used to determine the benefits of a new way for nurses to evaluate your readiness to go home.

Please circle the number that best describes how you feel.

The answers are on a 10 point scale, from 0 to 10. The words below the number indicate what the 0 or the 10 means.

For example, circling number 7 means you feel more like the description of number 10 than number 0 but not completely.

<table>
<thead>
<tr>
<th>Readiness questions</th>
<th>Please circle your answer.</th>
<th>Readiness category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How physically ready are you to go home?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td>Not ready</td>
</tr>
<tr>
<td>2. How would you describe your energy today?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td>Low energy</td>
</tr>
<tr>
<td>3. How much do you know about problems to watch for after going home?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td>Know nothing at all</td>
</tr>
<tr>
<td>4. How much do you know about restrictions (what you are allowed and not allowed to do) after going home?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td>Know nothing at all</td>
</tr>
<tr>
<td>5. How well will you be able to handle the demands of life at home?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td>Not at all</td>
</tr>
<tr>
<td>6. How well will you be able to perform your personal care (for example, hygiene, bathing, toileting, eating) at home?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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<tr>
<td>7. How much help will you have with your personal care after you go home?</td>
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<td>8. How much help will you have with your medical care needs (treatments, medications)?</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
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**READINESS FOR HOSPITAL DISCHARGE - NURSE ASSESSMENT FORM**

Use this form to assess readiness for discharge of your patient. Complete this form on the day of discharge. Please circle your answers.

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End-of Study RN Focus Group and Site Display Board
Welcome to the CFIR Technical Assistance Website

You have come to the right place if you are looking for more information about the Consolidated Framework for Implementation Research (CFIR) that was originally published in Implementation Science in 2009. This site is created for individuals considering using the CFIR to evaluate an implementation or design an implementation study.

- Implementation Science Basics
- What is the CFIR
- Benefits of using the CFIR
- Published Citations of the CFIR
- Future Plans for the CFIR
Consolidated Framework For Implementation Research (CFIR) 5 Domains
Site Principal Investigator Interviews via Web Conference
CFIR Domain

Individual Characteristics:  
*Individual identification with the Organization*

Interview Question:
What critical attributes/skills of a site PI do you see as necessary for successful implementation for a study such as the READI study?
CFIR Domain
Intervention
Characteristics:  
*Intervention source*

**Interview question:**
Discuss the main factors that influenced the decision to participate in the READI study
Reactions to READI

CFIR Domain
Outer setting: *Patient needs and resources*

Interview Question: How are patients responding to being asked about discharge readiness?

“Patients welcomed the questions as part of discharge care”
CFIR Domain

Process: Reflect & Evaluate

Interview Question: How will your organization determine if the study is successful?

“Important for RNs to see the end product”
“Nurse experience related to doing clinical research”
Facilitators Unit-Level Research

Staff Champions
- Logistics Planning with Staff
- Bring Research to Frontline Nurses

Chief Nurse Support
- Site PI Experience
- Engaging Local Leaders

Patient Informed Discharge
- Increase Dialogue
- Increase Patient Satisfaction
Challenges Unit-Level Research

Hospital Leadership Changes
- CNO
- Site PI
- Unit leaders

Electronic Health Record
- EHR Transition during study
- Data acquisition

RN time
- Additional work at Discharge
- Unit staff turnover
References


