A Model for Quality Improvement/Knowledge Translation Research

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Translating Research into Practice (TRiP)

1. Summarise the evidence
   - Identify interventions associated with improved outcomes
   - Select interventions with the largest benefit and lowest barriers to use
   - Convert interventions to behaviours

2. Identify local barriers to implementation
   - Observe staff performing the interventions
   - “Walk the process” to identify defects in each step of implementation
   - Enlist all stakeholders to share concerns and identify potential gains and losses associated with implementation

3. Measure performance
   - Select measures (process or outcome)
   - Develop and pilot test measures
   - Measure baseline performance

4. Ensure all patients receive the interventions
   - Implement the “four Es” targeting key stakeholders from front line staff to executives

   - Engage
     - Explain why the interventions are important

   - Educate
     - Share the evidence supporting the interventions

   - Evaluate
     - Regularly assess for performance measures and unintended consequences

   - Execute
     - Design an intervention “toolkit” targeted at barriers, standardisation, independent checks, reminders, and learning from mistakes

Overall Concepts

► Envision the problem within the larger health care system

► Engage a collaborative multidisciplinary team
TRiP Step 1: Summarize the Evidence

- Identify interventions to improve a **specific outcome**
- Select interventions with the largest benefit and lowest barriers to use
- Convert the interventions (maximum seven) to behaviors
- Potential sources: guidelines, systematic reviews
TRiP Step 2: Identify Local Barriers to Implementation

- Observe staff performing the interventions

- “Walk the process” to identify failure points, potential improvements for intervention implementation

- Enlist stakeholders to share concerns and identify potential gains/losses associated with implementing the intervention
Understand the Context

- To help understand the context in which the intervention will be implemented, ask all stakeholders why it is difficult or easy for them to comply with recommended practices.

- Listen carefully and learn what staff may gain or lose from implementing the intervention.

- Understanding barriers specific to the project is key to designing a successful intervention (Shojania, 2005).

TRiP Step 3: Measure Performance

- Select measures (process and/or outcome)
- Develop and pilot test measures
- Measure baseline performance
TRiP Step 4: Ensure All Patients Receive the Intervention

- Most complex step is to ensure that all patients reliably receive the intervention
- Interventions must fit the hospital’s system, including local culture and resources
“4 Es + 2”

Engage
- How does this make the world a better place?

Educate
- What do I need to do?
- Convert evidence to behaviors
- Evaluate awareness and agreement

Execute
- How can I do it?
- Listen to resisters
- Standardize, create independent checks, and learn from mistakes

Evaluate
- How do I know we made a difference?

Embed
- Has this become business as usual? How do I know it will last?
- Make policies and procedures, train new people, walk the process

Expand
- Who else needs to know this? What’s next?
- Pass it on to other units
- Identify and address your next challenge
Engage

► Explain why the interventions are important
  ► Share real-life stories of patients
  ► Estimate the harm attributable to omitting the intervention in the unit or hospital, given the baseline data
► Inform the unit of its annual number of events and patient morbidity/mortality associated with the current state
Educate

- Share the evidence supporting the intervention(s)
  - All levels of staff/providers
  - Original scientific literature supporting the proposed interventions
  - Concise summaries
  - Checklist of the evidence
Execute

- Design an intervention “toolkit” based on identified barriers to implementation

- Redesign care based on three principles
  - Standardize care processes
  - Create independent checks (e.g., checklists)
  - Reminders
  - Learn from mistakes

- Make it easy to do the right thing and difficult to do the wrong thing
Evaluate

► Regularly assess for performance measures and unintended consequences
► Share data broadly
► Review data at QI team meetings
► Decreased attention to other processes of care
► New harms resulting from the intervention
► Competing priorities
Endure

- Make policies and procedures
- Train new people
- Walk the process
► Pass on to other units

► Identify and address the next challenge
In Summary

- Translating research into practice
  - Five key components
    - Focus on systems
    - Engaging teams
    - Centralized support
    - Local adaptation
    - Collaborative culture
  - “4 Es + 2”