Engaging the unmotivated: Overcoming inherent obstacles in change frameworks for patients and providers

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Tuesday, February 20, 2018
12:00 – 1:00 p.m.
Bloomberg School of Public Health
Hampton House
624 N. Broadway, Room 688
• self is simply a “bundle” of perceptions
• which succeed each other with an inconceivable rapidity, and are in perpetual flux
• Self is always changing
Disclaimers

- Studying behavior change of patients and providers for 20 years, I have now learned to fail more gracefully
  - (i.e.: I do not have the answers)
- Discussion will be less about methods and data
  - (Journal Club this is not)
- I am a much better writer than I am a speaker
  - (Prepare to not be amazed)*

*Warning, there may be humor (Intended and unintended)
Translating Research

Have you heard:
“It takes 17 years to translate research into practice!”?
Definitions

Implementation research

• Consists of studies that support movement of evidence-based, effective health care approaches from the clinical knowledge base into routine use

• Includes the study of influences on healthcare professional and organizational behavior

Implementation science

The scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services

(Eccles & Mittman, 2006; Rubenstein & Pugh, 2006)
Implementation Science does

- Rely on theories, frameworks, models
- Appreciate the notion of complexity (and by extension complexity science) and how it can inform implementation efforts
- Appreciate the central role of context
- Apply a multilevel perspective to understand contextual factors
- Heterogeneity is just and important as overall summative evaluation
- De-implementation is also a growing field

Feldstein & Glasgow, 2008

The Practical, Robust Implementation and Sustainability Model (PRISM):

(Sittig & Singh, 2010; Strauss et al., 1997)
(Mittman, 2012; Proctor et al., 2009)
Implementation Science

- Appreciates heterogeneity, variability, contextual effects
- Focuses on process-mechanisms AND outcomes-impacts
- Accounts for adaptation and fidelity
- Accounts for sustainability, scale-up/spread potential
- Appreciates the importance of bottom-up development; partnerships

The innovation (intervention)
The Implementation Program (Strategies)
Local Adaptation
Change Challenges

System-level/Provider level

• With implementation of CPOE, less errors in medication dosing, greater polypharmac
• With changes in residency work hours, medical errors have not dramatically changes

Person-level

• In 1964, the Surgeon General said “people, smoking will kill you.” Still, ~17% of Americans smoke
• Obesity is of epidemic proportions (second leading cause of death – smoking still wins!)
The not-currently-motivated

• At any given time, 70% of smokers are not ready to quit

• Similarly, measuring “Organizational Readiness to Change” (ORCA) also suggests many hospitals and clinics are not ready for changes

• In my opinion, majority of work focuses on the ready to change.
Adult learning theory

- Adults need to be involved in planning their instruction and evaluating their results.
- We learn more effectively when new knowledge, skills, attitudes and values are presented in the context of their application to real life situations.
- Adults will be motivated to learn (as long as they perceive the learning as useful to help them perform tasks or solve problems they face in their lives.)

www.ncbi.nlm.nih.gov/pmc/articles/PMC4005174/
How Can I Know What I Don’t Know? Poor Self Assessment in a Well-Defined Domain

KEVIN W. EVA*, JOHN P.W. CUNNINGTON, HAROLD I. REITER, DAVID R. KEANE and GEOFFREY R. NORMAN

Table: Correlation between self-assessed ability and actual performance averaged across 10 discipline areas

<table>
<thead>
<tr>
<th></th>
<th>Factual recall</th>
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<tbody>
<tr>
<td><strong>Self-assessment versus proportion of correct responses</strong></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>-0.094</td>
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<tr>
<td>Year 2</td>
<td>-0.158</td>
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<tr>
<td><strong>Self-assessment versus number of questions attempted</strong></td>
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<tr>
<td>Year 1</td>
<td>-0.095</td>
</tr>
<tr>
<td>Year 2</td>
<td>-0.084</td>
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<tr>
<td><strong>Self-assessment versus number of correct responses of those attempted</strong></td>
<td></td>
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<tr>
<td>Year 1</td>
<td>0.036</td>
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<tr>
<td>Year 2</td>
<td>-0.122</td>
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*p < 0.05.
• One hundred thirty-three physicians provided information for 1,637 patients with diabetes.
• Total number of pages viewed decreased as quartile of A1c control worsened (137, 73, 68, 57; P = .007)
Of the 190 practices randomized, 143 (75%) dental practices provided follow-up data. Intervention practices' mean performance improved post-intervention: 11% increase in advice to quit smoking (patient-reported) (44% baseline, OR = 1.55 [95% CI 1.28-1.87]). A significant group-by-time interaction effect indicated that intervention practices improved more over the study period than control practices (P = 0.042). CONCLUSION: “This low-intensity, easily disseminated intervention was successful in improving provider performance on advice to quit.”

The unexamined life is not worth living.

Picture of Socrates
Patient-Centered Care

- focus on the individual patient’s particular health care needs, not just the population
- Patients and their families are empowered to become active participants in their care and play a role in decisions
- health care system’s mission, vision, values, leadership, and quality-improvement drivers are aligned to patient-centered goals
- providers become a patient advocate and strive to provide care is effective and safe
- the right care is provided at the right time and the right place.
- patients are active partners with their provider in their health care process

also https://catalyst.nejm.org/what-is-patient-centered-care/

Patient Rights and Responsibilities
“At UMass Memorial Health Care, our staff respects your rights as a patient and recognizes your individual health care needs. We want to be your partner in making decisions regarding your care.”
www.umassmemorialhealthcare.org/patient-rights-and-responsibilities

You are invited to the 10th Annual Massachusetts Department of Mental Health’s Research Centers of Excellence Conference “Person-Centered Integrated Care”
Date: Thursday, March 29, 2018 / Time: 8 AM - 1 PM
Location: Faculty Conference Room, UMass Medical School 55 Lake Avenue North, Worcester, MA
Summary of Challenges

• Theories, Models, Frameworks, Oh My!
• All are UNDERCOMPLICATED representations of reality
• Gaps in all
• Models become belief systems, do not evolve
• Many, Many, too many to choose from
• Few head-to-head comparisons of models
• Most research on the motivated, minority
Potential Partial Solutions
No amount of experimentation can ever prove me right; a single experiment can prove me wrong.

Picture of Albert Einstein, 1876-1955
Behavioral economics is cool and I’m not!

From https://medium.com/startup-grind/why-behavioral-economics-is-cool-and-i-m-not-807ca32fac5b
Behavioral economics

- People have limited cognitive abilities and
- A great deal of trouble exercising self-control
- Make choices that bear a mixed relationship to their own preference (such as happiness)
- tend to choose the option that has the greatest **immediate appeal** at the cost of long-term happiness, such as smoking, drinking, drugs and overeating, under-saving
- We are profoundly influenced by context and are not always rational

Policy makers might restructure environments to facilitate (nudge) better choices.
- simply rearranging items that are currently offered within the hospital cafeteria encourages us to buy more nutritious items
  - placing the fruit at eye level
  - make choices less convenient by moving soda machine into more distant areas.


TED Talks on Behavioral Economics: [www.ted.com/topics/behavioral+economics](http://www.ted.com/topics/behavioral+economics)
Collective Intelligence
Recommender Systems

Google
Yahoo!
Netflix
Amazon.com
Recommender System beat standard theory-driven System
Potential Partial Solutions

• Integration of Change Constructs
• Bridge across System, Provider, Patient models
• Use more data
• Balance
  • Emotion vs. Reason
  • Intensity vs. Scalability
  • Expert vs. Peer influence
  • Autonomy vs. Paternalism
• Use tactics from outside healthcare
  • Do things that are morally challenging?
Patient behavior Change
Self Determination Theory (SDT)

• A theory of motivation, concerned with supporting our natural or intrinsic tendencies to behave in effective and healthy ways.
  http://selfdeterminationtheory.org/

• change is more effective and lasting when patients are autonomously motivated.

• developing a sense of autonomy and competence are critical to the processes of internalization and integration, through which a person comes to self-regulate and sustain behaviors conducive to health and well being

Respondent-Driven Sampling

Wave 1 Recruit → Wave 2 → Wave 1

Social network

Wave 1

Peer Navigator

Wave 2

Social network

Wave 3

Decide2Quit.org
Patient Activation:

- having the knowledge, skills, and confidence to manage one’s health

- patient activation is strongly related to a broad range of health-related outcomes, suggesting improving activation has great potential.

- tailor support to the individual’s level of activation, encouraging small achievable steps for the low activated, and focusing on more difficult behaviors and the challenge of maintaining behaviors for those at higher levels of activation.

- In a study conducted within a disease management program, patient call centers were randomized to either tailor their coaching to the individual’s level of activation or to do “usual coaching”. Results: the tailored coaching group had significantly improved activation scores, improved adherence and clinical indicators, reduced hospitalization and ED use.