Frameworks and theories for implementation

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Outline

1. Frameworks: how to organize the implementation process
2. How to use theories for designing implementation strategies
3. How to link theories to implementation strategies
How to organize the implementation process…
## Implementation of Change Framework

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</thead>
</table>
| 1 | Development of proposal for change  
   | *e.g. recommendations in guidelines, quality indicators*                     |
| 2 | Analysis of actual performance  
   | *gap between theory and practice*                                           |
| 3 | Problem analysis  
   | *target groups, setting, facilitators, barriers*                           |
| 4 | Strategies  
   | *development and selection of interventions*                                |
| 5 | Implementation plan  
   | *development, testing and execution*                                       |
| 6 | Integration in routine care  
   | *creating practice routines*                                               |
| 7 | Evaluation and adaptation  
   | *evaluation of effects and costs, adjustment of plan*                      |

Grol 2013
Consolidated Framework for Implementation Research (CFIR)

Damschroder 2009
Knowledge to Action Framework (K2A)

Strauss, Tetroe & Graham 2009
How to use theories for designing implementation strategies...
<table>
<thead>
<tr>
<th>Theories</th>
<th>Aim</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social learning</td>
<td>Social networks</td>
<td>Diffusion of innovations (Rogers 1995)</td>
</tr>
<tr>
<td>Social marketing</td>
<td>Social networks</td>
<td>Change agents (Kottler 1991)</td>
</tr>
<tr>
<td>TQM</td>
<td>Organization</td>
<td>Changing culture, clear leadership, team building (Berwick 1989)</td>
</tr>
<tr>
<td>Process redesign</td>
<td>Organization</td>
<td>Chronic Care Model (Wagner 2001) Value based healthcare (Porter 2010)</td>
</tr>
</tbody>
</table>
Theory of planned behavior (Ajzen 1991)

- Knowledge
- Attitude
- Social influence
- Self effectiveness

Intention → Behavior

Intention is influenced by knowledge, attitude, social influence, and self-effectiveness.
## Stages of Change - Prochaska (1997)

<table>
<thead>
<tr>
<th>Stages of change</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Not acknowledging</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Acknowledging; but not sure</td>
</tr>
<tr>
<td>Preparation</td>
<td>Getting ready to change</td>
</tr>
<tr>
<td>Action</td>
<td>Changing behavior</td>
</tr>
<tr>
<td>Maintenance</td>
<td>integration, embedding</td>
</tr>
<tr>
<td>Relapse</td>
<td>Returning to old behavior</td>
</tr>
</tbody>
</table>
How to link theories to implementation strategies...
Behavior Change Wheel

Sources of behaviour  
- Intervention functions  
- Policy categories  

Michie 2011
Theoretical domains framework

- **Knowledge**
  - Are you aware of guidelines and evidence?

- **Skills**
  - Is sufficient training in techniques required?

- **Social/professional role and identity**
  - Is the action part of what the actor sees as ‘typical’ of their profession?

- **Beliefs about capabilities**
  - Are you confident in your capacity to do the behaviour? What makes it easier or difficult?

- **Optimism**
  - Is the actor generally optimistic that doing the behaviour will make a difference in the grand scheme of things?

- **Beliefs about consequences**
  - What are the benefits and negative aspects of doing the behaviour?

- **Reinforcement**
  - Does the behaviour lead to any personal or external reward when it is performed?

- **Intentions**
  - How motivated is the actor to do this?

- **Goals**
  - How much of a priority is this action compared to other competing demands?

- **Memory, attention and decision processes**
  - Does the actor ever forget? Are there reminders in place?

- **Environmental context and resources**
  - Are there sufficient resources to do the behaviour? If not, what is missing?

- **Social influences**
  - Who influences the decision to perform the behaviour?

- **Emotion**
  - Is performing the behaviour stressful?

- **Behavioural regulation**
  - What does the actor personally do to ensure that they perform the behaviour?
Linking theory with strategies

Individual professional
  Educational theories, Motivational theories

Social context
  Social influence, Leadership theories, Team climate

Organizational context
  Total Quality Management, Organizational theories

Economic and system context
  Economic theories, Complex system theories
Critical features of peer assessment of clinical performance to enhance adherence to a low back pain guideline for physical therapists: a mixed methods design

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Abstract

Background: Clinical practice guidelines are intended to improve the process and outcomes of patient care. However, their implementation remains a challenge. We designed an implementation strategy, based on peer assessment (PA) focusing on barriers to change in physical therapy care. A previously published randomized controlled trial showed that PA was more effective than the usual strategy “case discussion” in improving adherence to a low back pain guideline. Peer assessment aims to enhance knowledge, communication, and hands-on clinical skills consistent with guideline recommendations. Participants observed and evaluated clinical performance on the spot in a role-play simulating clinical practice. Participants performed three roles: physical
<table>
<thead>
<tr>
<th>Theory</th>
<th>Construct</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social constructivist learning theory</td>
<td>Contextual learning, collaborative learning, active participation</td>
<td>Presenting clinical problems that reflect authentic clinical practice</td>
</tr>
<tr>
<td>Situated learning theory</td>
<td>Learning in the context of daily practice</td>
<td>Delivering the program in communities of practice</td>
</tr>
<tr>
<td>Self regulated learning theory</td>
<td>Conscious goal setting and action planning</td>
<td>Designing an improvement plan based on peer feedback</td>
</tr>
<tr>
<td>Social cognitive learning theory</td>
<td>Performing the new behavior</td>
<td>Performing the new behavior individually</td>
</tr>
<tr>
<td></td>
<td>Observing the behavior of others</td>
<td>Observing a peer’s performance</td>
</tr>
<tr>
<td>Stages of change theory</td>
<td>Aligning strategies to stages of change</td>
<td>Peers capable of tailoring feedback to stages of change</td>
</tr>
<tr>
<td>Theory of planned behavior</td>
<td>Subjective norm</td>
<td>Introducing peers as assessor</td>
</tr>
</tbody>
</table>
Miller’s pyramid

- Knows
- Knows how
- Shows how
- Does
Making sense of all this with your own...

IS Sensemaking Toolbox