The Implementation Research Logic Model (IRLM)
A Method for Planning, Executing, Reporting, and Synthesizing Implementation Projects

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Do We Really Need Another Model?

essentially, all models are wrong, but some are useful

George E. P. Box
Yes, We Need Another Model

- Logic models often required by funders (EHE supplements!)
- Integrating the necessary conceptual elements of implementation research, which often involves multiple models, frameworks, and theories, is an ongoing challenge
- Transparency, Rigor, Openness, Specification, & Reproducibility
  - Rigor—the strict application of the scientific method to ensure robust and unbiased experimental design, methodology, analysis, interpretation and reporting of results
  - Improving the specification of phenomena in implementation research is necessary to inform our understanding of how implementation strategies work, for whom, under what determinant conditions, and on what implementation and clinical outcomes (Smith, Li, & Rafferty, 2020)
  - Testable way of explaining phenomena by specifying relations among variables, thus enabling prediction of outcomes (Glanz & Bishop, 2010)
Logic Models (in general)

• A graphic depiction that presents the shared relationships among various elements of a program or study
• Develop agreement among diverse stakeholders of the “what” and the “how”
• Improve planning by highlighting theoretical and practical gaps
• Support the development of meaningful process indicators for tracking
• Reproduce successful studies / identify failures of unsuccessful studies

Petersen, Taylor, & Peikes, 2013
Development of the IR Logic Model

Uses and Elements
Case Applications

• Used in the study of implementing a new model of patient care in a new physical space Implementation strategies

• Used in the first 6 months of three already-funded implementation research projects to plan for and describe the prospective implementation research aspects of the trials

• Applied in the later stages of a nearly completed implementation research project

• Used in a two-day training hosted by ISC^3i — EHE planning project grantees (post-training survey results will be presented)
Structure of the IRLM

- Began with the common “pipeline” logic model format used by AHRQ, CDC, NIH, PCORI, and others
  - Familiar to funders, investigators, readers, and reviewers
  - Adapted to integrate existing implementation science frameworks as its core elements with an eye toward facilitating causal modeling

Theory and Elements of the IRLM

• Generalized theory of the IRLM:
  • (1) implementation strategies selected for a given EBP are related to the implementation determinants (context-specific barriers and facilitators)
  • (2) strategies work through specific mechanisms of action to change the context or the behaviors of those within the context
  • (3) implementation outcomes are the proximal impacts of the strategy and its mechanisms, which then relate to the clinical outcomes of the EBP

• IRLM: Aid in the specification of the relationship between foundational elements of an IR study
  Determinant(s) → Implementation Strategy → Mechanism of Action → Outcomes
Definitions of IRLM Elements

• **Determinants**
  • Factors that might prevent or enable improvements (barriers & facilitators); may act as moderators or ‘effect modifiers,’ or as mediators; indicating that they are links in a chain of causal mechanisms (CFIR, Damschroder et al. 2009)

• **Implementation Strategies**
  • Supports, changes to, and interventions on the system to increase adoption of EBPs into usual care (Powell et al. 2012; Powell et al. 2015)

• **Mechanisms of Action**
  • Processes or events through which an implementation strategy operates to affect desired implementation outcomes (Lewis et al. 2018)

• **Outcomes**
  • **Implementation**: the effects of deliberate and purposive actions to implement new treatments, practices, and services (Proctor et al. 2011)
  • **Clinical**: the direct effects on participants of the EBP (e.g., symptoms, infection)
IRLM Formats
The Implementation Research Logic Model (IRLM)

Determinants
- Adaptable periphery
- Core components

Implementation Strategies
- Develop stakeholder interrelationships
- Utilize financial strategies
- Support clinicians
- Provide interactive assistance
- Train & educate stakeholders

Mechanisms
- Finance
- Policy Context
- Educate
- Quality Management
- Plan
- Restructure

Outcomes
- Implementation
- Outcomes
- Service
- Outcomes
- Client Outcomes

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IRLM for Comparative Implementation

Determinants
- Intervention Characteristics
- Inner Setting
- Outer Setting
- Characteristics of Individuals
- Process

Implementation Strategies
- Strategy Condition #1
- Strategy Condition #2

Mechanisms

Outcomes
- Implementation
- Service
- Clinical/Patient

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IRLM for Multi-Context Implementation of Single Intervention

Determinants
- Context #1
- Context #2

Implementation Strategies
- Strategies for Context #1
- Strategies for Context #2

Mechanisms

Outcomes
IRLM for Implementation Optimization Trial (4 clusters; 1 setting)

Determinants

Implementation Strategies

Mechanisms

Outcomes

Intervention Characteristics

Inner Setting

Outer Setting

Characteristics of Individuals

Process

Strategy Package #1

Strategy Package #2

Strategy Package #3

Strategy Package #4

Implementation Service

Clinical/Patient
IRLM with Clinical Intervention

Determinants
- Intervention Characteristics
- Inner Setting
- Outer Setting
- Characteristics of Individuals
- Process

Implementation Strategies

Mechanisms

Outcomes
- Implementation
- Service
- Clinical/Patient

Clinical Intervention
Determinants

Implementation Strategies

Strategy Mechanisms

Outcomes

Intervention Characteristics

Inner Setting

Outer Setting

Characteristics of Individuals

Process

Clinical Intervention

Intervention Mechanisms

Implementation

Service

Clinical/Patient

Northwestern Medicine

Feinberg School of Medicine

Center for Prevention Implementation Methodology

FOR DRUG ABUSE AND HIV
Using the IRLM

Guiding Principles
Principle 1: Strive for Comprehensiveness

• Determinants
  • Include all relevant determinants and not simply limit reporting to those that are hypothesized to be related to the strategies and outcomes
  • Valence should be noted
    • Simply adding plus (+) or minus (–) signs for facilitators and barriers, respectively
    • Using a coding system, such as that developed by Damschroder et al. 2013, to indicate the relative strength of the determinant
      –2 (strong negative impact)
      –1 (weak negative impact)
      0 (neutral or mixed influence)
      1 (weak positive impact)
      2 (strong positive impact)
  • Try not to use study-specific adjectives or change the name of the determinant (e.g., greater relative priority, addresses patient needs, good climate for implementation)
Principle 1: Strive for Comprehensiveness

• Implementation strategies
  • First, list all strategies in the system
  • Second, strategies should be labeled to indicate whether they were:
    (a) in place in the system prior to the study;
    (b) initiated prospectively for the purposes of the study (particularly for experimental study designs);
    (c) removed as a result of being ineffective or onerous; or
    (d) introduced during the study to address an emergent barrier or supplement other strategies because of low initial impact

• Relevant for IRLM used during planning, as an ongoing tracking system (article in process), for retrospective application to a completed study, and in the final reporting of a study
Principle 1: Strive for Comprehensiveness

• Outcomes
  • List all measured outcomes.
Principle 2: Indicate Key Conceptual Relationships

• Indicate the relationships between elements in a manner aligning with the specific theory of change for the study
  • Provide some form of notation to indicate these conceptual relationships using superscripts (preferred), color-coding, arrows (limited), or a combination of the three
    • Such notations in the IRLM facilitate reference in text to the study hypotheses, tests of effects, causal chain modeling, and other forms of elaboration
  • When presenting the IRLM using presentation programs (e.g., PowerPoint, Keynote, Prezi), colors and arrows can be helpful, and animations can make these connections dynamic and sequential without adding to visual complexity
**Principle 3: Specify Critical Study Design Elements**

- **Primary Outcomes**
  - Indicate the primary outcome(s) at each relevant level of the study design (i.e., clinician, clinic, organization, county, state, nation)
  - The levels should align with the specific aims and the level(s) targeted by the implementation strategy/ies
  - Suggestion: Include downstream health services and clinical outcomes even if they are not measured, as these are important for understanding the logic of the study and the ultimate health-related targets
Principle 3: Specify Critical Study Design Elements

- **For quasi/experimental designs**
  - Clearly label the independent variable(s) (i.e., the strategies that are introduced or manipulated or that otherwise differentiate study conditions)
    - important for internal validity and for differentiating conditions in multi-arm studies

- **For comparative implementation trials**
  - Indicate the determinants, strategies, mechanisms, and (potentially) the outcomes that differentiate the conditions
  - Might need to use an IRLM for each arm when the strategies either occur across two delivery systems or are simply were very different, by design

- **For implementation optimization designs**
  - Specify the different combinations, packages, or conditions being tested
Principle 3: Specify Critical Study Design Elements

• Additional specification options
  • Users of the IRLM can specify any number of additional elements that may be important to their study
    • Notate those elements of the IRLM that have been or will be measured versus those that were based on the researcher’s prior studies or inferred from findings reported in the literature
    • Indicate when implementation strategies differ by level or unit within the study (in large multisite studies, strategies might not be uniform across all units, particularly those strategies that already exist within the systems)
  • Be creative 😊
PSMG IRLM Example

Sustaining Proactive Physical Therapy (PT) for People with Early Parkinson’s Disease (PwEPD)
Implementing an Evidence-Based Clinical Intervention

• Sustaining regular exercise is associated with a slower decline in mobility and quality of life in people with Parkinson’s.

• How do we get people with Parkinson’s to exercise?
  
  • Physical therapy (PT) is a sustainable existing intervention that isn’t reliant on grant funding.
  
  • Clinical Practice Guidelines support PT soon after diagnosis for exercise advice.
  
  • But people with Parkinson’s don’t regularly go to PT, especially not early after diagnosis.
Project Context and Timeline

- **Proactive PD Program established 2016**
- **Spread in 2018**

**Fall 2015**
- Local Implementation of Proactive PT for Early PD

**Fall 2016**
- IRLM
- Spread & Sustain Beyond Health System

**Fall 2017**
- Study Spread & Sustainment in Health System

**Fall 2018**
- Fall 2019

Using Implementation Frameworks to Provide Proactive Physical Therapy for People With Parkinson Disease: Case Report

Miriam R Rafferty 1, Jillian MacDonald 2, Alexandria Byskosh 3, Laura Sloan 4, Santiago Toledo 5, Christina Marciniak 6, Tanya Simuni 5

Affiliations + expand
PMID: 31508801  PMCID: PMC7372734  DOI: 10.1093/ptj/pzz129

Free PMC article
Sustaining Proactive Physical Therapy (PT) for People with Early Parkinson’s Disease (PwEPD)

**Determinants**

- + CPGs support this EBI explicitly
- + Uses institutional processes
- - Weak objective measures of exercise and physical activity

**Evidence-Based Clinical Intervention**

1. MD refers PwEPD to PT
2. Physical therapists assess exercise, gait, and balance
3. Therapist prescribes, trains, and facilitates comprehensive exercise plan in 1-4 visits
4. Therapist monitors patients’ exercise participation and progression with regular re-checks every 3-12 mo

**Mechanisms**

- Increasing MD referrals increases access to PT
- Trained and supported physical therapists will effectively guide patients to effective, individually-tailored, and supported exercise participation
- Increased knowledge of Proactive PT approach through system increases buy-in and proportion of PwEPD accepting PT referrals
- PwEPD who are well-informed of their functional status and exercise strategies, and how have regular touch-points with physical therapists, will be more likely to increase and maintain regular exercise
- PwEPD better able to identify barriers and contact team

**Outcomes**

- Increased MD referrals to PT in PwEPD
- High program fidelity from physical therapists
- Increased adoption of Proactive PT by referrers, physical therapists and patients over long-term

**Key Implementation Strategies**

**Process**

- Local needs assessment
- Adaptable infrastructure changes (schedule triggers)
- Record OM in EMR or other Organization/System

**Characteristics of Individuals**

- +/- Site champions needed, bandwidth for professional growth
- +/- Clinical manager support
- +/- Informed patients

**Characteristics of Settings**

- +/- Organizational endorsement of EBIs & learning health system
- +/- Networks of clinics promote communication & collaboration
- +/- Demand from patients and MDs

**Process**

- Training, staffing, scheduling, adaptation, and sustainment barriers
- +/- Facilitator and site champions address barriers iteratively

**Abbreviations:** CPG=clinical practice guidelines; EBI= evidenced based intervention; EMR= electronic medical record; MD= medical doctor; OM=outcome measures; PM&R=physical medicine and rehabilitation; PwEPD=people with early PD; PT=physical therapy

## Completed Hypothetical IRLM

### Obesity Management Intervention implemented in Community Health Centers (CHCs)

### Determinants

<table>
<thead>
<tr>
<th>Intervention Characteristics</th>
<th>Inner Setting</th>
<th>Outer Setting</th>
<th>Clarity of Individuals</th>
<th>Process</th>
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</thead>
<tbody>
<tr>
<td>Intervention Source +2</td>
<td>Relative Advantage +2</td>
<td>Evidence Strength &amp; quality +2</td>
<td>Competing demands -1 D</td>
<td>Evidence Based +1</td>
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<tr>
<td>Relative Advantage +2</td>
<td>Evidence Strength &amp; quality +2</td>
<td>Design quality &amp; packaging +1 L</td>
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<td>Appropriate in primary</td>
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<td>Evidence Based +1</td>
<td>Readiness for implementation -1 C</td>
<td>Available Resources +1</td>
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<tr>
<td>Appropriate in primary</td>
<td>Networks &amp; communications +1 K</td>
<td>Leadershi engagement -</td>
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<td>Structural Characteristics +1</td>
<td>Readiness for implementation -1 C</td>
<td>Statewide initiatives</td>
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<tr>
<td>Available Resources +1</td>
<td>Available Resources +1</td>
<td>Statewide initiatives</td>
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<tr>
<td>Implementation climate</td>
<td>Implementation climate</td>
<td>Statewide initiatives</td>
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</tbody>
</table>

### Implementation Strategies

|-------------|-------------------------------------------------|-----------------------------|---------------------------------|-----------------|---------------------------------|-----------------------------|-----------------------------|---------------------|-----------------------------|-----------------------------|

### Behavioral Obesity Management Program

1. Individual/group visits
2. Multidisciplinary team
   a. Centralized case management
   b. Clinician champion
3. Bluetooth-enabled home scales
4. 2-way Automated Text Messaging
5. On-site recruitment/enrollment
6. Online Community Resources Guide
7. Online Self-Guided Nutrition Resources
8. EHR support tool build
   a. BMI alert
   b. BMI longitudinal tracking
   c. Alerts for labs
6. Physical Activity/Nutrition Counseling

### Mechanisms

| Knowledge and skill set improved for clinic staff | Self-efficacy improved of clinic staff | Flexibility of the package is continually adapted (adaptable, complexity) | Internal structural barriers are reduced (competing demands) | External support for patient needs are identified, leveraged, and made available (external policy and incentives) |
|-------------------------------------------------|-------------------------------|---------------------------------|----------------|---------------------------------|-------------------|---------------------------------|-------------------|

### Outcomes

<table>
<thead>
<tr>
<th>Reach</th>
<th>Adoption</th>
<th>Acceptability (program, strategies)</th>
<th>Feasibility (program, strategies)</th>
<th>Fidelity (program, strategies)</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Budget Impact Analysis</th>
<th>Equity (reach rates by race, age, BMI)</th>
<th>Timeliness (time from identification to program enrollment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C, H, I</td>
<td>K, L</td>
<td>C, H, I, L</td>
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### Implementation

<table>
<thead>
<tr>
<th>Service</th>
<th>Clinical/Population</th>
</tr>
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<tbody>
<tr>
<td>BMI</td>
<td>C, H, I, L</td>
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<td>Quality of Life</td>
<td>C, H, I, L</td>
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<tr>
<td>Home health routines</td>
<td>C, H, I, L</td>
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<tr>
<td>Sibling Eating</td>
<td>C, H, I, L</td>
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<tr>
<td>Stress</td>
<td>C, H, I, L</td>
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<tr>
<td>Acceptability (program, strategies)</td>
<td>C, H, I, L</td>
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<tr>
<td>Feasibility (program, strategies)</td>
<td>C, H, I, L</td>
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<tr>
<td>Retention (completion)</td>
<td>C, H, I, L</td>
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<tr>
<td>Cost Effectiveness</td>
<td>C, H, I, L</td>
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</table>
Using the IRLM for Different Purposes and Stages of Research

Planning, Executing, Reporting, Synthesizing
Planning

• Often begins with the known parameter(s) of the study
  • Working from the two “bookends” of the IRLM (context and outcomes often known; strategies, mechanisms, and even the EBP often are not)

• Work with community partners and/or organization stakeholders to fill in the implementation strategies that are likely to be feasible and effective (Waltz et al. 2015)

• Posit conceptually derived mechanisms of action based on determinants, strategies, and targeted outcomes
Executing

• Majority of the parameters will be known

• However, through completing the IRLM prior to the start of studies, we found that:
  • IRLM helped to reveal important contextual factors
  • Additional implementation strategies were needed to complement the primary ones proposed
  • Mechanisms needed to be added and measured

• Completed IRLM serves as ”protocol” and can form the basis for ongoing tracking of what occurs, what is altered, deviations, etc.
Reporting

• Nearly all elements of the IRLM will be known
• Means of showing what happened during the study
• Accurate reporting of the hypothesized relationships that were observed
• Facilitates communication of the findings
Synthesizing

• **Purpose**: draw conclusions for the implementation of an EBP/similar EBPs in a particular context (or across contexts) that are shared and generalizable to provide a guide for future research and implementation

• Being applied in a NCI-funded research consortium
Supporting Text and Resources

- Data re: determinants
- Measures
- Strategy specification (Proctor, Powell, & McMillen, 2013)
- “Paths” supported by theory (e.g., Lewis et al. 2018)
- Trial design description and methods
- Implementation plan/process model (e.g., EPIS)

By utilizing superscripts, subscripts, color, and other notations within the IRLM, it is easy to refer to (a) hypothesized causal paths in theoretical overviews and analytic plan sections; (b) planned measures for determinants and outcomes; and (c) specific implementation strategies in text, tables, and figures.
Acceptability and Usability of the IRLM

Results of a Post-Training Survey of EHE Planning Project Grantees
ISC$^3$I’s *Ending the HIV Epidemic* Summit

- Coordinating and technical assistance center for grantees funded under the national *EHE* plan
- 2-day in-person training in Chicago, IL, in October 2019
- N=132 participants from 63 projects
  - n=129 pre-training survey
  - n=66 post-training survey 6 weeks after
    - 42 investigators, 24 implementation partners; 68.2% women
    - 44.6% indicated having completed a full draft of the IRLM for their project
- 10 items related to the IRLM plus one about the general logic of implementation research
  - Rated on a 4-point scale from 1 (*not at all*) to 4 (*very much*)
IRLM was either “moderately” or “very” helpful in:

1) Improving the rigor and reproducibility 77.7%, $M=3.05^*$
2) Serving as a “roadmap” for the project 74.0%, $M=3.08$
3) Clearly reporting and specifying the project plan 67.8%, $M=2.94$
4) Understanding connections between determinants, strategies, mechanisms, and outcomes 66.3%, $M=2.92$
5) Identifying gaps in the IR logic of their project 64.2%, $M=2.86$
6) Deepening their knowledge of IR methods 62.9%, $M=2.83$
7) Planning the project 61.3%, $M=2.82$
8) Developing consensus and understanding of the project among diverse stakeholders involved 58.8%, $M=2.75$
9) Identifying gaps in research questions/analyses 51.3%, $M=2.54$

* All SDs = 0.89–1.09
Additional Results

- 74.1% ($M=3.02$, $SD=.886$) said the worksheets provided during the summit were “moderately” or “very” helpful in completing the IRLM.

- 77.6% ($M=3.18$, $SD=.827$) said their knowledge on the logic of implementation research increased “moderately” or “very much” after the two-day training.

- No statistically significant difference between investigators and implementation partners.
  - Approached significance: Investigators scored higher on project planning, reporting/specifying project plan, and knowledge of IR logic.
plans to monitor and evaluate the ability of the activities to achieve the outcome. Most importantly, applicants must clearly indicate how the proposed activities outlined in the supplement requests are expected to lead to development of the stated goals.

c. Provide an implementation logic model and describe what aspects of the logic model are being studied and with emphasis on implementation barriers/facilitators (determinants), how implementation strategies will address these determinants, and which implementation outcomes will be measured and expected to improve. Describe the implementation science framework or model utilized to support the logic model and to guide the study design and evaluation methods.
Resources for Using the IRLM

Quick Reference Guide, Worksheets, Templates, Examples

IRLM Website
Quick Reference Guide

Determinants

Factors that might prevent or enable improvements (barriers & facilitators). May act as moderators, effect modifiers, or mediators, indicating that they are links in a chain of causal mechanisms.

Intervention Characteristics

- Intervention source; Evidence strength and quality; Relative advantage; Adaptability; Trialability; Complexity; Design quality and packaging; Cost

Inner Setting

- Structural characteristics; Networks and communication; Culture; Implementation climate; Readiness for implementation

Patient Needs and Resources

- Cosmopolitanism; Peer pressure; External policies and incentives

Characteristics of Individuals

- Knowledge/beliefs about intervention; Individual stage of change; Self-efficacy; Individual identification with the organization; Other attributes

Process

- Engaging; Planning; Executing; Reflecting and Evaluating

Implementation Strategies

Interventions on the system to increase adoption of evidence-based innovations into usual care. A theory- or logic-driven connection should link an implementation strategy to (a) the barriers it will attempt to overcome and/or (b) the facilitators it will attempt to leverage.

Types

1. Plan; Educate; Finance; Restructure; Quality management; Policy context (Powell et al., 2012; Bunger et al., 2017)
2. Engage consumers; Evaluate; Change infrastructure; Stakeholder interrelationships; Financial strategies; Clinician support; Interactive assistance; Train and educate; Adapt (Powell et al., 2015; Waltz et al., 2015)

Mechanisms

Processes or events through which an implementation strategy operates to affect desired implementation outcomes (Lewis et al. 2018)

Mechanisms explain how an implementation strategy has an effect by describing the actions that lead from the administration of the strategy to the most proximal behavioral (individual, system) and/or implementation outcomes (i.e., mechanisms are the exact series of steps through which the change came about; Kazdin, 2007).

Some potential mechanisms:
1. Altering the status of a determinant.
2. Changing the behavior or attitude of an implementer (i.e., a proximal outcome that precedes an implementation outcome)

Note. Although mediation analysis can be informative, mediators identified statistically are not necessarily mechanistic.

Outcomes

The effects of deliberate actions to implement an EBI.

Types

1. Reach; Adoption; Implementation; Maintenance (RE-AIM; Glasgow et al., 1999)
2. Acceptability; Adoption; Appropriateness; Cost; Feasibility, Penetration; Fidelity; Sustainability (Proctor et al., 2011)
3. Speed and Quantity (Chamberlain, Brown, & Saldana, 2011)

Efficiency; Safety; Equity; Effectiveness; Patient-centeredness; Timeliness (IOM Standards of Care, 2006)

Satisfaction

Functioning

Symptomatology

...many others

Center for Prevention Implementation Methodology
FOR DRUG ABUSE AND HIV
### Implementation Research Logic Model

**IRLM — Implement**

Smith, Li, & Rafferty, 2020

**RE-AIM Framework**

**Expert Recommendations for Implementing Change (ERIC: Powell et al., 2015, Waltz et al., 2013)**

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<tr>
<th><strong>Characteristics of Implementation</strong></th>
<th><strong>Strategy</strong></th>
<th><strong>Process</strong></th>
<th><strong>Service outcome</strong></th>
<th><strong>Proctor et al., 2014</strong></th>
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**Reach (Effectiveness)**

1. From either taxonomy
2. Considering for you
   a. For help select ERIC Match
   b. For a full list of https://link/ing
   c. For a full list of https://img/ai

3. Add your discrete strategies

**Implementation**

- Leadership engagement
- Available resources
- Access to knowledge

**Translational**

- Facilitation
- Provide local technical assistance
- Provide clinical supervision
- Centralize technical assistance

**Provide interactive assistance**

- Tailor strategies
- Promote adaptability
- Use data experts
- Use data warehousing techniques

**Adapt and tailor to context**

- Develop stakeholder interrelationships
  - Identify and prepare champions
  - Organize clinician implementation team meetings
  - Recruit, designate, and train for leadership
  - Inform local opinion leaders
  - Build a coalition
  - Obtain formal commitments

**Train and educate stakeholders**

- Conduct ongoing training
- Provide ongoing consultation
- Develop educational materials
- Distribute educational materials
- Use train-the-trainer strategies
- Create a learning collaborative

**Support clinicians**

- Facilitate relay of clinical data to providers
- Remind clinicians
- Develop resource sharing agreements
- Revise professional roles
- Create new clinical teams

**Engage consumers**

- Involve patients/consumers and family members
- Intervene with patients/consumers to enhance uptake and adherence
- Prepare patients/consumers to be active participants
- Increase demand
- Use mass media

**Proctor et al., 2014**

- Planning
- Education
- Finance
- Restructure
- Policy

**Change infrastructure**

- Mandate change
- Change record systems
- Change physical structure and equipment
- Change service sites
IRLM Website

https://cepim.northwestern.edu/implementationresearchlogicmodel/
Concluding Thoughts
Concluding Thoughts

• Visual depiction of implementation project
• Usability is high for seasoned and novice implementation researchers alike
• Could increase the rigor and transparency of complex studies that ultimately could improve reproducibility
• Common structure to increase consistency
• Method for more clearly specifying links and pathways to test theories
• Simplified format – balance depth and detail
• May inhibit creative thinking if applied too rigidly
References


