# Expert Recommendations for Tailoring Strategies to Context

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# …and the rest of the ERIC Team

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# Agenda

**Byron Powell**

- Refining a Compilation of Discrete Implementation Strategies and Determining Their Importance and Feasibility

**Tom Waltz**

- Structuring Complex Recommendations: Methods and General Findings

**Laura Damschroder**

- Matching refined compilation of strategies to contextual constructs in the Consolidated Framework for Implementation Research (CFIR)

# Poll Question

Which response best describes the nature of your work?

- I conduct or collaborate on implementation research studies
- I implement programs and/or engage in quality initiatives
- I do some of both
- None of the above

# *Refining a Compilation of Discrete Implementation Strategies and Determining Their Importance and Feasibility*

Byron J. Powell, PhD

Thomas J. Waltz, PhD, PhD

Matthew J. Chinman, PhD

Laura J. Damschroder, MS, MPH

Jeffrey L. Smith, PhDc

Monica M. Matthieu, PhD

Enola K. Proctor, PhD

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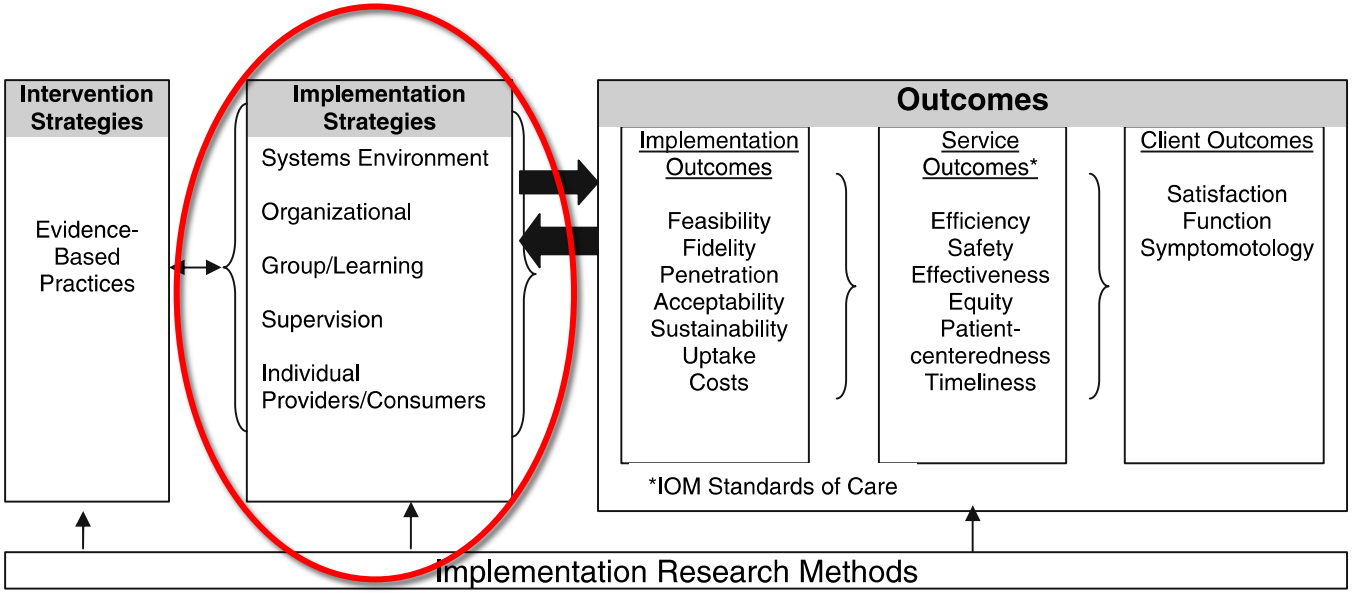
# Implementation Strategies

"Methods or techniques used to enhance adoption, implementation, and sustainability of a clinical program or practice." (Proctor, Powell, & McMillen, 2013)



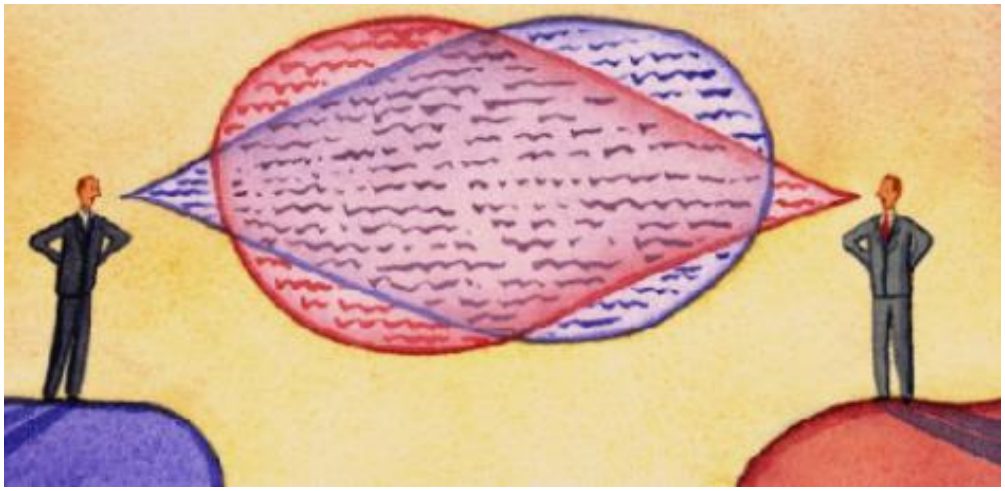

(Proctor et al., 2009)

# Initial Question

What strategies can be used to implement evidence-based innovations in clinical settings?

# Problem

- Literature a “Tower of Babel” (McKibbon et al., 2010)
- Strategy terms and definitions used inconsistently
- Strategies poorly described



# Attempt to Improve Clarity

*Review*

**A Compilation of Strategies for Implementing Clinical Innovations in Health and Mental Health**

Medical Care Research and Review
69(2) 123–157
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/1077558711430690
http://mcr.sagepub.com
SAGE

**Byron J. Powell[1], J. Curtis McMillen[2], Enola K. Proctor[1], Christopher R. Carpenter[3], Richard T. Griffey[3], Alicia C. Bunger[4], Joseph E. Glass[1], and Jennifer L. York[3]**

68 discrete strategies

- *Planning*
- *Educating*
- *Financing*
- *Restructuring*
- *Managing quality*
- *Attending to policy context*

***Limitations:***

- Not informed by wide-range of implementation & clinical experts
- No consensus beyond review team
- Categories not empirically derived

# Poll Question #2

Have you heard of the “ERIC” compilation of implementation strategies?

- What is ERIC?
- Yes, but I haven’t thought about using it
- I have thought about using the ERIC list of strategies
- I have used the ERIC list in my work

# Purpose of Stage 1 & 2 of ERIC

**Stage 1**: Establish expert consensus on a common nomenclature for implementation strategy terms and definitions

**Stage 2**: Develop conceptually distinct categories of implementation strategies and ratings of their feasibility and effectiveness

Waltz *et al. Implementation Science* 2014, **9**:39
http://www.implementationscience.com/content/9/1/39

IMPLEMENTATION SCIENCE

STUDY PROTOCOL Open Access

Expert recommendations for implementing change (ERIC): protocol for a mixed methods study

Thomas J Waltz[1,2*], Byron J Powell[3,4], Matthew J Chinman[5,6], Jeffrey L Smith[1], Monica M Matthieu[7], Enola K Proctor[3], Laura J Damschroder[8] and JoAnn E Kirchner[1,9]

# Expert Panel Participants

Snowball reputation-based sampling procedure:

- Editorial board of *Implementation Science*
- IRC's for VA QUERIs
- IRI faculty and fellows
- Restricted to 4 primary time zones in U.S.

71 participants

- 97% from U.S.; 3% from Canada
- 90% had expertise in implementation
- 45% also experts in clinical practice
- ~66% affiliated with VA

# Stage One: 3 Round Delphi

- Seeded with Powell et al. (2012) compilation
- Rounds 1 & 2 – Asynchronous web-based surveys to refine and extend original compilation
- Round 3 – Web-based polling and consensus process

***Powell et al. (2012)***

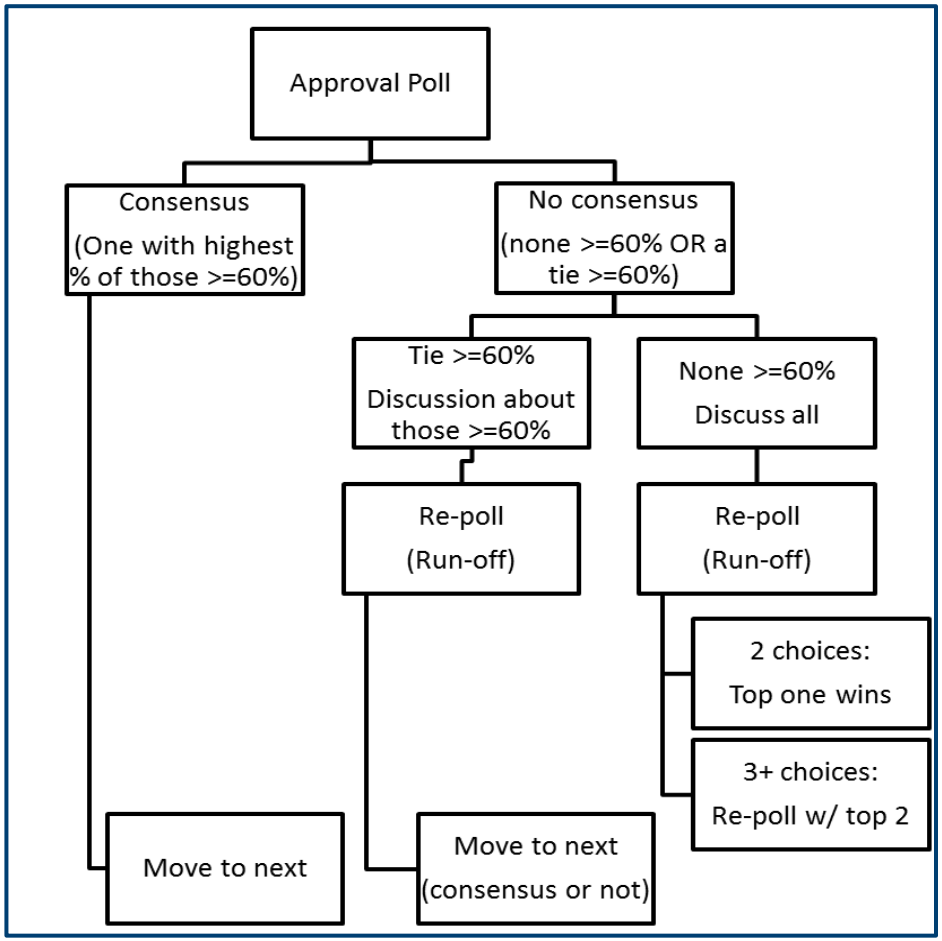
***Rounds 1 & 2 (n = 57 & 43)***

SurveyMonkey

***Round 3 (n = 40)***

GoToMeeting
by CITRIX

# Round 3 Voting Procedures



# Stage 2: Concept Mapping

- 35 members of the expert panel
- Engaged in structured sorting and rating tasks in Concept Systems Global MAX™
- Multidimensional scaling and hierarchical cluster analysis used to produce visual representations of interrelationships

# Participant View of Sorting Task

Expert Recommendations for Implementing Change (ERIC)

signed in as bjpowell@wustl.edu sign out

Instructions | Create a pile | Save | Arrange all | Minimize all | Maximize all | Edit pile name | Switch to

**PROJECT FOCUS PROMPT:**

**Progress Bar**

3 out of 73 sorted.

**Unsorted statements:**

Alter patient/consumer fees

Assess for readiness and identify barriers and facilitators

**Unnamed Pile 1**

Access new funding

**Unnamed Pile 2**

Alter incentive/allowance structures

**Unnamed Pile 3**

Build a coalition

http://www.conceptsystemsglobal.com

# Participant View of Rating Task

Expert Recommendations for Implementing Change (ERIC)

The Concept System ®
Global MAX ©

hide menu | signed in as Thomas Waltz | sign out | save | cancel | home | help

Progress:

**Project Home**

Brainstorming (73)
status: *OPEN*

Sorting
status: *OPEN*

Importance
status: *OPEN*

Feasibility
status: *OPEN*

**My Account**

My Projects
Edit Profile
Change Password
Sign out

**Importance Rating** [PREVIEW]

Please rate the following statements. We recognize that your rating may vary with the specifics of a particular implementation initiative. Later in the ERIC process, participants will be asked to recommend specific strategies given descriptions of specific implementation initiatives and organizational contexts. For now, please base your ratings on your general impression.

Please select a number from 1 to 5 for each discrete implementation strategy to provide a rating in terms of how important you think it is. Keep in mind that we are looking for *relative* importance use all the values in the rating scale to make distinctions. Use the following scale:

**Importance Rating**

1 = **Relatively unimportant**

2 = **Somewhat important**

3 = **Moderately important**

4 = **Very important**

5 = **Extremely important**

**Project Focus Prompt:**

○ Show unrated statements only ◉ Show all statements

| Statement | Rating |
|---|---|
| Access new funding | |
| Alter incentive/allowance structures | |
| Alter patient/consumer fees | |
| Assess for readiness and identify barriers and facilitators | |
| Audit and provide feedback | |

http://www.conceptsystemsglobal.com

# Stage 1: Results of Rounds 1-3

- Majority of terms and definitions from original compilation (69%) considered “no contest” and weren’t subjected to voting
- 21 strategies and five new strategies voted on in R3
- Alternative def. selected 81% of the time
  - 75% of definitions from Powell et al. retained
- Each new strategy retained
- Final compilation = 73 strategies

# “Final” Compilation

Powell *et al. Implementation Science* (2015) 10:21
DOI 10.1186/s13012-015-0209-1

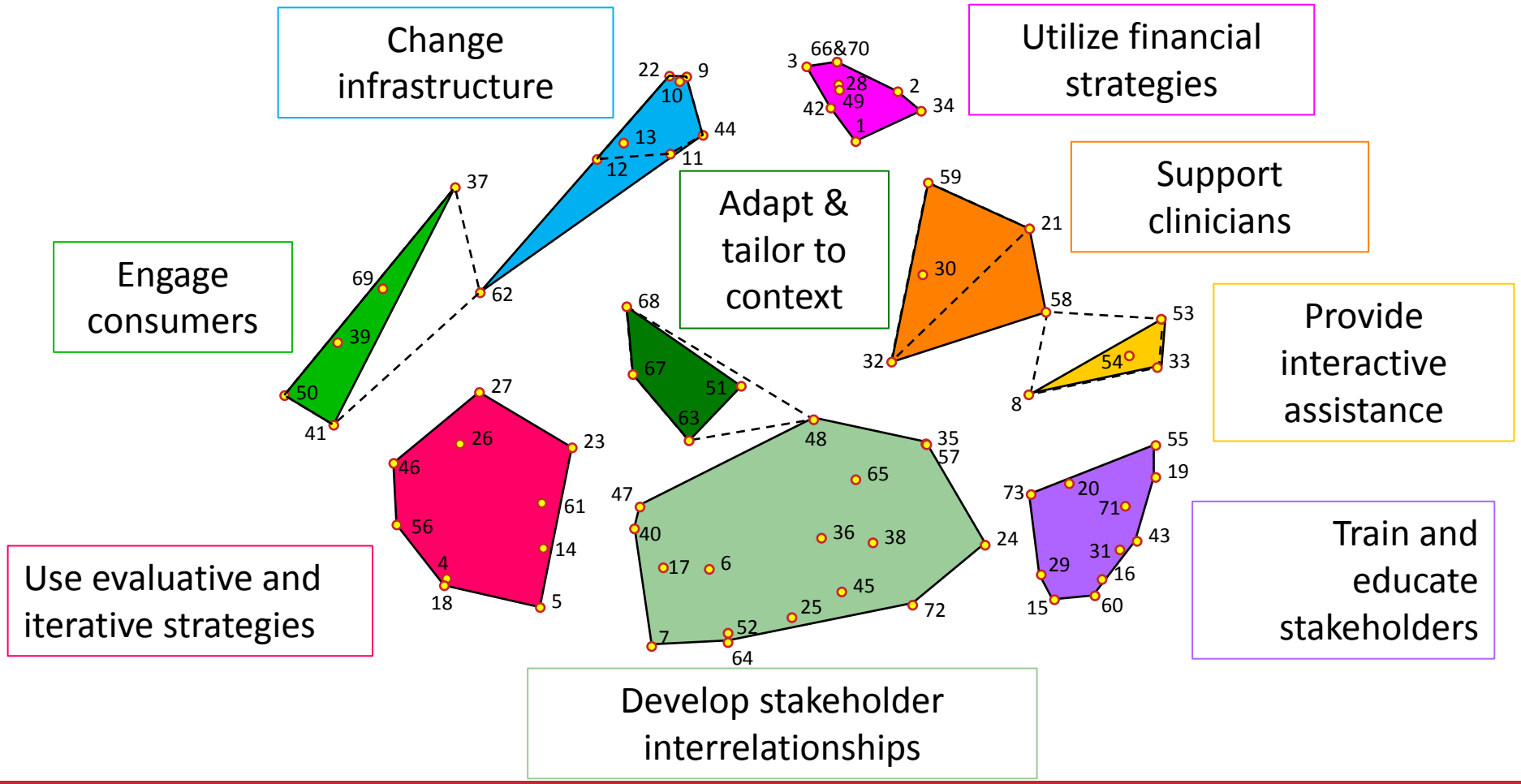
IMPLEMENTATION SCIENCE

RESEARCH Open Access

## A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project

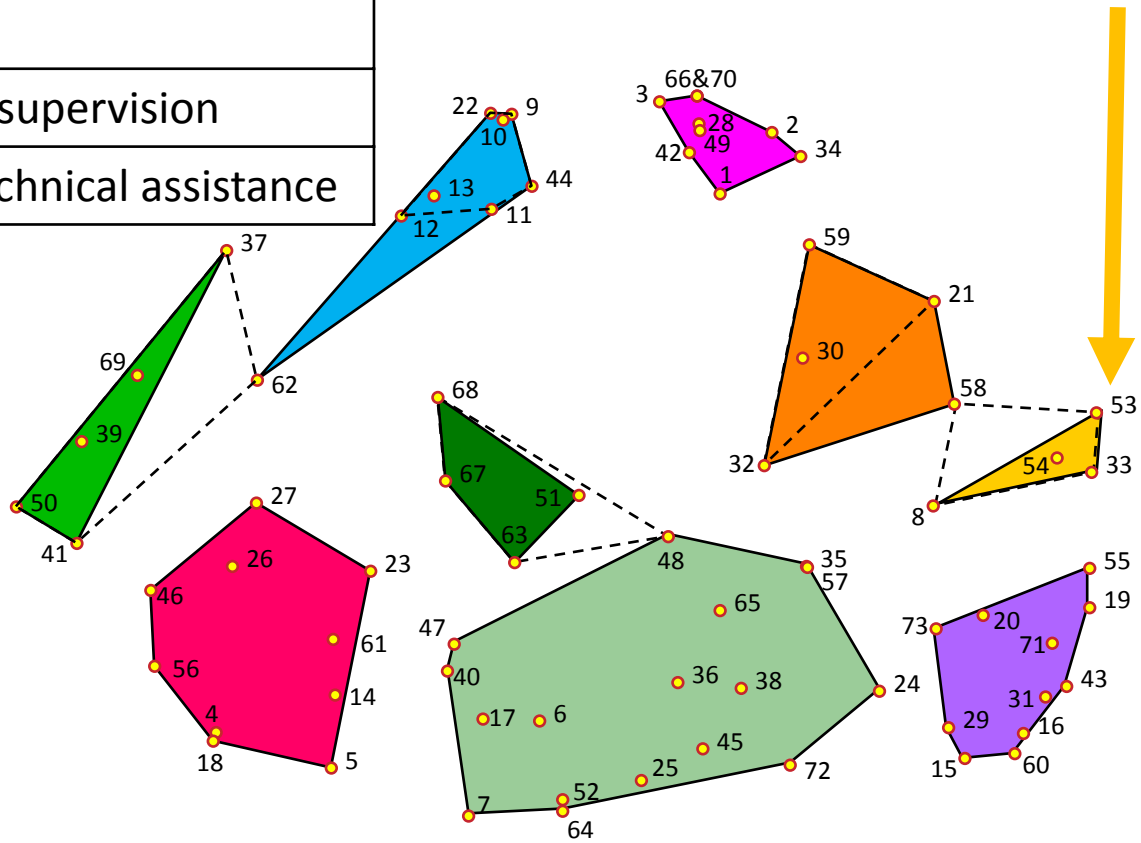
Byron J Powell[1*], Thomas J Waltz[2], Matthew J Chinman[3,4], Laura J Damschroder[5], Jeffrey L Smith[6], Monica M Matthieu[6,7], Enola K Proctor[8] and JoAnn E Kirchner[6,9]

# Cluster Solution



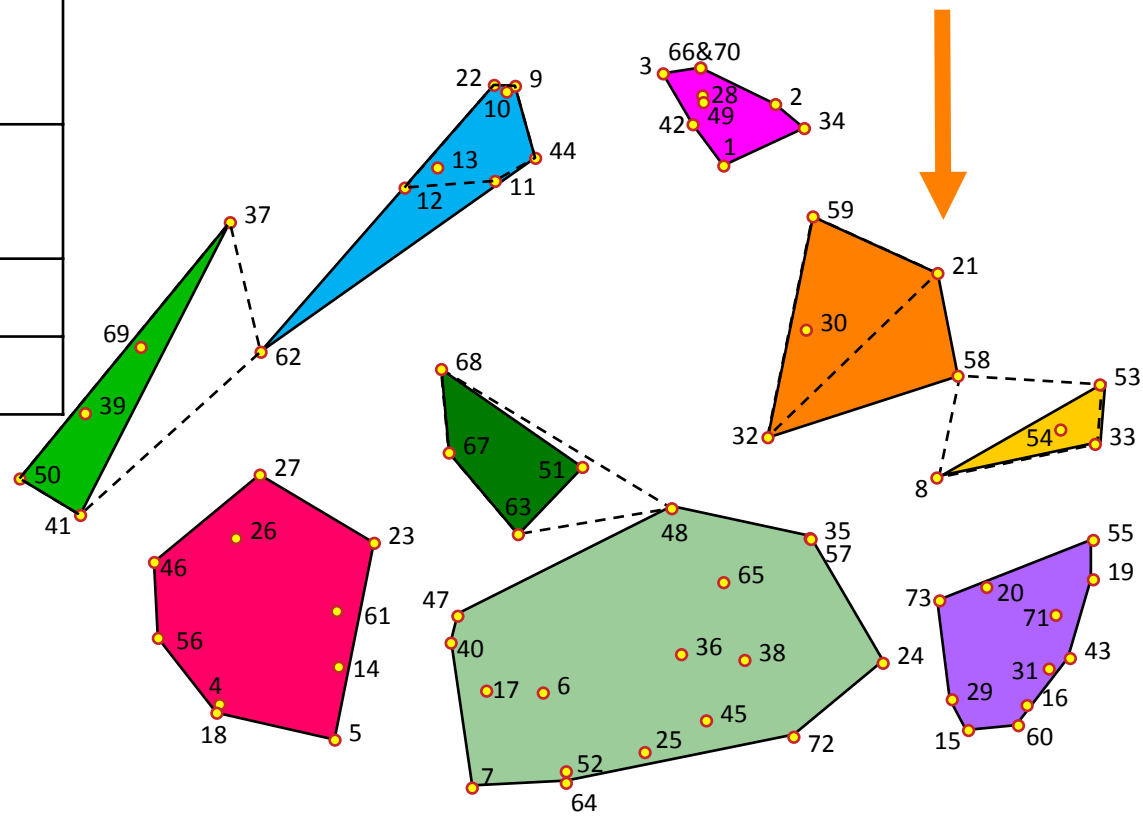
# Provide Interactive Assistance

| | |
|---|---|
| 8 | Centralize technical assistance |
| 33 | Facilitation |
| 53 | Provide clinical supervision |
| 54 | Provide local technical assistance |

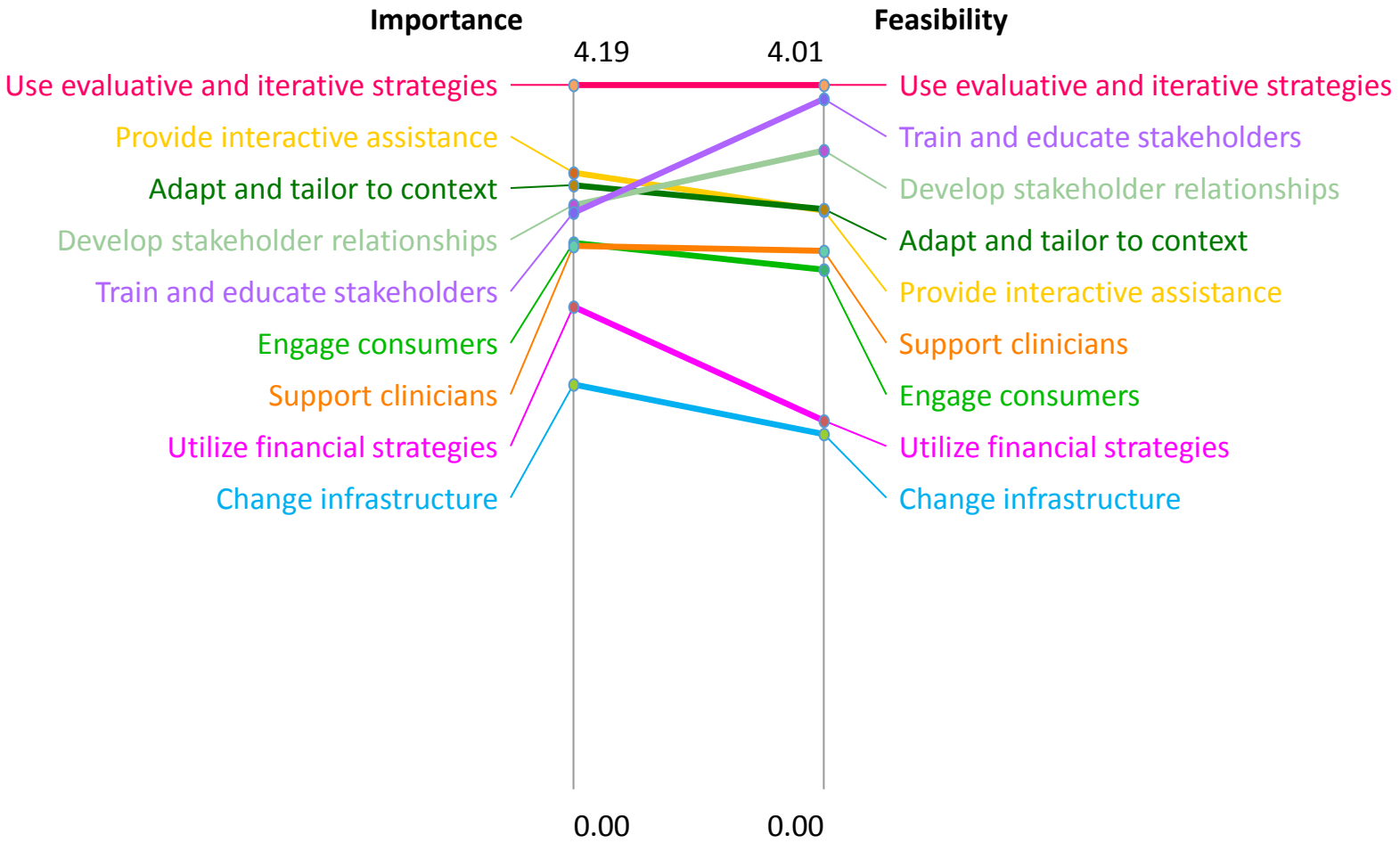


# Support Clinicians

| | |
|---|---|
| 21 | Create new clinical teams |
| 30 | Develop resource sharing agreements |
| 32 | Facilitate relay of clinical data to providers |
| 58 | Remind clinicians |
| 59 | Revise professional roles |



# Relative Ratings by Cluster

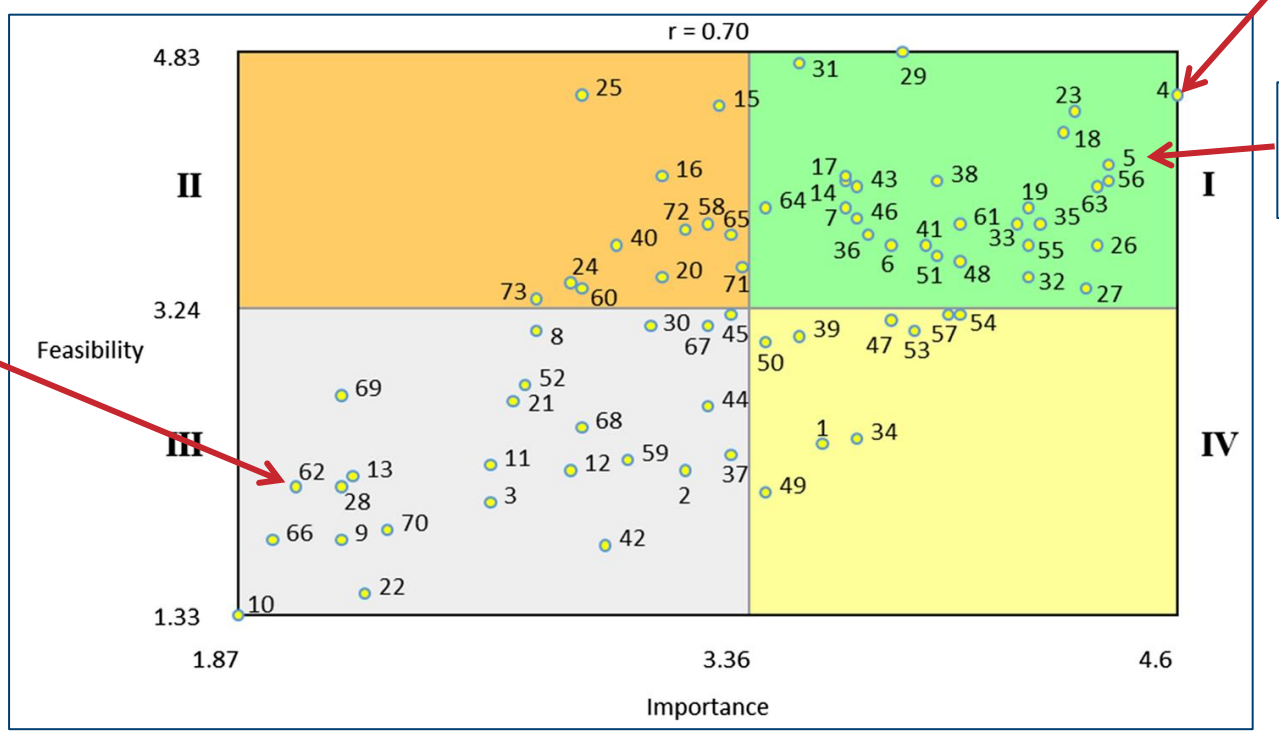


# “Go Zone”

Assess for readiness & identify barriers and facilitators

Audit & Feedback

Start dissemination organization



# Concept Mapping Results

Waltz *et al. Implementation Science* (2015) 10:109
DOI 10.1186/s13012-015-0295-0

IMPLEMENTATION SCIENCE

SHORT REPORT Open Access

## Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from the Expert Recommendations for Implementing Change (ERIC) study

Thomas J. Waltz[1,2*], Byron J. Powell[3], Monica M. Matthieu[4,5,10], Laura J. Damschroder[2], Matthew J. Chinman[6,7], Jeffrey L. Smith[5,10], Enola K. Proctor[8] and JoAnn E. Kirchner[5,9,10]

# Uses of Compilation & Ratings

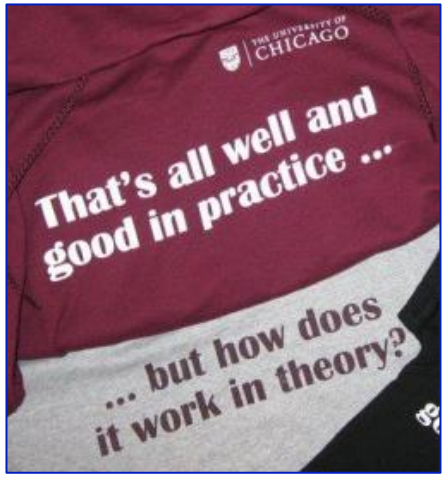
- Building blocks for strategy development and testing
- Improve specification and reporting of strategies in efficacy, effectiveness, and implementation research
- Assess strategy use prospectively or retrospectively

# Limitations

- Expert panel limited to North America
- In-person meetings may have added nuance
- Compilation is not linked to:

Context

Theory




Evidence

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Eastern Michigan University

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Central Arkansas VA Healthcare System

**Byron J. Powell, PhD**
University of North Carolina at Chapel Hill

**Matthew J. Chinman, PhD**
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**Enola K. Proctor, PhD**
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**JoAnn E. Kirchner, MD**
QUERI for Team Based Behavioral Health, Central Arkansas Veterans Healthcare System,
University of Arkansas for Medical Sciences

# Develop expert consensus on the types of strategies needed to implement different clinical innovations in different settings

# Initial Question

What strategies are most important to implement <u>different types</u> of evidence-based innovations in <u>different settings</u>?

# Menu Based Choice

***ERIC project's penultimate activity was a menu based choice (MBC) task.***

- MBC methods are used in consumer marketing research (aka "build your own" tasks), to identify optimal product configuration for goods and services.
- MBC tasks are useful for providing a context rich structure for making decisions that involve multiple elements.

# Methods

Panelists to examine 73 implementation strategies organized into 9 categories

***MBC Task:*** Build multi-strategy implementation approaches for 3 particular ***clinical practice changes*** being implemented in VA healthcare settings.

Each practice change with 3 accompanying scenarios describing:

- Specific relative strengths and weaknesses

*AND*

- Varying contextual characteristics

# High Priority Clinical Practice Initiatives

**3 VA quality improvement efforts focused on:**

1. Improving safety for patients taking antipsychotic medications *(Smith)*
2. Depression outcome monitoring in primary care mental health *(Kirchner)*
3. Prolonged exposure therapy for treating post-traumatic stress disorder *(Matthieu)*

# Practice Initiative Scenario Development

- **Developed using key informant interviews**
- **Current expertize in the respective area**
- **Provide common and realistic challenges they face in routine service delivery in VA settings:**
  - Front line providers
  - Clinical managers
  - Health service researchers
  - Implementation scientists

# Practice Initiative Scenario Development (2)

- Initial draft scenario developed by study team lead with input from clinical providers, managers, and researchers
- Reviewed and edited by entire ERIC study team, then sent back to lead for content validity
- Final review by purposefully chosen content experts in the specific practice change and familiar with implementation science (i.e., target group)
  - Asked to rate "*for each of the three scenarios, how similar that clinic is to the clinic you work in and to other clinics in the VA*"
  - Asked for "*suggestions for improving the content of the scenario narratives so they better match your PTSD clinic or other known PTSD clinics at the VA.*"

# Expansion for Context and Evidence

- ERIC project staff then systematically expanded each of the scenarios to:

*address varying organizational contexts*

- **Organizational culture**
- **Leadership**
- **Evaluation infrastructure**

*across levels of evidence*

- **Strength and quality**
- **Relative advantage**
- **Compatibility**
- **Adaptability**

# Example of Varying Context

| Relatively Weak | Relatively Strong |
|---|---|
| Culture:<br>• resources not allocated well<br>• staff/clients held in low regard<br>• lack of consistency in an individuals' roles in relation to the treatment team and leadership | Culture:<br>• resources generally allocated well<br>• staff/clients valued<br>• consistency of individuals' roles in relation to the treatment team and leadership |
| Leadership:<br>• poor/inconsistent support for the practice change<br>• authoritarian/autocratic<br>• poorly defined roles<br>• poor organizational structures | Leadership:<br>• strong/consistent support for the practice change<br>• transformational leadership<br>• clearly defined roles<br>• effective organizational structures |
| Evaluation:<br>• absence of feedback<br>• narrow use of performance information sources<br>• productivity measures (e.g., wRVU) de-incentivize the practice change | Evaluation:<br>• feedback for individual, team and system performance<br>• use of multiple sources of information on performance<br>• productivity measures (e.g., wRVU) incentivize the practice change |

# Example of Varying Evidence

| | Evidence | | | |
|---|---|---|---|---|
| **Practice Change** | | **Perceived evidence for the practice change is relatively *weak*** | **Perceived evidence for the practice change is relatively *strong*** | **Practice Change** |
| **(1) Prolonged Exposure for PTSD** | **Evidence Strength & Quality:** **Evidence Strength & Quality:** Research supporting the practice change is viewed as poorly applicable to the clinical setting or is not valued as evidence | **Although** Prolonged Exposure is an evidence-based practice for the effective treatment of PTSD, care providers and mental health leadership at PTSD Clinic **X** **are skeptical of the claim** that this specific treatment can help improve care for their patients with PTSD **any** better than the treatment options currently offered. | Prolonged Exposure is an evidence-based practice for the effective treatment of PTSD, therefore, care providers and mental health leadership at PTSD Clinic X believe in the research indicating that this specific treatment can help improve care for their patients with PTSD better than the treatment options currently offered. | **Evidence Strength & Quality:** **Evidence Strength & Quality:** Research supporting the practice change is viewed as applicable to the clinical setting and is valued as evidence for the practice change |

# Sampling Strategy

## 8 member investigative team

Purposive snowball sampling strategy:

- Began with experts identified in the earlier modified-Delphi process
- Leverage current professional relationships
- Recruit and retain (N=20) panelists for each practice initiative
- Labor intensive MBC task (*45-180 minutes; M=90 minutes*)
- Identified lead study team member for follow-up

# Participant Characteristics

| | Depression | PE for PTSD | Safety Monitoring |
|---|---|---|---|
| Participants | 20 | 22 | 20 |
| VA Affiliation | 75% | 91% | 75% |
| Implementation (IS) Expertise | 35% | 36% | 42% |
| Clinical Expertise | 20% | 10% | 43% |
| IS and Clinical Expertise | 45% | 55% | 32% |

- **31% of recruited experts participated**
- **Target duration for data collection phase: 6 weeks**
- **Actual duration of data collection phase: 12 weeks**

# Materials Developed for Panelists

## *Essential Supporting Documents* included:

- Introduction
- Description of the background for the targeted practice initiative
- Details of the target practice
- Processes integral to implementing the target practice
- Three scenarios, each with different relative strengths and weaknesses
  - Narrative
  - Side-by-side

# Optional Supporting Documents

**Brief Compilation:** List of all the strategies and their definitions

**ERIC Comprehensive Compilation:** Brief Compilation and summaries of ratings that were obtained in the Concept Mapping task in ERIC Phase 1.

**Concept Mapping Results:**

1. Summary of the sorting and rating data from the concept mapping task expert panelists completed in ERIC Phase 1.
2. Graphs that group the strategies spatially based on how often they were sorted together as similar.
3. Plots depict the average importance and feasibility ratings expert panelists provided for each strategy.

**Approval Webinar Results:** All of the strategies and the definitions that were evaluated in the modified-Delphi process in ERIC Phase 1.

- Each definition and its alternatives are presented with voting data for strategies with alternative definitions proposed.

# Menu Based Choice Task

**Implementation of Prolonged Exposure for Treating PTSD among Veterans in the VHA**

Please view the file ***PE for PTSD Description*** for the prose descriptions of the elements of this practice change (p. 2) and descriptions of Scenarios A, B, and C. Additional support materials are described in the *Read First* worksheet in this Excel workbook (bottom left tab).

**This worksheet is for Scenario A, found on p. 4 of the PE for PTSD Description file.**

To make a recommendation, click on a cell & small arrow will appear to the right. If you click on that arrow, you will view your recommendation options.

**Please make a recommendation for each strategy at each of the three phases of implementation.**

Feel free to take notes in the cells below. Suggestio material regarding how to fit particular strategies to t welcome, but not required.

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | **Recommendations for Scenario A** | | | |
| 4 | Discrete Strategy List by Cluster | Pre-implementation | Active Implementation | Sustainment | **Notes:** |
| 5 | **Use Evaluative and Iterative Strategies** | | | | |
| 6 | Assess for readiness and identify barriers and facilitators | A. absolutely essential | likely essential | B. likely essential | |
| 7 | Audit and provide feedback | A. absolutely essential | A. absolutely essential | A. absolutely essential | |
| 8 | Conduct cyclical small tests of change | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 9 | Conduct local needs assessment | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 10 | Develop a formal implementation blueprint | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 11 | Develop and implement tools for quality monitoring | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 12 | Develop and organize quality monitoring systems | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 13 | Obtain and use patients/consumers and family feedback | C. likely inessential | C. likely inessential | C. likely inessential | |
| 14 | Purposefully re-examine the implementation | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 15 | Stage implementation scale up | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 16 | **Provide Interactive Assistance** | | | | |
| 17 | Centralize technical assistance | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 18 | Facilitation | B. likely essential | C. likely inessential | C. likely inessential | |
| 19 | Provide clinical supervision | A. absolutely essential | A. absolutely essential | A. absolutely essential | |
| 20 | Provide local technical assistance | B. likely essential | B. likely essential | C. likely inessential | |
| 21 | **Adapt and Tailor to the Context** | | | | |
| 22 | Promote adaptability | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |
| 23 | Tailor strategies | D. absolutely inessential | D. absolutely inessential | D. absolutely inessential | |

Read First | Scenario A | Scenario B | Scenario C | Admin

# 3 Scenarios Varying Evidence and Context

Scenario A (weak evidence, weak context)

Scenario B (strong evidence, weak context)

Scenario C (weak evidence, strong context)

| "Absolutely Essential" Strategies (Part 1) | DEP | PTSD | Safety |
|---|---|---|---|
| Assess for readiness and identify barriers and facilitators | X | X | X |
| Audit and provide feedback | X | X | X |
| Conduct cyclical small tests of change | | | X |
| Conduct local needs assessment | X | X | X |
| Develop a formal implementation blueprint | | X | X |
| Develop and implement tools for quality monitoring | | | X |
| Develop and organize quality monitoring systems | | | X |
| Purposefully re-examine the implementation | | | X |
| Facilitation | X | X | X |
| Provide clinical supervision | | X | |
| Promote adaptability | X | | X |
| Tailor strategies | X | X | X |
| Build a coalition | X | | X |
| Capture and share local knowledge | | | X |

| "Absolutely Essential" Strategies (Part 2) | DEP | PTSD | Safety |
|---|---|---|---|
| Conduct local consensus discussions | | | X |
| Identify and prepare champions | X | X | X |
| Identify early adopters | | X | X |
| Inform local opinion leaders | | X | X |
| Organize clinician implementation team meetings | | | X |
| Recruit, designate, and train for leadership | X | | X |
| Conduct educational meetings | | | X |
| Conduct ongoing training | X | X | X |
| Develop educational materials | X | | X |
| Distribute educational materials | X | | X |
| Make training dynamic | | | X |
| Provide ongoing consultation | | X | X |
| Facilitate relay of clinical data to providers | X | | X |
| Remind clinicians | X | | X |

| "Absolutely INESSENTIAL" Strategies | DEP | PTSD | Safety |
|---|---|---|---|
| Develop an implementation glossary | | X | |
| Work with educational institutions | X | | |
| Develop resource sharing agreements | X | | |
| Use mass media | X | | X |
| Alter patient/consumer fees | X | X | X |
| Develop disincentives | | | X |
| Make billing easier | | | X |
| Use capitated payments | X | | X |
| Use other payment schemes | X | | |
| Change accreditation or membership requirements | X | | X |
| Change liability laws | X | X | X |
| Change service sites | X | X | |
| Create or change credentialing and/or licensure standards | X | | X |
| Start a dissemination organization | X | X | |

# Discussion

- MBC produced distinct recommendations
- Absolutely Essential & Likely Essential ratings
- Epoch data
- More context?
- Potential impact of panel composition on the types of strategies endorsed
- Collaborating with partners

# *Matching the compilation of ERIC strategies to contextual barriers guided by the Consolidated Framework for Implementation Research (CFIR)*

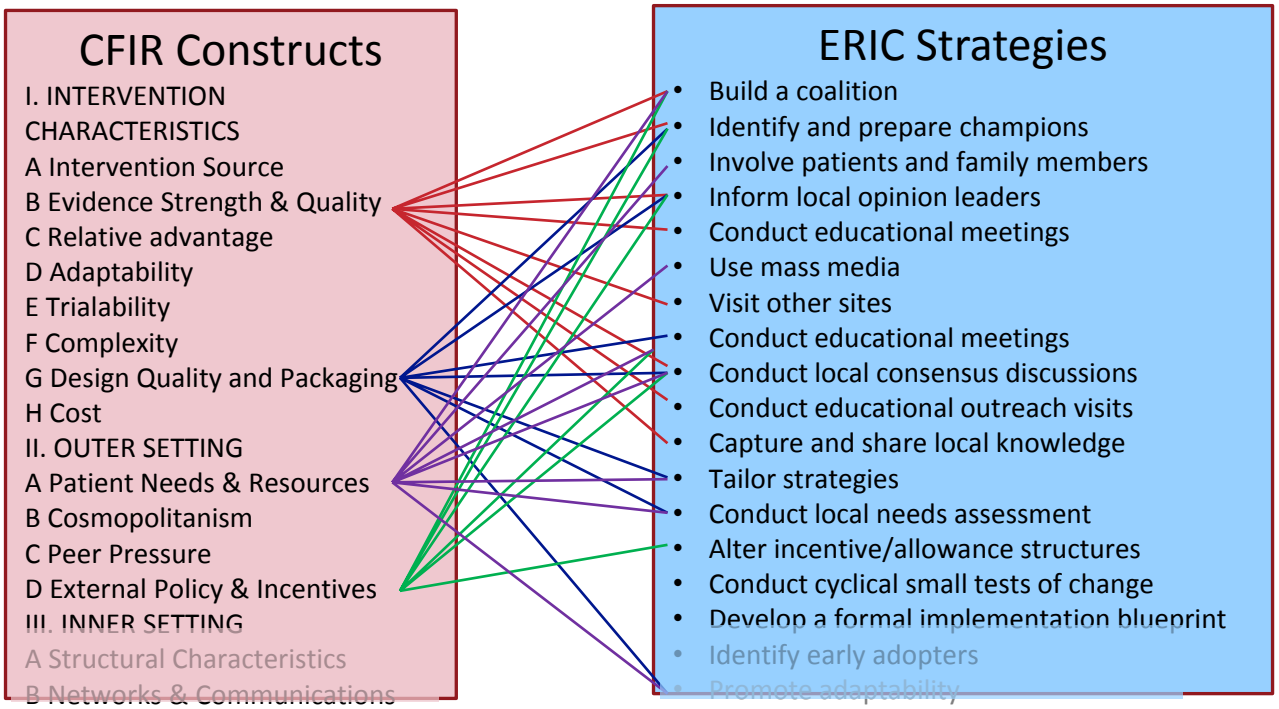
Laura J. Damschroder, MS, MPH

Thomas J. Waltz, PhD, PhD

Byron J. Powell, PhD

# Research Question

**Which ERIC strategies <u>best address barriers specified by constructs from the CFIR</u>?**



# Poll Question #3

Have you heard of the CFIR?

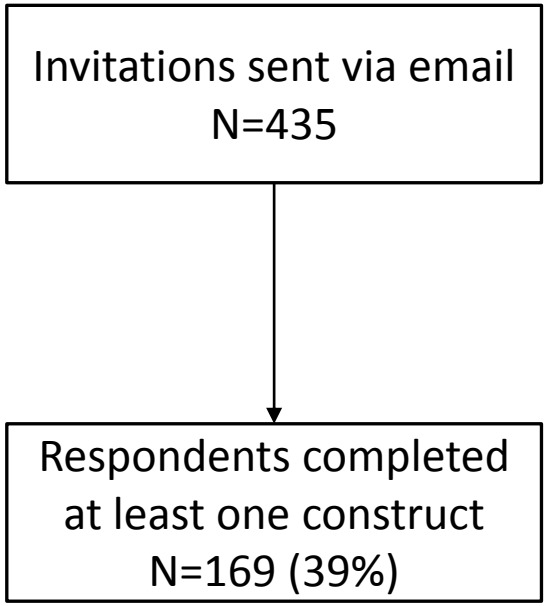
- What is  the CFIR?
- I am familiar with the CFIR
- I have thought about using the CFIR in my work
- I have used the CFIR in my work
- None of the above

# CFIR: 5 Domains, 39 constructs

| Construct | | Short Description |
|---|---|---|
| **I. INTERVENTION CHARACTERISTICS** | | |
| A | Intervention Source | Perception of key stakeholders about whether the intervention is externally or internally developed. |
| B | Evidence Strength & Quality | Stakeholders' perceptions of the quality and validity of evidence supporting the belief that the intervention will have desired outcomes. |
| C | Relative advantage | Stakeholders' perception of the advantage of implementing the intervention versus an alternative solution. |
| D | Adaptability | The degree to which an intervention can be adapted, tailored, refined, or reinvented to meet local needs. |
| E | Trialability | The ability to test the intervention on a small scale in the organization [8], and to be able to reverse course (undo implementation) if warranted. |
| F | Complexity | Perceived difficulty of implementation, reflected by duration, scope, radicalness, disruptiveness, centrality, and intricacy and number of steps required to implement |
| G | Design Quality and Packaging | Perceived excellence in how the intervention is bundled, presented, and assembled |
| H | Cost | Costs of the intervention and costs associated with implementing that intervention including investment, supply, and opportunity costs. |

# Methods

# Participants



# Survey of Implementation Experts

innovation (e.g., through social marketing, education, role modeling, training) are ineffective or non-existent.

Drag and drop ERIC strategies from the left column to the Rankings box and order them so that #1 is the top strategy.

Having Trouble?

Select and rank up to 7 strategies that best address barriers related to **Relative Priority:**

♦ Stakeholders perceive that implementation of the innovation takes a backseat to other initiatives or activities. ♦

**Items**

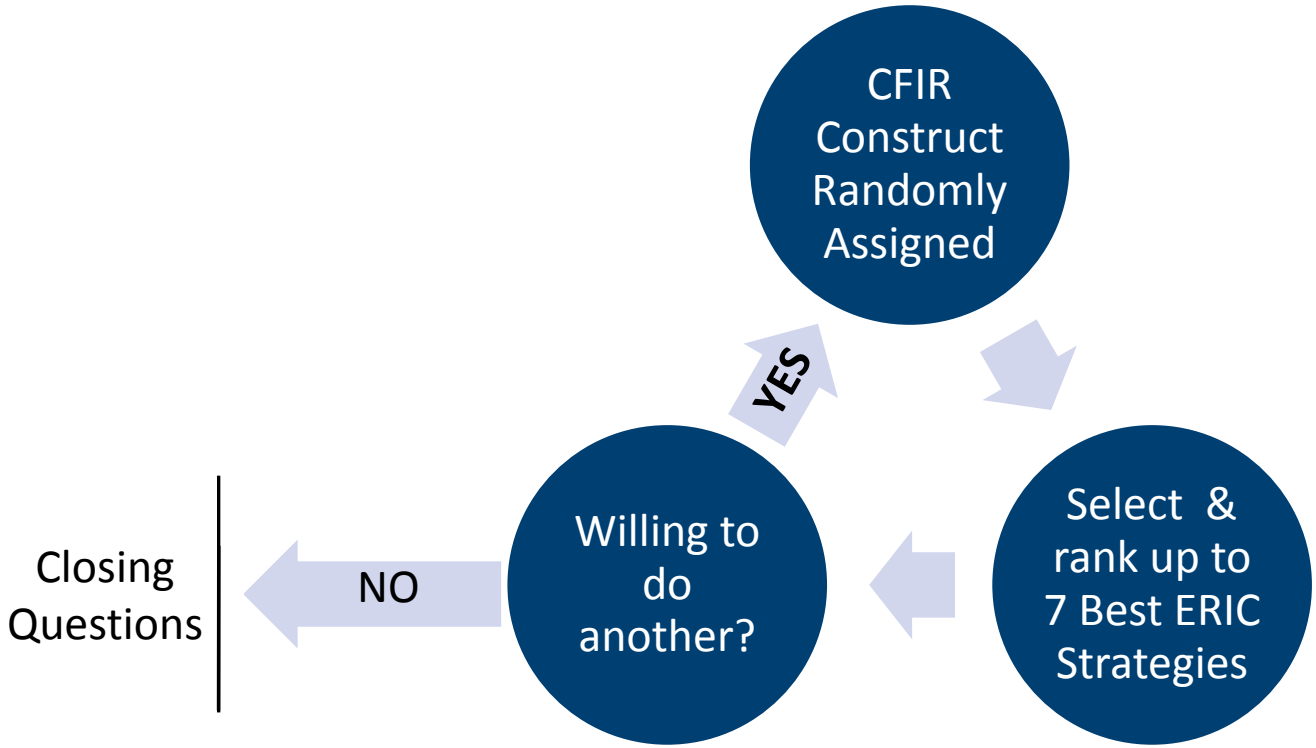
- Access new funding
- Alter incentive/allowance structures
- Alter patient/consumer fees
- Assess for readiness and identify barriers and facilitators
- Audit and provide feedback
- Build a coalition
- Capture and share local knowledge
- Centralize technical assistance
- Change accreditation or membership requirements
- Change liability laws
- Change physical structure and equipment
- Change record systems
- Change service sites

**Rankings**

Conduct local consensus discussions

- Conduct local consensus discussions
- Conduct local needs assessment
- Conduct ongoing training
- Create a learning collaborative
- Create new clinical teams
- Create or change credentialing and/or licensure standards
- Develop a formal implementation blueprint

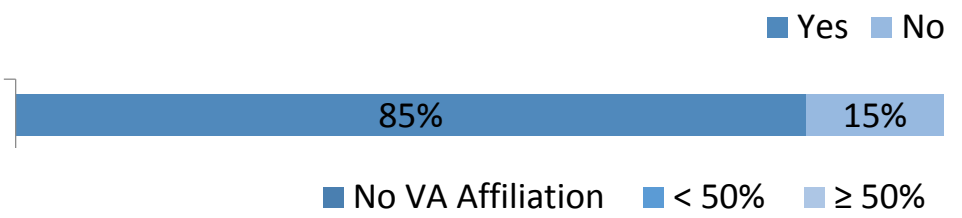
# Assignment of CFIR constructs



# Participant Characteristics

Implementation experts have knowledge and experience related to changing care practices, procedures and/or systems of care. Based on the above definition…

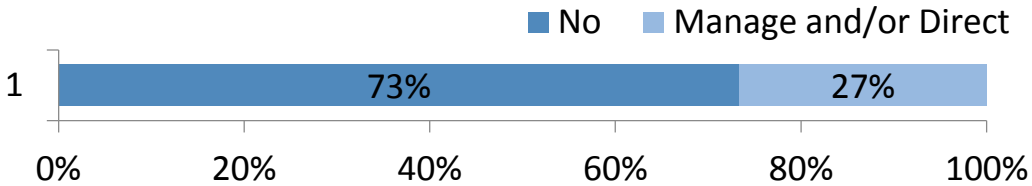
…could someone accuse you of being an implementation expert?



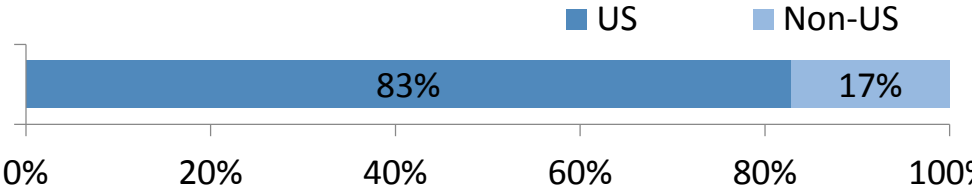

How much of your employment is with the VA?

How much of your employment is dedicated to research?

Does your employment include any clinical responsibilities?
CHECK ALL THAT APPLY




Nationality of respondent



# Mapping Results

# Mapping Results: ***Example***

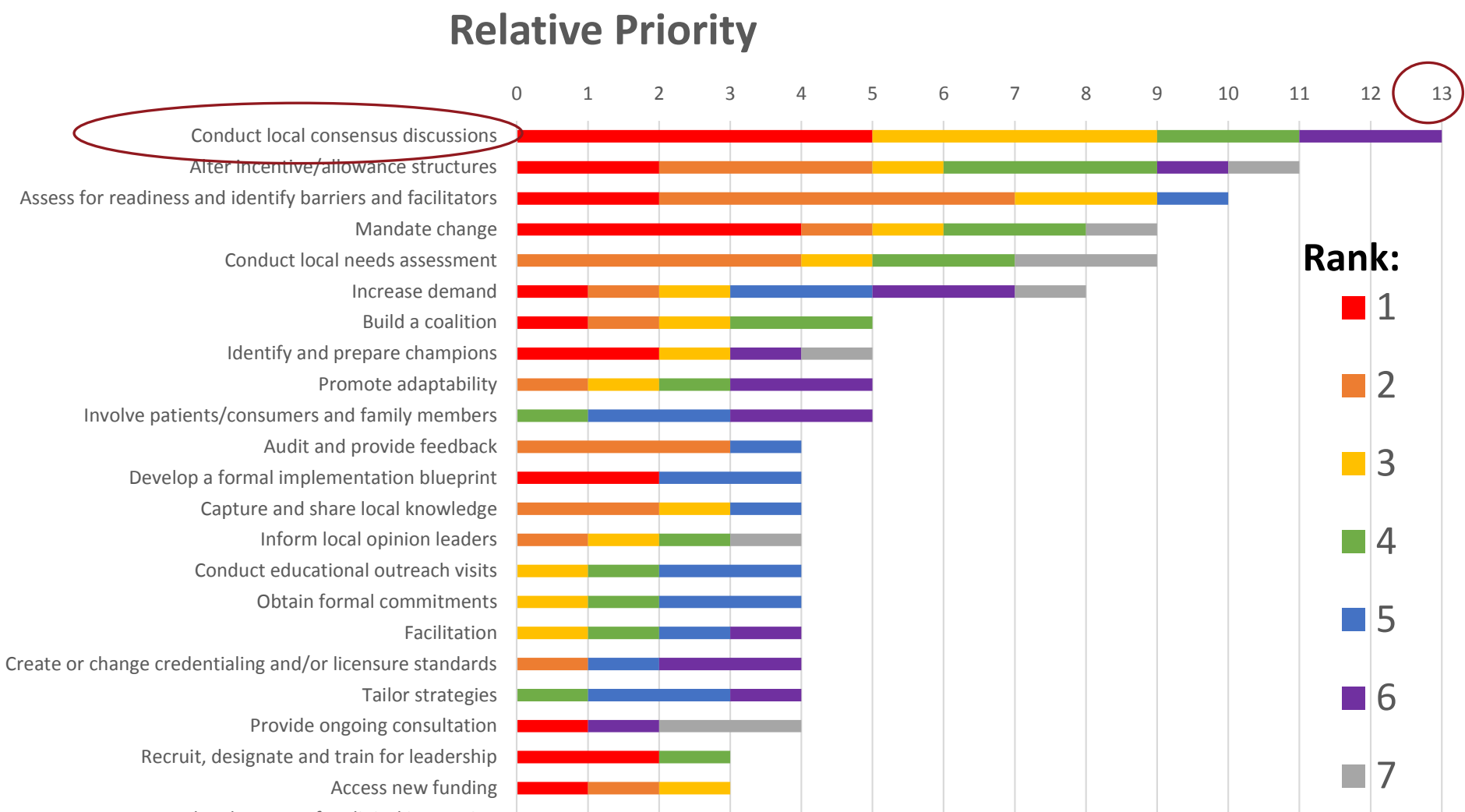
Select and rank up to 7 strategies that best address barriers related to **Relative Priority:**

♦ Stakeholders perceive that implementation of the innovation takes a backseat to other initiatives or activities. ♦

N = 28 respondents:

- Endorsed 53 different ERIC strategies in the top best 7

# ERIC strategies chosen: Relative Priority n=28



# Wide distribution of endorsements

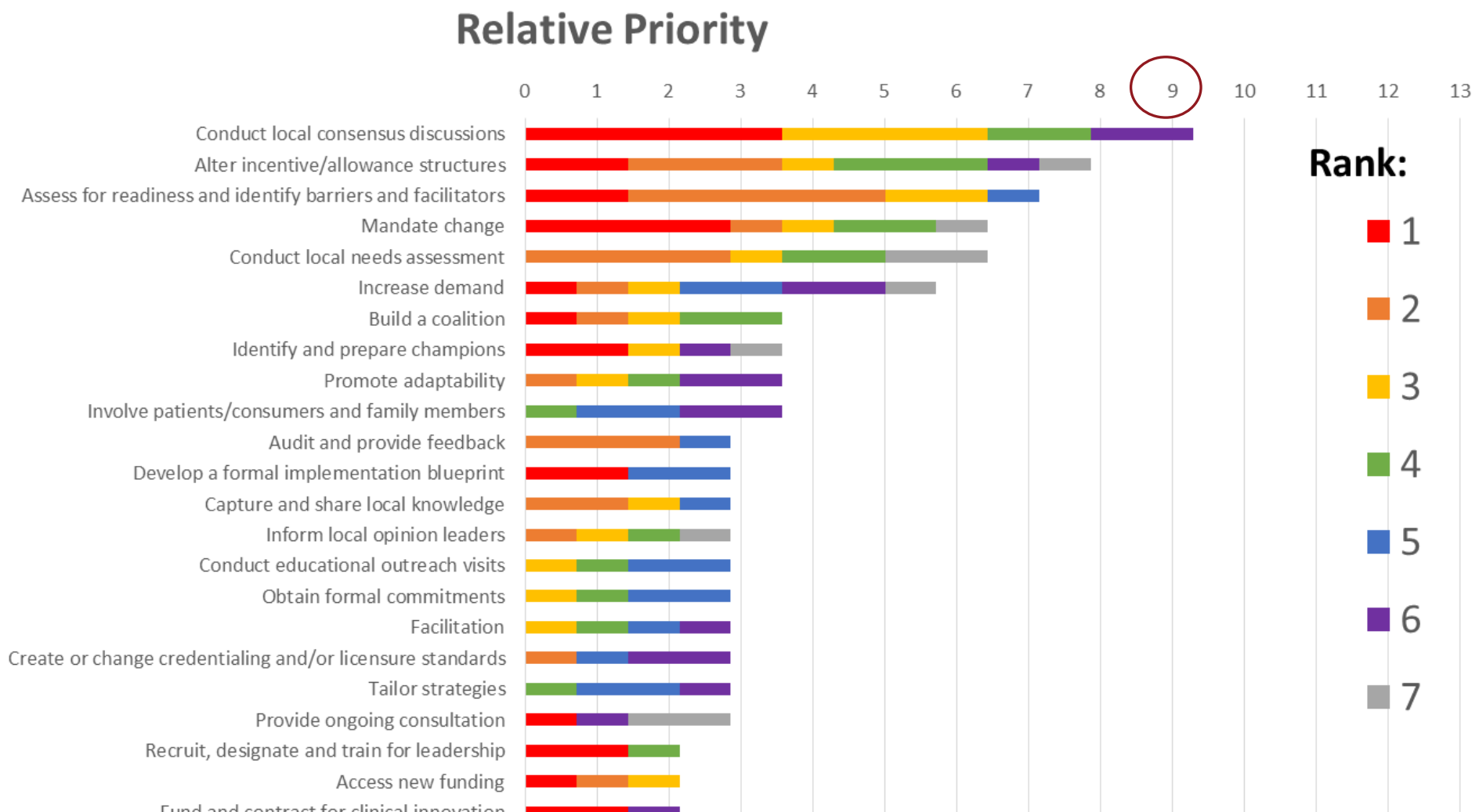
Number of ERIC strategies ranked per CFIR Construct

- Average = 47 strategies (Range: 35 – 55)

Number of respondents varied by CFIR construct

- Average = 26 (Range: 21 to 33)
- Normalized the number of “endorsements” as if n=20 for all CFIR constructs

# ERIC strategies chosen: Relative Priority n=20



# Tiers of Endorsement

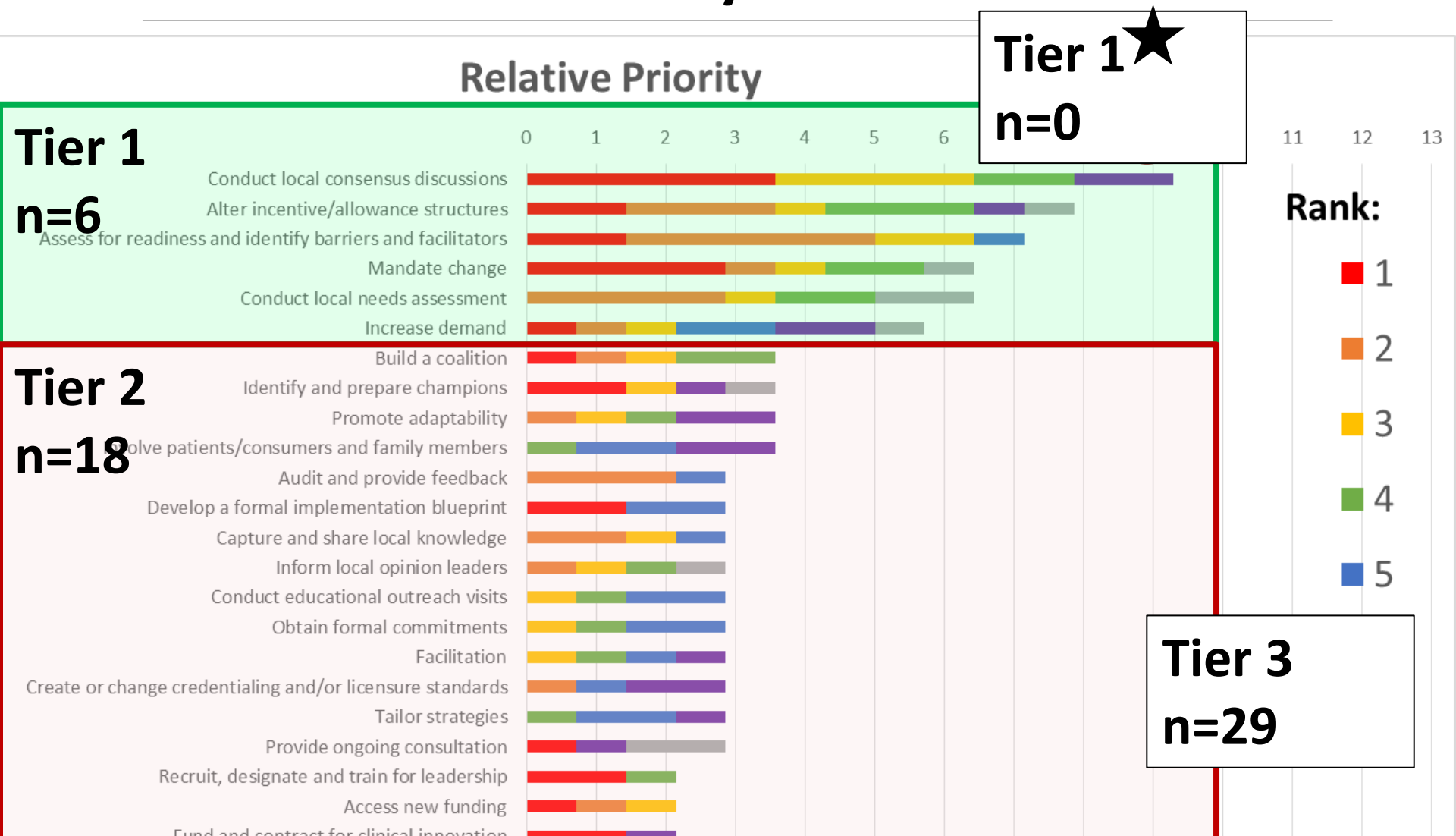
At least 10 endorsed the strategy → Tier 1★

4 to 9.5 endorsed the strategy → Tier 1

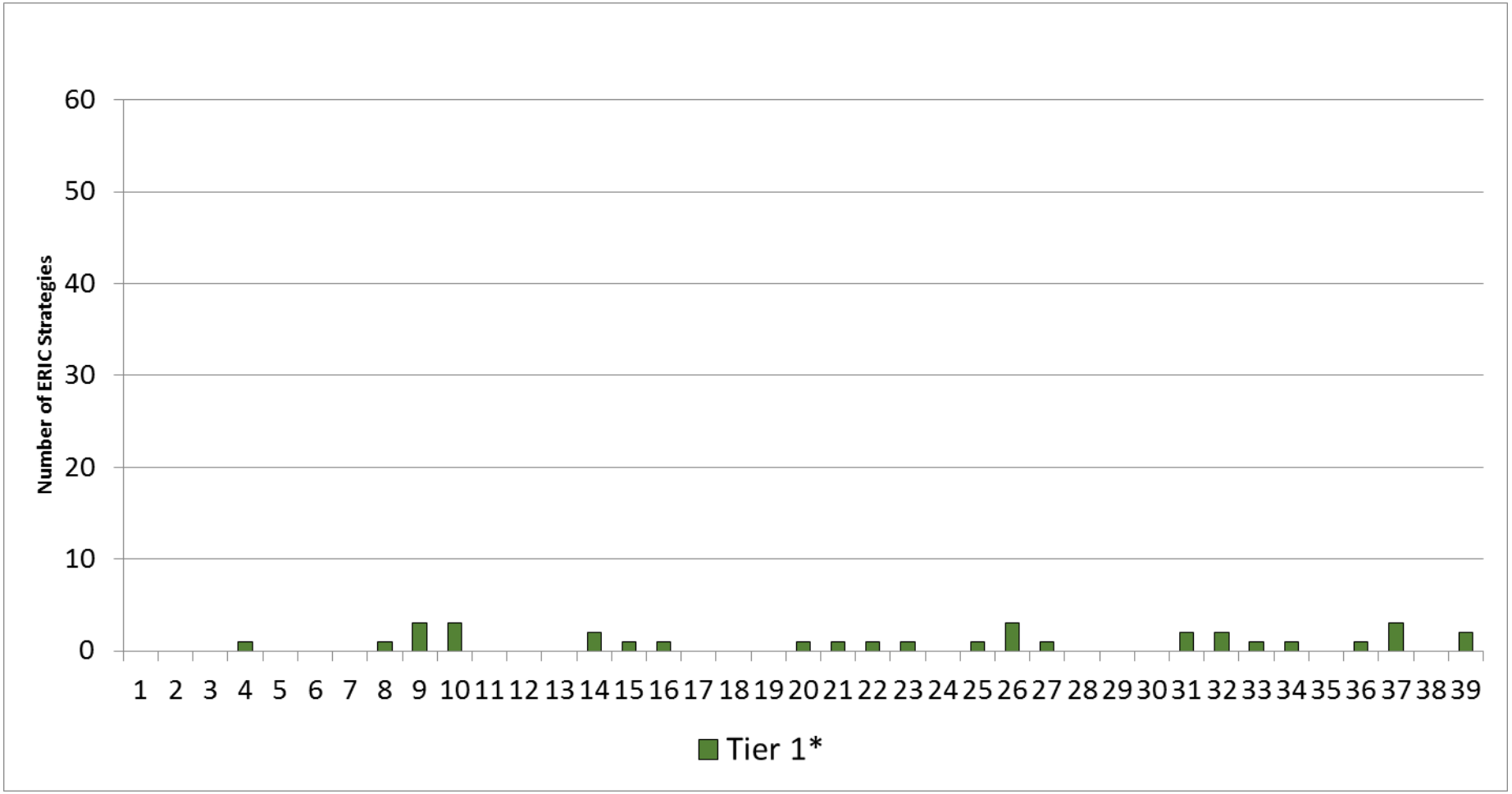
2 to 3.5 endorsed the strategy → Tier 2

1 to 1.5 endorsement the strategy → Tier 3

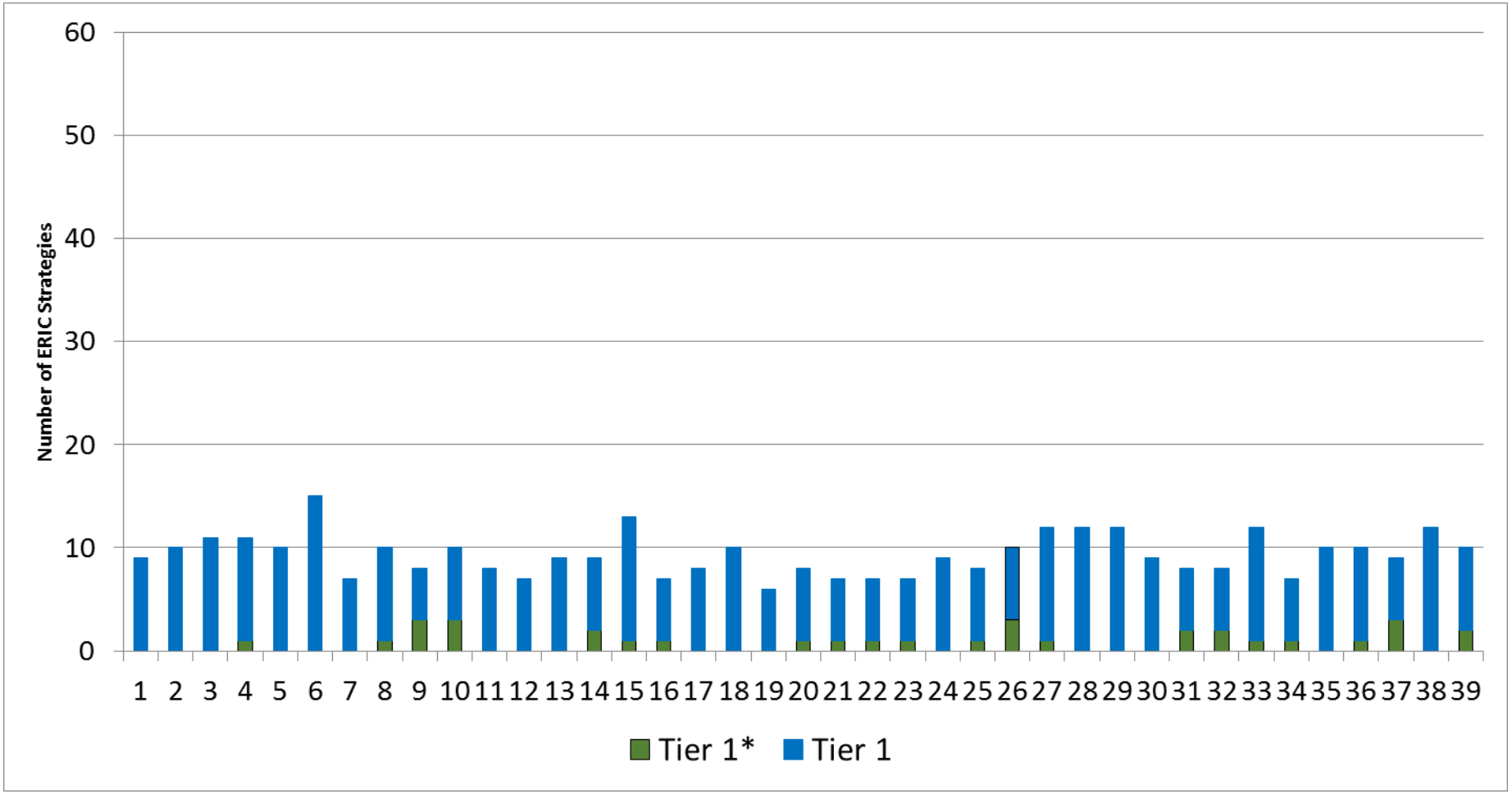
# ERIC strategies chosen: Relative Priority n=20



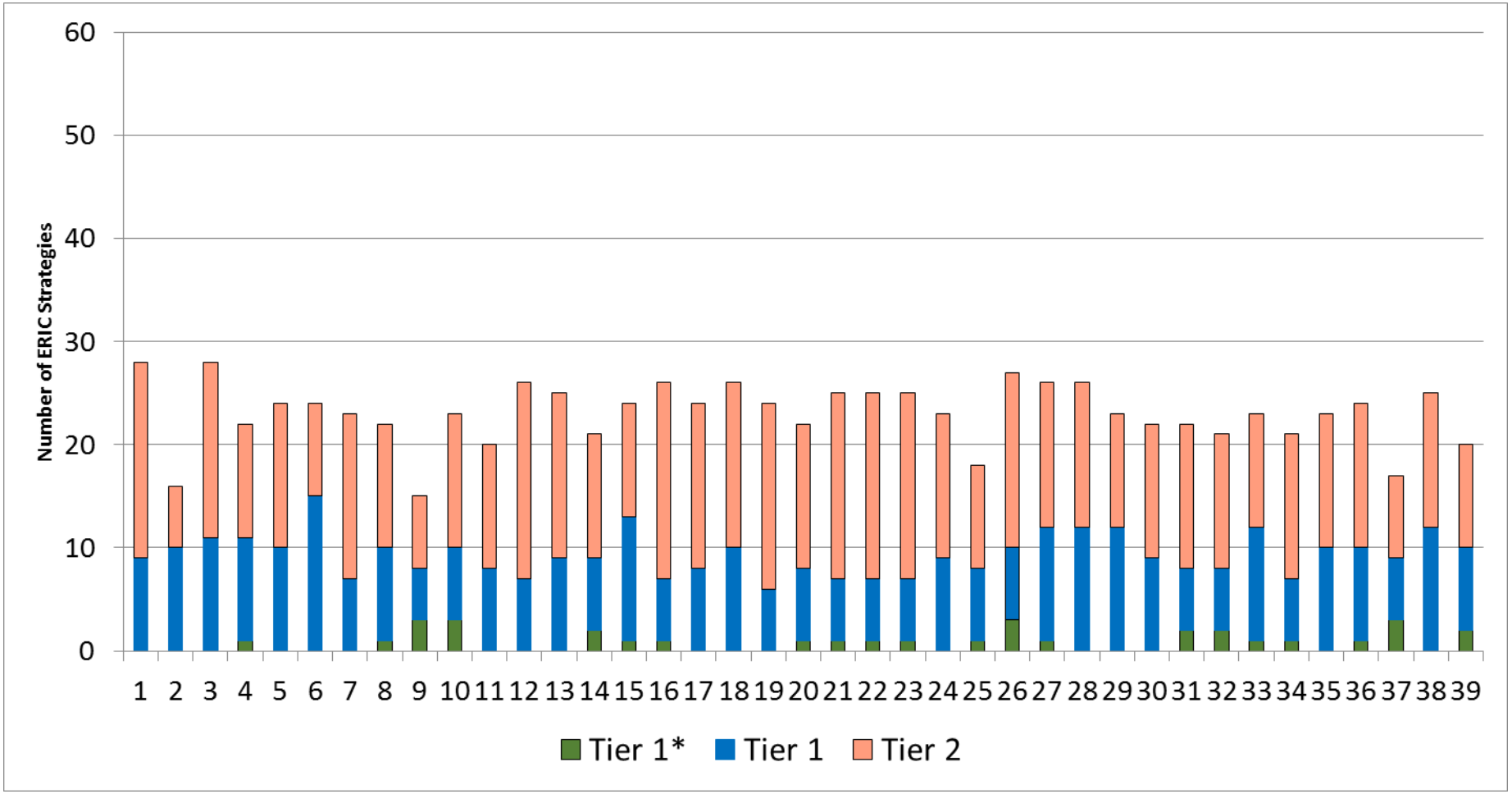
# Tier 1*; n=33


Number of ERIC Strategies
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
Tier 1*

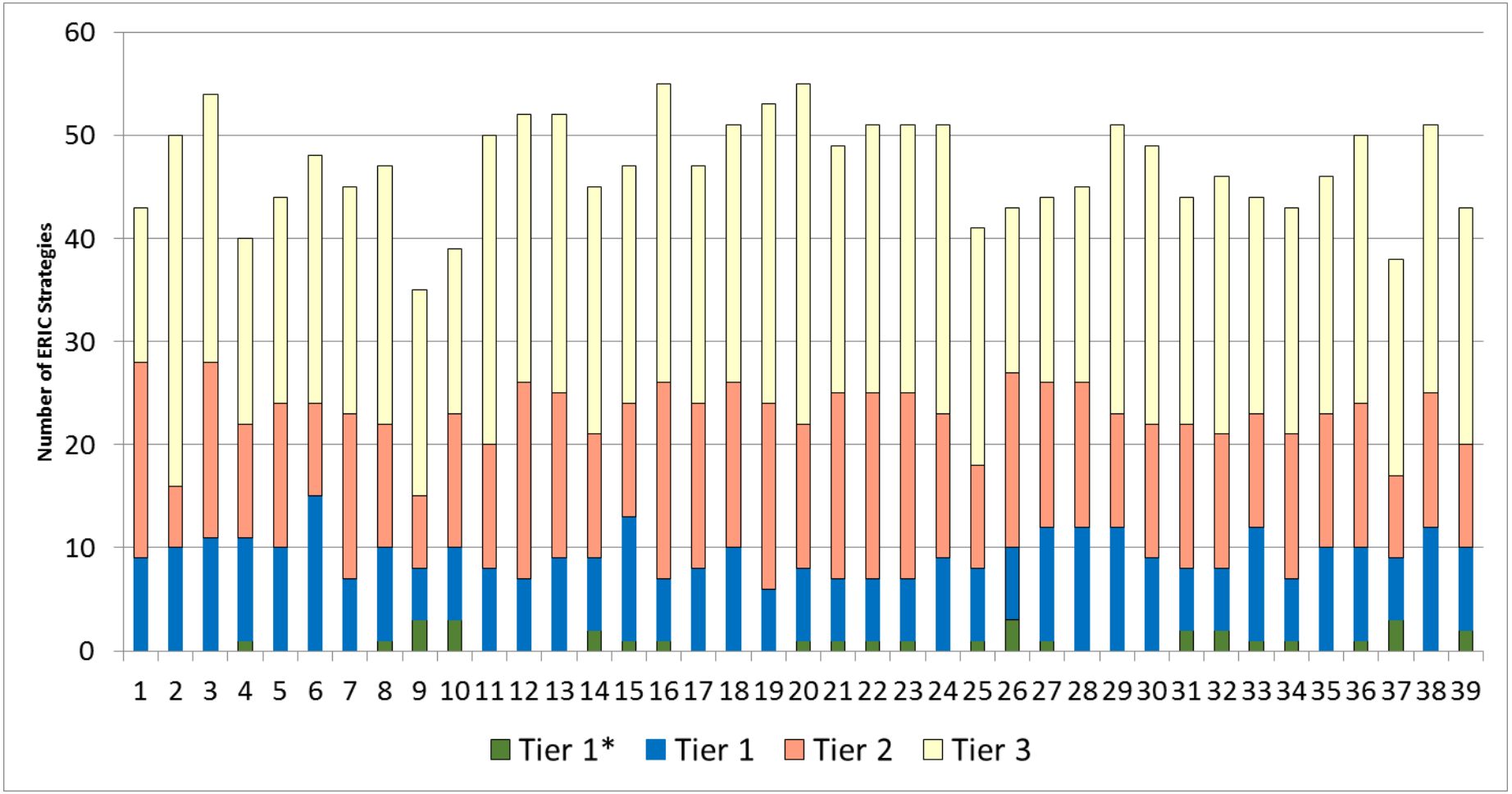
# Tier 1; n=332


Number of ERIC Strategies
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
Tier 1*
Tier 1

# Tier 2; n=534


Number of ERIC Strategies
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
Tier 1*
Tier 1
Tier 2

# Tier 3; n=933


Number of ERIC Strategies
0
10
20
30
40
50
60
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
Tier 1*
Tier 1
Tier 2
Tier 3

# Conclusion

Loose consensus on “best strategies” to address CFIR barriers

- With a few exceptions
- Some CFIR Constructs are broad
- Diverse sample of implementation experts
  - Diverse settings

Nonetheless, this provides a starting point from which to build an evidence base for barrier-specific specific strategies

# www.CFIRGuide.org

CFIR

## Consolidated Framework for Implementation Research

- Home
- CFIR Constructs
- Design an Evaluation
  - Overview
  - Qualitative Data
  - Quantitative Data
  - Implementation Outcomes
- Design an Implementation Strategy
- Tools and Templates
  - Interview Guide Tool
- Published Studies
- Additional Resources
- Participate
- Contact Us

### Design an Implementation Strategy

An evidence base is not yet established for how to tailor implementation strategies. This section describes a few ideas for developing interim tools and the needed evidence base. Please refer to our glossary for language about implementation in this section.

#### You are in the right place if you:

1. Have completed an assessment to identify the constructs that may be barriers (or facilitators) for implementing an innovation into your setting
2. Intend to implement an innovation into one or many settings and need guidance in selecting techniques to bundle into an implementation strategy tailored to your project.

#### The CFIR for Implementation Strategies

The CFIR describes four constructs related to the Process of implementation: Planning, Engaging, Executing, and Reflecting and Evaluating. Successful implementation relies on iterative, interacting activities related to these four constructs.

Most prescriptive frameworks and models include some form of these four constructs; though there is variation depending on the framework or model. These four CFIR constructs provide guidance for evaluating the nature and quality of implementation as it unfolds. As CFIR does not provide a step-by-step guide for how to implement innovations into organizations, we do provide links to a few published prescriptive frameworks and models that do provide such guidance (see Additional Resources).

# Tailor an Intervention Strategy

Intro

Domains

- Innovation Characteristics
- Outer Setting
- Inner Setting
- Characteristics of Individuals
- Process

## Process

To learn more see the wiki.

Constructs

- Planning
- Engaging
- Executing
- Reflecting & Evaluating

Quantitative and qualitative feedback about the progress and quality of implementation accompanied with regular persc
see the wiki.

**Techniques**

Select a construct

Learn more about the construct in the wiki, or click Techniques

# Tailor an Intervention Strategy

Intro

Domains

Innovation Characteristics

Outer Setting

Inner Setting

Characteristics of Individuals

Process

## Process: Reflecting & Evaluating

Deselect nonessential questions. Click on question to see prompts.

- [ ] Develop and implement tools for quality monit
- [x] Audit and provide feedback
- [ ] Develop and organize quality monitoring systems

Select techniques you want to include for each construct…

# Tailor an Intervention Strategy

The tool will generate a document that lists the techniques you chose which can then be used as a basis for a documented tailored Implementation Strategy

## Process

**Reflecting & Evaluating**

- Audit and provide feedback

## Inner Setting

**Structural Characteristics**

- Assess for readiness and identify barriers and facilitators
- Change physical structure and equipment
- Build a coalition

**Leadership Engagement**

- Involve executive boards

## Innovation Characteristics

**Evidence Strength & Quality**

- Conduct local consensus discussions

# Questions?

Go to www.CFIRGuide.org for technical assistance using the CFIR

- We will continue to post more tools and information in the coming months

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