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TRANSFORMING DEMENTIA CARE

Current and Future use of RE-AIM and its PRISM Expansion and their Application in Pragmatic Trials

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https://bit.ly/2BnJzuk

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Acknowledgments: Borsika Rabin, Katy Trinkley, Meredith Fort, Monica Perez Jolles, Amy Huebschmann, Jen Gabbard, Bryan Ford, and the other great researchers cited throughout this talk

Housekeeping

- All participants will be muted
- Enter **all questions** in the Zoom **Q&A/chat box** and send to Everyone
- Moderator will review questions from chat box and ask them at the end
- Want to continue the discussion? Associated podcast released about 2 weeks after Grand Rounds
- Visit impactcollaboratory.org
- Follow us on Twitter & LinkedIN:

@IMPACTcollab1 https://www.linkedin.com/company/65346172

Learning Objectives

Upon completion of this presentation, you should be able to:

- Describe key features of the RE-AIM framework and how it can be applied for *pragmatic research*
- Discuss how the PRISM framework expands upon RE-AIM and how it is used to address *health equity*
- Discuss the importance of *adaptations* and the issues involved with iterative adaptations during implementation

Plan for today

1. Issues in Pragmatic Trials
2. Overview and Evolution of RE-AIM
3. Newer Applications for RE-AIM: *health equity, iterative application*

4. Overview of PRISM
5. New and Future Directions for PRISM: *context and accessibility*
6. Example Application- Integrated social needs screening for multi-morbid patients

I have no disclosures or conflicts of interest related to this presentation

Issues in Pragmatic Trials
(Russ's RE-AIM/PRISM perspective)

Co-creation and Engagement

Reach and Equity

Feasibility and Generalizability

Speed of research vs. practice

Costs

Adaptations

Integrating all the above while being practical; rigorous and 'balanced' on internal and external validity; and not creating unintended consequences

The 5 Rs to Enhance Pragmatism and Likelihood of Translation

Research that is:

- Relevant
- Rapid and Recursive
- Redefines Rigor
- Reports Resources Required
- Replicable

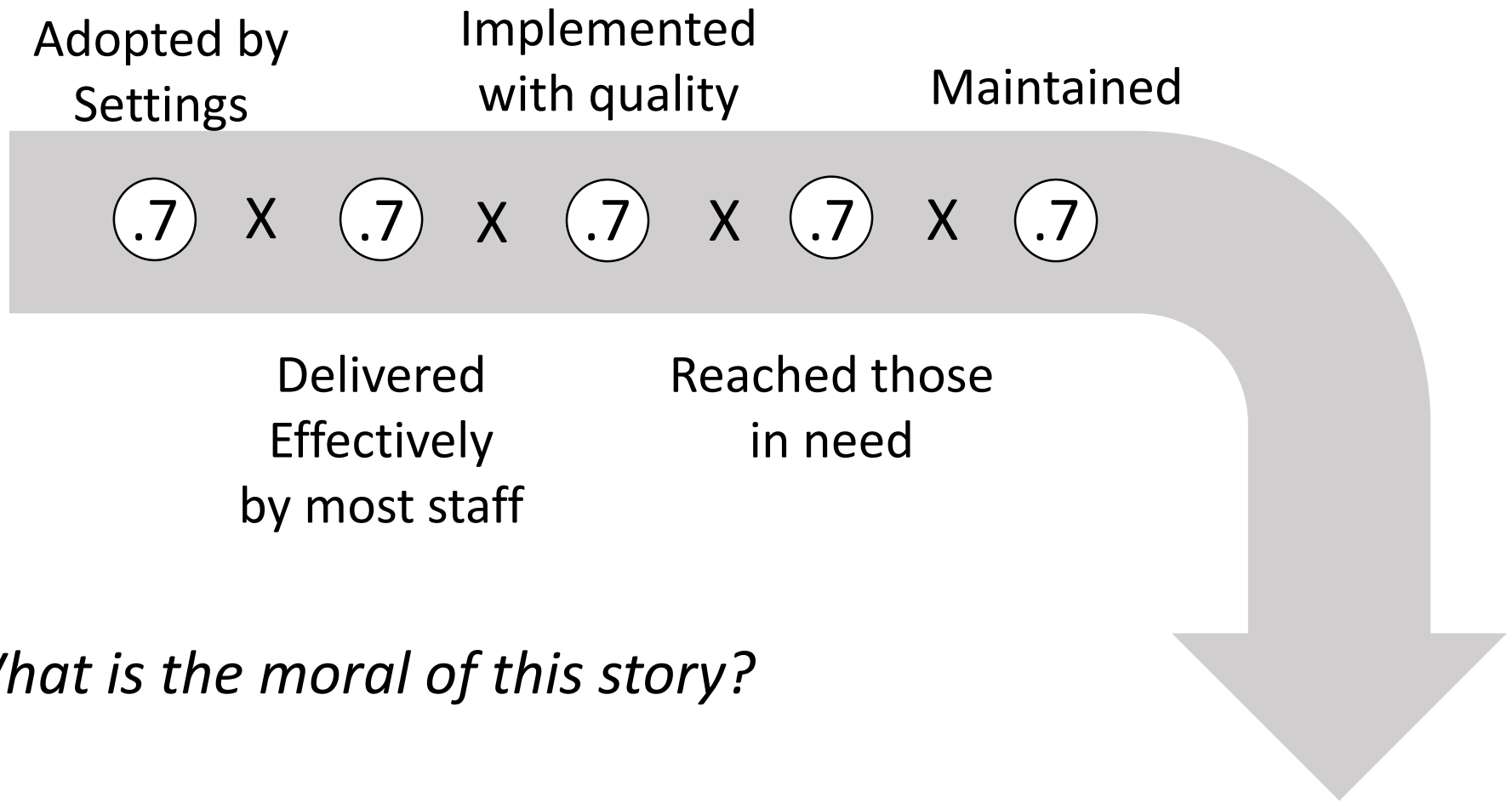
Peek, C.J, et al. (2014). The 5 Rs: An Emerging Bold Standard for Conducting Relevant Research in a Changing World. *Annals Of Family Medicine*, *12*(5), 447-55. doi:10.1370/afm.1688

deGruy, F.V, et al. (2015). A plan for useful and timely family medicine and primary care research. *Family Medicine*, *47*(8), 636-42.

Too often, we have assumed, “If you publish it…”

Thought Exercise and Genesis of RE-AIM

Real World Impact of 100% Effective Intervention



What is the moral of this story?

Overall population benefit to target population = 17%

Overview and Evolution of RE-AIM

Addressing These Issues of Population Health was Initial Purpose of RE-AIM Framework and Outcomes

www.re-aim.org

Developed in 1999- before implementation science or pragmatic trials were recognized areas of research- IT HAS (AND WILL CONTINUE TO BE) EVOLVED

Purpose and History of RE-AIM Framework

- Intended to facilitate **translation of research** to practice, policy and real-world application
- **Balance internal and external validity, and emphasizes representativeness and equity**
- Individual (RE) and **Multi-level** Setting (AIM) factors- community, organization, staff
- **Ultimate Impact depends on all elements** (reach x effectiveness, etc.)

Glasgow RE et al. RE-AIM at 20. *Frontiers Public Health*. 2019: 7: 64 https://doi.org/10.3389/fpubh.2019.00064
Glasgow et al. *Amer J Public Health*. 1999; 89: 1322-1327

www.re-aim.org

Pragmatic Use of RE-AIM- What is Feasible?

RE-AIM Dimension	Key Pragmatic Priorities to Consider and Answer
Reach (Individual Level)	WHO is (was) intended to benefit and who actually participates or is exposed to the 'program' or policy?
Effectiveness (Individual Level)	WHAT is (was) the most important benefit you are trying to achieve and what is (was) the likelihood of negative outcomes?
Adoption (Setting Levels)	WHERE is (was) the program or policy applied WHO applied it?
Implementation (Setting Levels)	HOW consistently is (was) the program or policy **delivered?** **HOW will (was) it be adapted?** **HOW much will (did) it cost?** **WHY will (did) the results come about?**
Maintenance (Individual and Setting Levels)	WHEN will (was) the program become operational; how long will (was) it be sustained (setting level); and how long are the results sustained (individual level)?

Glasgow RE & Estabrooks, P. Preventing Chronic Disease, 2018; 15: E02. https://doi.org/10.5888/pcd15.170271

Why Should You Cost Your Implementation?

Often the first and ***key question potential adopting settings will ask***

Decision-makers want to know what it will cost them to implement

Is itself a key outcome- both Proctor et al. and RE-AIM outcomes

Cost is a ***key determinant of adoption, implementation (success and adaptations, sustainment and dissemination***

Increasingly required in proposals

More and more costing guidance, resources, and examples

Eisman, A. et al. (2021) 16:75 https://doi.org/10.1186/s13012-021-01143-x
Cronin, et al.(2024). Implementation costing guide. https://bit.ly/2BnJzuk

Adaptations Happen
(and can be bad or good, even necessary)

Evaluating complex interventions: Confronting and guiding
(vs. ignoring and suppressing) **heterogeneity** and **<u>adaptation</u>**

Brian S. Mittman, PhD Oct. 2018
Department of Research and Evaluation,
Kaiser Permanente Southern California

**Also see PCORI Methodology Guidance; and
ADAPT Guidance (Moore et al. *BMJ*
2021;374:n1679)

Adaptation – the *deliberate or accidental (i.e., drift)* **modification of the program (or implementation strategies), including:**

- deletions or additions (enhancements) of components
- refinements in the nature of included components
- adjustments in the manner/intensity of the administration of program components (called for in the program manual, curriculum or core components analysis)
- *cultural and other modifications due to local circumstances*

Moore G. et al. *BMJ* 2021;374:n1679 http://dx.doi.org/10.1136/bmj.n1679
Miller C. et al. The FRAME-IS*. Implementation Science* (2021) 16:36 https://doi.org/10.1186/s13012-021-01105-3

Types of Adaptations – Cultural; Resources; AND Local:

ALL WITH AND *DRIVEN BY MULTI-LEVEL PARTNERS*

RE-AIM and PRISM can ***help guide adaptations***

Focus of Adaptation	Timing of Adaptation (point in the project)		
	Planning	During	Sustainment-Dissemination
Intervention			
Implementation Strategy			
Setting			

Rabin BA, et al. Systematic, multimethod assessment of adaptations across four diverse health systems interventions. *Front Public Health*. 2018;6(APR). https:// doi. org/ 10. 3389/ FPUBH. 2018. 00102.

New applications for RE-AIM

- Health equity
  - Equity issues at each RE-AIM dimension
  - Prioritizing outcomes
  - Choosing strategies
- Iterative application
  - Project lifecycle
  - Team summary, discussion, and action planning

Health Equity Issues at Each RE-AIM Dimension

RE-AIM Dimension	Disparity	Overall Impact
Reach	30%	70% benefit
Effectiveness	0 (equal)	70% benefit
Adoption	30%	49% benefit
Implementation	30%	34% benefit
Maintenance	30%	24% benefit

RE-AIM Equity Outcomes Cascade

ADOPTION
 # and type of settings that participate

IMPLEMENTATION
Consistently deliver intervention and resources with quality

REACH
(equity)
 # and type of citizens and families that participate

EFFECTIVENESS
(equity)
 # and type of citizen and families that benefit (on what outcomes)

MAINTENANCE
Long-term implementation and effectiveness

Equity issues and *potential for drop-off,*
loss of impact, and *inequities* at each step

Perez Jolles, M, Fort, M, Glasgow, RE. (2024). *International Journal for Equity in Health*. 23:41 https://doi.org/10.1186/s12939-024-02130-6

RE-AIM Equity Outcomes Cascade **FIXES**

ADOPTION
 # and type of settings that participate

Tailor to and **engage leaders, partners** having multiple perspectives and address history

IMPLEMENTATION
Consistently deliver intervention and resources with quality

Make implementation **simple, low cost** and burden, and provide support

REACH
(equity)
 # and type of citizens and families that participate

Multiple and diverse **tailored promotion** channels and increased access

EFFECTIVENESS
(equity)
 # and type of citizen and families that benefit (on what outcomes)

Utilize evidence-based resources and strategies; make data-based **adaptations**

MAINTENANCE
Long-term implementation and effectiveness

Provide ongoing **feedback**, support and **resources** for implementation

Example actions to prevent or minimize 'drop off' and inequities at each step

Perez Jolles, M, Fort, M, Glasgow, RE. (2024). *International Journal for Equity in Health*. 23:41 https://doi.org/10.1186/s12939-024-02130-6

The Need for Speed: Rationale for ***Iterative RE-AIM***

- D&I frameworks are often cited
  - But frequently NOT used throughout a project lifecycle
  - Almost always for planning or evaluation
- RE-AIM has been used most for evaluation, but also successfully for planning
- Neither RE-AIM (or PRISM) nor most other D&I models have been used **iteratively to guide adaptations** at key points
- A major limitation to D&I models and methods is that they are much **slower than needed by partners**

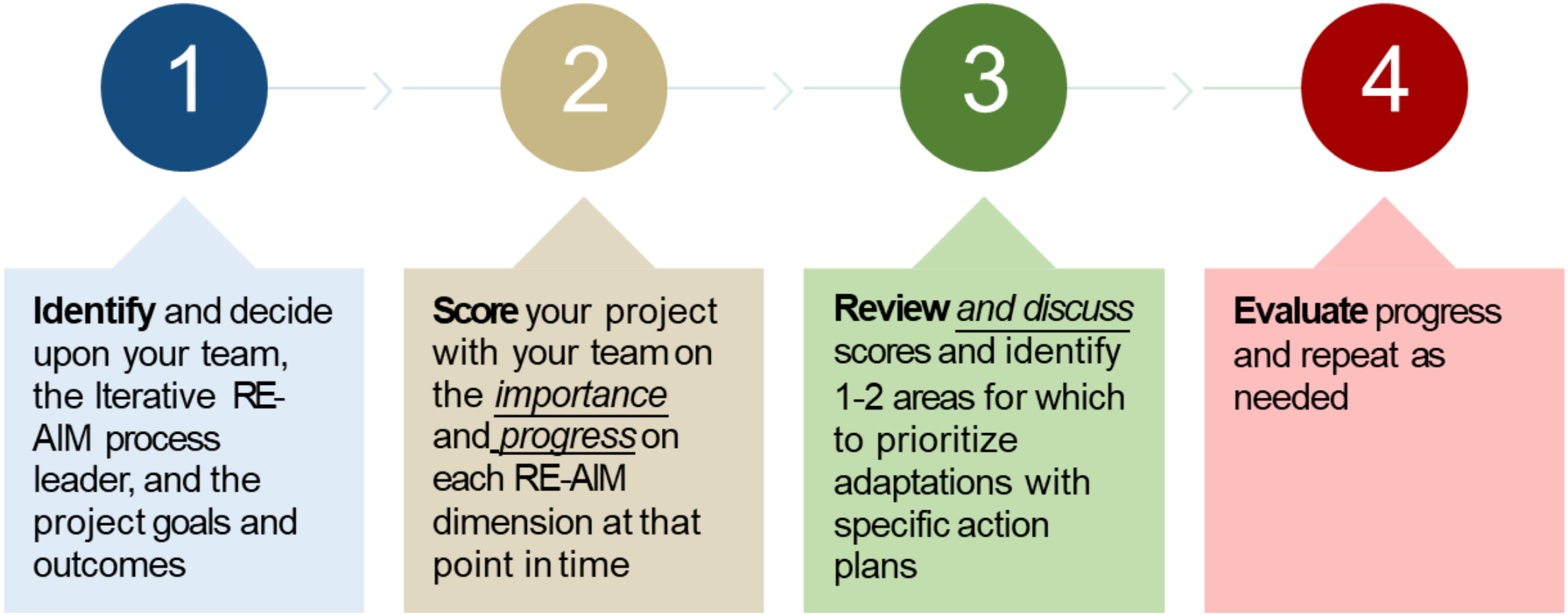
Glasgow, RE .... & Rabin B. Making implementation science more rapid. (2020) Frontiers Public Health. 8: 194
Norton WE, et al. Advancing rapid cycle research..... *JNCI: Journal of the National Cancer Institute*. https://doi.org/10.1093/jnci/djad007

Key Functions of Iterative RE-AIM Strategy Bundle

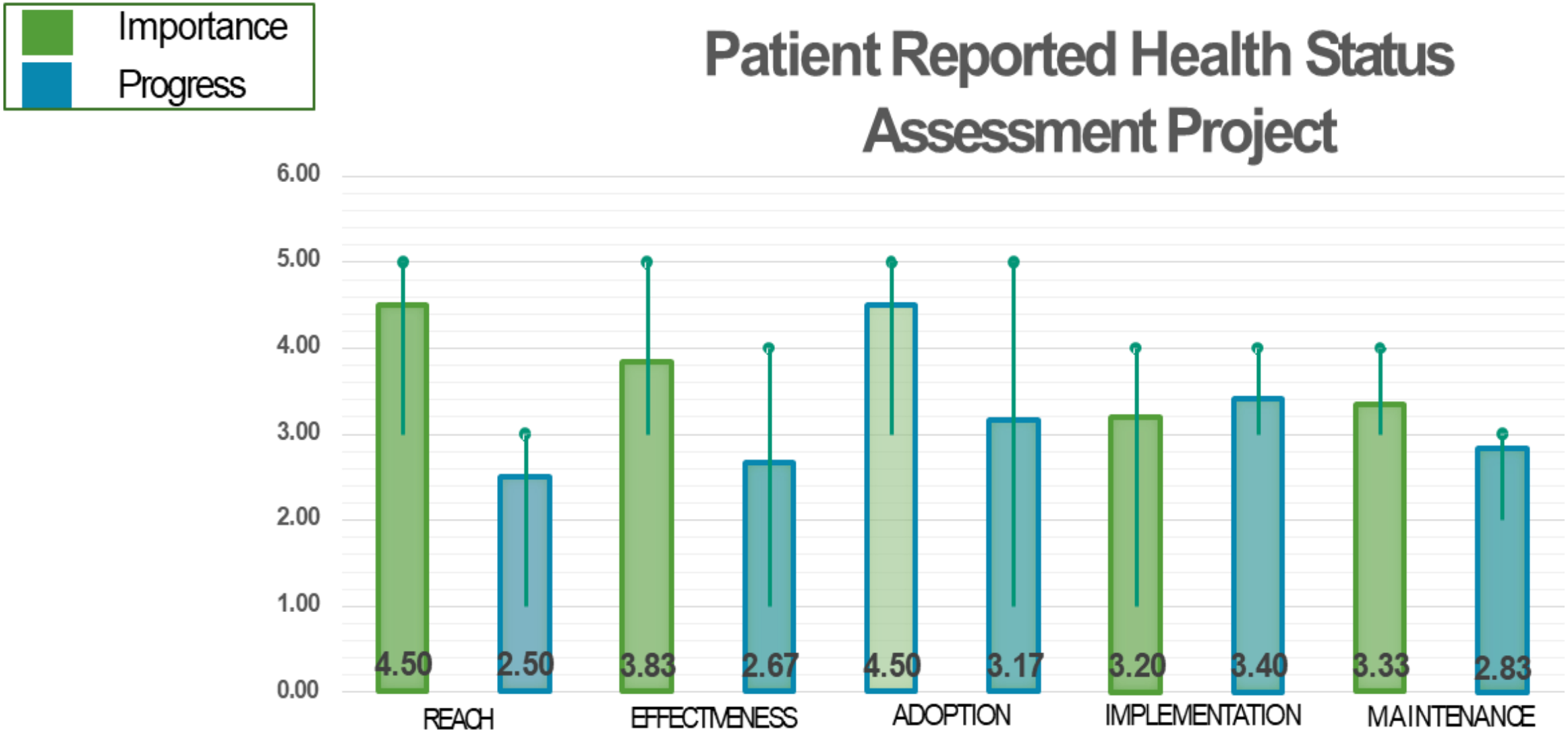
1. Obtain **independent input and perspectives** from each team member; then summarize results in **visual displays**
2. Team analyzes, **reflects on, and discusses *progress and priorities*** a that time point*
3. Specify **1–2** team RE-AIM **priority areas and adaptations** for next implementation period*
4. **Implement and evaluate** the delivery and impact of adaptations
5. Learn from iterations and **repeat as appropriate** over time

Glasgow RE, Battaglia C et al. Use of the RE-AIM framework to guide iterative adaptations: Applications, lessons learned, and future directions. *Front Health Serv*. 2022;2:959565. doi:10.3389/frhs.2022.959565

How do you use iterative RE-AIM?



Sample “Gap” Analysis



RE-AIM Purpose and Uses

Facilitate **transparency and translation** of research to include costs, adaptations

Balances internal and external validity, and emphasizes **representativeness and equity**

Multi-level:

Adoption vs. Reach

Representativeness on all RE-AIM dimensions

Ultimate Impact depends on all elements (reach x effectiveness, etc.)

SCAN ME

Glasgow RE et al. RE-AIM at 20. *Frontiers Public Health*. 2019: 7: 64
Glasgow et al. *Amer J Public Health*. 1999; 89: 1322-1327

RE-AIM.org

SCAN ME

- Brief explainer videos
- FAQ's and examples
- Guidance on application
- Searchable list of 700+ article abstracts
- Calculators, checklists, tools
- Recommended slides
- Webinars, upcoming events, blogs

Also, chapters on PRISM and RE-AIM in new Nilsen 2024 book: Implem. Science: Theory and application

Glasgow et al (2019). RE-AIM Planning and Evaluation Framework: 20-Year Review. *Front Public Health*, 7, 64. doi:10.3389

Holtrop et al. (2021) Understanding and applying the RE-AIM framework *J Clinical Translat Sci*, page 1 of 10. doi: 10.1017/cts.2021.789

Special issue *Front Public Health*- 13 articles https://www.frontiersin.org/research-topics/10170/

Other Things You Wanted to Know About RE-AIM?

Application Challenges

Issue	How Addressed
• Distinguishing Reach vs. Adoption	• Reach is at Individual (recipient) level • Adoption is at the Setting…AND the Staff/implementer levels • May not have reach measure in all projects; often have multiple adoption levels
• ‘Denominator’ or characteristics of nonparticipants not known	• Transparently report the recruitment or implementation situation • Provide both a conservative and an upper bound estimate (e.g., sensitivity analysis) • Use public or admin. records data to describe target population- e.g., census, employee or organizational data

Application Challenges

Issue	How Addressed
• How to determine ‘Overall’ Outcome or total impact	• Convert each dimension measured to a 0-1 scale (or 1- 100) and multiply the results • During planning identify with and from stakeholders which RE-AIM outcomes are highest priority and make those primary
• Trouble determining representativeness	• Compare ‘participants’ to either the overall intended population (e.g., all patients in EHR) or to those who decline • Identify a priori a small number of factors most likely to be related to key outcomes (e.g., SDOH, risk score, motivation)

Overview of PRISM

“Context is Everything”

- Context is multi-level and dynamic - not just places, but also history and relationships (trust, etc.)
- Addressed through PRISM extension of RE-AIM Outcomes: “RE-AIM in context”

Nilsen P, Bernhardsson S. Context matters in implementation science: *BMC Health Serv Res*. 2019;19(1):189.
Shelton, RC et al. An extension of RE-AIM….*Front Public Health* 2020 8:134
Chambers, D et al. The dynamic sustainability framework. *Implement Sci.* (2013) 8:117.

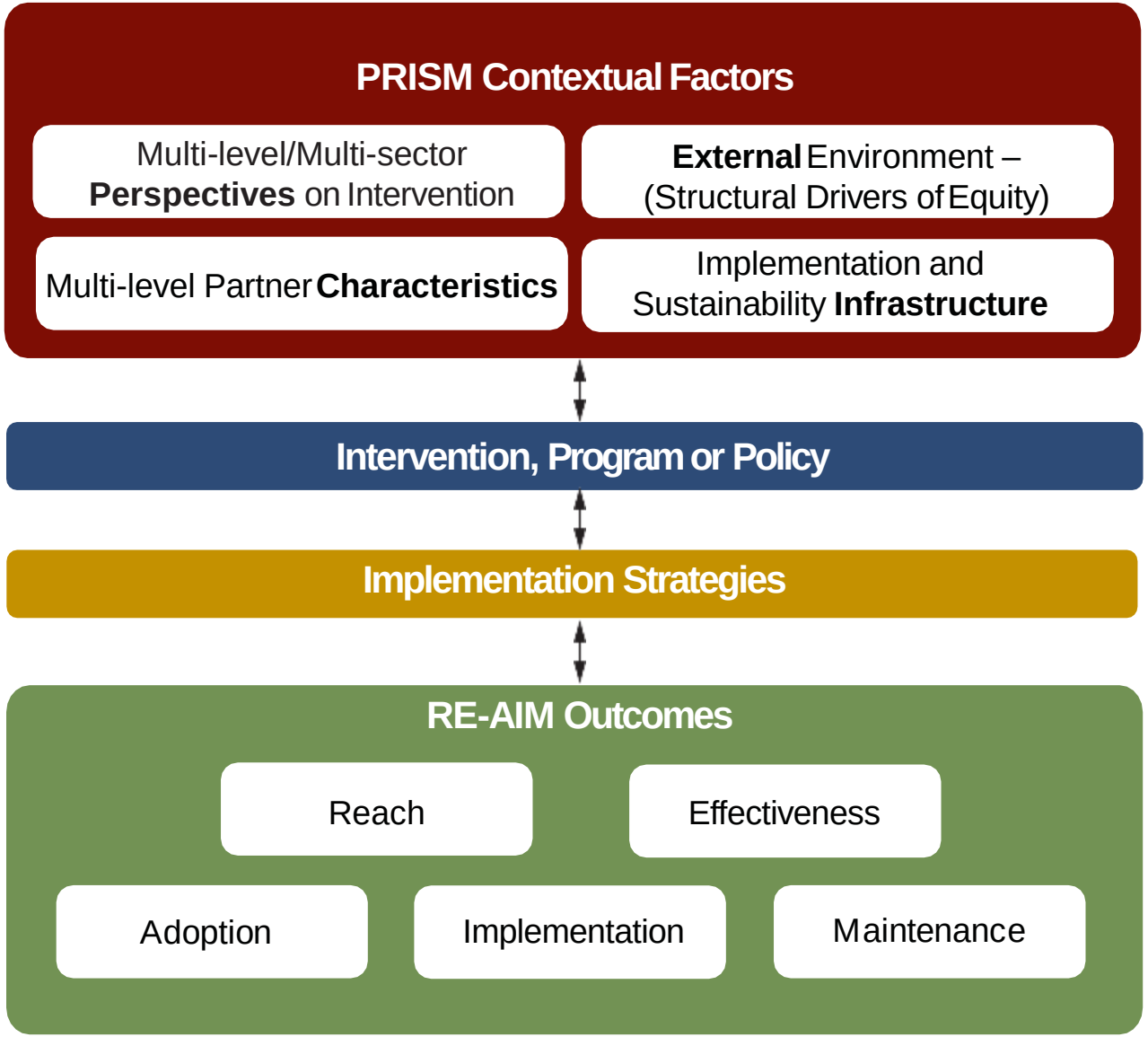
What is PRISM?

- Practical, Robust Implementation and Sustainability Model
- **Contextually expanded RE-AIM**
- Has been used as a:
  - Determinant framework
  - Process framework
  - Implementation framework
  - Evaluation framework

Feldstein, A. C., & Glasgow, R. E. (2008). *Jt. Commission J Qual Patient Safety*, *34*(4), 228-243. https://doi.org/https://doi.org/10.1016/S1553-7250(08)34030-6

Rabin et al. (2022). *Implementation Science*, *17*(1). https://doi.org/10.1186/s13012-022-01234-3

PRISM figure (newly imagined)



Perez Jolles, M, Fort, M, Glasgow, RE. (2024). *International Journal for Equity in Health*. 23:41

REPEAT AFTER ME……..

- PRISM contains RE-AIM (they are not different or competing frameworks)
- PRISM contains RE-AIM (is the contextually expanded RE-AIM)
- PRISM Includes RE-AIM

Key Findings- Recent Citation Analysis Review

(180 articles – 32 made 'integrated' use)

1. PRISM has been primarily used in **outpatient clinical settings** and in the **US**
2. It has been used to study a **variety of issues and conditions** using a wide range of **experimental designs** and often using **mixed methods**
3. Most studies have reported on **half or more of the PRISM domains**
    a. Most frequently assessed were **Organizational perspectives** on the Program/Intervention, and **Implementation and Sustainability Infrastructure**
4. PRISM contextual components were most frequently operationalized using **qualitative methods**
5. **Implementation** and **Maintenance** were most reported RE-AIM outcomes

Rabin et al. (2022). *Implementation Science*, *17*(1). https://doi.org/10.1186/s13012-022-01234-3

Example applications for PRISM

1. Addressing Health Equity
2. Addressing Multiple Chronic Conditions
3. iPRISM Webtool for implementation teams and investigators

Use of the PRISM Framework to Address Health Equity

Monica Perez Jolles, PhD
Meredith Fort, PhD
Russell E. Glasgow, PhD

Perez Jolles, M, Fort, M, Glasgow, RE. (2024). *International Journal for Equity in Health*. 23:41 https://doi.org/10.1186/s12939-024-02130-6

Fort, M., Manson, S, Glasgow, RE. (2023). *Front. Health Serv*. 3:1139788. doi10.3389/frhs.2023.1139788

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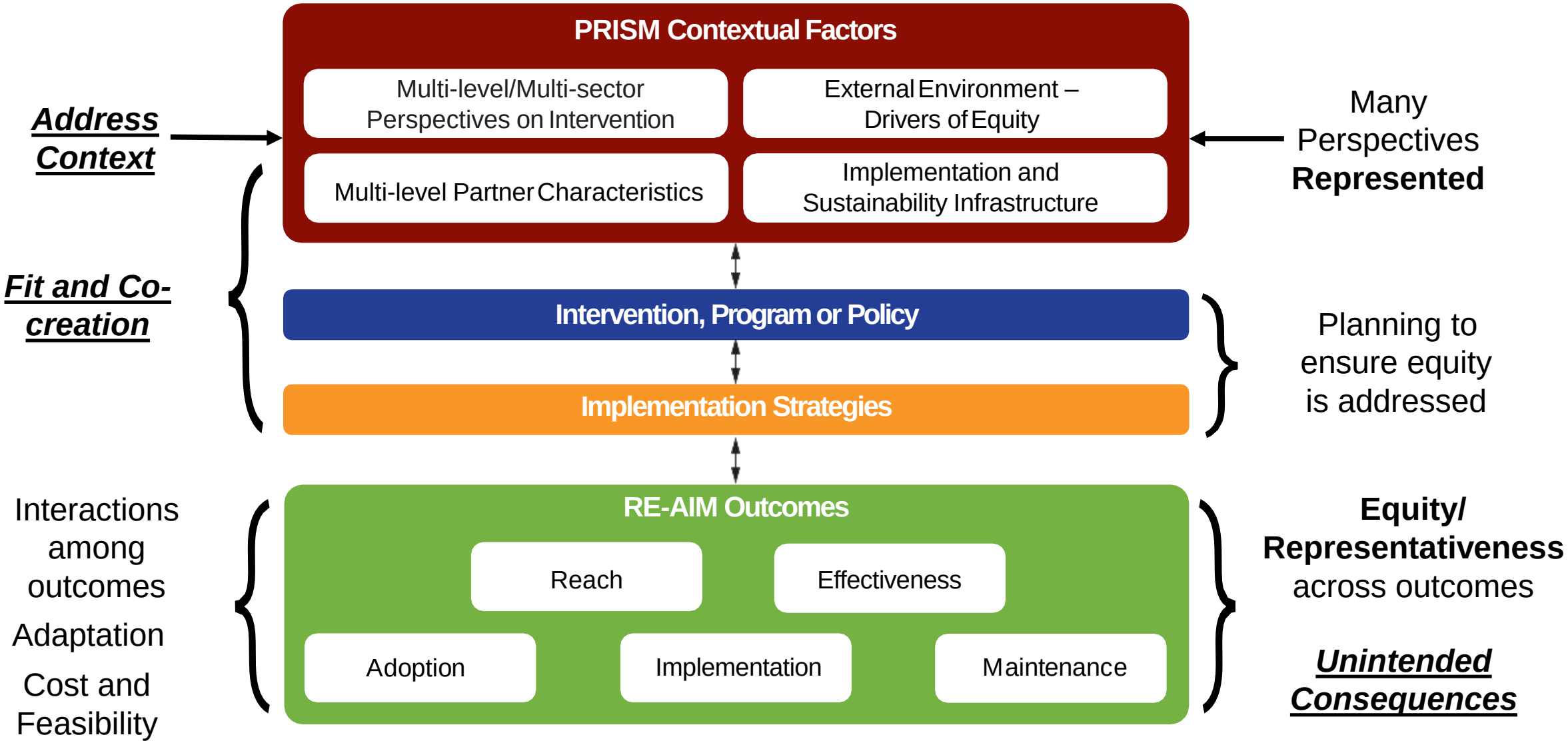
How PRISM (and RE-AIM Outcomes) Address Equity Issues



Fort MP, Manson SM and Glasgow RE (2023). Applying an equity lens… *Front. Health Serv*. 3:1139788. doi10.3389/frhs.2023.1139788

How Can PRISM (and other D&I Science Frameworks) Help Address Health Equity?

Broaden Focus on All Steps and Outcomes Necessary for Population and Equity Impact

Focus Attention on Issues of Representation and Representativeness*

Address Systems Issues and Unintended Consequences

Understand Context and Guide Tailoring and Adaptation to Context* and Population

Methods and tools: Integrate with other frameworks including those on equity

Example: ***My Own Health Report System*** to Assess and Integrate Patient-Centered Multi-Risk Reduction Plans for Patients with Multiple Chronic Conditions

Goal: Evaluate a primary care based **integrated assessment and feedback** system to 1) provide integrated risk feedback and patient prioritized goal setting, 2) inform patient-provider interactions and action plans and c) deliver systematic follow-up

Setting and Population: Primary care patient wth Type 2 diabetes and at least one other chronic condition

Screening and Feedback: integrated into 8-12 minute web-based pre-visit assessment
Health Behaviors: Smoking, physical activity, eating patterns, substance use (tailored options)
Mental Health: depression, anxiety, quality of life, distress (tailored options)
Social Needs: Food insecurity, medication affordability, transportation, housing, (tailored options)
Real Time Feedback to Patients and Providers: Integrated risk and action planning summary; choice of or multiple modalities

Systematic Follow-up: testing automated nudges vs. live staff contact

A. Huebschmann and R. Glasgow (MPIs). Rapid and Rigorous Accelerator Initiative Award project, Univ. Colorado

Figure 1. My Own Health Report (MOHR) intervention – what does it do?

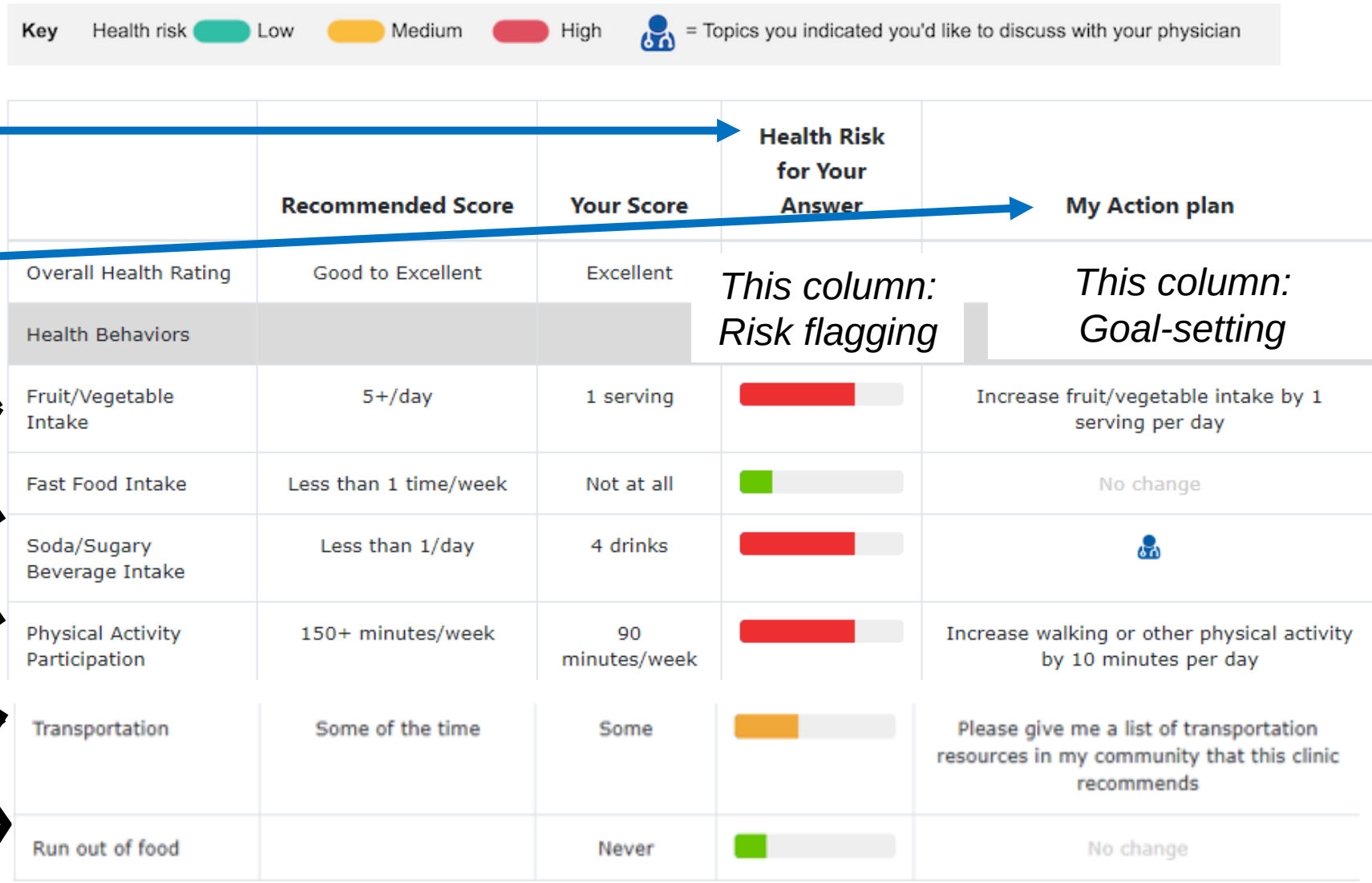
*Figure 1a. Core Functions**

1. Risk flagging – patients' MOHR survey responses identify behavioral cancer risks and unmet social needs
**5 A's model = "Ask"*

2. Goal-setting – patients pick goals for what they are ready to address from multiple flagged cancer risks and unmet social needs
**5 A's model = "Assess/Advise*

3. Service linkage – arranged with clinician during index primary care visit – clinician provides appropriate referrals and clinic-specific resources needed for one's goals
*5 A's model = "Assist/Arrange"

***Figure 1b.** Example 1-page patient feedback display*



*From 5 A's model[34-36]: Function #1 = Ask; Function #2 = Assess/Advise; Function #3 , Assist/Arrange – see Table 2 for operationalization; Pwr strategies (Table 3) of R^2 message and R^2 Navigation will be further opportunities for Assist/Arrange to occur

My Own Health Report: *PRISM Contextual Factors in primary care application*

Characteristics:

- Staff/clinic: number and type (e.g., social workers, behavioral health)
- Patients: # and severity of conditions; digital literacy; years with PCP

Perspectives:

- Staff/clinic: workflow; history with behavior change; experience with technology; burn out
- Patients: history with health behavior change; trust; family context; etc.

Implementation and Sustainability Infrastructure:

- QI system; audit and feedback; responsible person; accountability; resources

External Environment:

- Value based care criteria; Epic EHR constraints

Outcomes based on RE-AIM: Emphasis on ***equity*** on ALL dimensions below; mixed methods assessment

Reach: Proportion and characteristics of eligible patients who participate- why or why not

Effectiveness:

1. Completion of MOHR assessment and quality of pt-provider communication
2. **# at-risk behaviors, mental health issues, and social needs improved (primary)**
3. Completion of social needs referrals

Implementation:

1. Consistency of offering MOHR and prompting its discussion
2. Documentation of appropriate referrals
3. **Adaptations** made to process, timing, staff roles, recruitment, discussions, feedback provided
4. **Costs** of implementation, including staff training and supervision

Maintenance: Intent to maintain or adapt MOHR and ***iterative PRISM (next slide)*** after research evaluation period- why or why not

Most Recent: Web-based Iterative PRISM

- To increase accessibility and use by diverse groups
- Use for (across all or choice of): Planning; guiding iterative implementation/adaptations; or sustainment phases
- Automated, real time data collection, analysis and feedback

prismtool.org

Trinkley et al. The iPRISM webtool. *Implementation Science Communications* (2023) 4:116
https://doi.org/10.1186/s43058-023-00494-4

Purpose

- **Simplify implementation science - using PRISM**
  - For diverse researchers and implementation *teams*
  - Support *rapid learning health systems*

- **Web-based resource to Guide and prompt users to iteratively:**
  - Assess context
  - Align project with context
  - Assess priorities and progress on key outcomes
  - Develop *feasible and impactful strategies/adaptations*
  - Create action plans

Trinkley KT, et al. *Acad Med*. 2022;97:1447 (primary care & cardiology decision aid)
Maw A, et al. *Implement Sci Commun*. 2022;3:89 (hospital based EHR dashboard)

prismtool.org

PRISM
Practical, Robust Implementation and Sustainability Model

About

iPRISM Webtool

An innovative approach to iteratively applying an implementation science framework across a project's lifespan.

The webtool guides individuals and teams to choose strategies and make adaptations in a systematic way, aligned with their project's context.

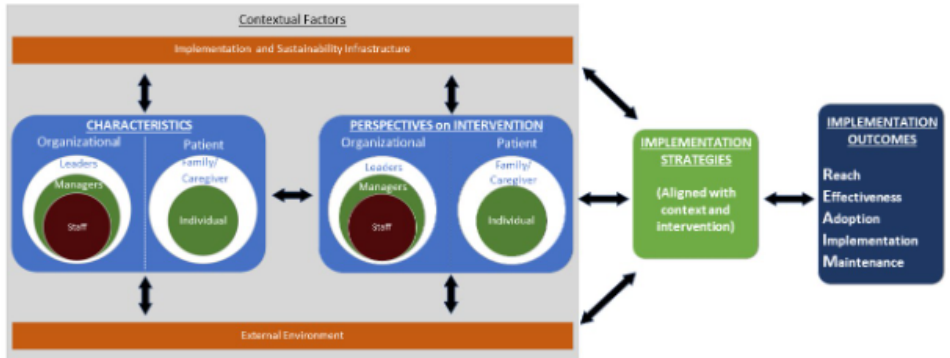
Start HERE

+ Quick tips to get started

What to expect

+ More detail

Practical, Robust Implementation and Sustainability Model (PRISM)



Use this tool iteratively to assess the context and fit of your program during planning, implementation, and sustainment in real-world settings

ACCESS THE iPRISM WEBTOOL HERE

You may choose to complete this as an individual, as a team, or gather as a team after individually completing the tool to compare and discuss

PRISM
Practical, Robust Implementation and Sustainability Model

About

iPRISM Webtool / Getting Started

4 steps to complete The iPRISM Webtool

Step 1: Indicate if you are completing as an Individual or as a Team Member

Step 2: Answer some questions about your program

Step 3: Review your results

Step 4: Identify and prioritize strategies to improve the implementation success of your program

PRISM
Practical, Robust Implementation and Sustainability Model

About

PRISM Assessment Tool / Getting Started / Stage

What is the Stage of Your Program?

I am...

... **planning** a program

... **implementing** a program

... **sustaining** a program

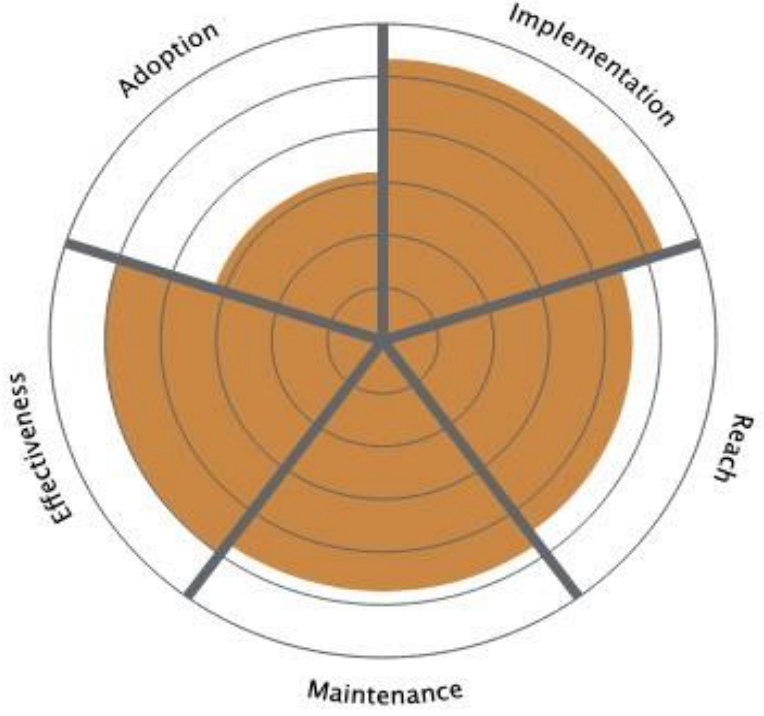
Graphical display of responses

RE-AIM Scores

Below are your **average** scores to the 2-4 questions in each category.

Hover over each category to view details for individual questions.

Export



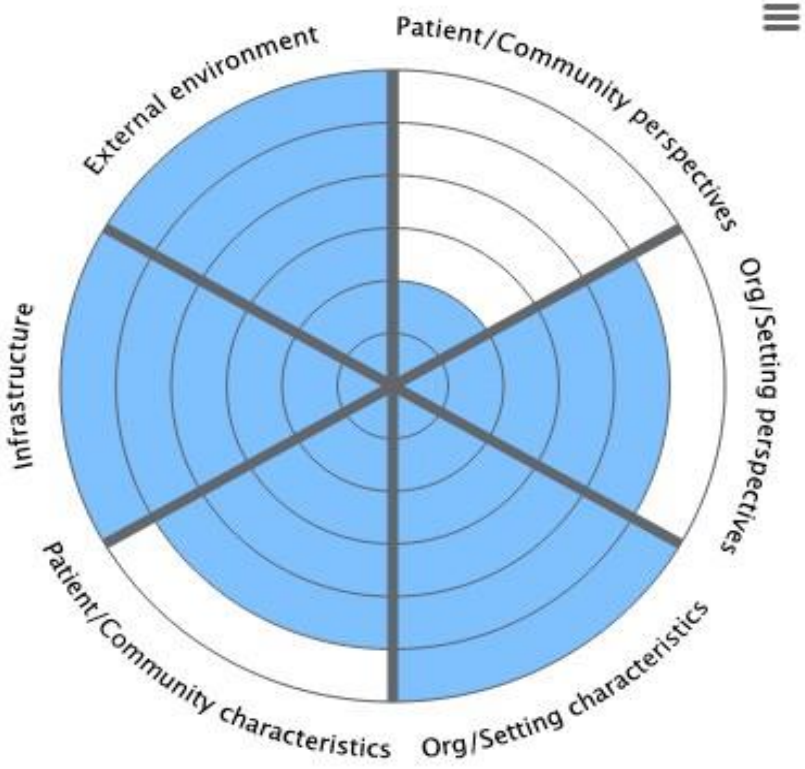
View alternative displays of your results

PRISM Scores

Below are your **individual** scores for the 1 question in each category.

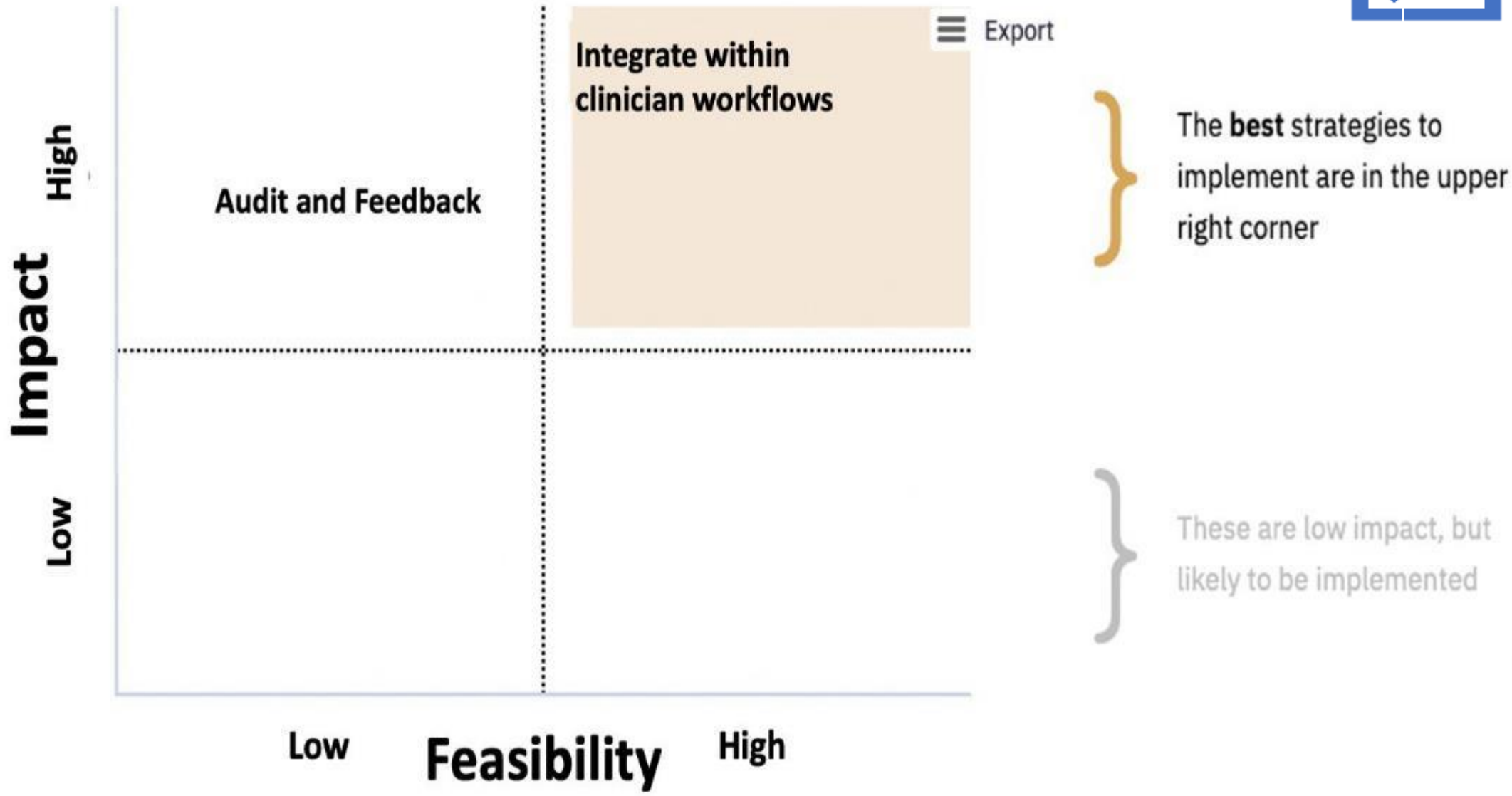
Hover over each category to view details for individual questions.

Export



Prioritize strategies

https://prismtool.org



Future Directions for PRISM Research and Practice

QUANTITATIVE SURVEY MEASURES FOR PRISM

NOT NECESSARY TO USE ALL PRISM COMPONENTS OR EVERY MILESTONE

INVESTIGATE RELATIONSHIPS WITHIN AND BETWEEN PRISM, RE-AIM, AND OTHER OUTCOMES

Evolution of RE-AIM -> PRISM: Lessons Learned

Systems Perspective.	Has Evolved and Expanded.	Expanded the original model to focus on adaptions and sustainability.
Emphasize qualitative methods to understand "how" and "why."	Capture costs.	Understand and address health equity issues.
Encourage pragmatic and iterative use.	Package for use by non-researchers.	Integrate with other models.

Glasgow et al. RE-AIM Planning and Evaluation Framework: Adapting to New Science and Practice with a 20-Year Review. *Front Public Health.* 2019;7:64.

And Remember:

All Models (and Methods) Are Wrong…
Some Are Useful

*"To every complex question,
there is a simple answer…
and it is wrong."*

~H. L. Mencken

Questions
and
Comments

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UNIVERSITY OF COLORADO
CHILDREN'S HOSPITAL COLORADO

COISC3

Thank you

Russell E. Glasgow, PhD

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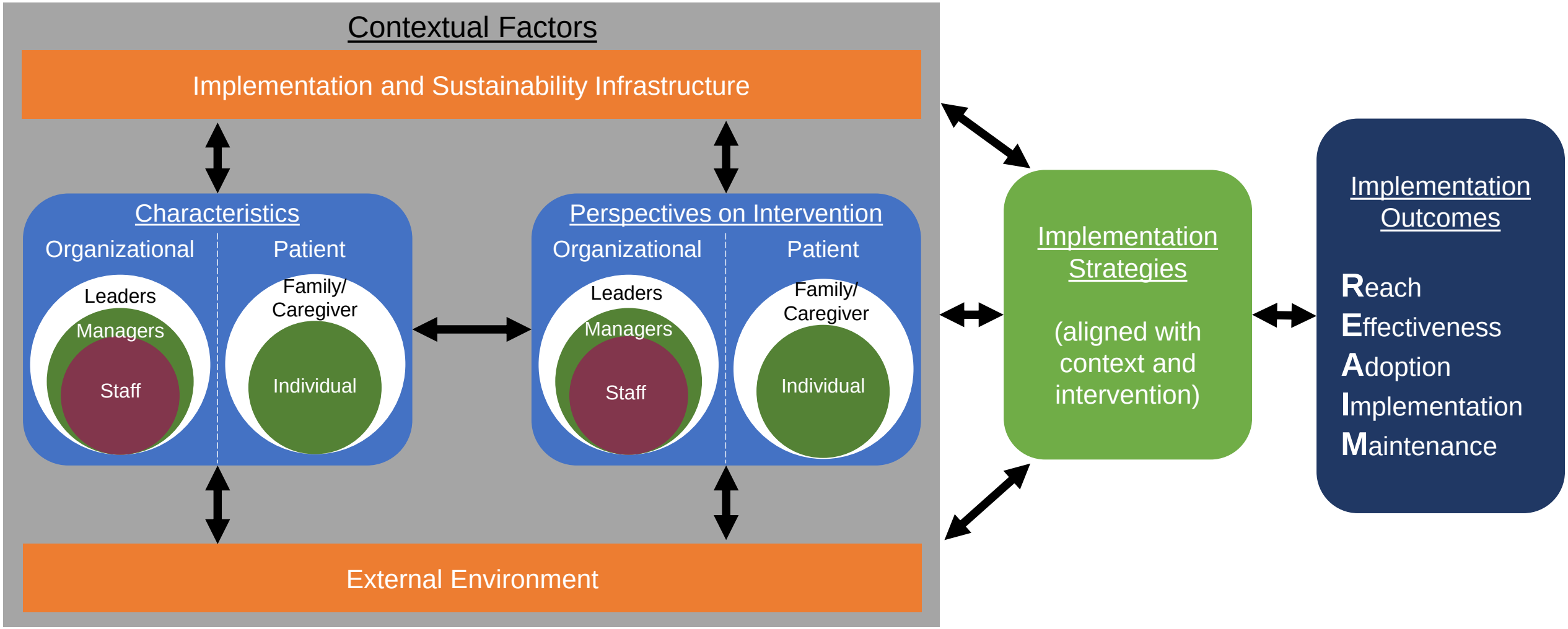
https://bit.ly/2BnJzuk
Twitter: @RussGlasgow


Contextual Factors
Implementation and Sustainability Infrastructure
Characteristics
Organizational
Patient
Leaders
Managers
Staff
Family/
Caregiver
Individual
Perspectives on Intervention
Organizational
Patient
Leaders
Managers
Staff
Family/
Caregiver
Individual
External Environment
Implementation
Strategies
(aligned with
context and
intervention)
Implementation
Outcomes
Reach
Effectiveness
Adoption
Implementation
Maintenance

TITLE: Rapid, Rigorous, Patient-centered Program (R2P2)

	Partner Engagement	Aim 1: Design Intervention & Strategy	Aim 2: Implement & Test	Aim 3: Sustain, Scale, & Disseminate
Timeline	**Pre-project-2 months**	**0-6 months**	**6-18 months**	**18-24 months**
Meta-goals for the AAI center. What are our key research questions to inform the field?	• What is the most efficient way to meaningfully engage partners? • Which perspectives are essential? • What is the right balance of partners? • How do we assess time, cost and quality of engagement?	• How rapidly can we design the intervention? Where can we speed up without losing rigor? • What training and resources are required for rapid design? • How to best enhance equitable access and impact?	• How to rapidly assess and address dynamic context? • What pragmatic designs can be done efficiently? • How to rapidly produce meaningful and equitable results? • What are efficient ways to record and analyze adaptations?	• How do we develop, evaluate, and adapt key sustainment messages? • How do we communicate replication costs? • What organization and individual influencers will help most to disseminate?
Key objectives for this phase of the project	Ensure engagement of the essential perspectives/users in all phases of the project.	Rapidly and iteratively design the intervention and implementation strategies.	Conduct a moderate-sized pragmatic study assessing implementation and patient-centered outcomes.	Develop a dissemination strategy and sustainability plan
Required elements or functions for all projects (will take different forms, as appropriate to project)	1. Invite multi-perspective partner group 2. Select and implement process for engagement 3. Assess level and cost of engagement	1. Define Key functions of the intervention and implementation strategies and optional forms 2. Develop a logic model including context, imp. strategies and outcomes 3. Conduct an iterative, user-centered design process.	1. Design and conduct a pragmatic trial that assesses the following: • RE-AIM Implementation outcomes (RE-AIM) including costs • Context and adaptations • Pt. centered impact	1. Design a social marketing campaign 2. Develop sustainment guidance materials for participating settings and adaptation guide for new sites. 3. Assess uptake of the intervention.

Rapid and Rigorous Accelerator Program Specific Aims

1. *Rapidly and rigorously Design a host of tools to improve the patient-centeredness of care.*

2. *Rapidly and rigorously Implement & Test interventions in real-world settings using pragmatic research- across multiple projects, problems, and settings.*

3. *Rapidly and rigorously Disseminate and Sustain project delivery and outcomes.*

Equity Issues in Evidence-Based Research: *Evidence on What?* (take home point)

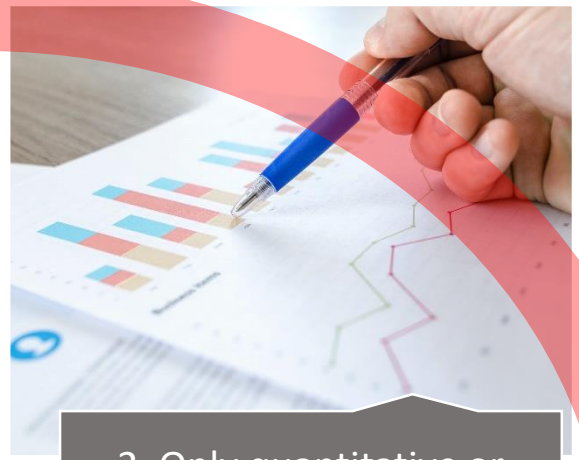
External Validity/Pragmatic Criteria, Often Ignored

- Participant **representativeness**
- **Setting and staff** representativeness
- **Multi-level context**
- **Adaptation/change** in intervention and implementation strategies
- What outcomes for whom over what time period
- **Reasons for participation and drop out**

Bottom line: What works for whom, under what conditions, for what outcomes, how much does it cost

Common Misconceptions

1. Only for evaluation

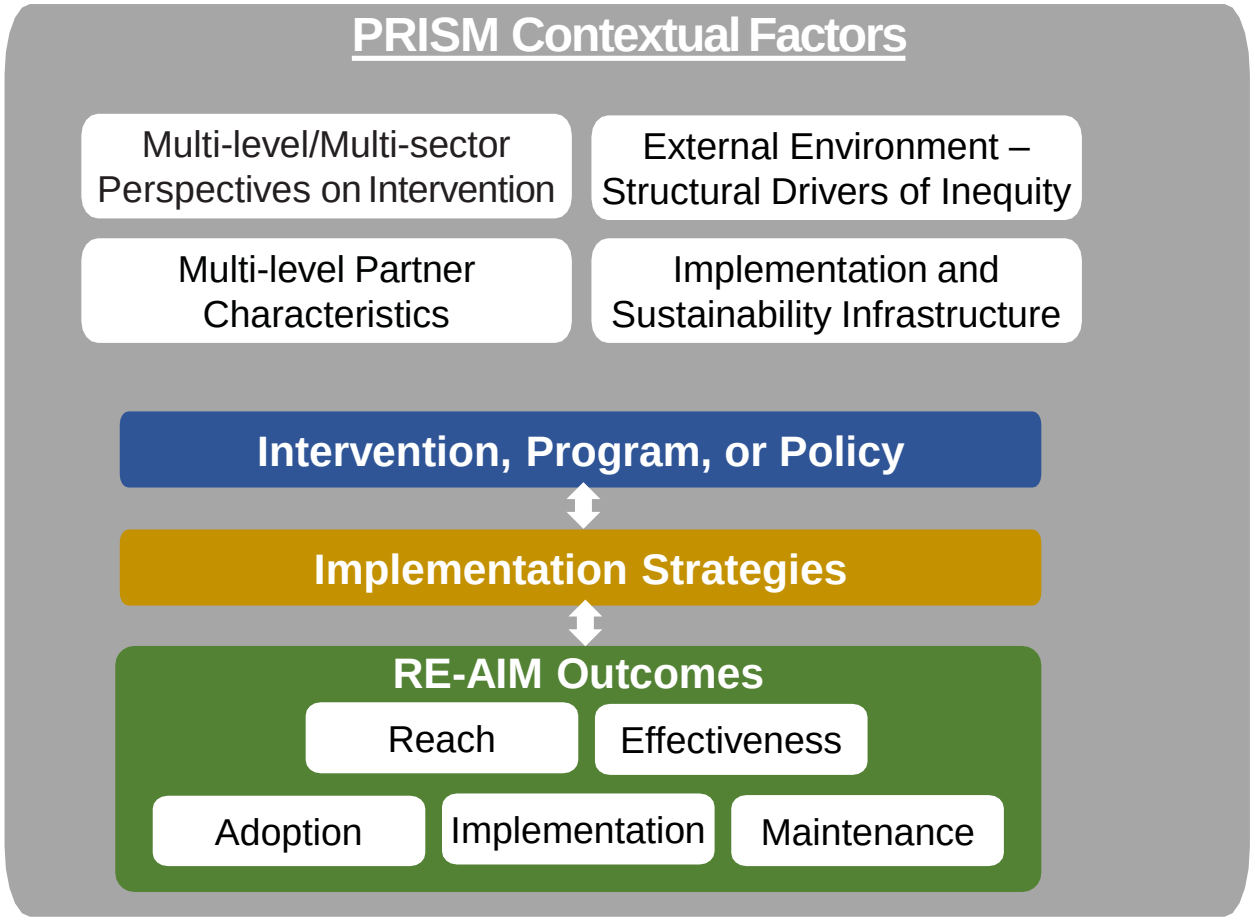


2. Only quantitative or qualitative

3. Mandates that all dimensions are used and equally important

4. Does not address context or determinants

See video of Dr. Holtrop discussing: re-aim.org/resources-and-tools/recommended-re-aim-slides/


PRISM Contextual Factors
Multi-level/Multi-sector Perspectives on Intervention
External Environment – Structural Drivers of Inequity
Multi-level Partner Characteristics
Implementation and Sustainability Infrastructure
Intervention, Program, or Policy
Implementation Strategies
RE-AIM Outcomes
Reach
Effectiveness
Adoption
Implementation
Maintenance

Comparison of Two Different Types of Programs

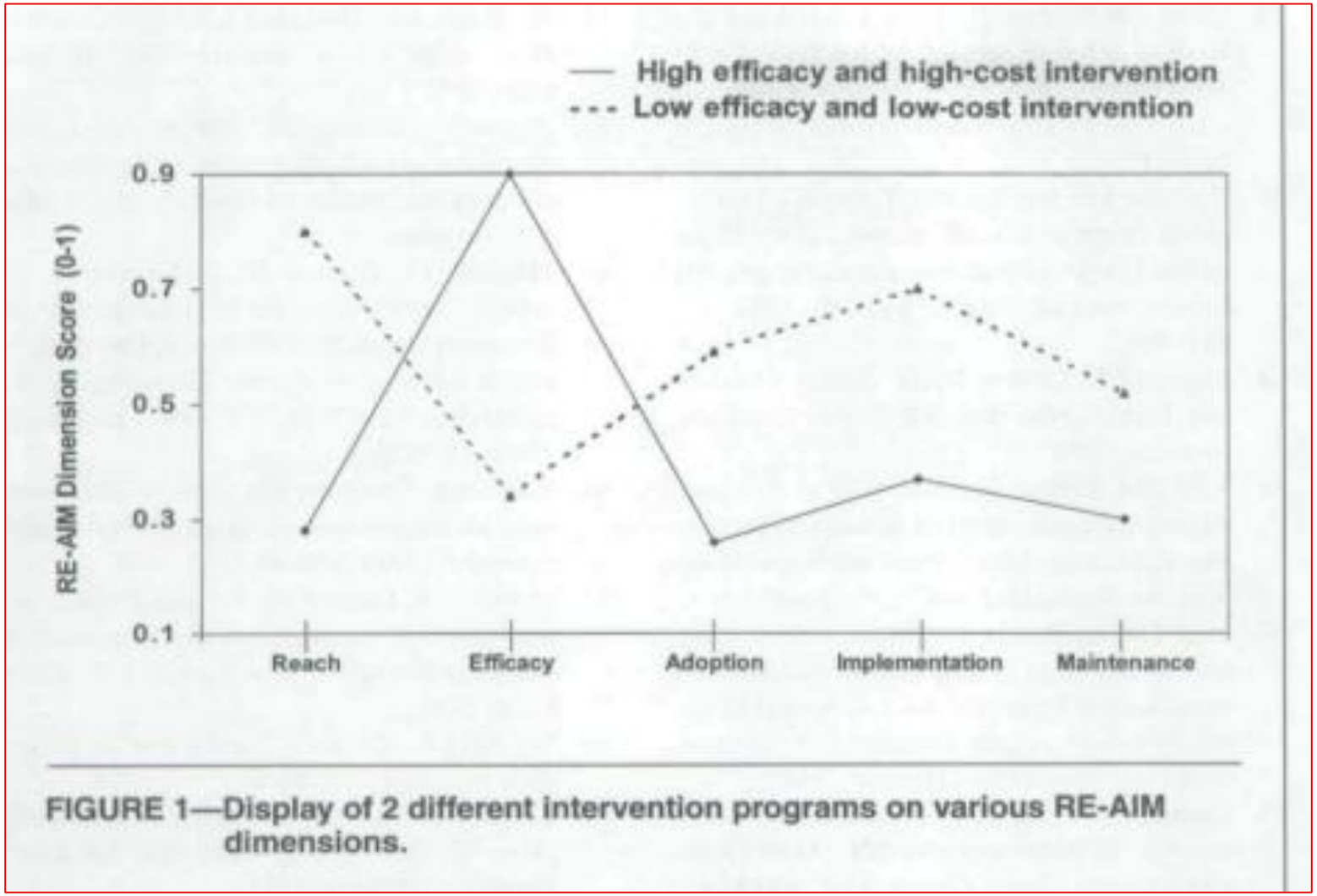


FIGURE 1—Display of 2 different intervention programs on various RE-AIM dimensions.

Glasgow et al 1999

Resource Sheet 2- Select strategies and specific evaluation questions

Dimensions for Dissemination	Questions to Ask of Potential Programs	Strategies to Enhance Future Translation and Dissemination
Reach (individual level)	• What percentage of the target population would come in contact with your program? • Will you reach the most in need? • Will research participants reflect the targeted population?	• Formative evaluation with potential users and nonusers • Small-scale recruitment studies to enhance methods • Identify and reduce participation barriers • Use multiple channels of recruitment
Effectiveness (individual level)	• Will the intervention likely affect key targeted outcomes? • What unintended adverse consequences may occur? • How will impact on quality of life be assessed?	• Incorporate tailoring to individuals • Reinforce messages via repetition, multiple modalities, social support and systems change • Consider stepped care approaches • Evaluate adverse outcomes and quality of life for program revision and cost-to-benefit analysis
Adoption (setting or organizational level)	• What percentage of target settings and organizations will use the program? • Do organizations include high-risk or underserved populations? • Does program fit with organizational goals and capacities?	• Conduct formative evaluation with adoptees and non-adoptees • Recruit settings that have contact with the target audience • Develop recruitment materials outlining program benefits and required resources • Provide various cost options and customization of the intervention
Implementation (setting or organizational level)	• Can different levels of staff successfully deliver the program? • What proportion of staff within a setting will agree to program delivery? • What is the likelihood that various components will be delivered as intended?	• Provide delivery agents with training and technical assistance • Provide clear intervention protocols Consider automating all/part of the program • Monitor and provide staff feedback and recognition for implementation
Maintenance (individual and setting levels)	• Does the program produce long-term individual behavior change? • Will organizations sustain the program over time? • What are characteristics of persons and settings showing maintenance?	• Minimize level of resources required • Incorporate “natural environmental” and community supports • Conduct follow-up assessments and interviews to characterize success at both individual and setting levels • Consider incentives and policy supports

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Public Health Need **Thought Exercise**

Implementing A Dementia Screening (or Disparities Reduction) Program; or COVID-19 Vaccine) Story

Even if 100% effective...is only so good as how and whether:

- It is **adopted** widely, including in low resource settings
- Local stakeholders and delivery staff choose to deliver it
- It can be **implemented** consistently with quality
- It **reaches** intended recipients, including those at highest risk receive it
- It can be **maintained** or sustained

❖ *If we assume 70% success* for each step above…….

Glasgow RE, Vogt TM, Boles SM. *Am J Public Health.* 1999;89(9):1322.
Glasgow RE, et al. *Frontiers Public Health* 2019 7:64. doi: 10.3389/fpubh.2019.00064

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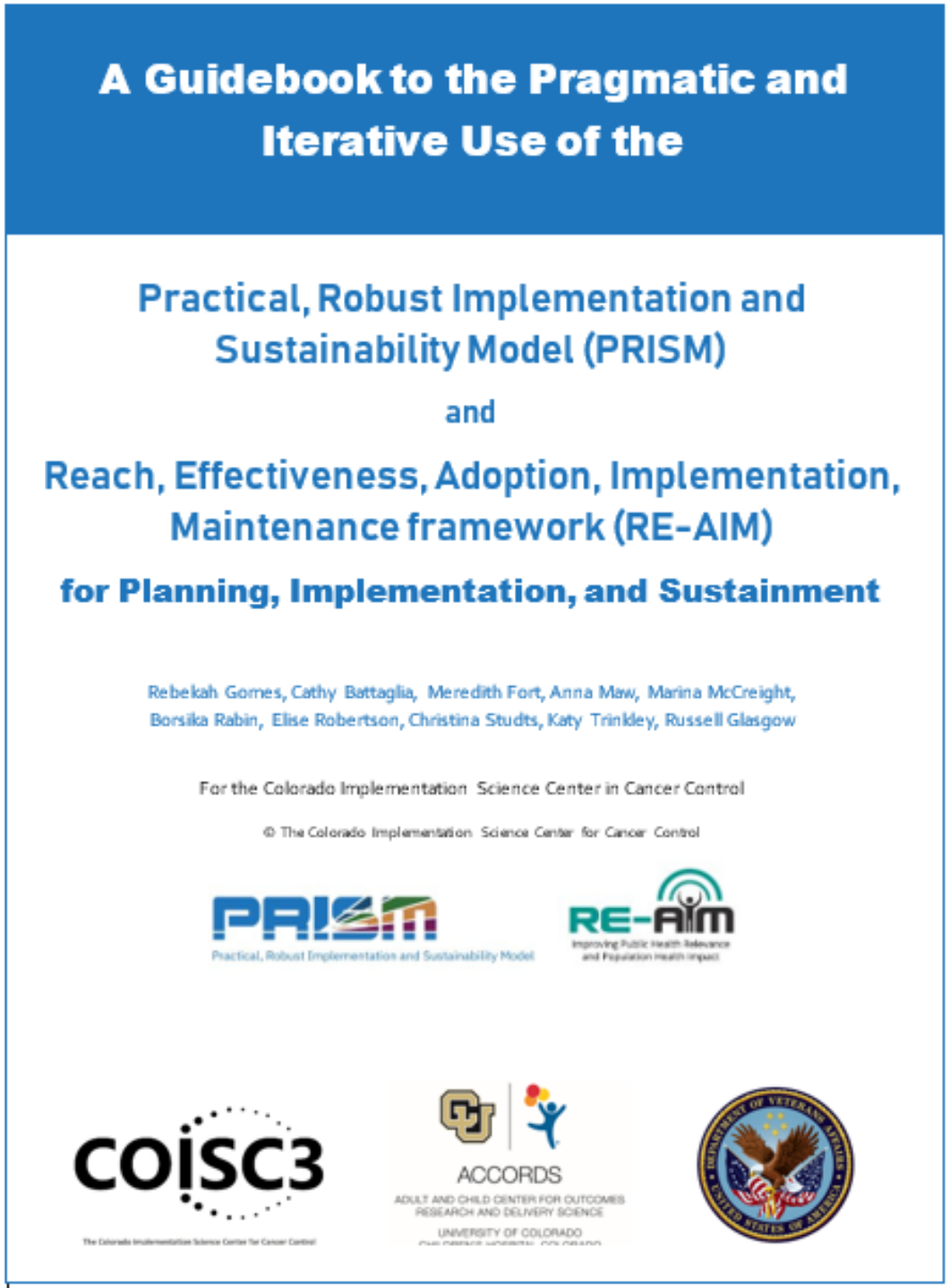

Purposes:

- Briefly discuss key conceptual issues in PRISM and RE-AIM
- Provide guidance, examples, and recommendations for pragmatic use of these frameworks
- Provide survey items for different project phases and tables of strategies to enhance RE-AIM outcomes

https://tinyurl.com/4fmvf7kr