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**Dartmouth Center for
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Application of the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) Framework in Implementation Research

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In support of improving patient care, Dartmouth Health is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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Learning Objectives:

1. Describe limitations in the population and public health impact of traditional efficacy and effectiveness research.
2. Summarize assessment approaches for the multidimensional implementation outcomes specified in RE-AIM.
3. Apply the RE-AIM framework to specific research questions in conjunction with other contextual frameworks.



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1. Have a Dartmouth Health CE for Professionals account *with your mobile number included*. Go to <https://dh.cloud-cme.com> to log in or create an account.
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Application of the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) Framework in Implementation Research

**DCIS Fundamentals Seminar Series
May 13, 2026**

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Delivery Science (ACCORDS)
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Learning Objectives

- Describe limitations in the population and public health impacts of traditional efficacy and effectiveness research
- Summarize assessment approaches for the multidimensional implementation outcomes specified in RE-AIM
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The impact of health-related interventions:
It's not just about effectiveness!

Reach: What proportion of individuals who could benefit actually receive the intervention? Are they representative of all who are eligible?

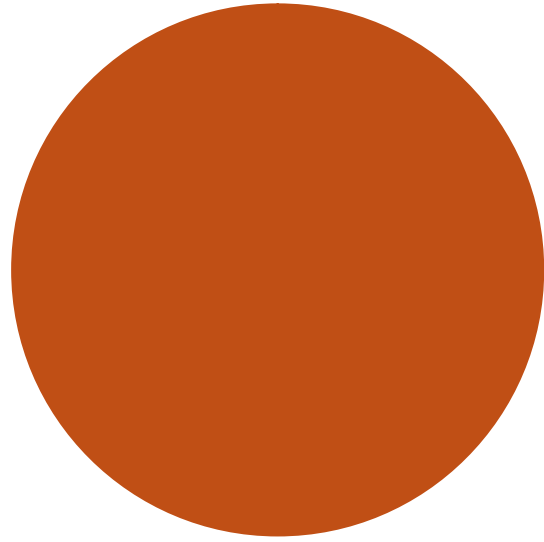
Effectiveness: What outcomes are experienced by those who receive the intervention? Are those outcomes equivalent across groups? Are there negative or unintended effects/consequences?

Adoption: (1) What sites/organizations decide to deliver the intervention? Are they representative of all sites/organizations that could?
(2) What staff/clinicians/personnel within the site/organization decide to deliver the intervention? Are they representative of all who could?

Implementation: How well is the intervention delivered? Are core components or functions delivered, what level of fidelity, what are the costs, are there adaptations?

Maintenance: (1) Is delivery of the intervention maintained over time? By all or only some, and do those groups differ in characteristics?
(2) Are effects of the intervention maintained over time among those who receive it?

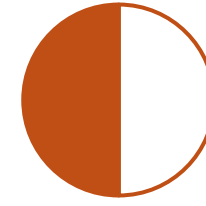
The Goal:



100% *Population-Level Impact*

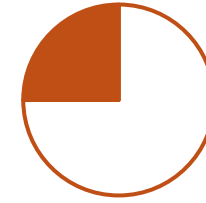
The Reality:

Half of settings/staff use the intervention
(**Adoption** = 50%)



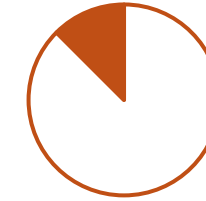
50% Population-Level Impact

Half deliver the intervention well
(**Implementation** = 50%)



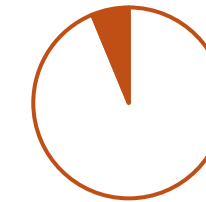
25% Population-Level Impact

Half of eligible patients/clients accept/receive
(**Reach** = 50%)



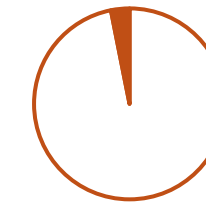
12.5% Population-Level Impact

Half of patients/clients receive benefit
(**Effectiveness** = 50%)



6.2% Population-Level Impact

Half maintain delivery/benefit
(**Maintenance** = 50%)



3.1% Population-Level Impact

Assessing RE-AIM dimensions

Quantitative assessment:

RE-AIM Dimension and Questions	Technical Definition	Reporting Recommendations
Reach (Individual level): WHO is intended to benefit and who actually participates or receives the intervention?	The absolute number, proportion, and representativeness of individuals who receive the intervention, and the reasons why	• Percentage of eligible individuals who participate based on a valid denominator • Characteristics of individuals who participate compared to non-participants • Any exclusion criteria used
Effectiveness (Individual level): WHAT is the most important benefit you are trying to achieve and what is the likelihood of negative or unintended outcomes?	The effects of the intervention on intended outcomes, as well as potential negative effects, heterogeneity, quality of life, and economic outcomes, and the reasons why	• Primary and secondary outcomes • Broader outcomes (e.g., quality of life, unintended consequences) • Attrition • Differential results by subgroups

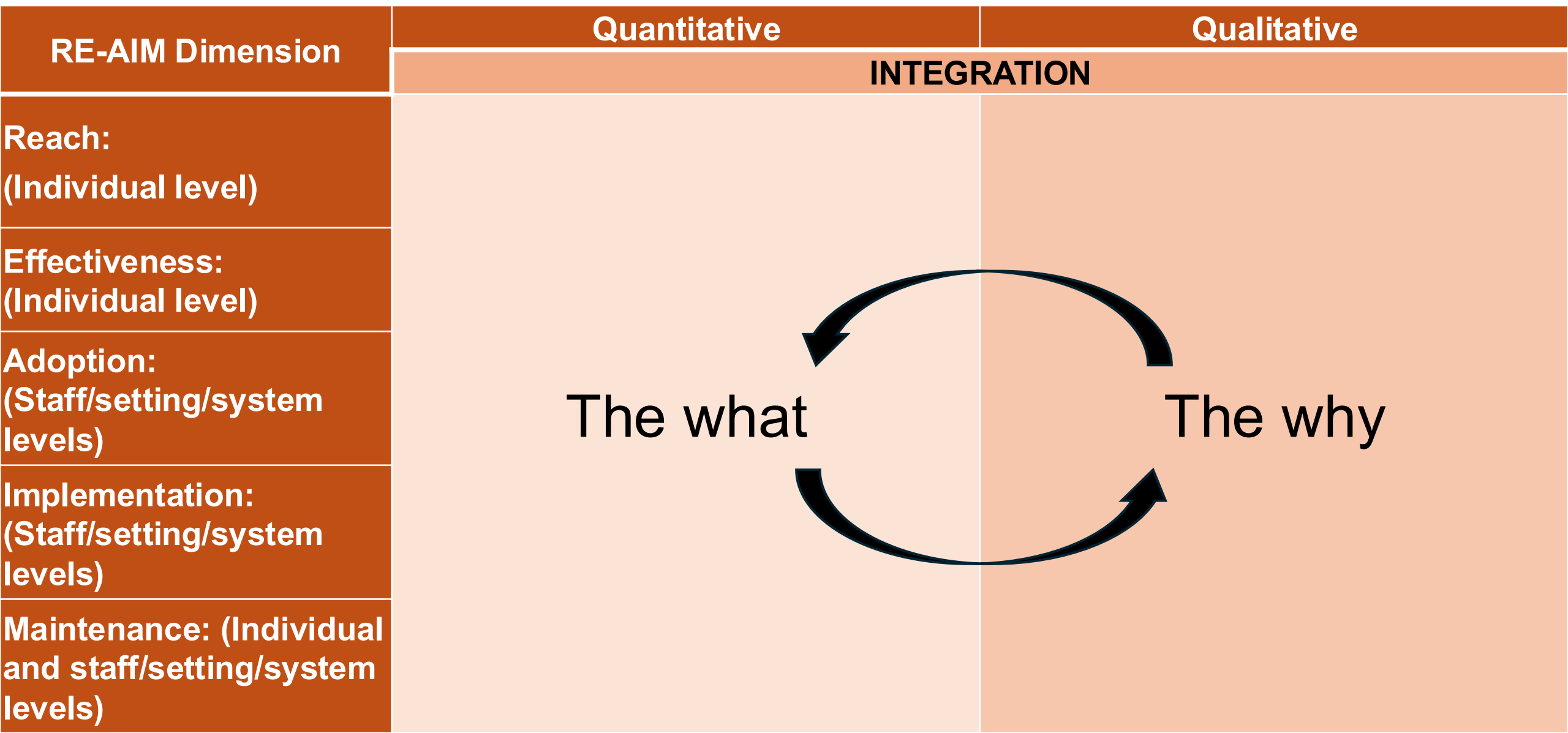
RE-AIM Dimension and Questions	Technical Definition	Reporting Recommendations
Adoption (Staff/setting/system levels): WHERE is the intervention initiated and WHO initiated it?	The absolute number, proportion, and representativeness of intervention agents, settings, and systems that initiate the intervention, and the reasons why	• Percentage of staff/settings/systems approached that initiated the intervention • Characteristics of those who initiated versus those who did not, at each level • Any exclusion criteria used
Implementation (Staff/setting/system levels): HOW consistently was the intervention delivered, how was it adapted, how much did it cost, and WHY did the results come about?	Fidelity to the intervention as it was intended to be delivered, adaptations, costs, and the reasons why	• Consistency and adherence to intended intervention delivery (including across staff/settings/systems) • Adaptations made to the intervention and implementation, including type, timing, and reasons • Costs of implementing the intervention

RE-AIM Dimension and Questions	Technical Definition	Reporting Recommendations
Maintenance (Individual and staff/setting/system levels): HOW LONG did the results last and HOW LONG was intervention delivery sustained?	Length of time that effectiveness results are sustained, and the extent to which the intervention becomes institutionalized with continued delivery	• Primary and secondary outcomes at various points after the final intervention time-point • Broader individual outcomes, long-term attrition, and heterogeneity in effects • Sustainment of intervention delivery at various points after project or initiative ending • Heterogeneity in sustainment across staff/settings/systems • Adaptations made after the project or initiative ending • Long-term degree of alignment with staff/setting/system goals and priorities

Qualitative assessment:

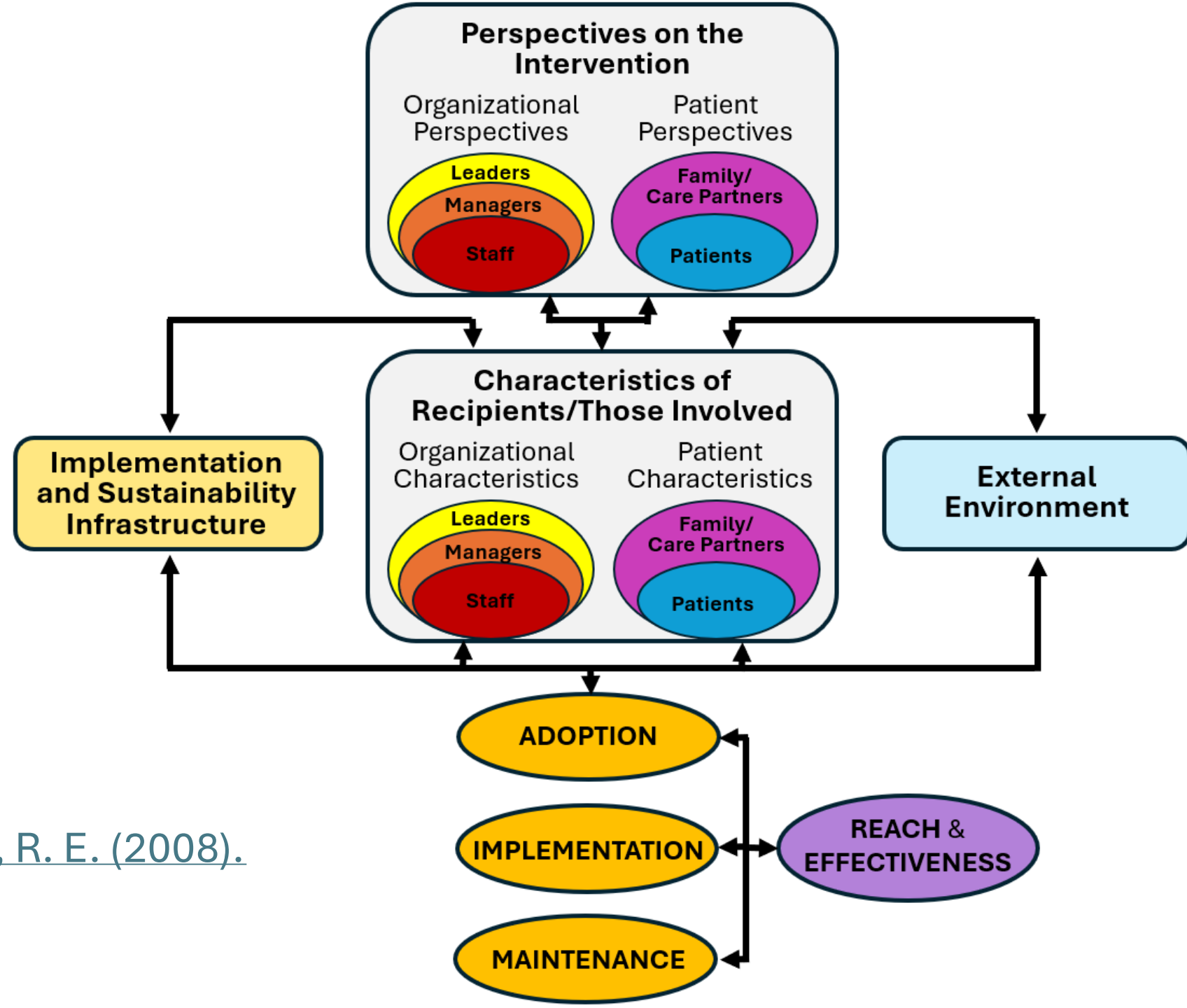
RE-AIM Dimension	Qualitative Methods	Questions
Reach: (Individual level)	• Interviews (patients, clinicians, staff, administrators) • Focus groups • Observation/ethnography • Records review • Meeting notes • Pre- or post-mortem	• What did you think of the intervention? How did it go when you tried to access it? • What groups seemed to benefit most from the intervention? Least?
Effectiveness: (Individual level)		• What surprised you about the outcomes?
Adoption: (Staff/setting/system levels)		• What made your site decide to start delivering the intervention? • What made it easy to deliver? What got in the way?
Implementation: (Staff/setting/system levels)		• How costly would you estimate it was to deliver this intervention?
Maintenance: (Individual and staff/setting/system levels)		• What changes were made to the intervention to make it fit better with your organization/your community/your patients? • What are your thoughts about continuing to deliver this intervention going forward? What resources or supports would be needed to be able to do so?

Mixed Methods

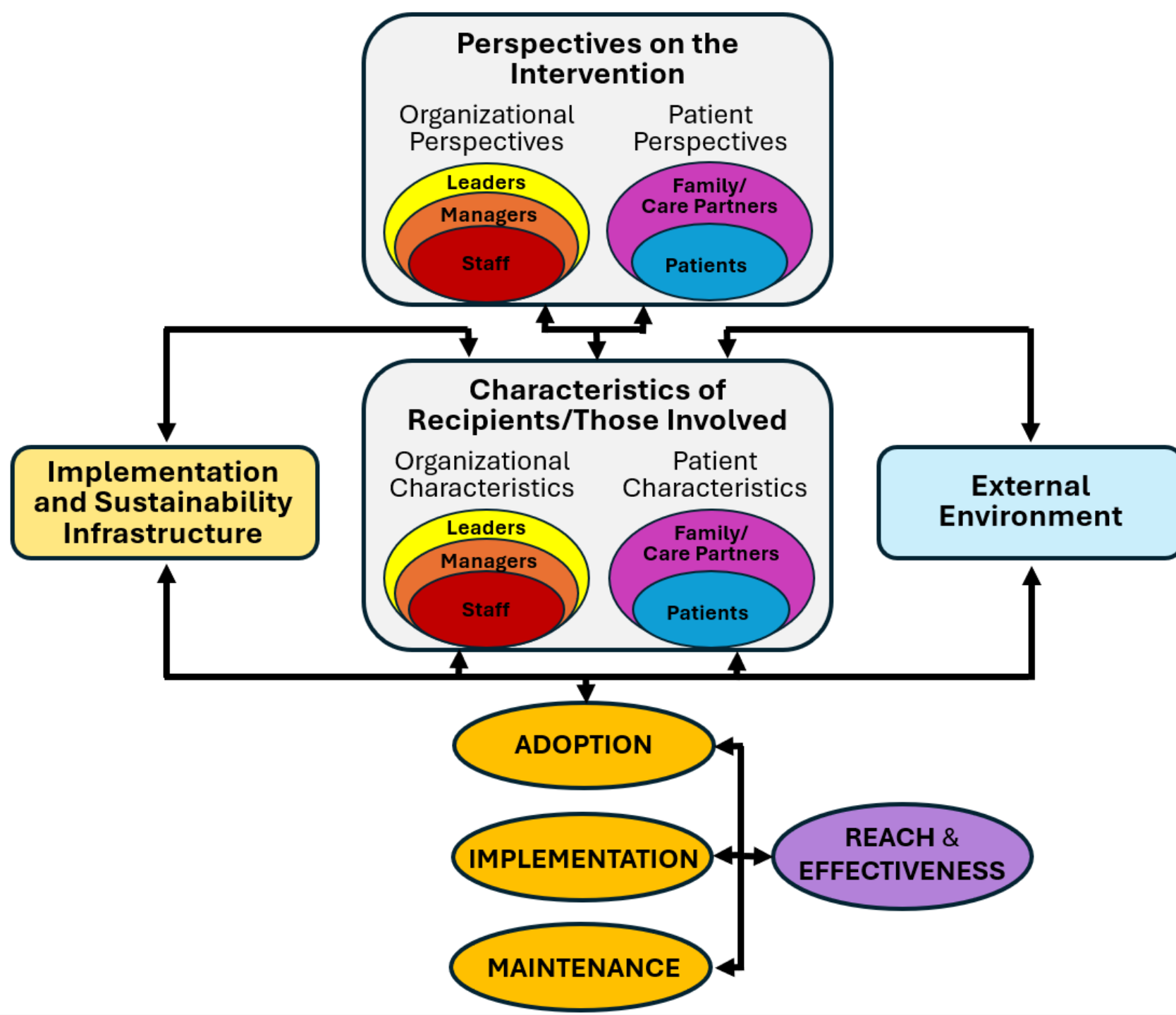
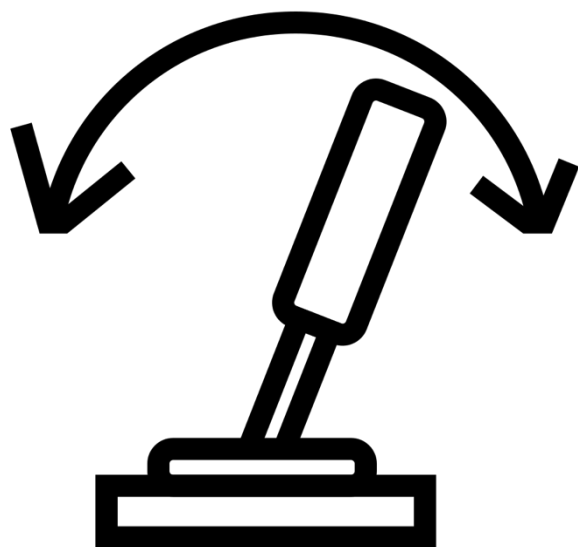


PRISM:

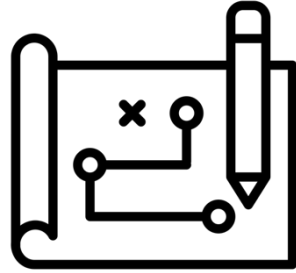
Practical, Robust Implementation and Sustainability Model



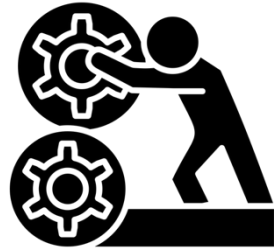
Feldstein, A. C., & Glasgow, R. E. (2008).



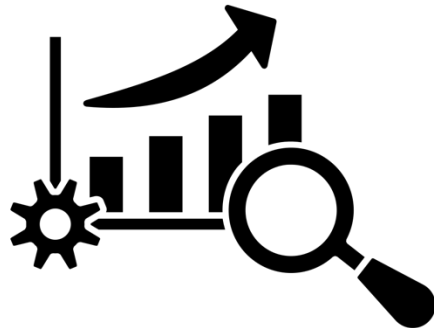
Ways to use RE-AIM in implementation research:



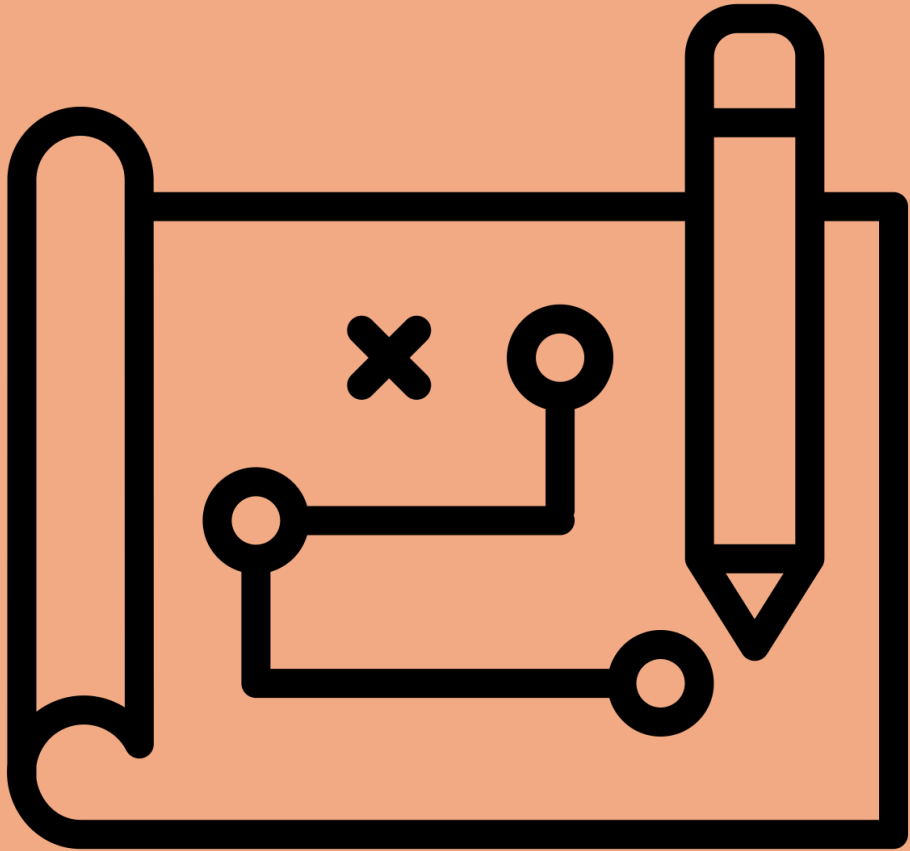
Planning



Implementing

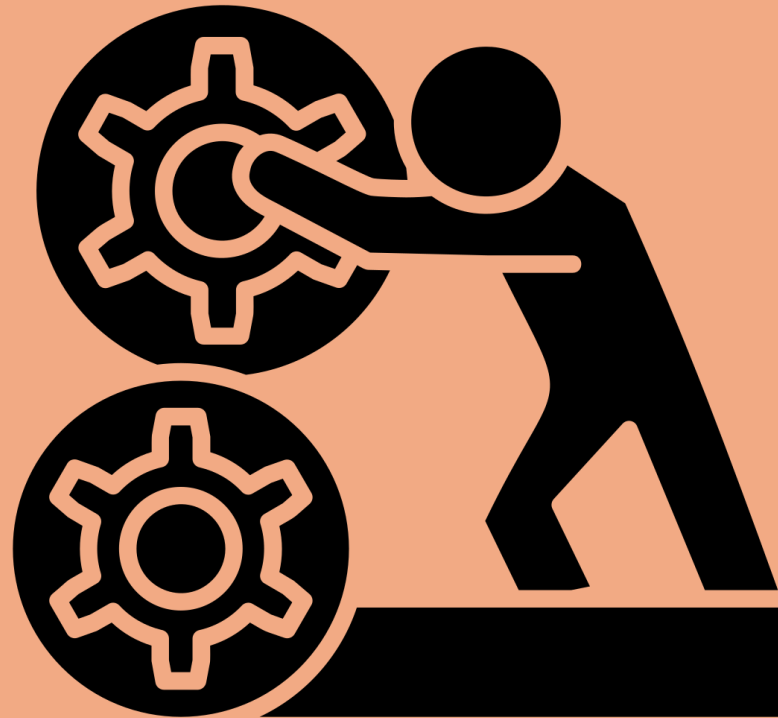


Evaluating



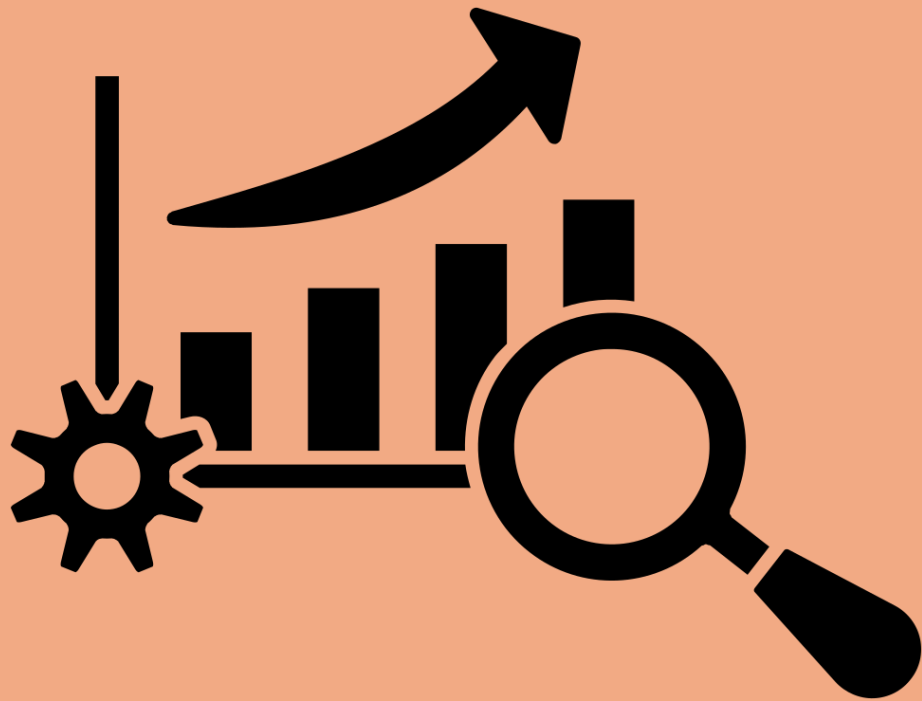
PLANNING with RE-AIM

- Use RE-AIM to “design for dissemination, implementation, sustainment, and equity”
- Use RE-AIM to identify your partners’ priorities
- Use RE-AIM(/PRISM) to anticipate multilevel barriers and facilitators – and select implementation strategies



IMPLEMENTING with RE-AIM

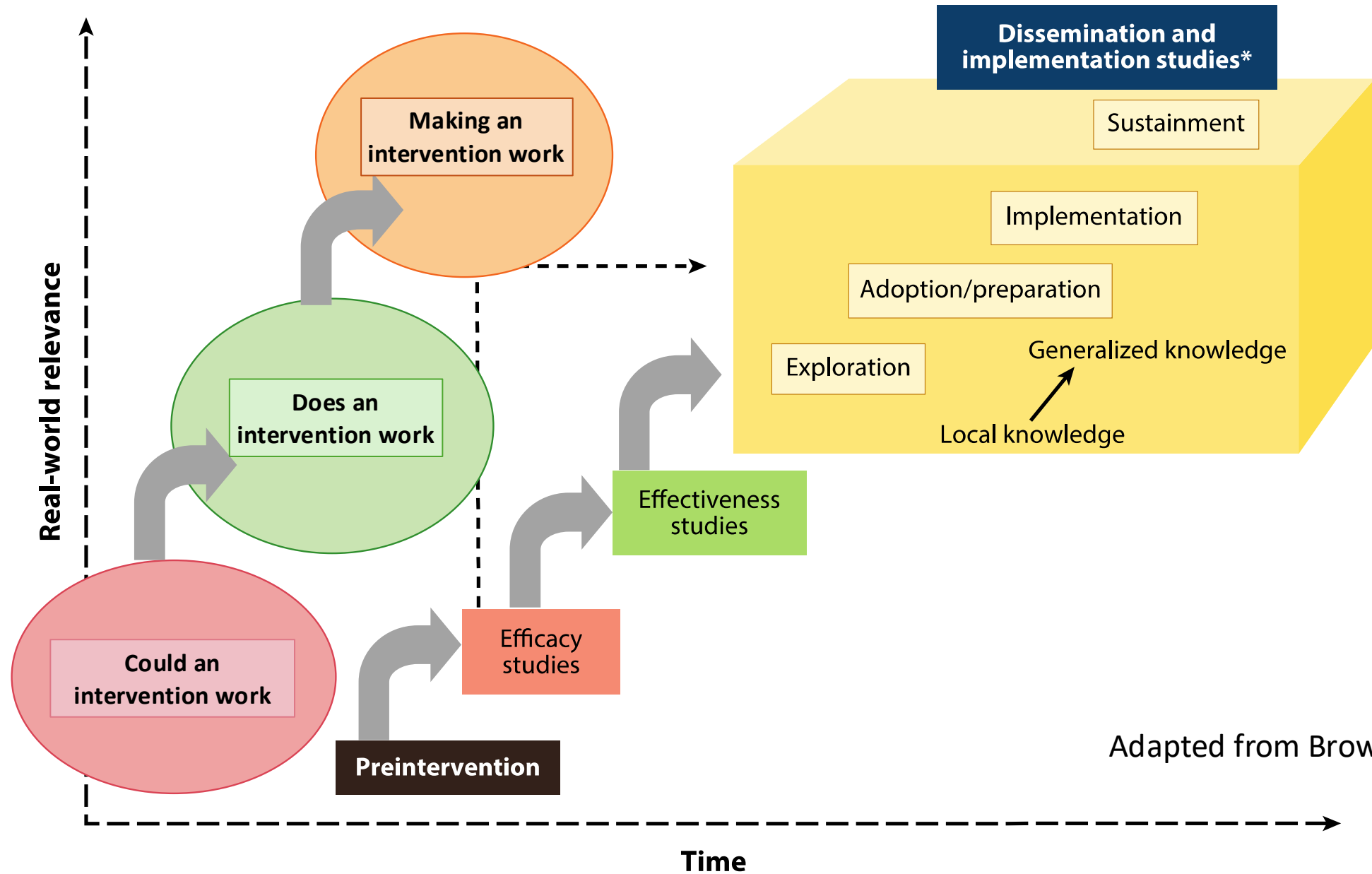
- Use iPRISM (or iterative RE-AIM) to assess, prioritize, and address implementation outcomes
- Use PRISM(/RE-AIM) to assess changes in context during implementation
- Systematically adapt intervention/implementation strategies to target RE-AIM outcomes



EVALUATING with RE-AIM

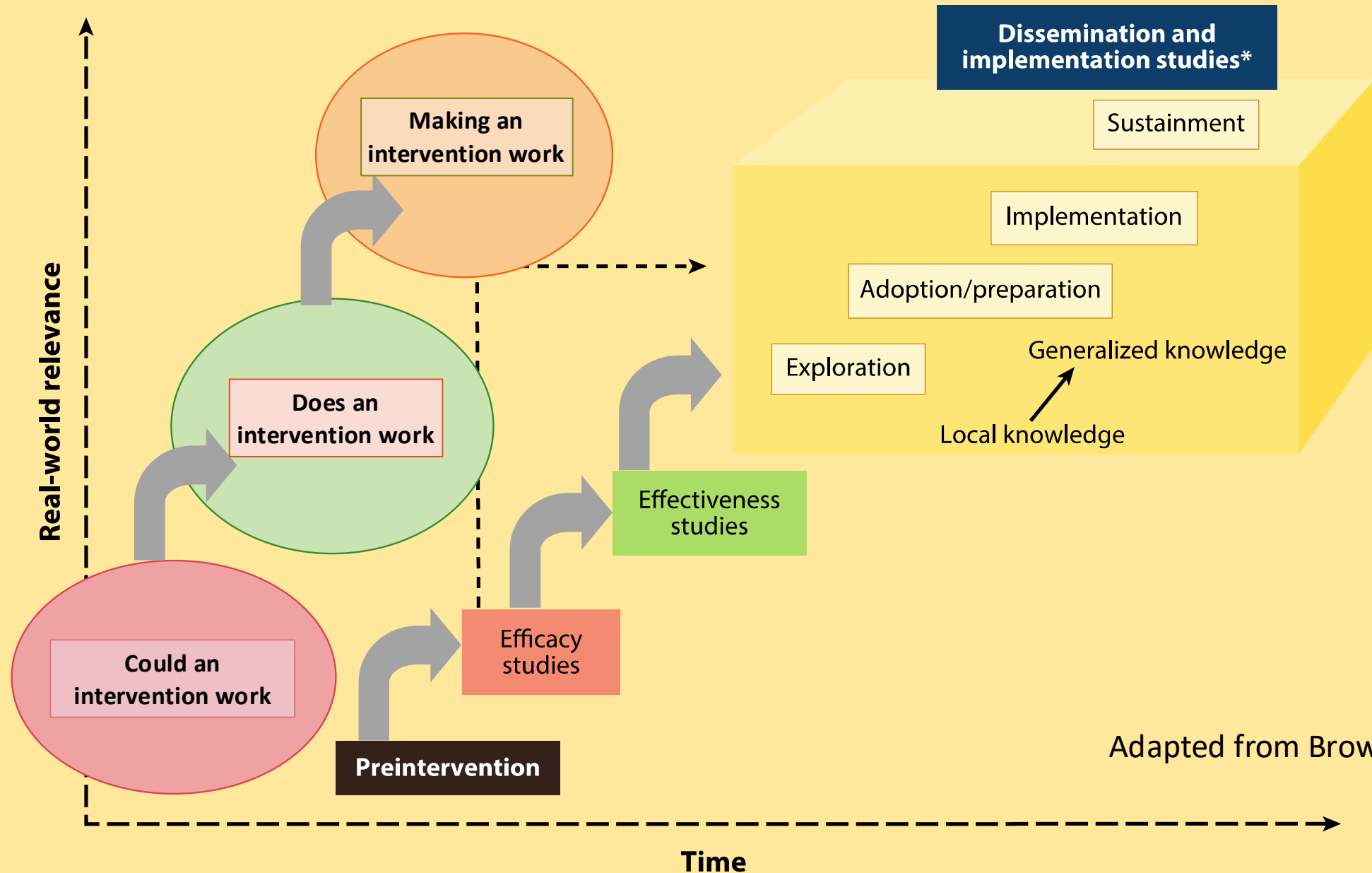
- Assess RE-AIM outcomes quantitatively, qualitatively, or with mixed methods
- Assess PRISM contextual factors associated with RE-AIM outcomes quantitatively, qualitatively, or with mixed methods
- Examine whether adaptations engaged mechanisms leading to improved RE-AIM outcomes

Can you use RE-AIM in pilot studies,
type 1 hybrids,
or other “pre-implementation” projects?



Adapted from Brown et al. (2017)

*These dissemination and implementation stages include systematic monitoring, evaluation, and adaptation as required.

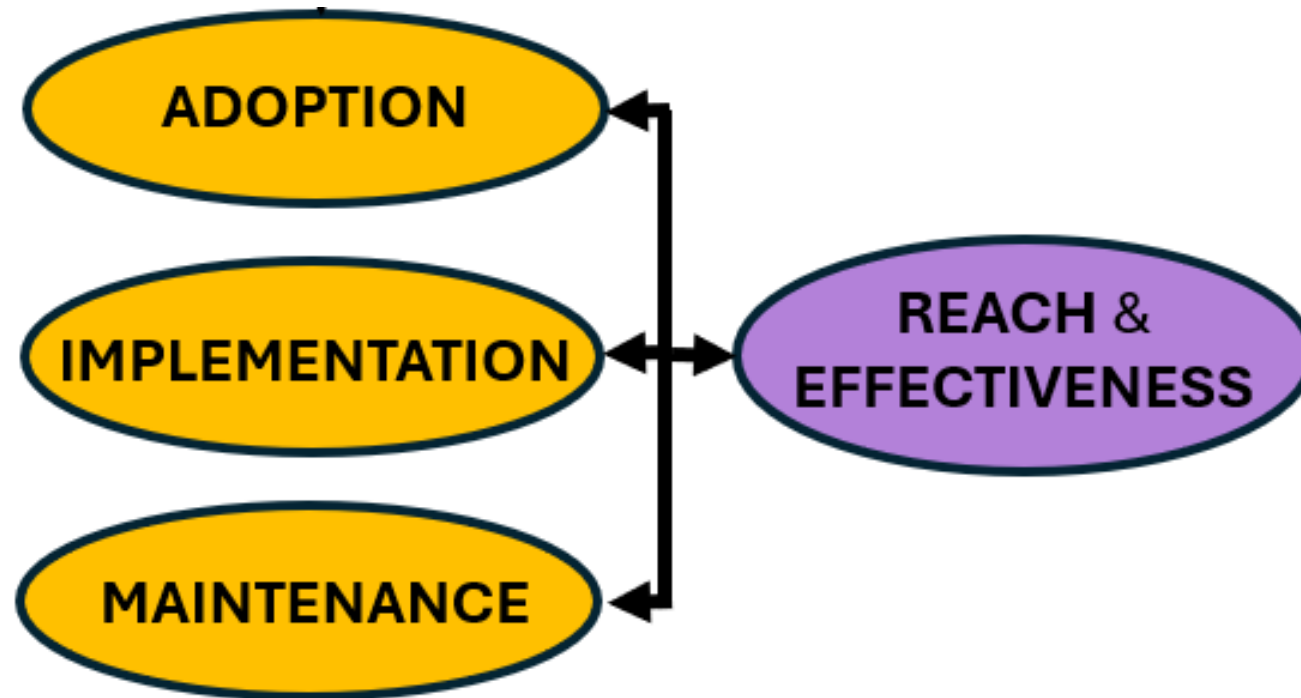


Adapted from Brown et al. (2017)

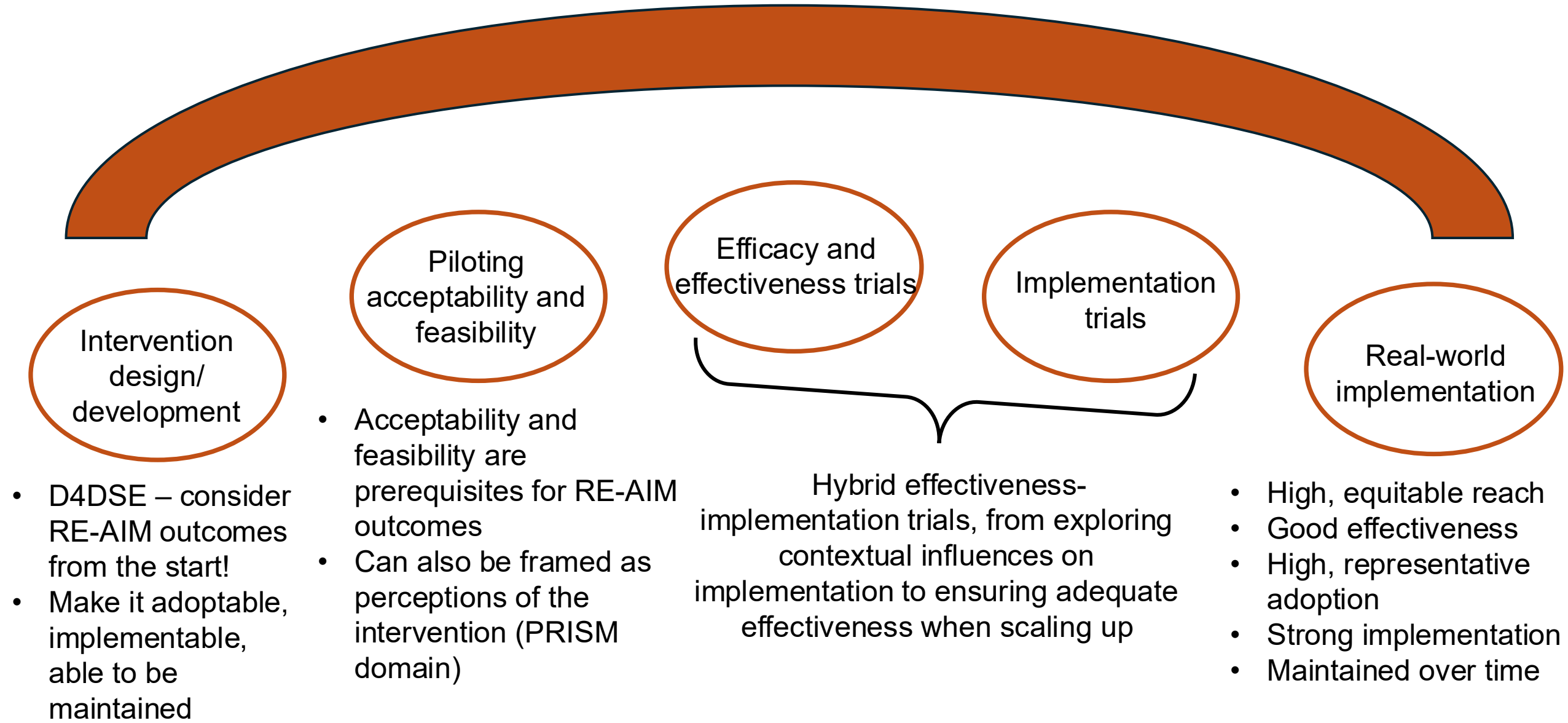
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We want to get to **IMPACT:**



RE-AIM overarching a program of research



Comprehensive RE-AIM resources:

- <https://re-aim.org/>
- <https://prismtool.org/>

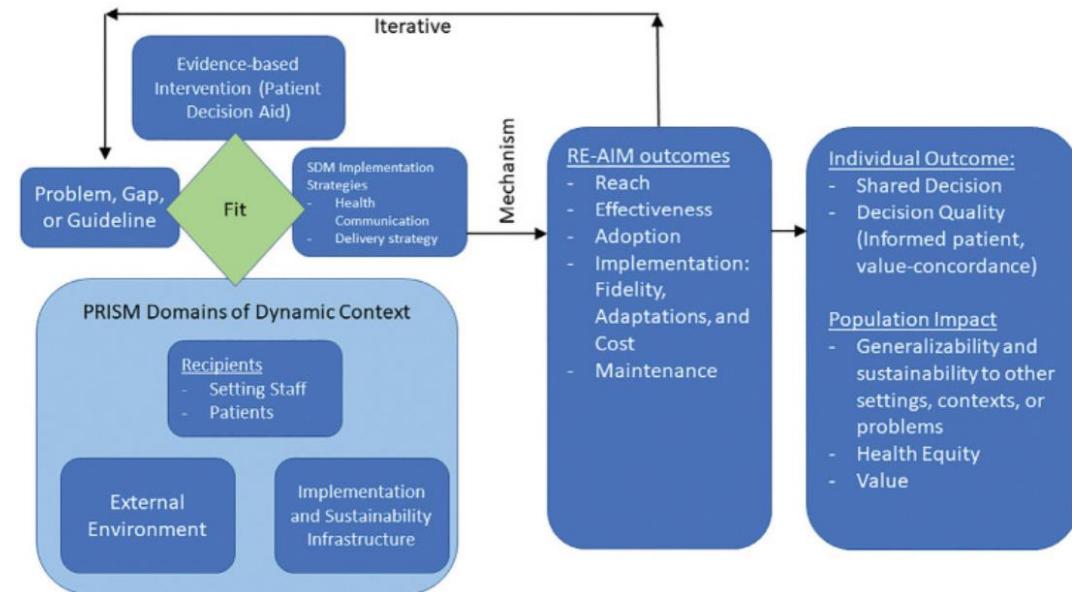
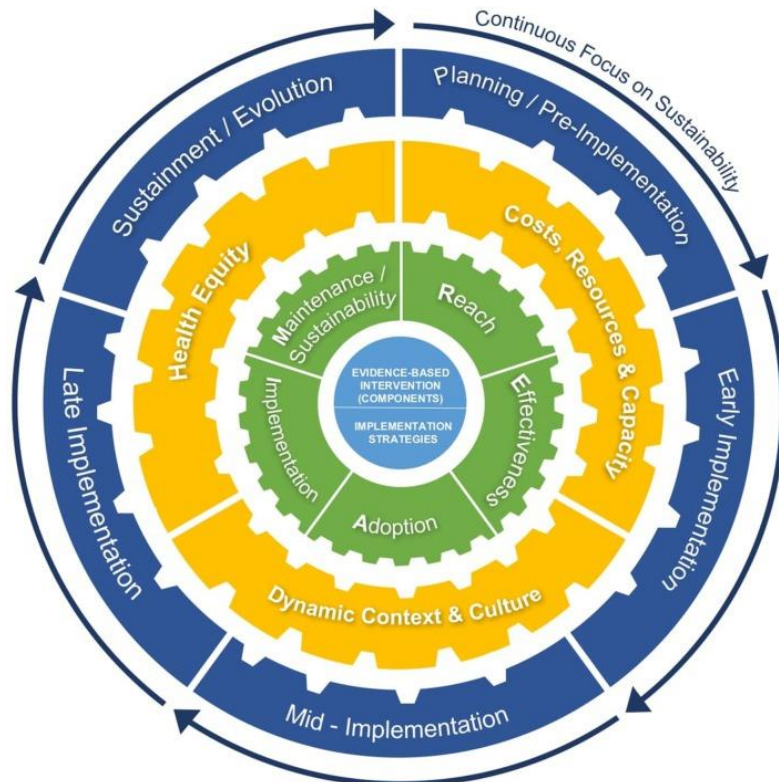
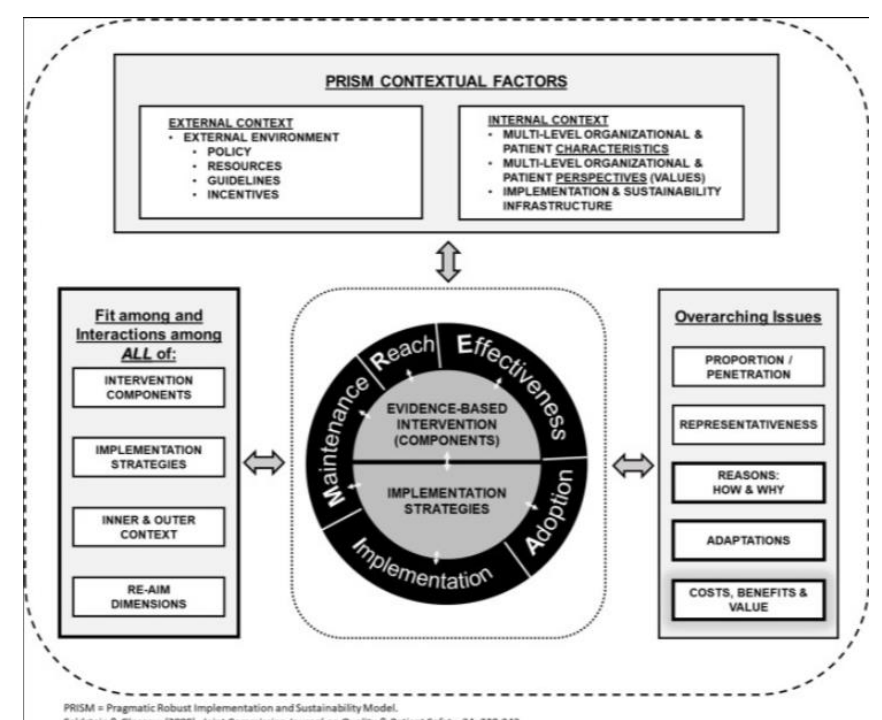
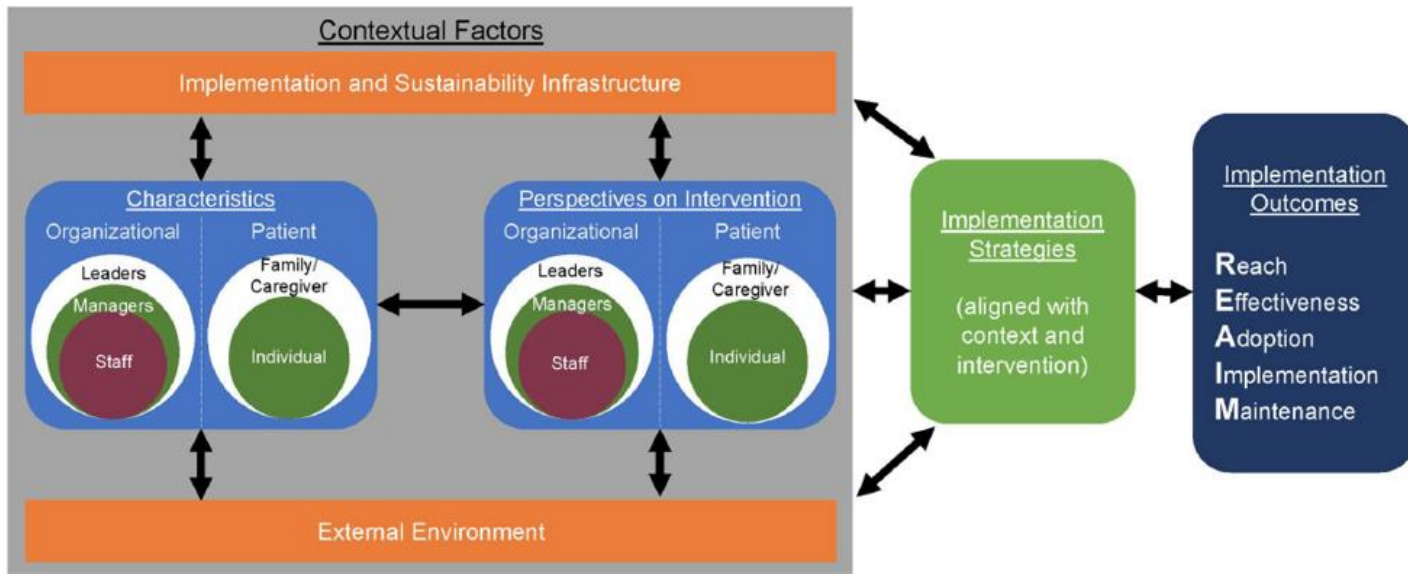


WELCOME TO RE-AIM IMPLEMENTATION

RE-AIM and PRISM guide users to plan, implement, and evaluate programs
with contextual factors in mind, increasing

[Standard Survey items for RE-AIM](#)[PRISM Contextual Survey Instrument \(PCSI\)](#)[PRISM Qualitative Database](#)[Interactive RE-AIM Planning Tool](#)[IPRISM Webtool](#)[Measures and Checklists](#)[Grant Writing Guidance](#)[Previous Events and Blogs \(Archives\)](#)[Figures, Images, and Visuals](#)

START HERE! TAKE A TOUR OF RE-AIM.ORG



Questions?

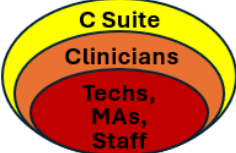
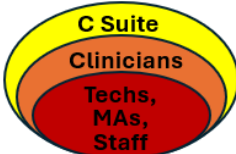


Thank you!

christina.studts@cuanschutz.edu





PRISM Domain	Example factors that get in the way	Example strategies to overcome them
Patient Perspectives on LCS 	Fear, irrelevance, skepticism, perceived stigma, medical mistrust, “one and done”	Supportive and person-centered communication, shared decision-making tools, non-stigmatizing patient/family education
Organizational Perspectives on LCS 	Complex, time consuming, LDCT is all we need, “nice to have” but don’t have to have	Clinical champions, continuing education, leadership messaging
Patient Characteristics 	Eligibility unclear, transportation/housing needs, un/under-insured, competing demands, cultural/language differences	Empathic smoking history assessment, navigation, multilingual materials, referral pathways to existing local social/community resources
Organizational Characteristics 	Size, existing services, isolation, culture of resistance to change	Interdepartmental implementation team, implementation plan, engagement at all levels to increase buy-in, community engagement
Implementation and Sustainability Infrastructure	No ownership, tracking challenges (patients “fall through the cracks”), inadequate staffing, lack of dedicated resources	Dedicated coordinator, standardized referral pathways, EHR integration and tools, audit & feedback, advocacy for adequate staffing/resources
External Environment	Reimbursement policies, health inequities, evolving guidelines, accreditation programs	Technical assistance/coaching, training, learning communities, advocacy



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Learning Opportunities at Dartmouth

Seminar Series

Fundamentals of Implementation Science

Monthly on the 2nd Wednesday

12:00 – 1:00PM ET

Virtual



Works in Progress

Monthly on the 3rd Wednesday

12:00 – 1:00PM ET

In Person & Virtual



Hosted by:

Jeremiah Brown, PhD, DCIS Director

Kelly Aschbrenner, PhD, DCIS Co-Director

Sarah Lord, PhD, DCIS Co-Director

MS in Implementation Science



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MS in IMPLEMENTATION
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100% ONLINE

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9 or 18 Months

What is Implementation Science?
Implementation science is a rapidly growing field with robust government investment and industry interest that addresses the lag between evidence-based practices and widespread practical application in the real world.

The Implementation Science program at Dartmouth provides rigorous training in dissemination and implementation science including theory, methods, and practical applications, as well as essential project management, collaboration, and leadership skills. Graduates will be equipped to apply these skills in a broad range of disciplines and communities throughout the country and the world.

1st

Be part of one of the first implementation science master's programs in the world.

Learn from leaders at the forefront of the dissemination and implementation science field.

Complete the IMPACT Capstone Project where you'll gain hands-on experience throughout the duration of the program.

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Accelerated In this delivery option, students take two concurrent courses at a time (four courses per term) and spend approximately 18-20 hours per week on coursework and class time.

9 Months Total **30 Students Per Class** **2 Courses At A Time**

Traditional In this delivery option, students take one course at a time (two courses per term) and spend approximately 16-20 hours per week on coursework and class time.

18 Months Total **30 Students Per Class** **1 Course At A Time**

Why Implementation Science and Why Now?

Employment for Implementation Science-related occupations is projected to grow annually by 9% by 2021.

The salary range for jobs in the Implementation Science field is \$70,000 - \$200,000.

"Implementation science is the bridge between great ideas and great people ready to use them. This science brings the 'know' to the 'do.'"

-Genevieve Shaeffer '20

Implementation Science MS graduates can likely expect positive job prospects at all geographic levels.

Scan Here:

LEARN MORE ABOUT THE PROGRAM!

Courses In:

- Implementation and De-implementation Strategies
- Application of Theories, Models, and Frameworks
- Qualitative and Mixed Methods in Implementation Research
- Measuring Implementation Science Context, Process and Outcomes
- User-Centered Design Applied to Interventions and Implementation Strategies
- Evaluation of Experimental Trials Including Cost Effectiveness
- Education, Community-Based Participatory Research, and State Services
- And More!

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The Dartmouth Center for Implementation Science is a Center of Biomedical Research Excellence (COBRE) supported by the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH) under Award Number P20GM156710



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