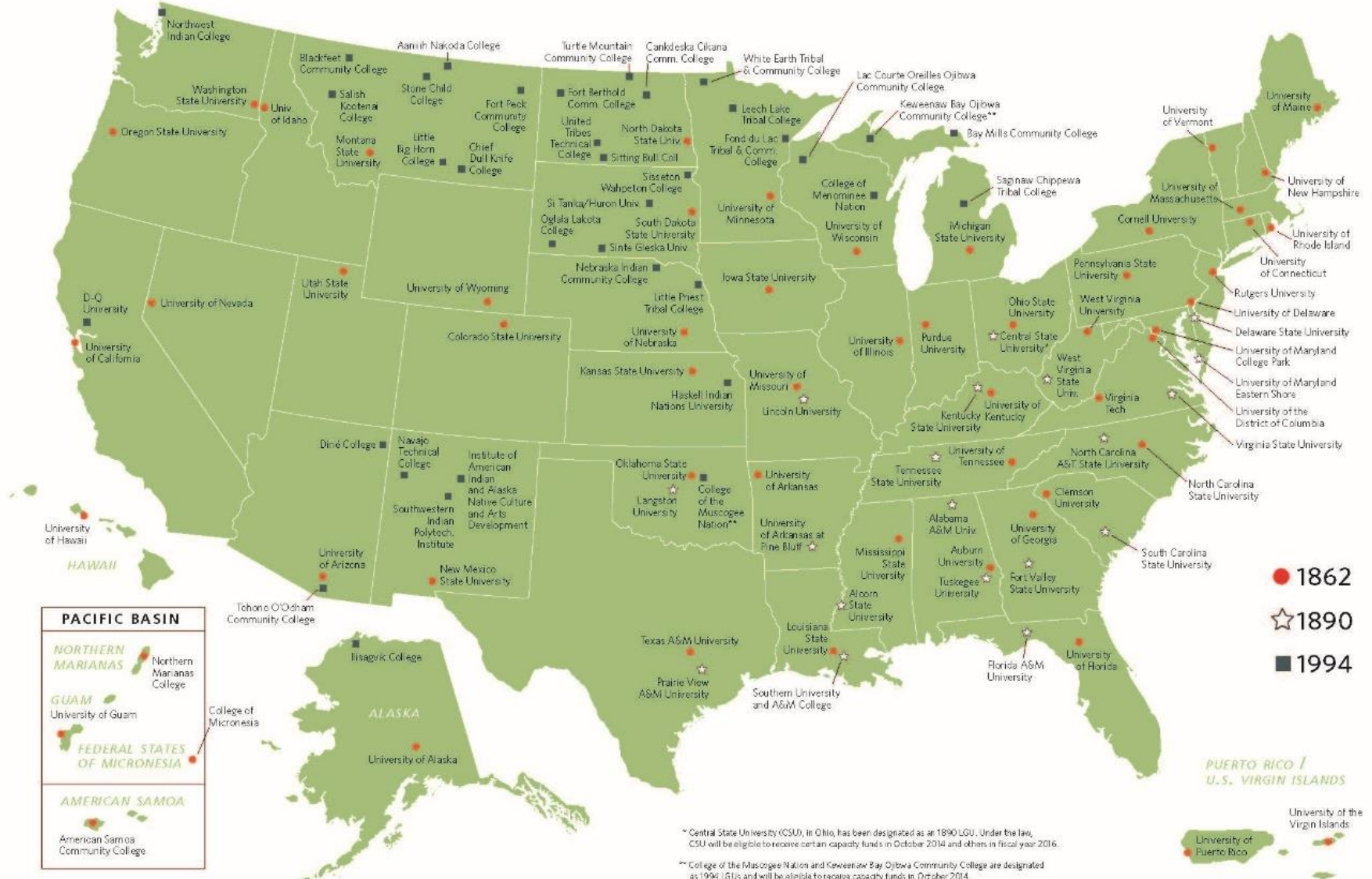


Scaling Up and Out: Increasing the Uptake of Built Environment Approaches in Community Settings

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NIFA LAND-GRANT COLLEGES AND UNIVERSITIES



* Central State University (CSU), in Ohio, has been designated as an 1890 LGU. Under the law, CSU will be eligible to receive certain capacity funds in October 2014 and others in fiscal year 2016.

* College of the Muscogee Nation and Keweenaw Bay Ojibwa Community College are designated as 1994 IGJIs and will be eligible to receive capacity funds in October 2014.



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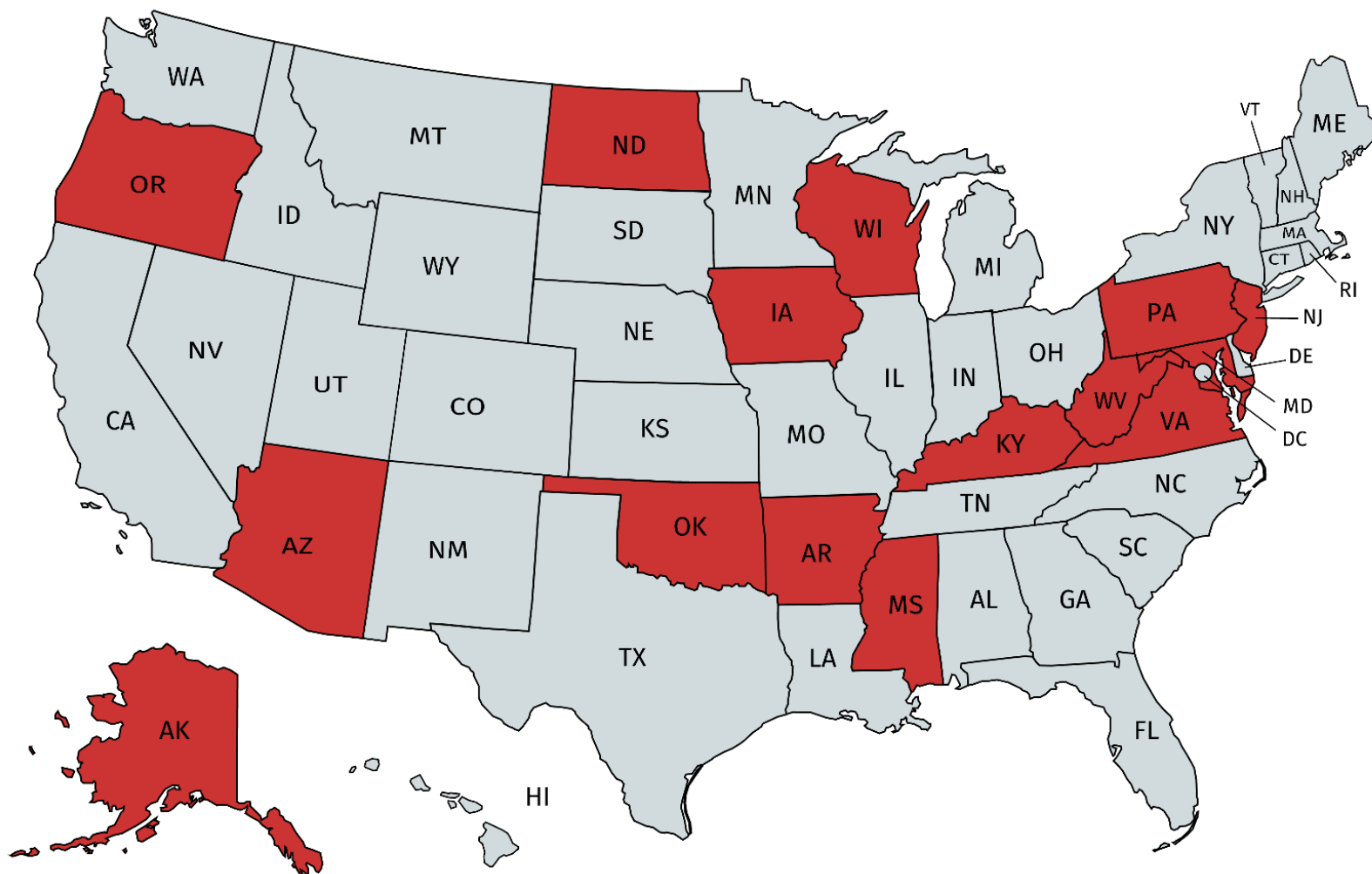
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Locations of Extension-delivered older adult physical activity programs





Beginning With the End in Mind: Contextual Considerations for Scaling-Out a Community-Based Intervention

Laura E. Balis^{1,2*}, Thomas E. Strayer III³, NithyaPriya Ramalingam³ and Samantha M. Harden¹

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Introduction: A number of effective physical activity programs for older adults exist, but are not widely delivered within community settings, such as the Cooperative Extension System. The purpose of this paper was to determine if an evidence-based intervention (EBI) developed in one state Extension system could be scaled-out to a new state system.

Methods and results: The RE-AIM (reach, effectiveness, adoption, implementation, maintenance) framework was used to guide an iterative evaluation of three translational stages. Stage 1: Before program adoption, Extension health educators were surveyed and interviewed to assess physical activity programming perceptions and factors that may influence their decision to attend training or deliver the program in practice. Results indicated that a virtual, scalable training protocol would be necessary and that training needed to include hands-on instruction and be catered to those who were less confident in physical activity program delivery. Stage 2: Training attendees were surveyed pre- and post-training on factors related to the adoption-decision making process and contacted post-training to assess program delivery status. Training did not influence perceptions of the program, intent to deliver, or confidence in delivering the program. Stage 3: During program implementation, the program was evaluated through the RE-AIM framework by surveying across three key stakeholder groups: (1) program participants, (2) potential delivery personnel, and (3) Extension administrators. Findings indicate that the program has the potential to reach a large and representative proportion of the target audience, especially in rural areas. However, adoption and implementation rates among Extension health educators and community partners were low and data collection for effectiveness, implementation, and maintenance was a challenge.

Conclusion: Overall, the results indicate initial struggles to translating and evaluating the program in a large, rural state. Implications for practice include making system-level changes to increase physical activity program adoption rates among Extension health educators and improve data collection and program evaluation through this community-based organization. More work is needed to identify infrastructure support and capacity to scale-out EBIs.

Keywords: RE-AIM, physical activity, cooperative Extension system, implementation science, translation

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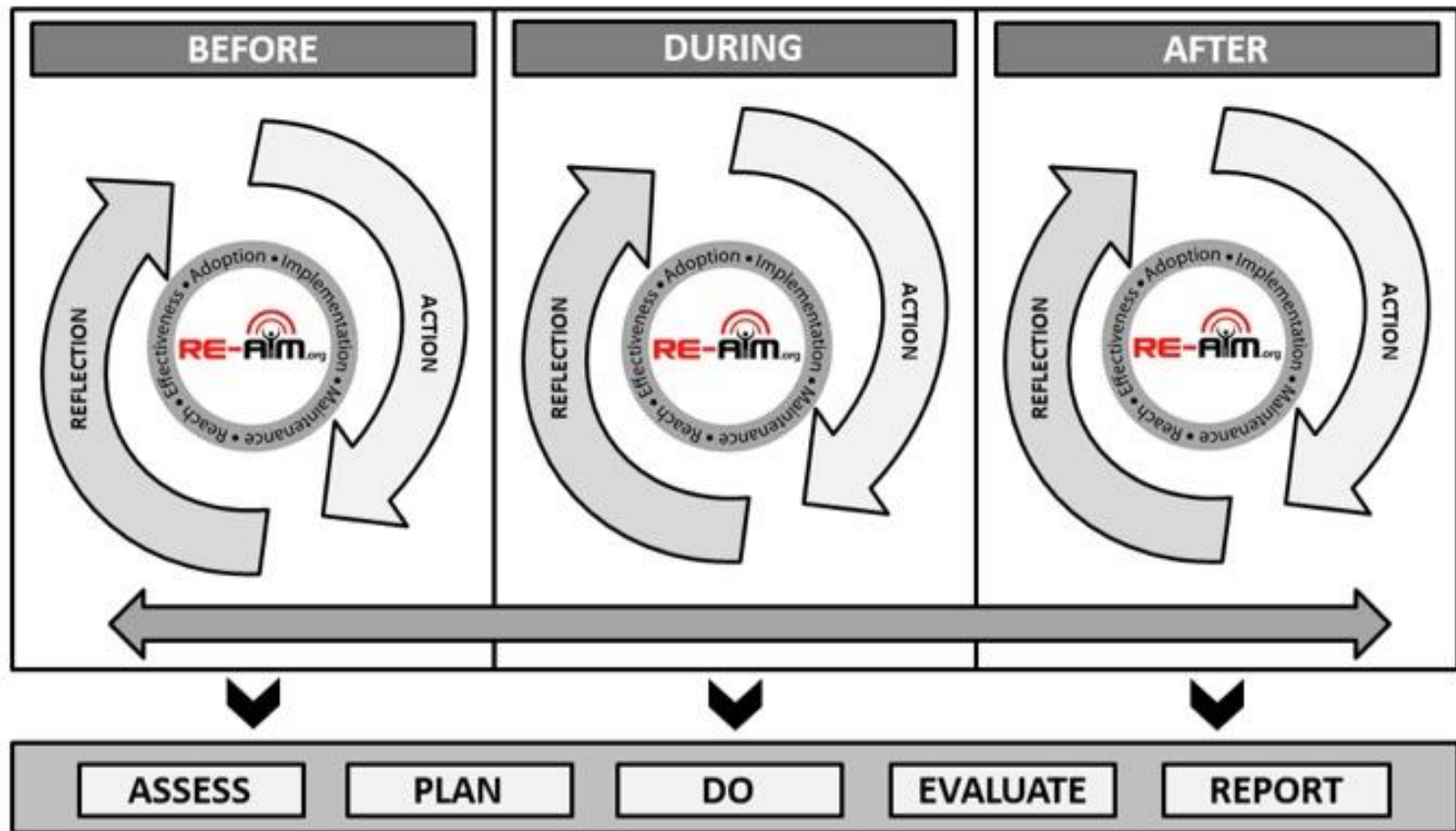
Capture perceptions
of Extension
Educators who could
deliver the program in
practice

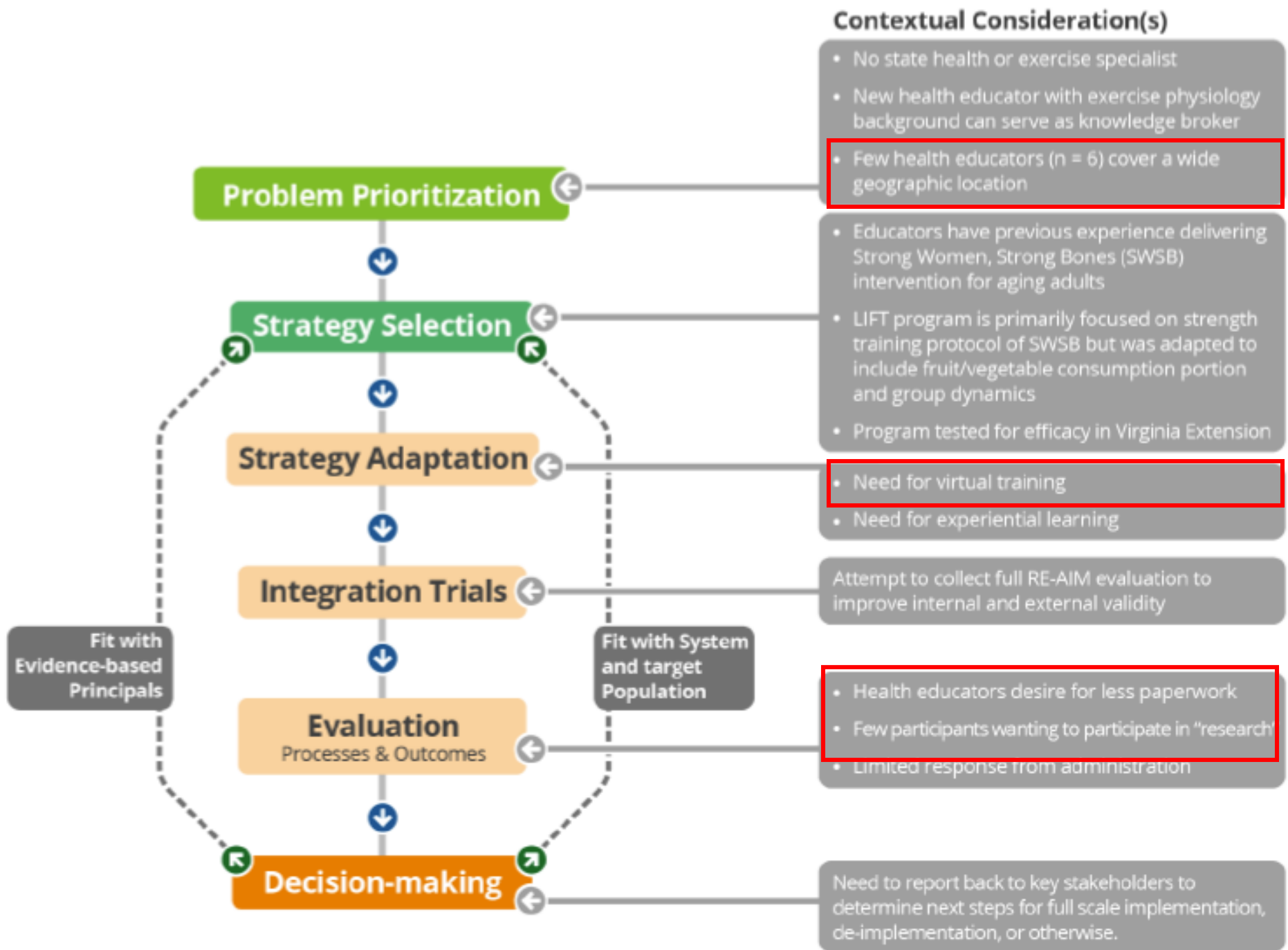


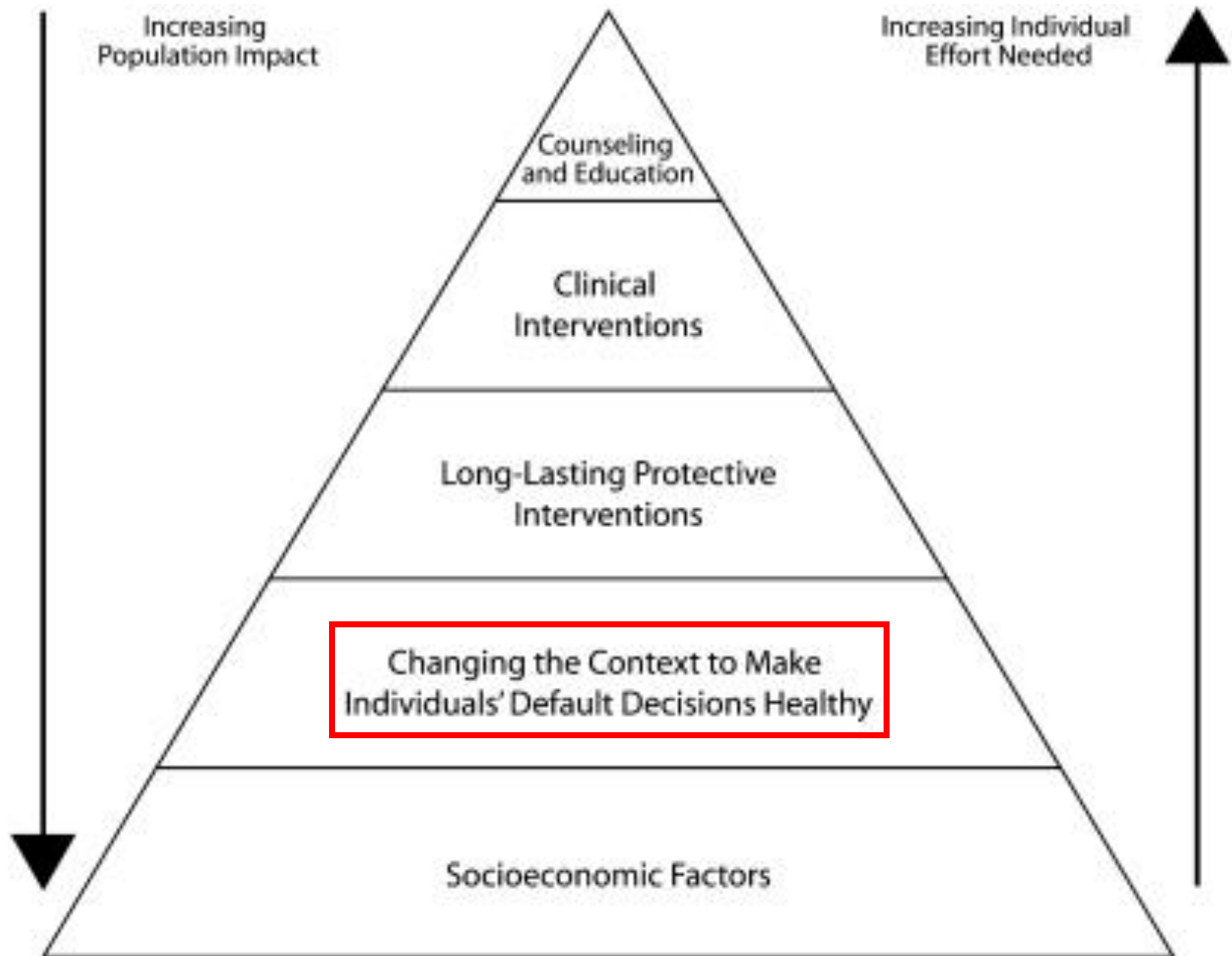
Understand delivery
personnel's adoption-
decision making
process



Evaluate program
through
RE-AIM framework









Evaluating “Take the Stairs, Wyoming!” Through the RE-AIM Framework: Challenges and Opportunities

Laura E. Balis^{1*} and Thomas Strayer III²

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² Center for Quality Aging, Vanderbilt University Medical Center, Nashville, TN, United States

Introduction: Health promotion delivery systems are increasingly being asked to implement policy, systems, and environmental interventions (PSEs). However, evaluating PSEs is challenging, especially in low-resource community settings. This paper describes the use of RE-AIM to evaluate a physical activity PSE delivered through University of Wyoming Extension and highlights challenges and opportunities in pragmatic, real-world program evaluation.

Methods: Extension health educators adapted a point-of-decision prompt intervention encouraging stairway use through posters, called Take the Stairs, Wyoming! *Reach* was assessed through estimates of daily traffic, *effectiveness* was assessed through opportunistic interviews, *adoption* was calculated as the number and proportion of sites that agreed to hang posters, *implementation* was calculated as the proportion of sites with a poster in place at a 2-weeks follow-up visit, and *maintenance* was assessed through 6-months opportunistic interviews (individual level) and proportion of sites with a poster in place (organizational level).

Results: Overall, the posters were widely *adopted* and most posters were *implemented* as intended. However, capturing *reach*, *effectiveness*, and *maintenance* was challenging, as health educators found the evaluation burdensome. Therefore, it was difficult to determine if the posters were effective at increasing physical activity levels.

Discussion: Suggestions are provided for capturing *reach*, *effectiveness*, and *maintenance* data in community settings. Future efforts are needed to create evaluation tools to pragmatically measure effectiveness of PSEs on changing behaviors, as well as to prioritize program evaluation in Extension.

Keywords: PSEs, RE-AIM, extension, evaluation, point-of-decision prompt, physical activity

INTRODUCTION

Health promotion delivery systems are increasingly being asked to implement policy, systems, and environmental interventions (PSEs). PSEs, such as creating or improving places for physical activity (1) and providing healthier food and beverages in schools (2), focus on changing the environment to support healthy behaviors. One system tasked with implementing PSEs is the nationwide Land-Grant University Cooperative Extension System (Extension). In Extension, campus-based specialists support county-based educators who deliver programs in agriculture, natural resources, 4-H/youth development, community development, and family and consumer science (3). Within

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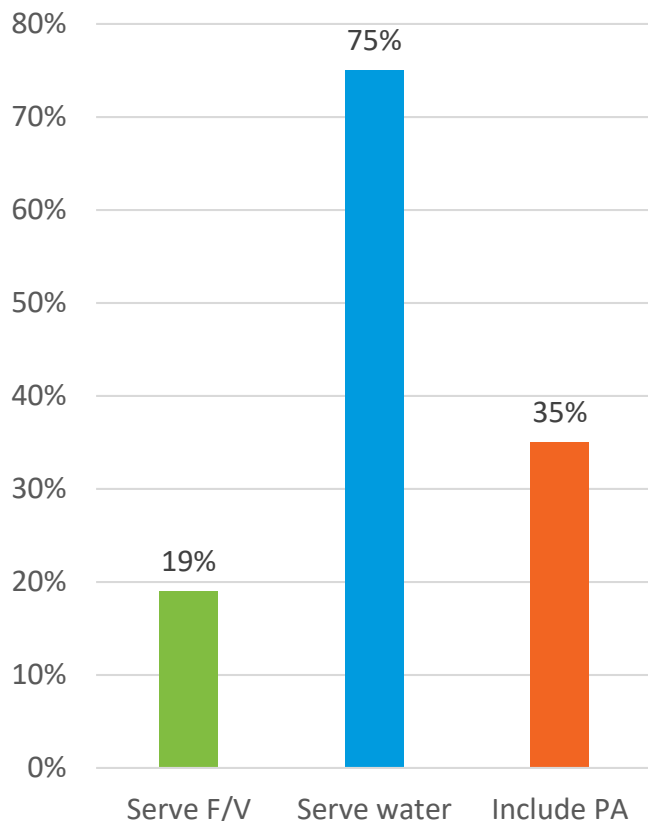
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Scaling Out a 4-H Healthy Meeting Initiative: Challenges in Implementation and Comprehensive Evaluation

Laura E. Balis, PhD¹; Samantha M. Harden, PhD²

ABSTRACT

The national Cooperative Extension System delivers a number of nutrition and physical activity interventions, but it is unknown how an intervention may translate from 1 state within the system to another. Using the reach, effectiveness, adoption, implementation, maintenance framework for program evaluation can improve intervention scale-out. Adoption is a key dimension of reach, effectiveness, adoption, implementation, maintenance: if delivery personnel do not deliver an intervention, it can have no impacts on health. Here, differences are discussed regarding adoption rates between state Extension systems when scaling out a 4-H healthy meeting intervention. This experience provides suggestions for improved scale-out of Extension programs, including state-specific adaptation and pragmatic data collection.

Key Words: adoption, Cooperative Extension, physical activity, RE-AIM framework, scale-out (*J Nutr Educ Behav* 2019; 51:1020–1024.)

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INTRODUCTION

The national Cooperative Extension System¹ connects research to practice through land-grant universities in each state and territory. With its broad reach² and strong history of improving agricultural practices,³ Extension is positioned to tackle the nation's biggest challenges. Following the release of the National Framework for Health and Wellness in 2014,⁴ chronic disease prevention became an Extension priority area. Extension delivers a number of nutrition and physical activity interventions, however, scaling out (ie, implementing an intervention in a new setting and to a new population)⁵ from 1 state system to another remains challenging.^{6,7} Part of this challenge is that Extension struggles with program evaluation. Extension programs are often evaluated with a posttest only (generally directed toward program satisfaction) or no evaluation beyond reporting attendance.^{8,9} This results in 2 translational issues: (1) programs are developed in 1 state and adopted in

another before full evaluation efforts are completed or reported, and (2) the degree to which programs are feasible for delivery outside their original state is unknown.

To scale out Extension programs better, comprehensive program evaluation is important. Recent publications^{10–12} recommended planning and evaluating Extension programs through the reach, effectiveness, adoption, implementation, maintenance (RE-AIM) framework, which goes beyond measuring who participates in a program (reach) and the primary outcomes (effectiveness) to include systems-level dimensions (adoption, implementation, and maintenance), to assess whether an intervention works in the real world.¹⁰ Extension has traditionally focused heavily on reach (specifically, the number of individuals participating in a program), because educators are mandated to track the number of contacts, but the other RE-AIM dimensions were not emphasized. Without strong adoption rates

(ie, the number, proportion, and representativeness of delivery agents willing to initiate a program),¹⁰ the reach and effectiveness of programs cannot be fully achieved.

One Extension target audience is youths. The 4-H program, the nation's largest youth development program, is delivered through Extension and reaches nearly 6 million youths/yr.¹³ The 4-H program stands for *Head, Heart, Hands, and Health*.¹³ This widely recognized 4-H branch of Extension offers a number of youth programming types: in-school and after-school programs, camps, and community clubs.¹³ Whereas 4-H programs are often strong in the *head, heart, and hands* (through engaging in project learning, leadership, and service),^{14–16} many state 4-H systems struggle to address contemporary health challenges such as poor dietary quality and sedentary time.¹⁷ 4-H is of particular interest because program offerings are educational in nature and youths are inspired to learn by doing.¹³ In this way, health behaviors that are observed during 4-H programming may extend into other facets of the youths' lives.

However, before 2015, there were no structured programs in place to help 4-H volunteers and staff integrate the fourth H of *health* in meeting practices.¹⁸ One intervention developed to assist 4-H programs with promoting healthy habits is the

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Conflict of Interest Disclosure: The authors have not stated any conflicts of interest.

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4th H for Health Challenge

4-H Clubs are invited to participate in the 4th H for Health CHALLENGE in the coming year! One 4-H Club from each county can win a **\$100 gift card** by completing this challenge!



What to do?

- Serve a fruit or vegetable as a snack at three (3) meetings
- Serve water as the main beverage at six (6) meetings
- Add 15 minutes of physical activity at nine (9) meetings



Clubs can register for the challenge and learn more about the challenge on our website:
<http://www.uwyo.edu/4-h/opportunities/state-opportunities/health-movement.html>

*FMI Contact Laura Balis in Fremont County at 332-2363 or lbalis@uwyo.edu or
Megan Brittingham in Goshen County at 532-2436 or mbrittin@uwyo.edu*

PLEDGE TO HEALTHIER FOOD OPTIONS

In 2019, the Arkansas Delta Region Obesity Project (ArDROP) partnered with food pantries to address community health

3 food pantries adopted healthy food policies



Increased access to healthy foods for
11,310 Arkansans*

*Number of food insecure Arkansans in Lee, Mississippi, and St. Francis counties, 2018 Map the Meal Gap Data

EXECUTING POLICIES

Increase
in healthy
foods



&

Decrease
in sugary, fatty,
& salty foods



In Lee, Mississippi, & St. Francis counties:

3 in 4 adults are
overweight or obese*

*2018 BRFSS Data

Obesity can lead to



- Heart disease and stroke
- High blood pressure
- High Cholesterol
- Diabetes
- Some cancers

With community stakeholders and partners, ArDROP:



Worked with pantries to conduct assessments of strengths and need.

Identified Healthy Food Purchasing Policy and storage space as limiting factors in providing healthier options to patrons.

Assisted pantries in adopting healthy food policies. Pantries pledged to make healthier food options available to Arkansans experiencing food insecurity.

Purchased shelving and refrigeration for pantries to increase capacity to offer fresh produce and other perishable healthy foods.



ArDROP is an initiative through the University of Arkansas Cooperative Extension Service supported by CDC DNPAO High Obesity Program funding (1809).



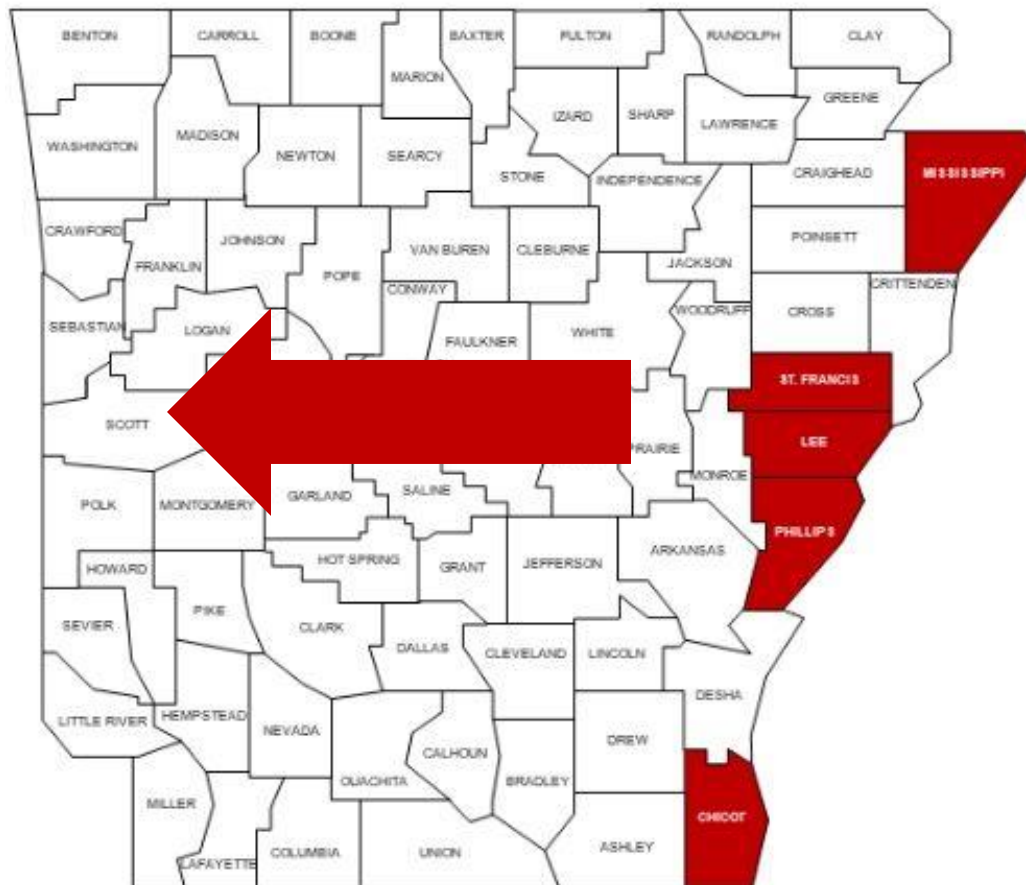
For more information on ArDROP, visit <https://www.uaex.edu/life-skills-wellness/healthy/health-programs/ArDROP.aspx>

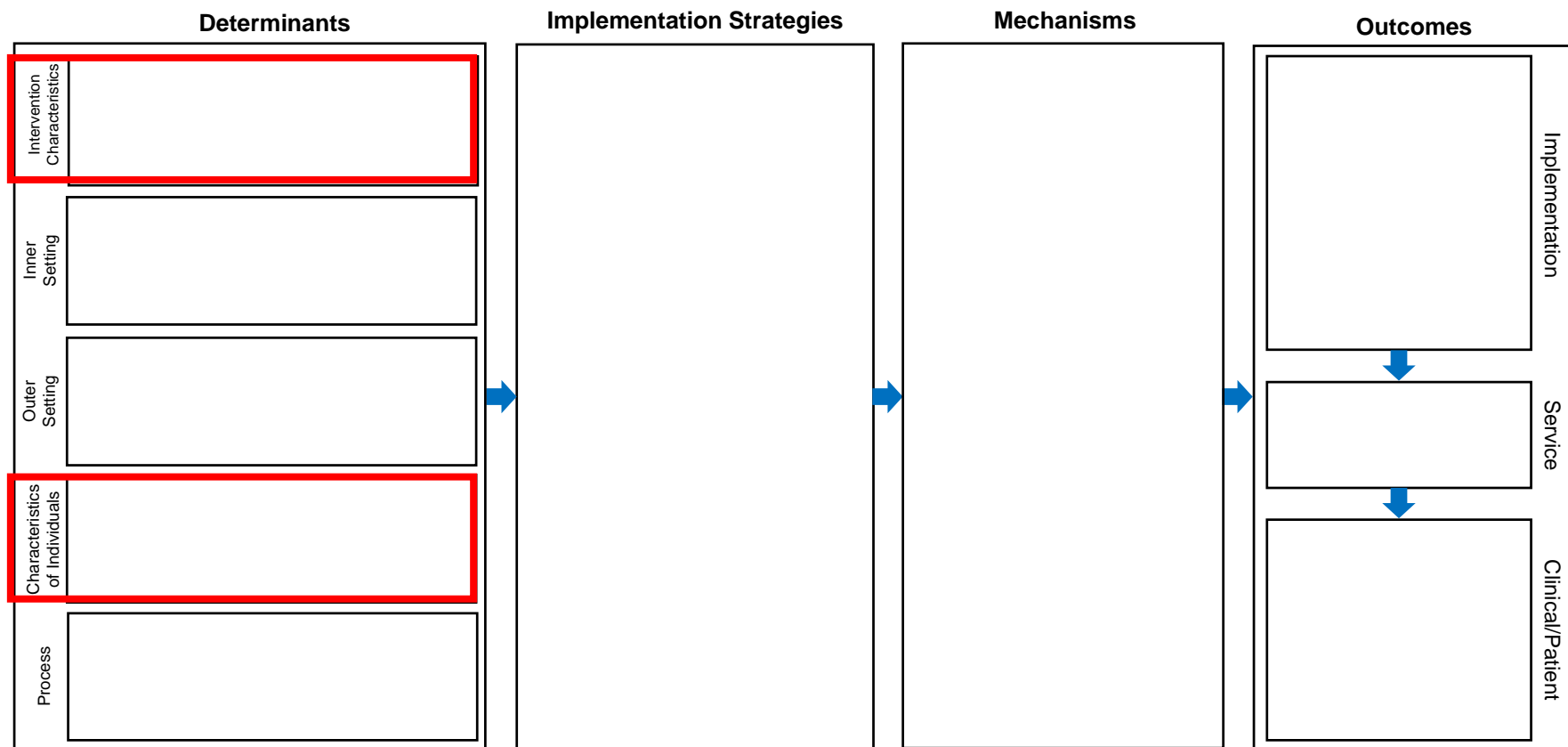




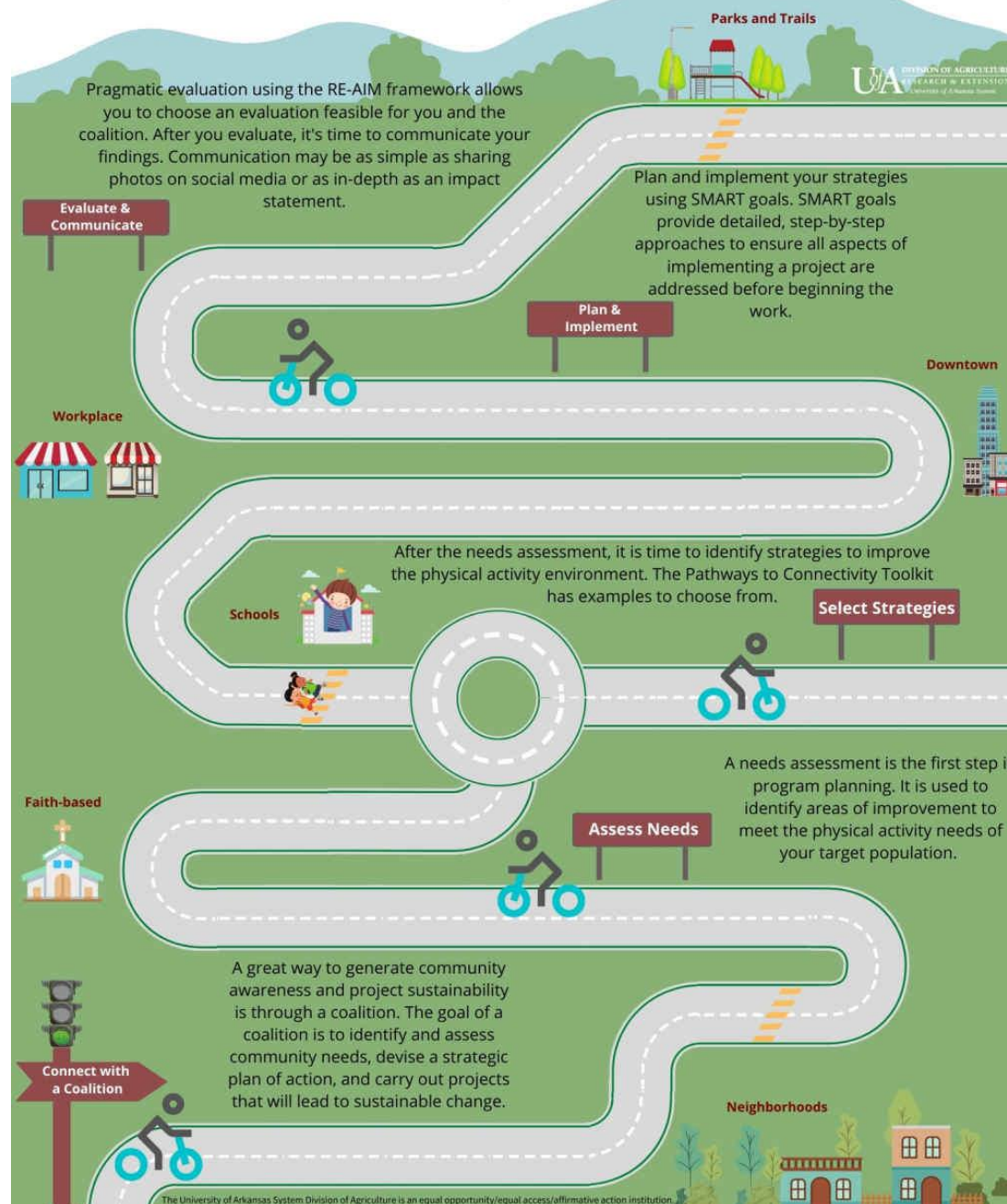








Places for Physical Activity



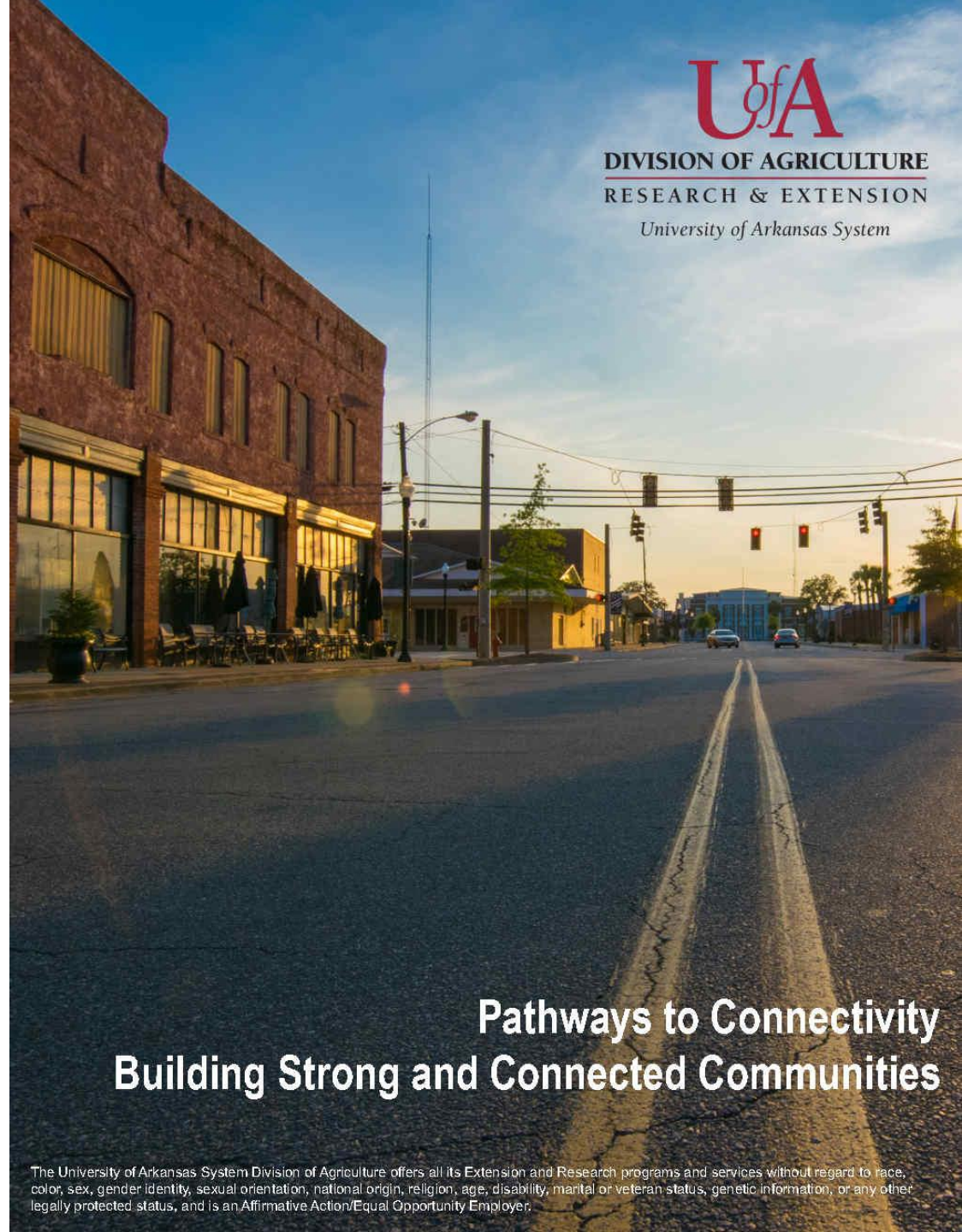
Purpose

Understand perceptions of:

- Built environment interventions
- Pathways to Connectivity Toolkit
- Other support needed

Methods

Virtual focus groups with delivery agents



UofA

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION

University of Arkansas System

Pathways to Connectivity Building Strong and Connected Communities

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My struggle is the coalition
right now.

Other resources needed
(meaning units)

Coalition guidance (n=50)

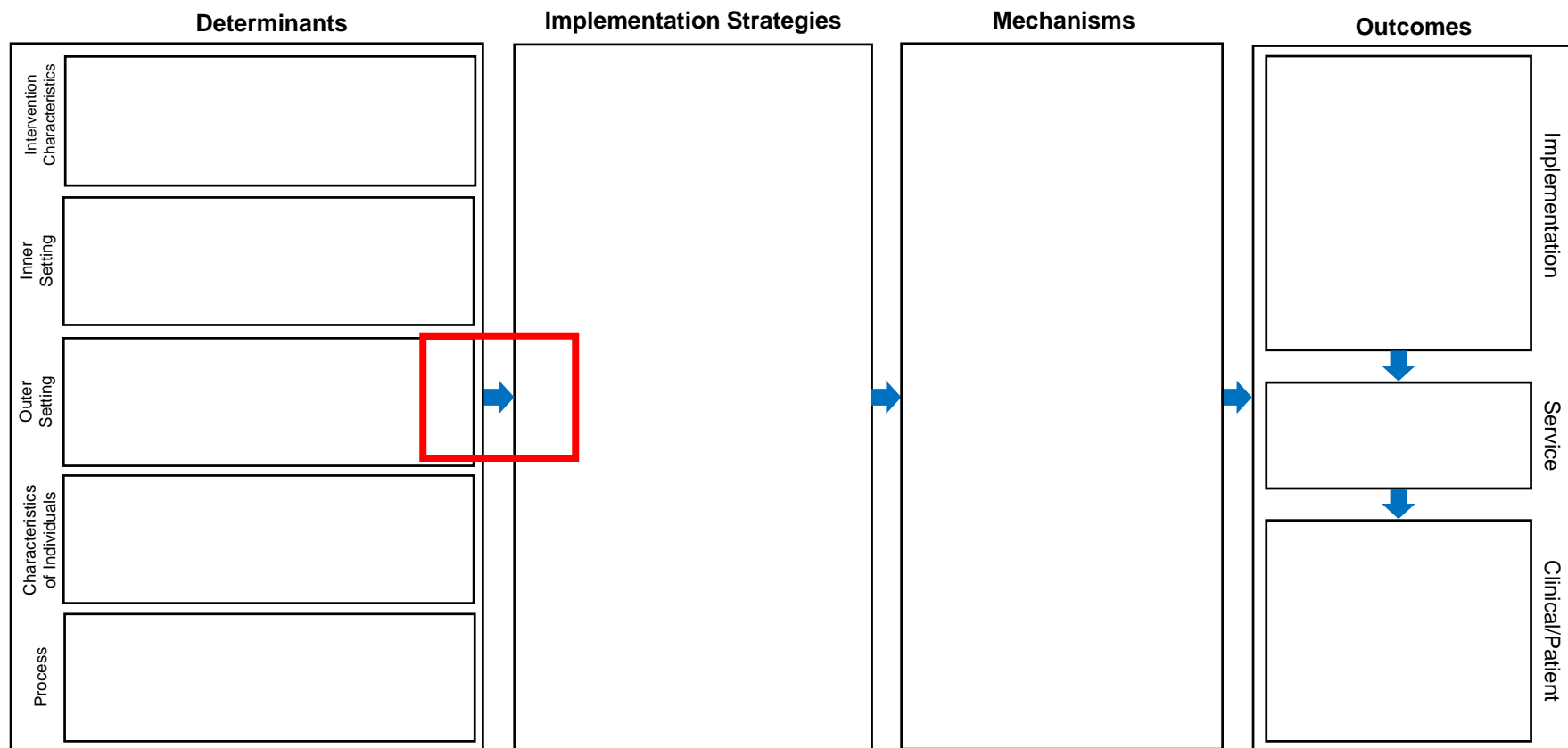
Funding (n=11)

Prompts (n=8)

Organizational changes (n=4)

Expert assistance (n=3)

I think funding is the
biggest barrier. Especially
now.



Places for Physical Activity

Implementation strategies to help increase physical activity in your community through:

- Active-friendly routes to everyday destinations
- Access to places for physical activity

Pathways to Connectivity Toolkit

Guide your coalition through a five step process to implement physical activity strategies.

1. Connect with a Coalition
2. Assess Needs
3. Select Strategies
4. Plan & Implement
5. Evaluate & Communicate

Coalition Coaching

Receive technical assistance and coaching to guide you through the process of effectively working with coalitions to drive community change.

Mini-grants

Apply for mini-grants to implement physical activity strategies in your community.

Table 2. Operationalization of three implementation strategies to support built environment approaches in community settings

Domain	Places for Physical Activity Toolkit	Coalition Coaching	Mini-Grants
ERIC implementation strategy	Develop educational materials	Provide local technical assistance	Access new funding
Actors	Developed through an integrated research-practice partnership (IRPP) approach by a PhD-level researcher and Master's-level staff with experience in built environment approaches	Master's-level staff with experience in coalition work, built environment approaches, and Agent training and technical assistance	
Action	Detail the process of partnering to change the built environment and provide descriptions and pictures of evidence-based built environment approaches, including “pop-up” events	Provide technical assistance through phone calls, Zoom meetings, and onsite visits.	Offer grants of up to \$3,000 to fund built environment approaches or pop-up feasibility events
Targets of the action	Family and Consumer Science Extension Agents		
Temporality	Agents use the toolkit as a guide throughout the adoption, implementation, and sustainability phases	Agents request coaching at any point in the coalition process	Agents apply for grants once they have an established community coalition partnership
Dose	n/a	One hour of coaching every other week; optimal dose to be determined	Agents may receive one grant per year
Implementation outcomes effected	Adoption, fidelity, sustainability	Adoption, sustainability	Adoption, implementation cost, sustainability
Justification	IRPP recommendations, focus group results, literature on supporting practitioners and community partners on built environment approaches	Focus groups results, literature on technical assistance to build practitioner skills	Focus group results, literature on mini-grants for built environment approaches

Use evaluative and iterative strategies	<ul style="list-style-type: none"> • Assess for readiness and identify barriers and facilitators • Audit and provide feedback • Purposefully reexamine the implementation
Adapt and tailor to context	<ul style="list-style-type: none"> • Tailor strategies • Promote adaptability • Use data experts
Train and educate stakeholders	<ul style="list-style-type: none"> • Conduct ongoing training • Distribute educational materials • Use train-the trainer techniques
Engage consumers	<ul style="list-style-type: none"> • Increase demand • Use mass media • Involve patients/consumers and family members
Change infrastructure	<ul style="list-style-type: none"> • Mandate change • Change record systems • Change physical structure and equipment

<ul style="list-style-type: none"> • Facilitation • Provide local technical assistance • Provide clinical supervision 	Provide interactive assistance
<ul style="list-style-type: none"> • Identify and prepare champions • Organize clinician implementation team meetings • Identify early adopters 	Develop stakeholder interrelationships
<ul style="list-style-type: none"> • Remind clinicians • Revise professional roles • Facilitate relay of clinical data to providers 	Support clinicians
<ul style="list-style-type: none"> • Alter incentive/allowance structures • Access new funding • Fund and contract for the clinical innovation 	Utilize financial strategies

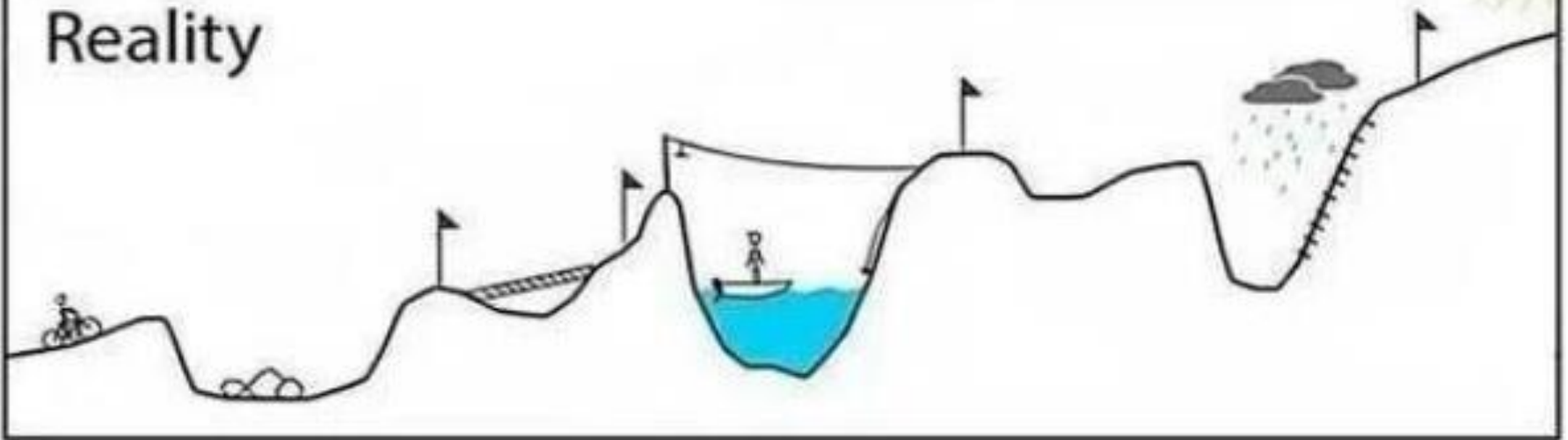
ERIC, meet ISAC

ISAC Implementation Strategy	ISAC Definition	Example
Intervene with participants to enhance uptake and adherence	Develop strategies with participants to encourage and problem solve around adherence	Work with participants to understand and resolve barriers to attendance (e.g., lack of transportation or childcare, concerns with driving at night; Balis et al., 2019)
Make billing easier	Make it easier to bill for the evidence-based program	Meet requirements for third-party reimbursement (e.g., Diabetes Prevention Program; Contreras, 2020)
Obtain and use participant and family feedback	Develop strategies to increase participant feedback on the implementation effort	Ask for input throughout the program (e.g., a weekly feedback form in nutrition education programs; Balis et al., 2017)

Your plan



Reality





Collaborative research studies to identify determinants of implementation



Synthesis of existing research on implementation determinants



Clear rationale for why additional in-depth or rapid contextual inquiry is needed

Interest in
implementing specific
built environment
interventions

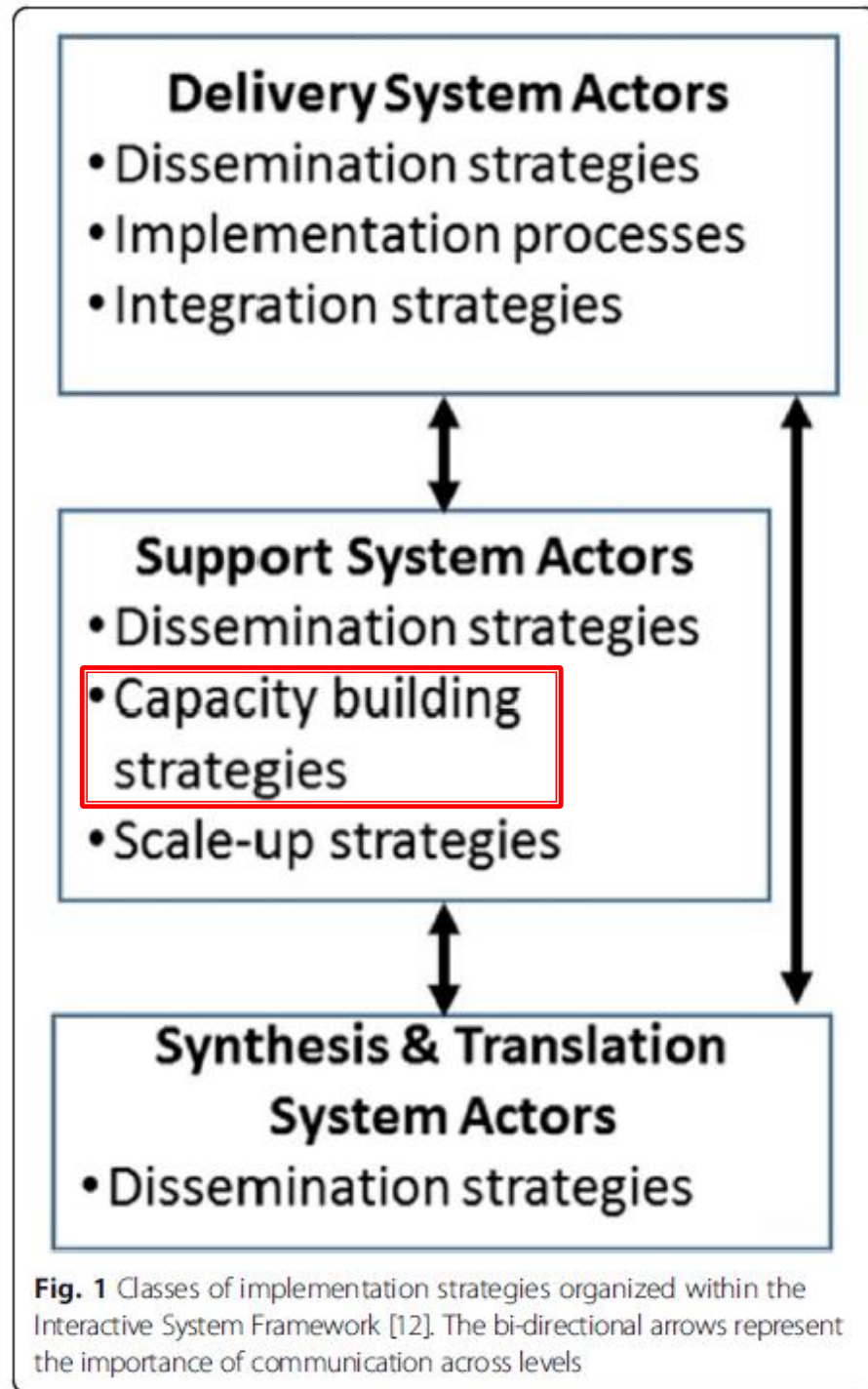
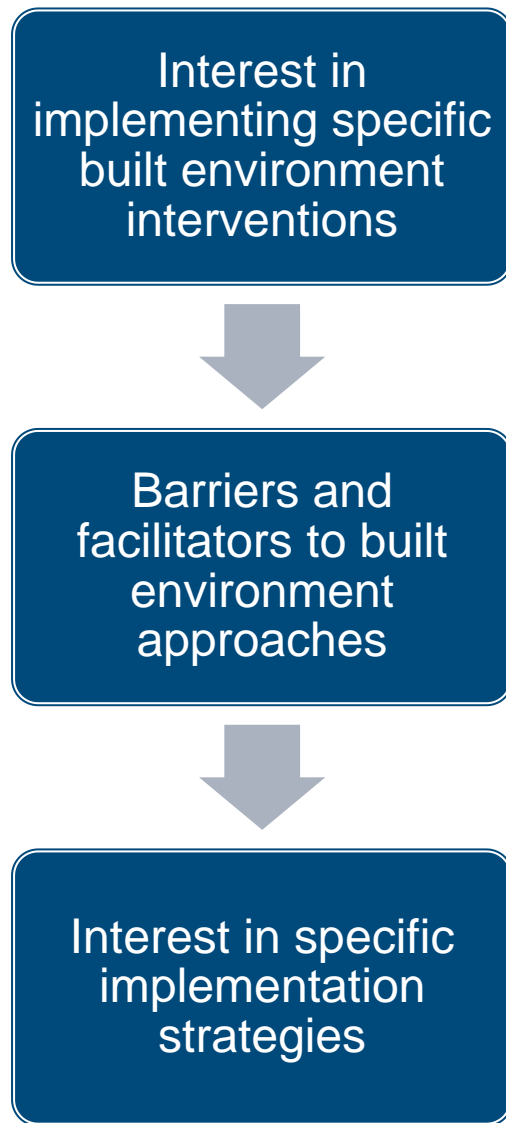


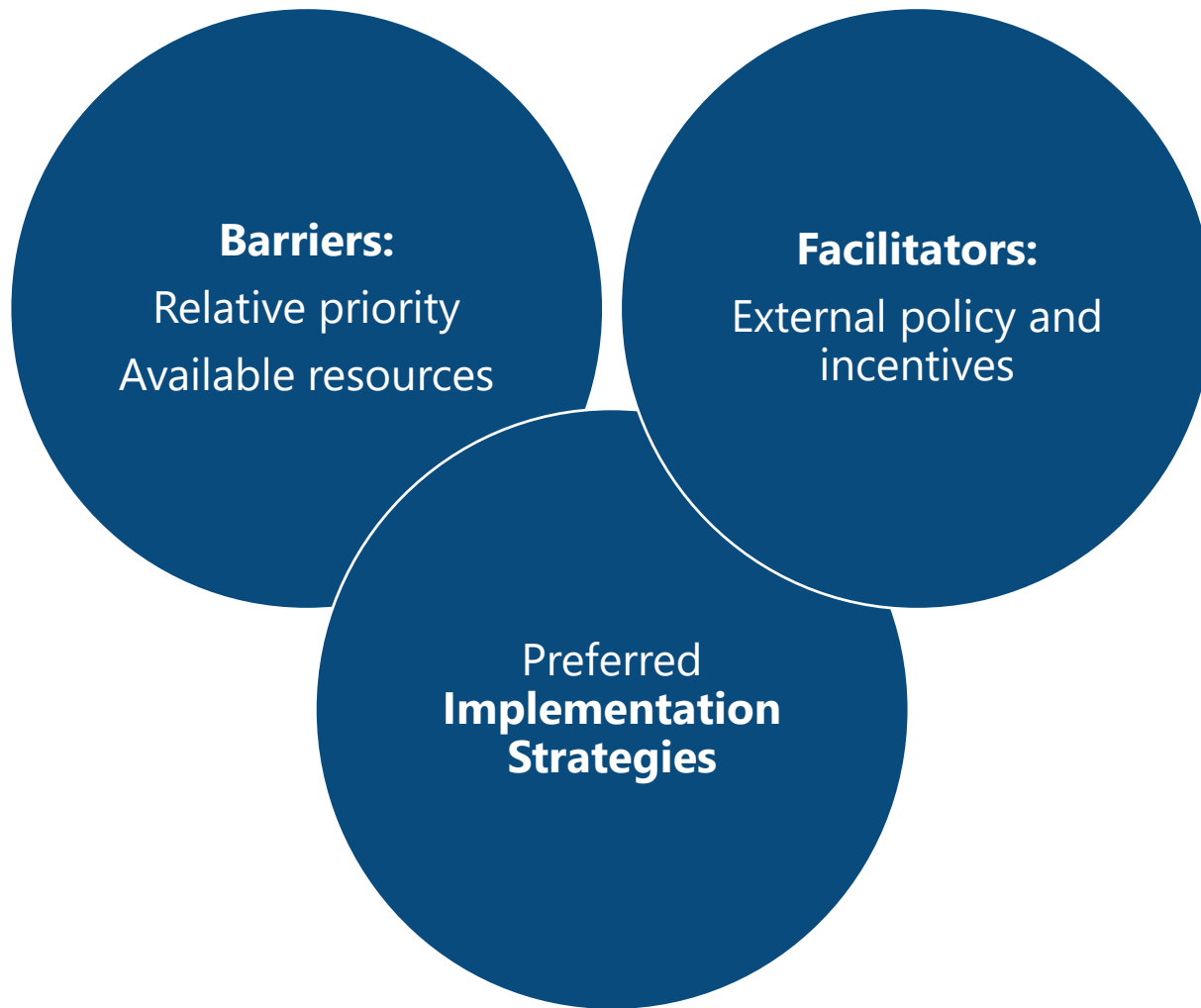
Barriers and
facilitators to built
environment
approaches



Interest in specific
implementation
strategies









Collaborative research studies to identify determinants of implementation



Questions?

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