Building Public Health Practitioners' Capacity to Evaluate Policy, Systems and Environmental (PSE) Change Interventions

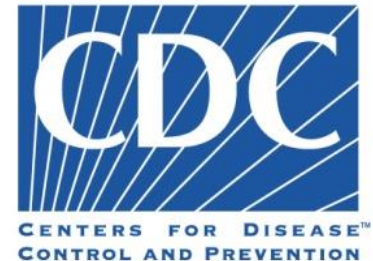Jennifer Leeman, Abby Lowe, Larissa Calancie, Gayle Payne, & Jan Jernigan

Brought to you by

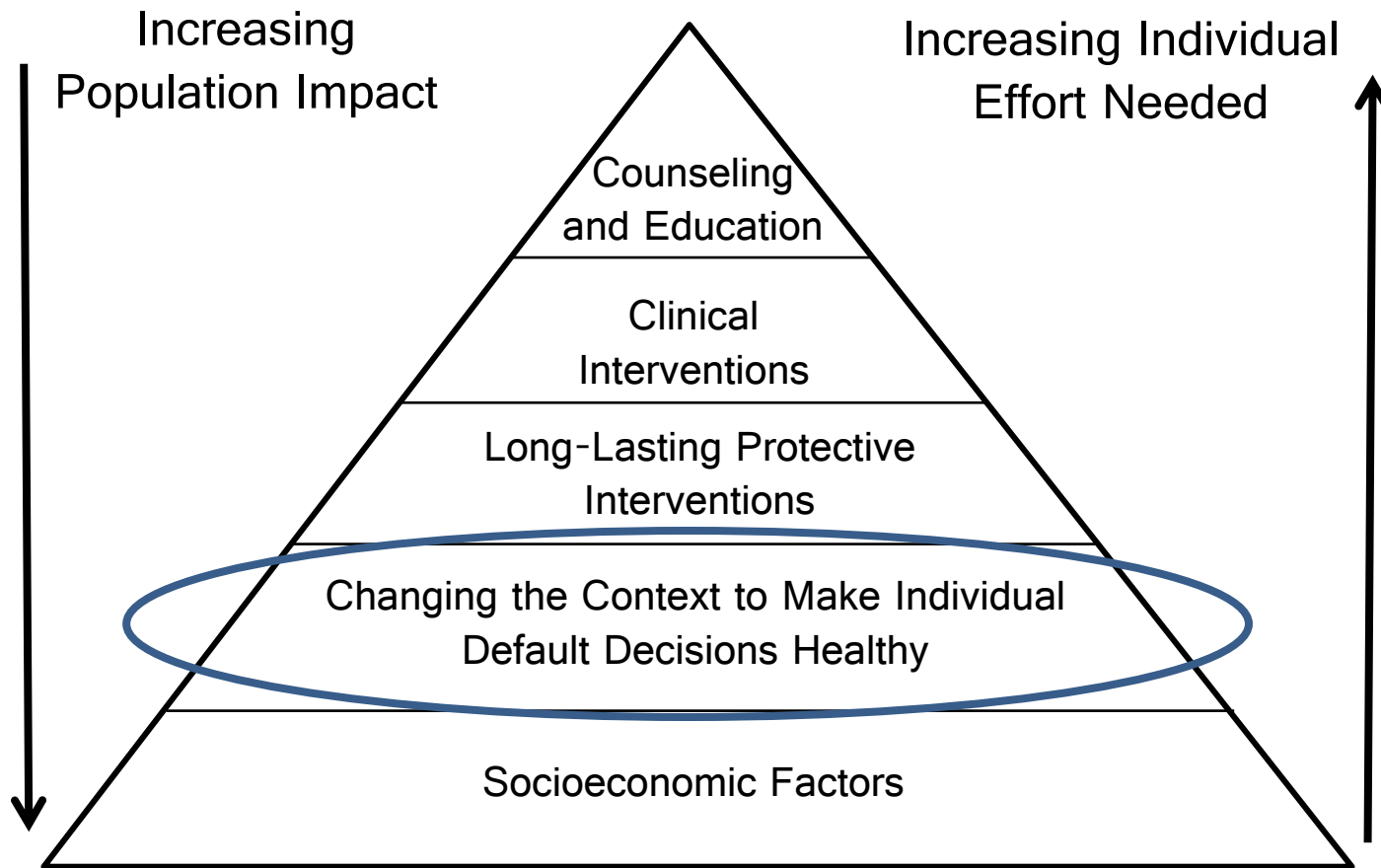Funded by **Centers for Disease Control and Prevention:**

- Division of Nutrition, Physical Activity and Obesity (DNPAO)
- Prevention Research Center Program

Importance of PSE Interventions: The Health Impact Pyramid

Increasing Population Impact

Increasing Individual Effort Needed

Counseling and Education

Clinical Interventions

Long-Lasting Protective Interventions

Changing the Context to Make Individual Default Decisions Healthy

Socioeconomic Factors

Frieden TR. A framework for public health action: The Health Impact Pyramid. *AJPH* 2010;100(4):590-595.

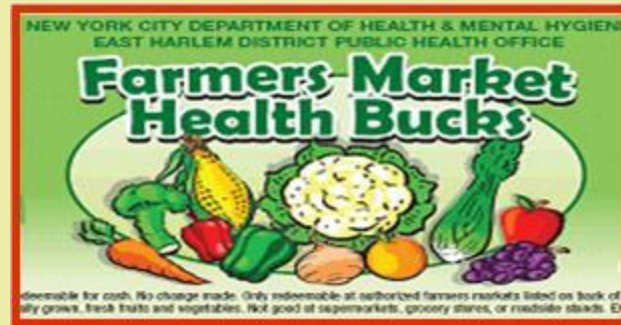# Examples of PSE Interventions
www.centertrt.org

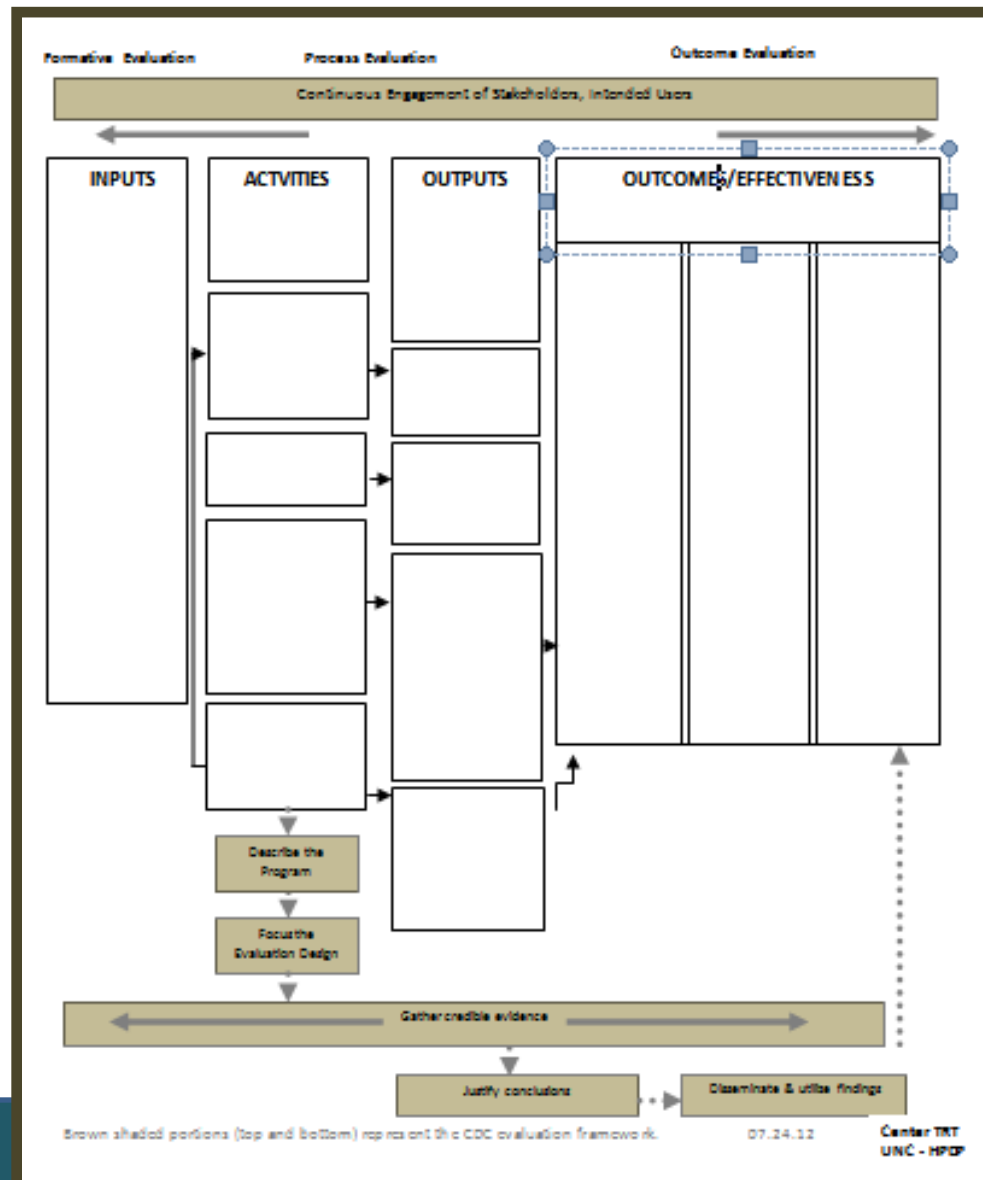# The PSE Intervention Process

Adapted from Longest, B. (2006) and Kingdon, J. (2003)
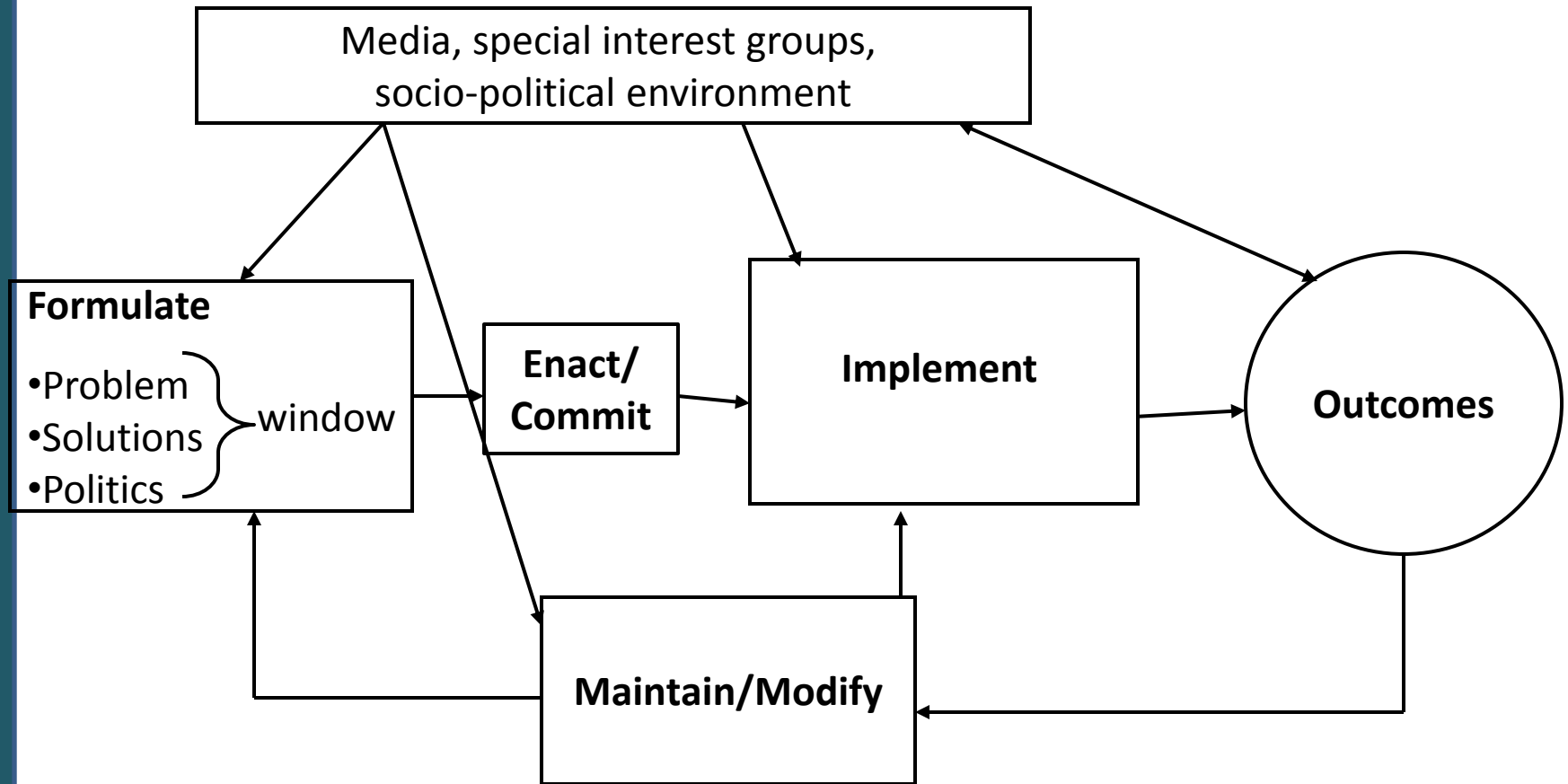
How do we evaluate a process that is

- Uncertain

- Multilevel and multi-sectoral

- Cyclical

- Incremental and

- Influenced by many factors outside our control?

Center TRT Evaluation Framework

Formative Evaluation   Process Evaluation   Outcome Evaluation

Continuous Engagement of Stakeholders, Intended Users

| INPUTS | ACTVITIES | OUTPUTS | OUTCOMES/EFFECTIVENESS |

Describe the Program

Focus the Evaluation Design

Gather credible evidence

Justify conclusions   Disseminate & utilize findings

Brown shaded portions (top and bottom) represent the CDC evaluation framework.   07.24.12   Center TRT UNC - HPDP

Center TRT's framework integrates

- CDC evaluation framework

- Kingdon's "window of opportunity" concept

- Longest's policy making framework

- Glasgow's RE-AIM framework

- Brennan's framework for policy and environment strategies for obesity prevention

- Aday's criteria for evaluating healthcare systems

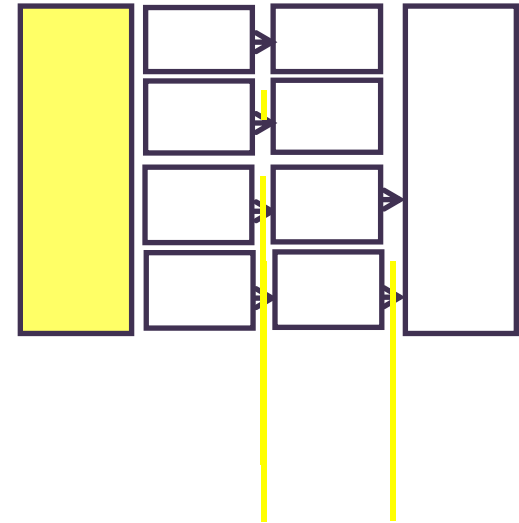# Case Study: Mandatory School Nutrition Standards

- District wide

- Apply to all foods & beverages sold, served, or distributed during school day

Case Study: Inputs

- **Prepare for windows of opportunity**

- Problem
- Solutions } window
- Politics

- Other

Kingdon, J. 2003. Windows of Opportunity.

Case Study: Activities
In sync with stages of PSE change

Formulate

Enact/Commit

Implement

Maintain/Modify
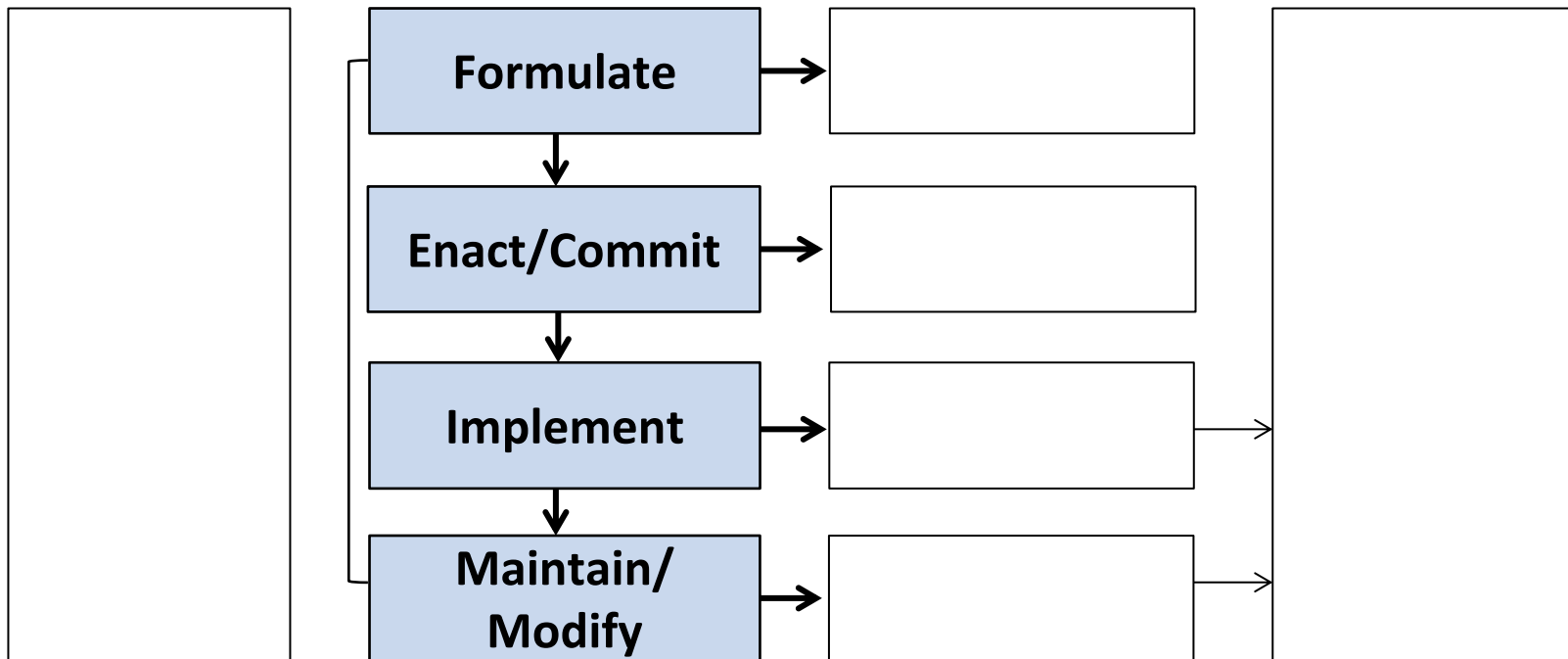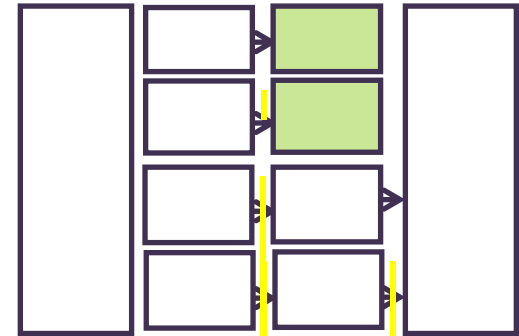
Longest (2006) Health Policy Making in the US

Case Study: Outputs Formulate & Enact

- Awareness – important throughout

- Engagement – important throughout

- Proposed and Enacted Policies
  - Employ evidence-based approaches
  - Follow model policy guidance
  - Are adequate resources allocated to implement the policy

Brownson et al. 2009

Case Study: Outputs Implement & Maintain
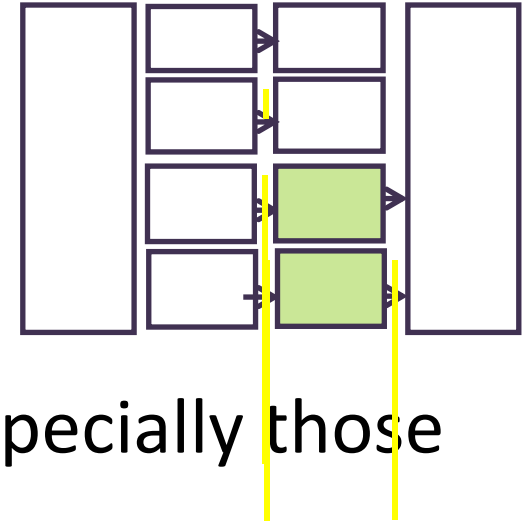
RE-AIM of Enacted PSEs

– Reach to intended population, especially those at greatest risk

– Adoption by settings/sectors

– Implementation

• as intended

• feasibility, acceptability, affordable

– Maintenance

Glasgow et al. (2003)

Case Study: Outcomes/Effectiveness
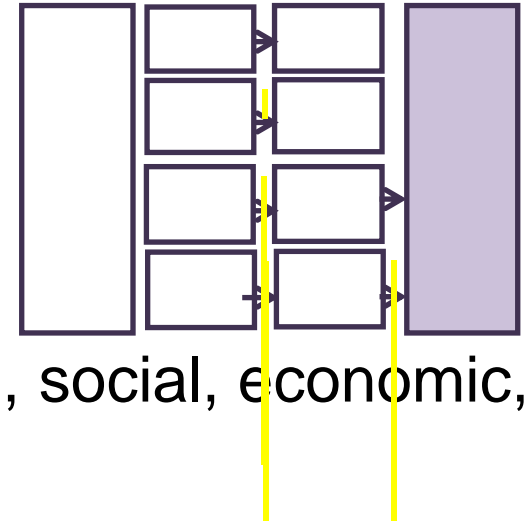
- **Short Term**
  - Changes to environments (physical, social, economic, communication)

- **Intermediate Term**
  - Changes to health behaviors

- **Long Term**
  - Improvements in population health
  - Decreased BMI
  - Decreases in BMI equitably distributed
  - Policy cost effective

Aday et al. (2004)

Questions?

Building practitioner evaluation capacity

1. In-person trainings

2. Webinar

3. Evaluation Materials

4. Site Visits

Results of capacity-building efforts

Competencies

Before training	Training: Understanding policy, systems and environmental interventions	After training
2.65	Identify 2-3 internet sources that disseminate PSE interventions	**4.23** *(+1.58)*
2.69	Describe the types of <u>activities</u> that occur during each of the 4 phases of program planning and implementation: 1) Formulating 2) Enacting 3) Implementing and 4) Maintaining/Modifying	**3.96** *(+1.27)*
2.42	Use the RE-AIM framework to develop processes and outcome evaluation questions	**3.85** *(+1.43)*

Consistent challenges

- Participants' varied knowledge/experience
- Complex material
- Challenging to show Framework visually
- Too little time
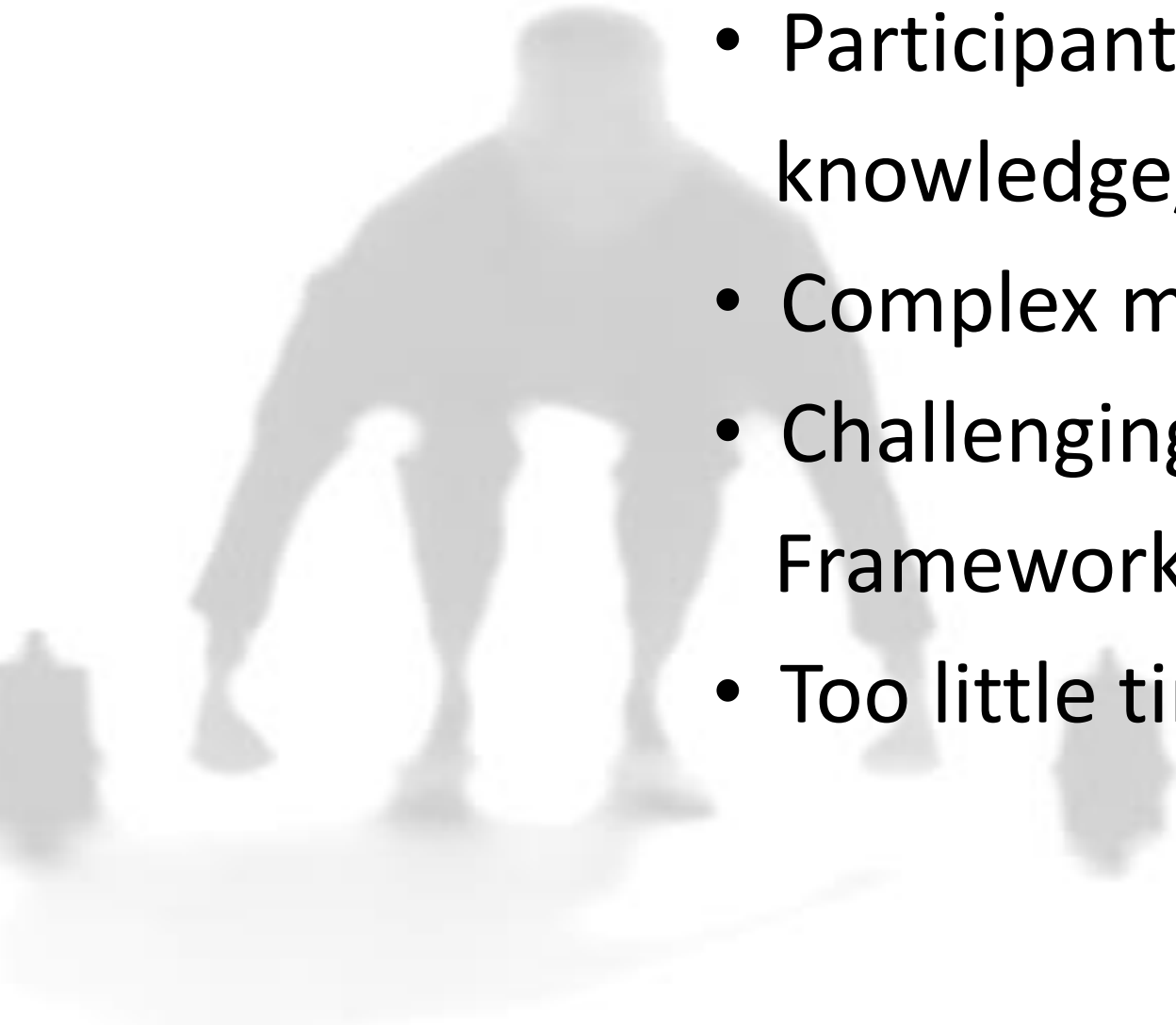
Addressing Challenges

- Separate trainings into *two levels*
- Give *more background*; do *more activities*
- New slide deck with *more visual cues*
- *More time* for trainings
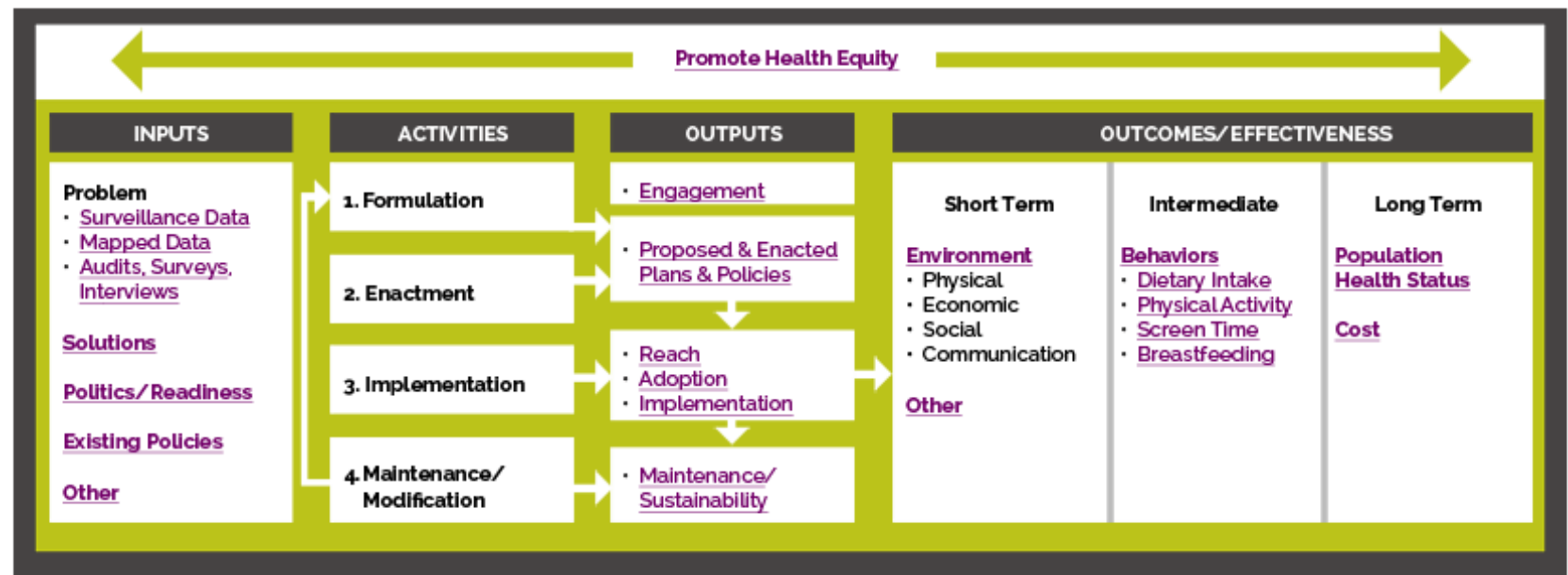
5. Web-Based Training

6. Website

CENTER TRT EVALUATION FRAMEWORK

The image below is the **Center TRT Evaluation Framework**, which was designed to support practitioners' efforts to evaluate policy and environmental change interventions to prevent obesity. As you can see, the Framework is laid out just like a traditional logic model and includes inputs, activities, outputs, and outcomes.

Click on any of the links within the Framework to learn about **example indicators, data sources** and **other resources** for evaluating that component of the Framework.

CENTER TRT EVALUATION FRAMEWORK

Promote Health Equity

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES/EFFECTIVENESS		
			Short Term	Intermediate	Long Term
Problem · Surveillance Data · Mapped Data · Audits, Surveys, Interviews **Solutions** **Politics/Readiness** **Existing Policies** **Other**	1. Formulation 2. Enactment 3. Implementation 4. Maintenance/ Modification	· Engagement · Proposed & Enacted Plans & Policies · Reach · Adoption · Implementation · Maintenance/ Sustainability	**Environment** · Physical · Economic · Social · Communication **Other**	**Behaviors** · Dietary Intake · Physical Activity · Screen Time · Breastfeeding	**Population Health Status** **Cost**

6. Website - continued

ENGAGEMENT

Stakeholder engagement is an essential part of generating buy-in and ensuring acceptability of any intervention. Similarly, engagement in coalitions and other collaborating groups ensures diversity of perspectives and awareness of relevant issues. Evaluating engagement underscores the value of engagement and paves the way for ongoing improvements.

Example Indicators

- Percentage and representativeness of key stakeholders: signed onto project, attending meetings, participating in events, and participating in implementation
- Number of new partnerships
- Stakeholders' satisfaction with level of involvement
- Stakeholders' perceptions of ownership of intervention
- Stakeholders know about and understand the problem and the proposed or enacted solutions (e.g., policy or plan)?

Methods

- Tracking logs of attendance/participation
- Interviews with partners
- Surveys of partners

Resources/Tools

Robert Wood Johnson Foundation's Community Engagement Resource List: This list includes case studies, tools, websites, articles, and other resources to facilitate community engagement.

Tell us what you think!

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