

Advancing Resilience using I+PSE Approaches in Nutrition and Health: Integrated Framework, Application, and Evaluation Strategies

California Department of Public Health Webinar
Wednesday, January 6, 2021

Presenters

Dr. Dena Herman, Ms. Angie Tagtow, Dr. Leslie Cunningham-Sabo



MCH Nutrition Leadership Training Program
& Western MCH Nutrition Leadership Network
UCLA Fielding School of Public Health

Overview

- Overview of the MCHB Childhood Obesity Prevention Enhancement Project
- Applying the I+PSE Conceptual Framework for Action
- Results of the MCHB Childhood Obesity Prevention Enhancement Project
- Initial results from I+PSE Evaluation Literature Review

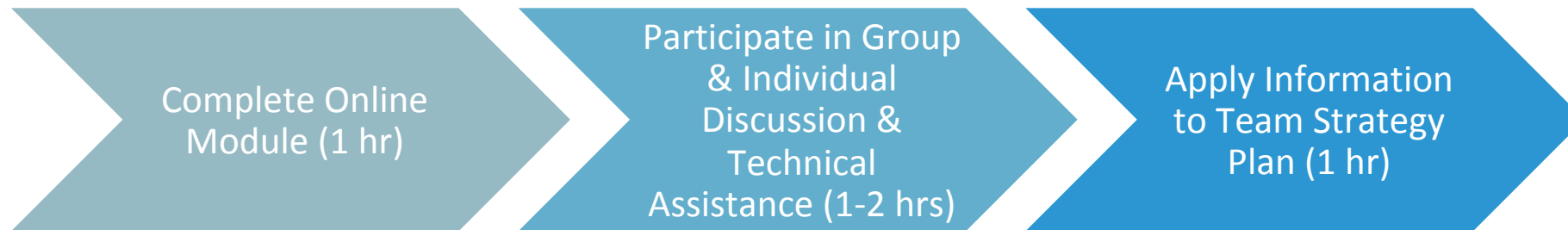


Western MCH Nutrition Leadership Network

- The Western Partners MCH Nutrition Leadership Network (NLN) members are state and regional Title V and public health nutrition leaders from the 13 Western states, including Hawaii, Alaska and Inter-tribal Councils.
- The NLN began in 1999 and has State members in Regions: VI, VII, VIII, IX, and X.
- NLN Purpose: provide leadership training for nutritionists in leadership positions, as well as networking, promoting CE , and supporting TA and opportunities for collaborative learning to strengthen the practice of public health nutrition across the western region.
- The Western MCH Partners include nutrition faculty at the following universities: Colorado State University, Oregon Health Sciences University, and University of Washington and collaborations with Arizona State University and University of California at Berkeley.

Childhood Obesity Prevention Enhancement Project

- Scope: State health departments are charged with addressing childhood obesity, yet often lack resources, skills, and training needed to address multifactorial issues to reduce/prevent obesity at the systems level
- Aim: Provide comprehensive I+PSE training to enhance the viability and sustainability of state program efforts to reduce childhood obesity
- Process: Provide I+PSE training and TA for 4 western state MCH nutrition teams that result in comprehensive, tailored strategic plans



- Teams: California, Oregon, Washington, Winslow Indian Health Care Center (Arizona)

2018-2019 Childhood Obesity Prevention Enhancement Project Team Leads



Suzanne Haydu, MPH, RD

Nutrition & Physical Activity Coordinator
California Department of Public Health



Robin Stanton, MA, RDN, LD

MCH Nutrition Lead
Oregon Health Authority



Chris Mornick, MPH, RDN

Nutrition Coordinator
Washington State Department of Health



**Nicole Lawrence, MPH, CHES,
RDN, LDN**

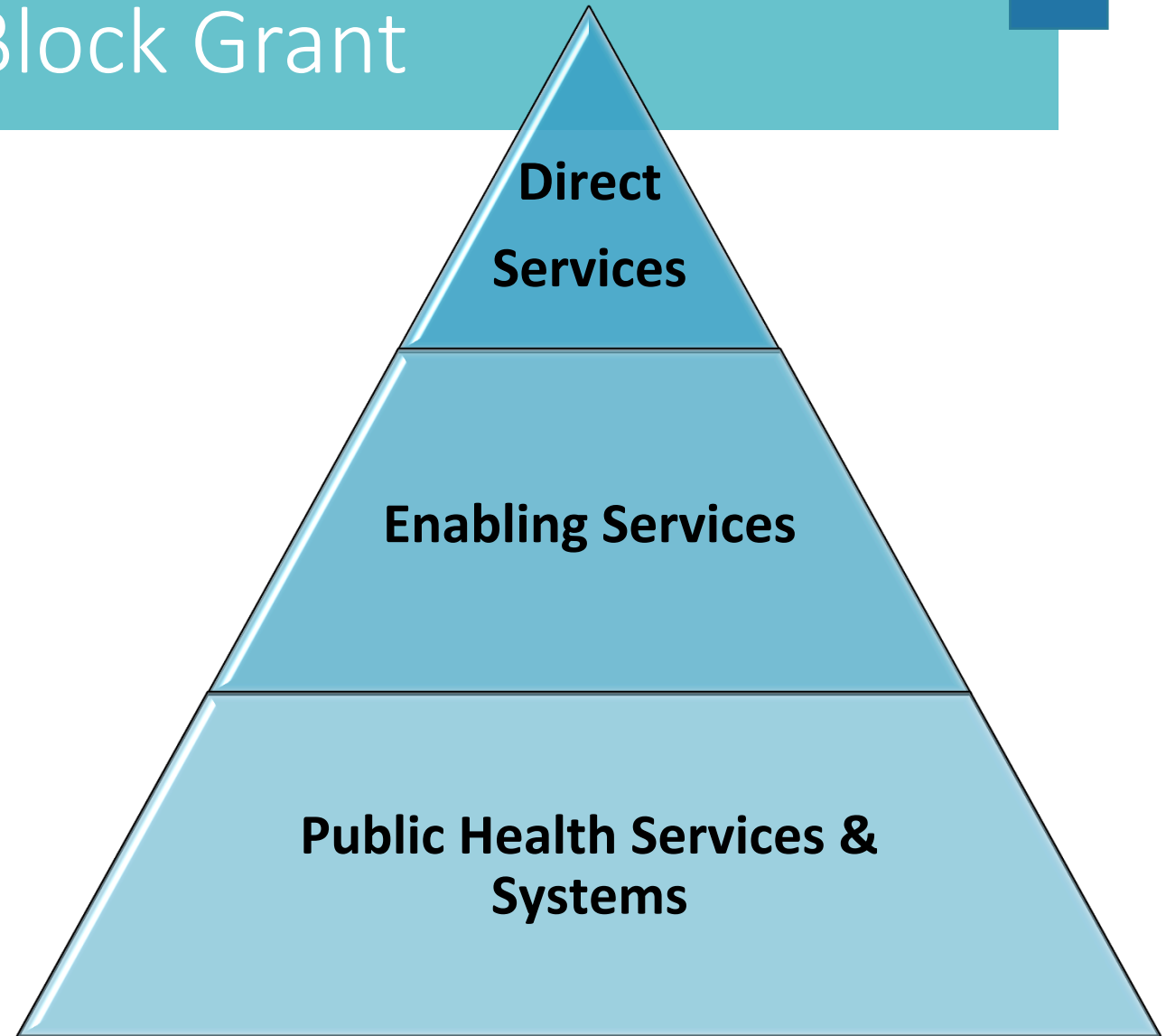
LCDR USPHS, Supervisory Dietitian
Winslow Indian Health Care Center (AZ)

Public Health Services for MCH Populations: Title V MCH Services Block Grant

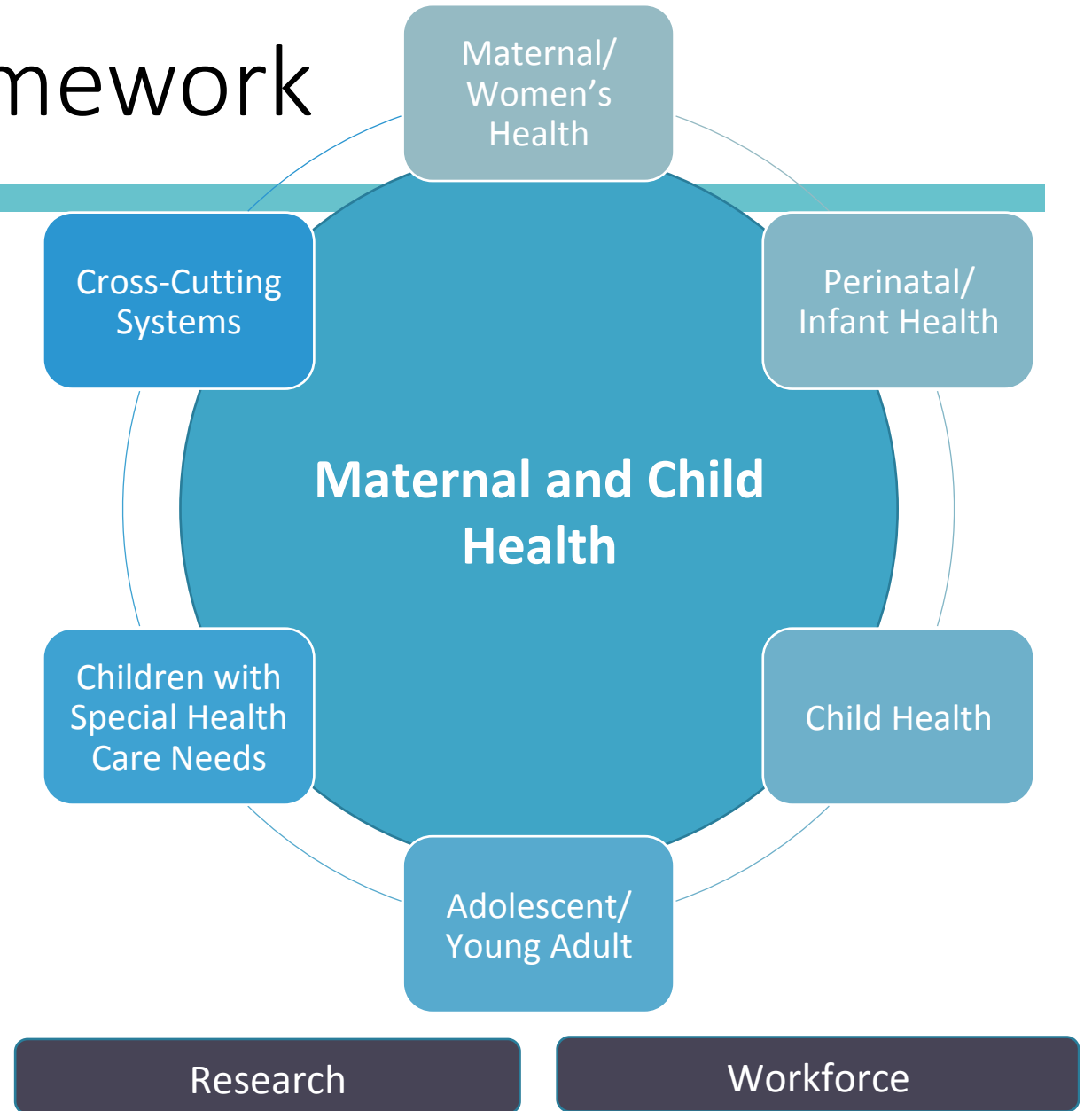


MCH Block Grant Services
Program, Title V, SEC. 501
(a) (1) (A-B)

Appropriations to states
**"to improve the health of
all mothers and children."**



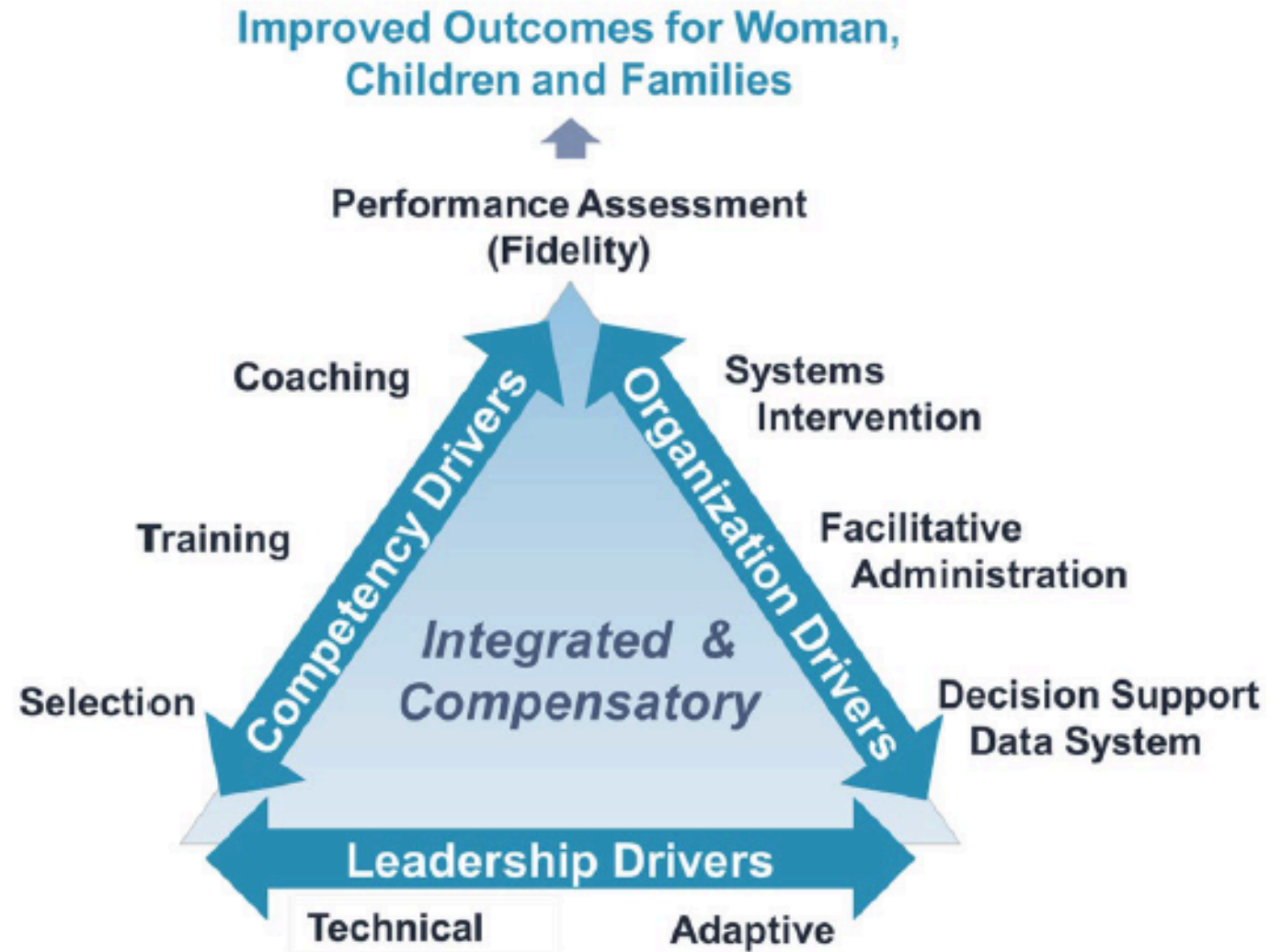
MCHB Strategic Framework



Adapted from Carolyn Gleason, Title V Block Grant
Project Officer, Division of State and Community Health,
MCHB, Overview of the Title V Block Grant Program.
MCH Nutrition Grantee Conference Call. October 7, 2019

MCH Workforce Development Training & Technical Assistance Implementation Drivers Framework

Oscar Fleming W, Apostolico A, Mullenix A, Starr K, Margolis L. Putting implementation science into practice: Lessons from the creation of the National Maternal and Child Health Workforce Development Center. *Matern Child Health J.* 2019; 23:722-732. <https://doi.org/10.1007/s10995-018-02697-x>



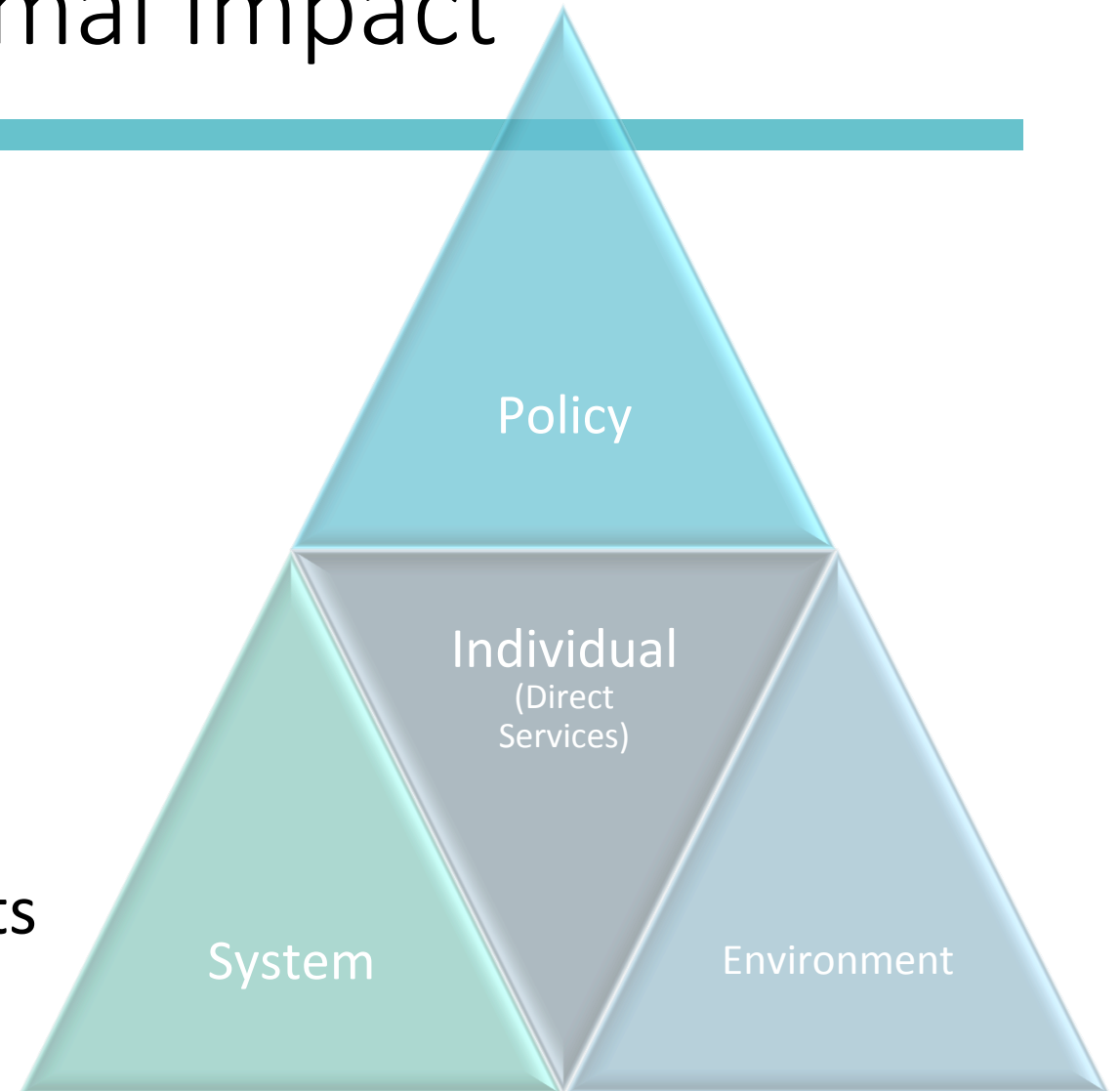
“I+PSE”

Individual	Direct Services - Evidence-based interventions directed to individuals and families that support increased knowledge and positive behavior change
Policy	Organizational & Community Policy – Changes to procedures or organizational practices Public Policy - Changes to or creation of laws, ordinances, resolutions, mandates, regulations or rules
Systems	Infrastructure & Operations - Changes to infrastructure that impacts all elements of an organization, institution, or framework <i>*Result of individual, policy PLUS environmental changes</i>
Environment	Built Environment - Modifications to physical spaces and settings in organizations, institutions, or public areas Natural Environments – Changes to ecological resources, landscapes and ecosystems that impact soil, water, energy, climate, biodiversity, and energy

Building Blocks for Optimal Impact

Benefits of I+PSE

- Tackle wicked problems
- Reciprocal support
- Multisectoral and interdisciplinary
- Multi-level action
- Applicability and adaptability
- Iterative
- Community and population benefits
- Operationalize and institutionalize





Polling Question

On a scale of 1 (low) to 5 (high), to what extent do you implement policy, systems, and environmental approaches in your current work?

Applying the I+PSE Conceptual Framework for Action

Tools to Optimize MCH Nutrition Impact

Presented By

Angie Tagtow, MS, RD, LD

Why Policy, Systems, and Environments?

“Programs focusing solely on individual behavior change miss the opportunity to identify and creatively address the underlying needs of the families within their communities. To implement PSE changes, organizations must understand and address the **needs of the community** and strategically plan to sustain activities...by incorporating breastfeeding services into the agency’s larger programming and by **building solid community partnerships**. Partnerships are critical for PSE change implementation and can **strengthen collective capacity** to address structural barriers that contribute to inequitable breastfeeding rates that local agencies cannot overcome alone.”

Reis-Reilly H, Fuller-Sankofa N, Tibbs C. Breastfeeding in the community: Addressing disparities through policy, systems, and environmental changes interventions. *J Human Lactation*. 2018;34(2):262-271.

Aiming for Collective Impact

- A group of stakeholders from different sectors who make a commitment to a common agenda for solving a complex social issue within a community
 - Stakeholders work together on a common agenda
 - Coordinate existing strategies
 - Increase alignment and coordination of diverse strategies
 - Backbone support and shared resources
 - Frequent and strategic communication
 - Evaluate total impact using shared measures
- Becomes a framework for collaboration

Adapted from Kania J, Kramer M. Embracing Emergence: How Collective Impact Addresses Complexity. *Stanford Social Innovation Review*. 2013;1-7.
https://ssir.org/articles/entry/social_progress_through_collective_impact

Social Determinants of Health



Healthy Individuals and Healthy Communities

- “Social determinants of health are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” (Healthy People 2030)
- Healthy eating and active living intersects with each of these areas
- Add new tools to our toolbox
 - Policy, system, and environmental (PSE) strategies



Operationalizing the I+PSE Conceptual Framework for Action

See MCH Nutrition Worksheet: Conducting an I+PSE Inventory

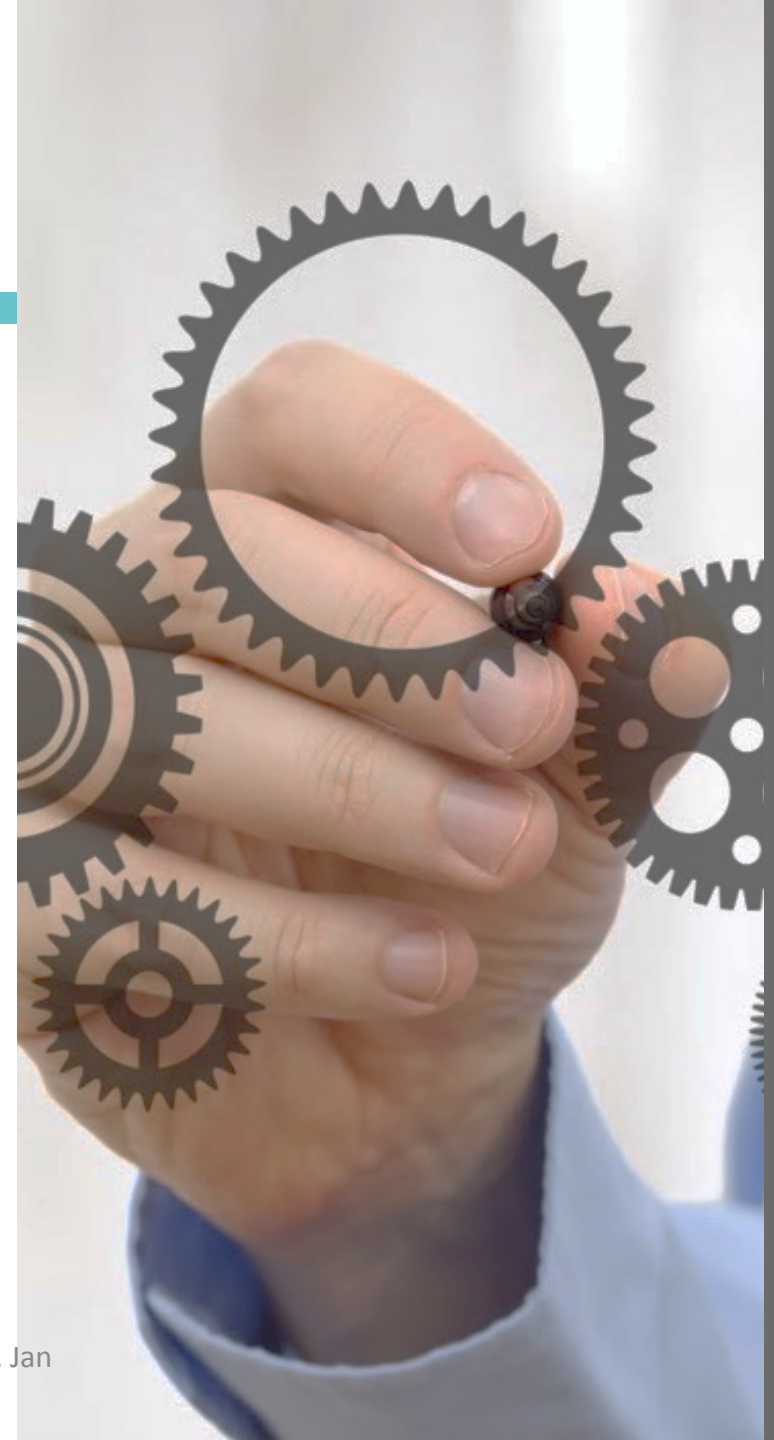
Individual Behavioral Change Theories

- Health Belief Model
- Health Promotion Model
- Theory of Planned Behavior
- Theory of Reasoned Action
- Social Cognitive Theory
- Self-Regulation Model
- Integrated Theory of Health Behavior Change
- Transtheoretical Model (Stages of Change)



System Change Theories and Frameworks

- Community Organization Model
- Culture of Health Framework
- Diffusion of Innovation Theory
- Life Course Theory
- Organizational Change Model
- PRECEDE-PROCEED Framework
- Social Determinants of Health
- Social-Ecological Model



Spectrum of Prevention

COHEN L, SWIFT S. THE SPECTRUM OF PREVENTION: DEVELOPING A COMPREHENSIVE APPROACH TO INJURY PREVENTION. *INJ PREV*. 1999;5(3): 203-207. AVAILABLE AT <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1730534/>



I+PSE Conceptual Framework for Action



Source: Tagtow A. UCLA School of Public Health, MCHB Nutrition Training Grant. Childhood Obesity Prevention Enhancement Project, 2019

California Department of Public Health I+PSE Webinar, Jan
2021

Using the I+PSE Conceptual Framework for Action to Support Healthy Eating and Active Living



Strengthen Individual Knowledge & Behavior

- Enhance personal, individual, or household's decision-making and capability of healthy eating and active living



Promote Community Engagement & Education

- Connect with diverse groups of people with information and resources to promote healthy eating and active living



Educate Intermediaries & Service Providers

- Inform service providers or intermediaries who will transmit skills and knowledge of healthy eating and active living to others



Facilitate Partnerships & Multisector Collaborations

- Build connections and cultivate relationships with groups and individuals around healthy eating and active living to meet broader public health goals



Align Organizational Policies & Practices

- Adapt policies and procedures that shape organizational norms that support healthy eating and active living



Foster Physical, Natural, & Social Settings

- Examine, modify and design physical and natural spaces within organizations or public environments that support healthy eating and active living



Advance Public Policies & Legislation

- Develop strategies to ensure laws, regulations, and policies that support healthy eating and active living

Using the I+PSE Conceptual Framework for Action to Support Healthy Eating and Active Living





**Strengthen
Individual
Knowledge &
Behavior**

Enhance personal, individual, or household's decision-making and capability of healthy eating and active living

Professional: Attend a webinar on the new *Dietary Guidelines for Americans* and the recommendations for infants, toddlers, pregnant and lactating women

Provide USDA MyPlate materials to parents and caregivers

Conduct a presentation to the Mayor/City Council on the economic impact of HEAL on businesses



**Promote
Community
Engagement &
Education**

Connect with diverse groups of people with information and resources to promote healthy eating and active living

Partner with the local public health department to conduct a healthy food access community assessment

Offer cooking classes to 4-H groups, scout troops, and boys and girls' clubs

Work with city planners and engineers to assess walkability of neighborhoods



**Educate
Intermediaries &
Service
Providers**

Inform service providers or intermediaries who will transmit skills and knowledge of healthy eating and active living to others

Work with health care providers to implement a fruit and vegetable prescription program

Provide a webinar to early care and education providers on the importance of drinking water

Host a roundtable discussion with physicians and lactation consultants on strategies for promoting breastfeeding



**Facilitate
Partnerships &
Multisector
Collaborations**

Build connections and cultivate relationships with groups and individuals around healthy eating and active living to meet broader public health goals

Link Title V MCH with other programs such as WIC, CACFP, SNAP-Ed, HeadStart, food policy council

✓ Forge partnerships between elementary schools and civic groups to build and maintain school gardens

Establish a community of practice or network focused on childhood obesity prevention



**Align
Organizational
Policies &
Practices**

Adapt policies and procedures that shape organizational norms that support healthy eating and active living

Encourage staff and co-workers to take exercise breaks; establish a staff wellness policy that supports HEAL

✓ Explore the coordination or integration of services (WIC, SNAP, Medicaid) within a community

Assess employers in the community to identify organizational shortfalls in supporting breastfeeding women



**Foster Physical,
Natural, & Social
Settings**

Examine, modify and design physical and natural spaces within organizations or public environments that support healthy eating and active living

Display HEAL messages (posters and brochures) throughout early care centers, schools, clinics, and worksites

✓ Create clean, comfortable, and private spaces for breastfeeding employees in the workplace

Install sidewalks in neighborhoods for increased access to food retail

**Advance Public Policies & Legislation**

Develop strategies to ensure laws, regulations, and policies that support healthy eating and active living

...or work with those who can!

Local

Ensure access (frequency, time of day, location, affordability) to farmers' markets

✓ Regional

✓ Meet with the Regional Planning Commission to develop or expand trails

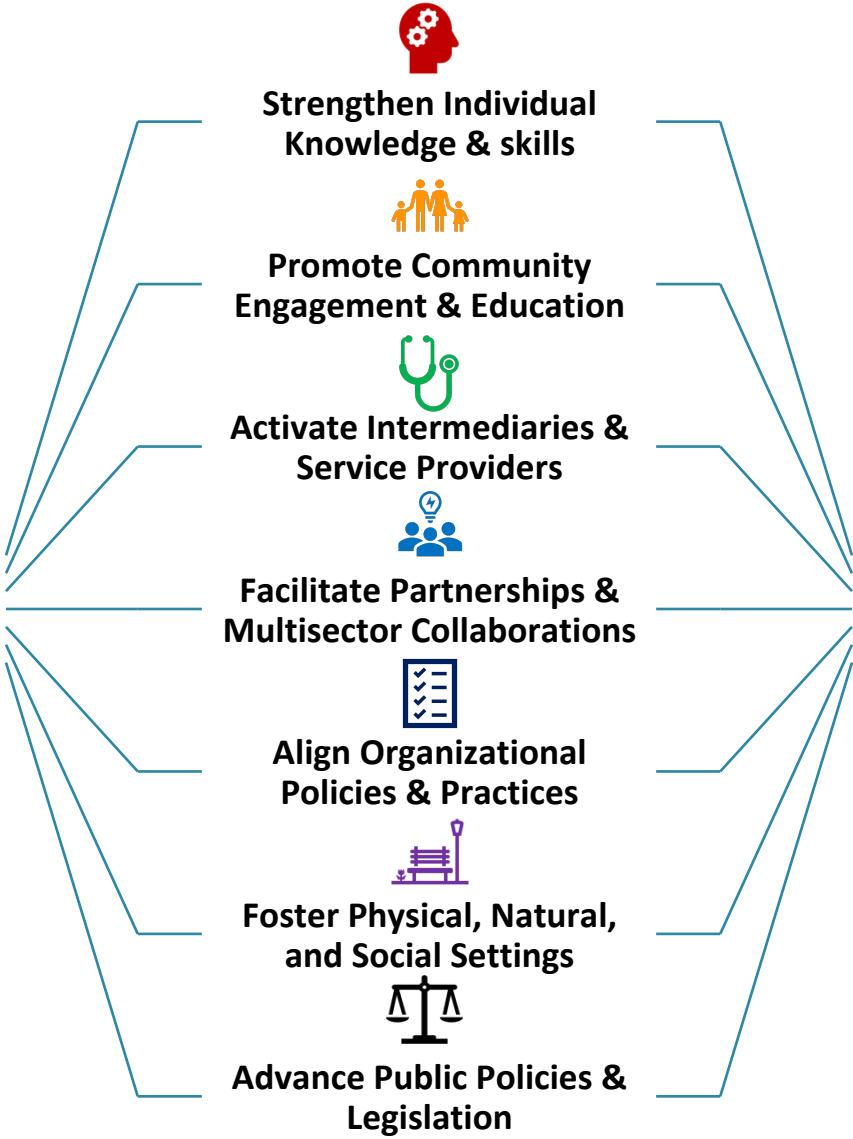
State

Request additional funding for fruit and vegetable snack program in schools

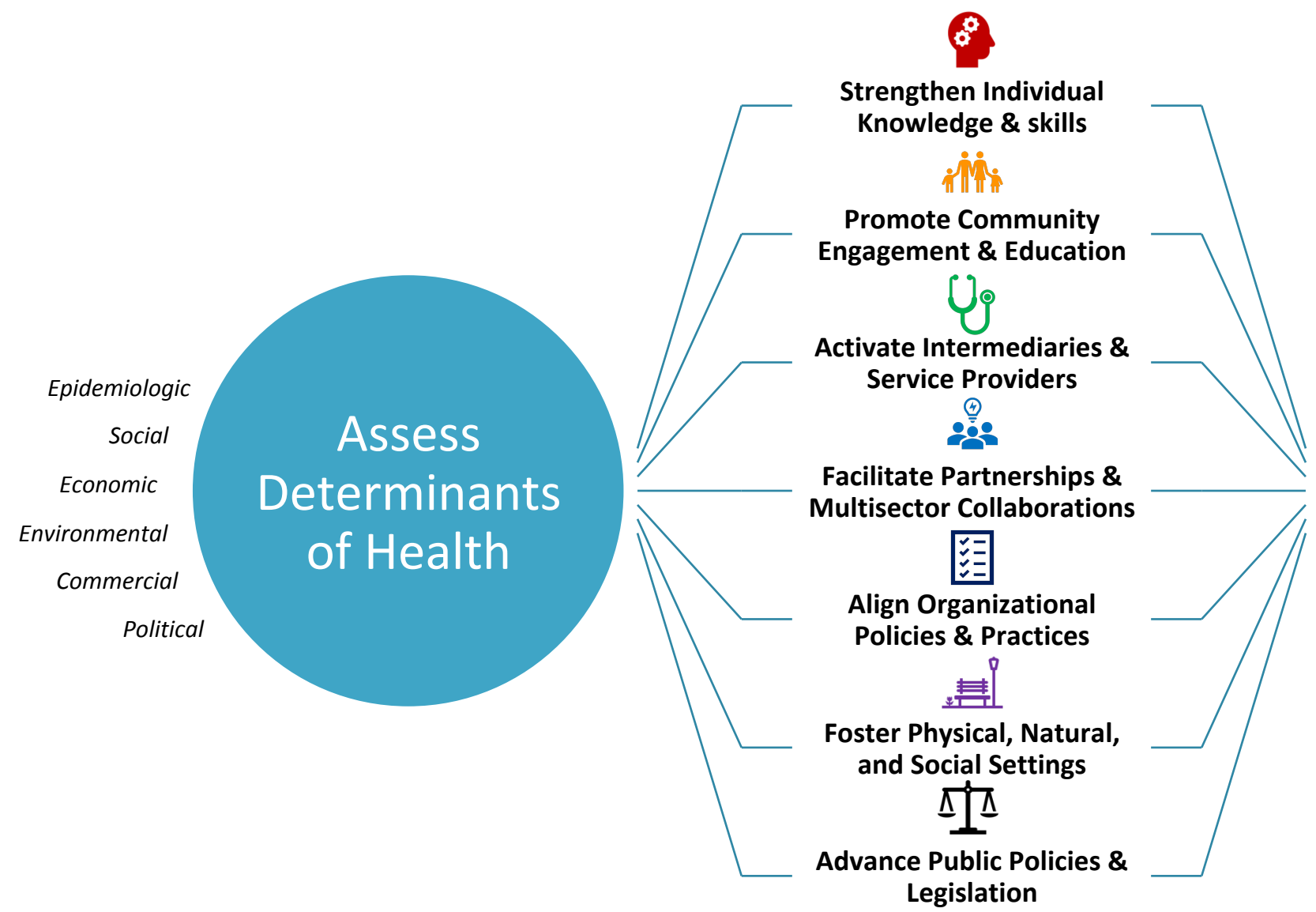
Federal

Monitor Farm Bill (Title IV Nutrition), Child Nutrition Reauthorization Act, Family Medical Leave Act, Affordable Care Act

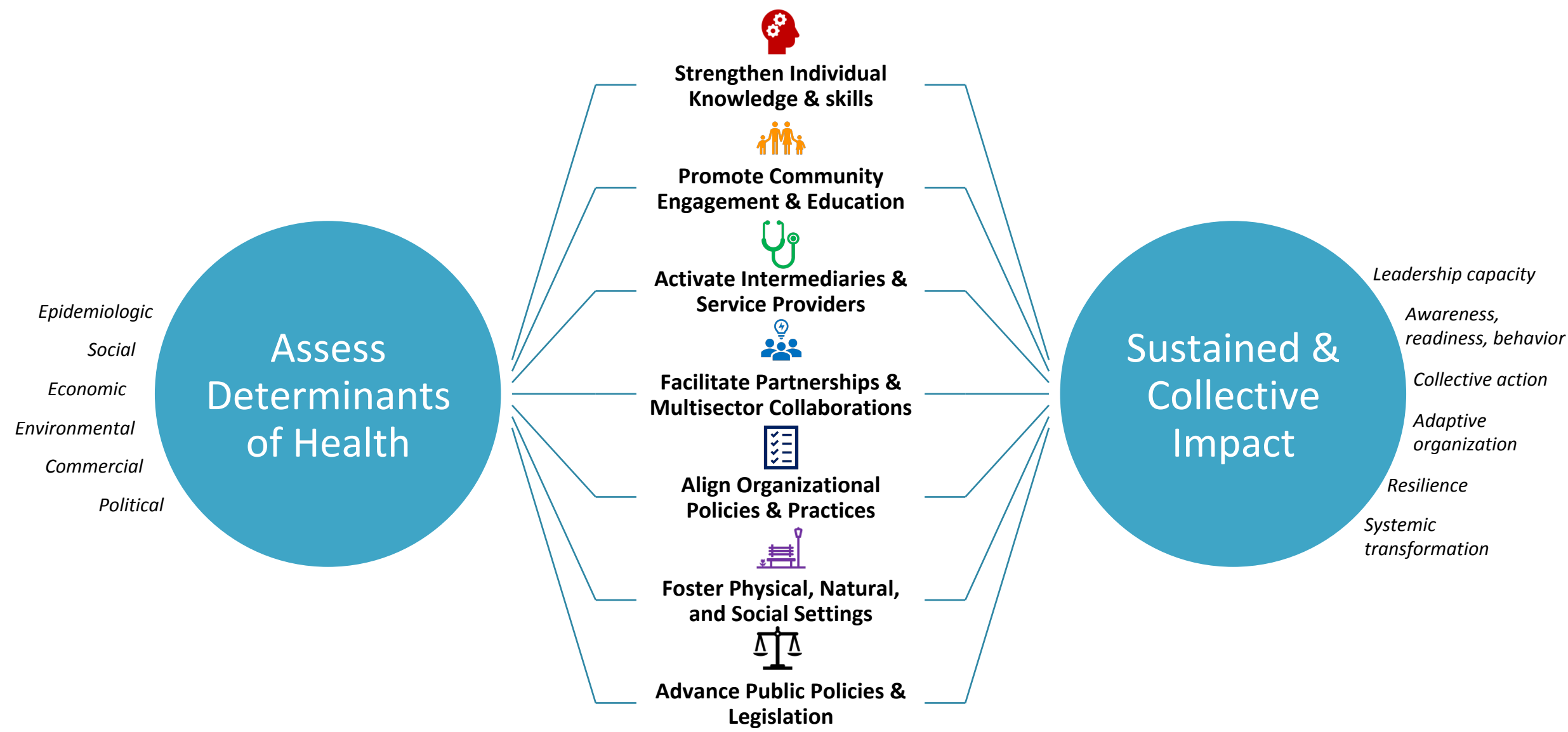
I+PSE Conceptual Framework for Action



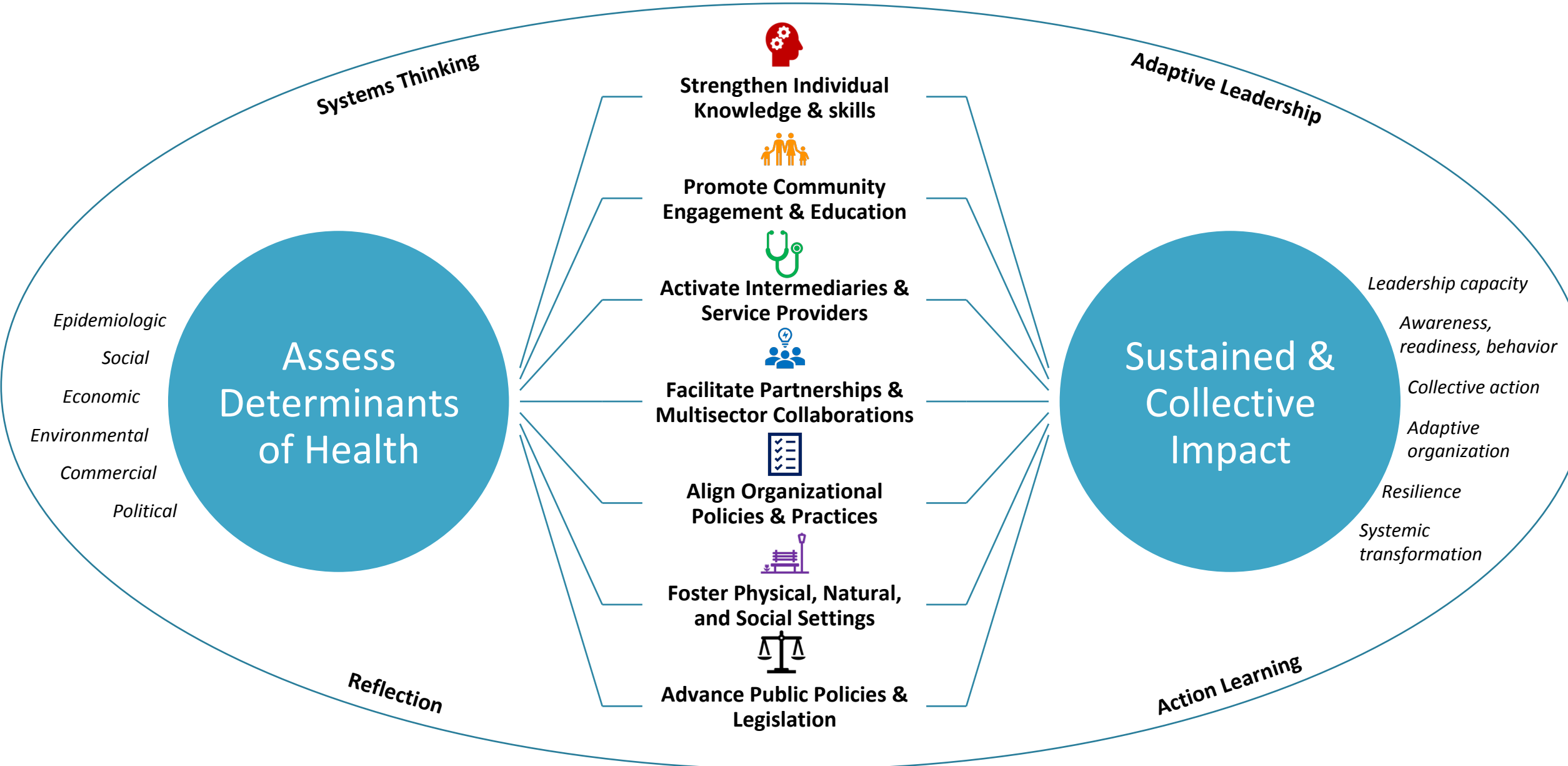
I+PSE Conceptual Framework for Action



I+PSE Conceptual Framework for Action



I+PSE Conceptual Framework for Action



Building Blocks for Optimal MCH Nutrition Impact



I+PSE Can:

- ✓ Be integrated into existing efforts
- ✓ Drive multi-level action
- ✓ Cultivate relationships
 - Reciprocal support
 - Multisectoral and interdisciplinary
- ✓ Be operationalized at the organization and community levels
 - Applicable and adaptable
- ✓ Achieve broader community and population benefits
- ✓ Result in collective and sustained impact



Chat Question

Describe one way in which you are currently implementing policy, system, and/or environmental approaches in your work.

Results of the MCHB Childhood Obesity Prevention Enhancement Project

Presented By
Dena Herman, PhD, MPH, RD

Childhood Obesity Technical Assistance Efforts: *What Did We Learn?*

- Assessed readiness to change with RFP
- Conducted
 - Midpoint Evaluation Survey
 - Endpoint Evaluation Survey
 - Participant Team Interviews

Childhood Obesity Technical Assistance Efforts:

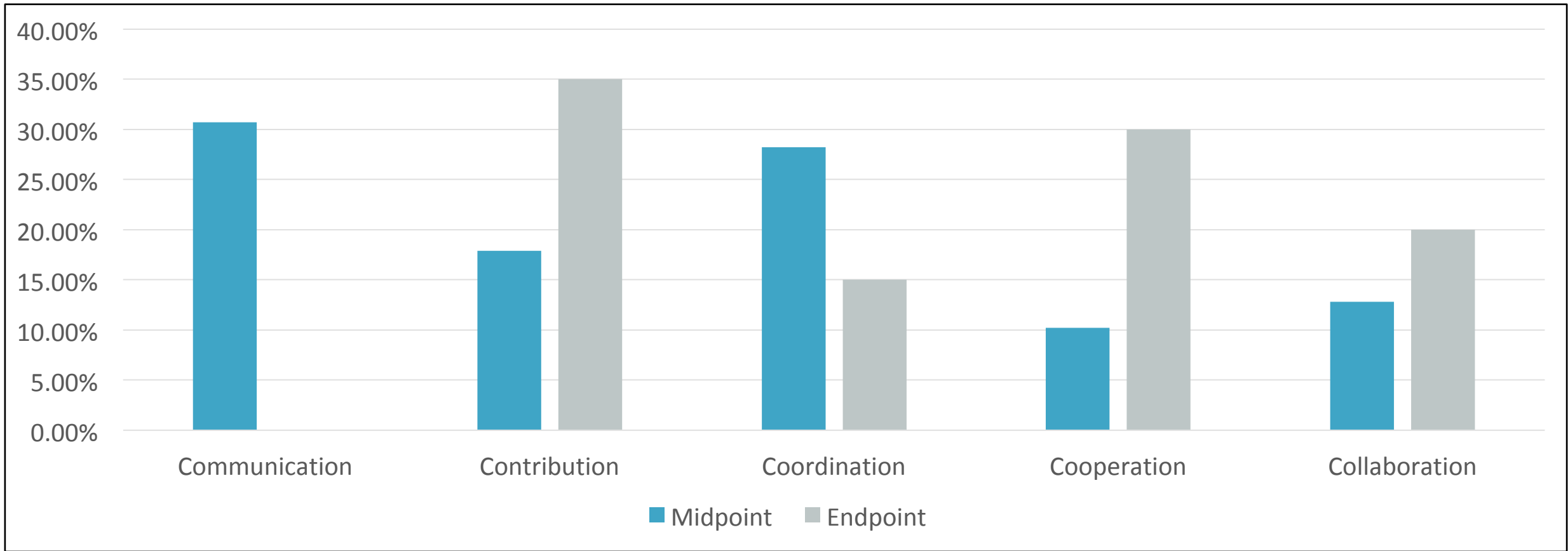
What Did We Learn?

Adapted from University of Wisconsin Cooperative Extension. Evaluating Collaboratives. Reaching the Potential (July 1998). Available at <https://learningstore.uwex.edu/Assets/pdfs/G3658-08.pdf>

Table 2: Classification of Relationship Quality

Integration	Classification	Process	Structure	Purpose
<div>Low</div> <div>↓</div> <div>High</div>	1	Communication	Network, Roundtable	Dialogue and common understanding. Clearinghouse for information. Explore common and conflicting interests.
	2	Contribution	Support each other's efforts	Mutual exchanges to support each other's efforts. Build mutual obligation and trust.
	3	Coordination	Taskforce, Council, Alliance	Match and coordinate needs, resources, and activities. Limit duplication of services. Adjust current activities for more efficient and effective results.
	4	Cooperation	Partnership, Consortium, Coalition	Link resources to help parties achieve joint goals. Discover shared interests. Build trust by working together.
	5	Collaboration	Interdependent system with shared resources	Develop shared vision. Build interdependent system to address issues and opportunities. Share resources.

Quality of Relationships Formed During TA: Midpoint Survey to Endpoint Survey



Readiness to Change: Endpoint Survey

On a scale of 1 to 5, TA respondents answered the question:

- “Over the course of the project, do you feel you have met your expectations of individual and organizational readiness to change?”
 - High level of readiness to change (Level 4, n=3)
 - Highest level of readiness to change (Level 5, n=1)

Interviews with TA Participant Teams Revealed a Range of Experiences



Barriers to Change

“We do not feel that our organization is ready to change at this time because they are not all aware of the PSE training and have not yet participated.”


“(Our) organization already has a PSE focus... I continually integrate I + PSE approaches in all of my projects.”

Next Steps

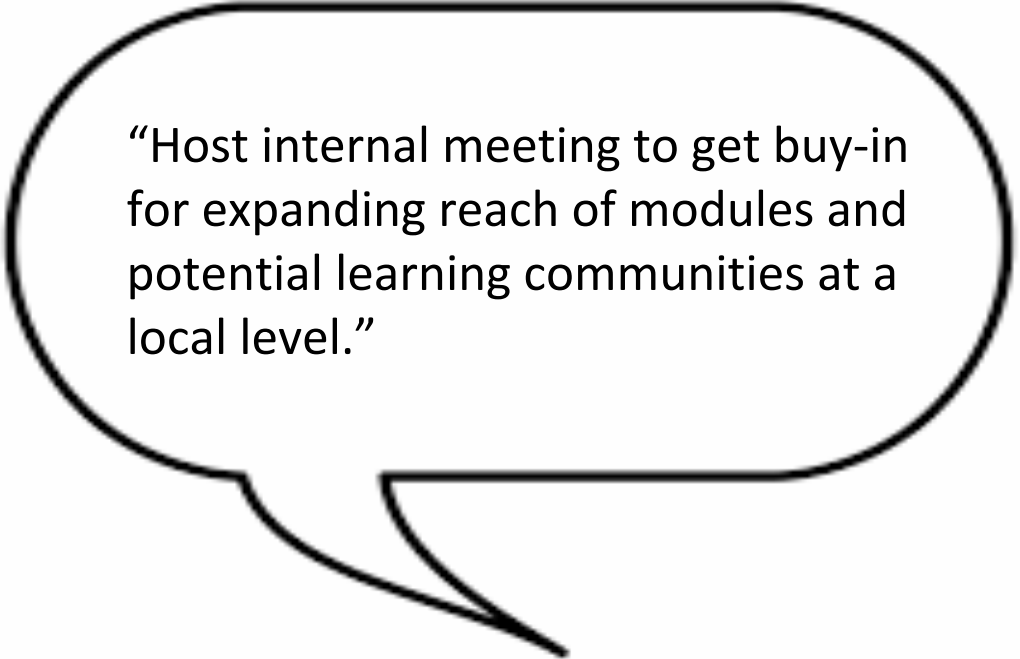
“Host internal meeting to get buy-in to expand reach of modules and potential learning communities at a local level.”

“Recruit individuals to participate in online modules...solicit buy in from upper-level management.”

Next Steps



“Recruit individuals to participate in the online modules...solicit buy in from upper-level management.”



“Host internal meeting to get buy-in for expanding reach of modules and potential learning communities at a local level.”

Conclusions from Technical Assistance Effort

- Learning activities broadened the thinking process and pushed teams to move projects/strategic plans forward by identifying new directions for work.
- Expectations were exceeded - guidance and direction received - particularly through individual coaching and mentoring - was very valuable.
- Identification of “expansion possibilities” were mentioned by all teams as positive outcomes.
 - Possibilities to incorporate I + PSE into work, but also recognized reality of lack of existing funding and/or infrastructure to facilitate forward movement



Polling Question

On a scale of 1 (low) to 5 (high), to what extent do relationships impact the success of your work?

I+PSE Evaluation Strategies

Interim Results From a Review of the Literature

Presented By
Leslie Cunningham-Sabo, PhD, RD

Polling Question

Evaluation of PSE initiatives is critical in order to demonstrate impact and revise strategies as needed.

Which one of these components is the most challenging to evaluate?

- 1) Strengthen individual knowledge and skill
- 2) Promote community engagement and education
- 3) Activate intermediaries and service providers
- 4) Facilitate partnerships and multisector collaborations
- 5) Align organizational policies and practices
- 6) Foster physical, natural and social settings
- 7) Advance public policies and legislation

PSE Evaluation Literature Review

- Key questions
 - Characterize initiatives and their evaluation strategies
 - Match with seven I+PSE Conceptual Framework for Action components
 - Identify where evaluation strategies align with Framework components
 - Identify evaluation gaps and challenges

PSE Evaluation Literature Review

Strategies

- Key search terms (PSE [or derivation] + evaluation [or assess] + initiative or intervention or framework)
- Years 2009 – 2019 (will update with 2020)
- Databases - CINAHL, Web of Science, MEDLINE, PsychINFO, CAB Abstracts
- Include gray literature, consult with practitioner ‘experts’
- Independent coders; compare and reach consensus

Results 'in Progress'

- Abstracting this information:
 - Funding source
 - Name of initiative; purpose
 - Setting; timeframe
 - Evaluation data/tools' alignment with I+PSE Conceptual Framework for Action components
 - Initiative results (successes, challenges)

Snapshot of Results Table

First author, year of publication	Funding Source	Initiative; Purpose/s	Settings	Length	Framework Components* aligned with evaluation strategies	Results; Successes; Challenges
Abildso 2019	Community Transformation Grant from CDC	Change the Future West Virginia; evaluate adoption and reach of nutrition-based PSE in food deserts	Schools, farmers markets, retail food outlets	2-3 years	3 - online survey completed by implementation team members 4 - online survey completed by implementation team members 5 - signed agreements with farmers markets and retail food outlets, online survey completed by implementation team members 6 - online survey completed by implementation team members RE-AIM Framework, online survey, copies of signed agreements with farmers markets and retail food outlets	Schools in 48/55 counties implemented Farm to School activities; 2/3 of farmers markets signed collaboration agreements; hiring of personnel with trust & connections was valuable for improving process; changes in local grocery stores was easier than national stores
Arriola 2016 (just reports survey responses, not intervention) & 2017 - identical but in different journals 2016 article first author Jacob Arrilola	CDC to Emory PRC & NCI	Prevention Strategies that Work; measured congregants' perceptions of healthfulness of church environment, policies, and	6 Faith-Based Organizations	12 months	pre-post surveys of FBO members 1 - survey 3 - TA (but was not measured) 5 6	increase in perceived un/healthy food served @ church associated with greater general un/healthy foods eaten, no sig relationships btwn changes in church PA environment and church or general PA behavior; three churches had improvements in three socio-environmental aspects of

Results 'in Progress'

- Number of articles/initiatives – 45
- Massive (\$\$\$) v (multi) county-level initiatives
- Focus areas – fruits and vegetables (e.g., Farmer's Markets), physical activity (e.g., environmental), breastfeeding
- Funding timeframe 1 – 3 years (too short to show effect, just implementation)

Results 'in Progress'

Types/levels of evaluation reported

- Mainly online surveys, some interviews and environmental assessments
- Description of the initiative process
- Most evidence of change/no change are at these levels:
 - Organizational policies and practices
 - Environmental changes

Gaps between initiative objectives and data collected

- Community engagement and working with a coalition but no documentation of effectiveness
- Timeframe too short to document achievement of health outcomes



Chat Question #1

What kinds of data will be beneficial to demonstrate MCH effectiveness and the impact of I + PSE initiatives?

Chat Question #2

Collaboration activities are (briefly) described in most of the included articles but the quality of collaborations is not assessed

- What are the characteristics of strong collaborations?
 - How would you measure these?

Thank You!

- Q & A
- Contacts:
 - Dr. Dena Herman, dherman@ucla.edu
 - Ms. Angie Tagtow, atagto2@uic.edu
 - Dr. Leslie Cunningham-Sabo, Leslie.Cunningham-Sabo@ColoState.edu



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