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MCH Innovations Database Practice Summary & Implementation Guidance

Individual + Policy, Systems and Environmental (PSE) Approaches Technical Assistance

This mentored TA practice includes online training modules, a tailored workbook, and coaching for MCH health professionals to acquire skill sets in developing individual and policy, systems, and environmental (I + PSE) approaches to improving healthy eating and active living practices among vulnerable MCH populations and communities. The goal of the TA effort is to develop I + PSE skills sets in teams of MCH practitioners to more comprehensively address the wicked public health problems that exist in health systems.



Location

California



Topic Area

Nutrition/Physical Activity



Setting

Community



Population Focus

Cross-Cutting/Systems Building



NPM

NPM 1: Well-Woman Visit; NPM 4: Breastfeeding; NPM 8.1: Physical Activity – Ages 6 to 11; NPM 8.2: Physical Activity – Ages 12 to 17; NPM 10: Adolescent Well-Visit



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Section 1: Practice Summary

PRACTICE DESCRIPTION

Obesity is disproportionately represented among low-income women and children, and African American, Hispanic/Latino, and American Indian/Alaskan Native (AI/AN) populations (Ogden et al, 2010). Children living in poverty experience more than 2 times the prevalence of obesity compared to other children (Singh et al, 2010). Of great concern, AI/AN communities have the highest maternal and infant mortality rates, and 4 of the 5 leading causes of death related to poor diet (USHHS, 2015). Rural populations experience greater health disparities than those in urban/suburban settings, and will require unique, tailored, multilevel approaches to effectively address nutrition policy, food access, etc. (USHHS, 2013). Solutions are urgently needed to prevent obesity in these high-risk communities, but few strategies have proven successfully long-term or at the population level (Roberto et al, 2015).

The University of Minnesota Systems Approaches for Healthy Communities Initiative (UMN) developed [an online Policy, Systems, and Environment \(PSE\) training module for teams of practitioners](#). Using the Social-Ecological Model (Pereira et al, 2019) and the Spectrum of Prevention frameworks (Kumaniyika, 2019)¹; the training modules guide teams to take action on the many policy, systems and environmental (PSE) factors influencing individuals or families to make healthy choices. This mentored TA practice includes online training modules, a tailored workbook, and coaching for MCH health professionals to acquire skill sets in developing individual and policy, systems, and environmental (I + PSE) approaches to improving healthy eating and active living (HEAL) practices among vulnerable MCH populations and communities. The goal of the TA effort is to develop I + PSE skills sets in teams of MCH practitioners to more comprehensively address the wicked public health problems that exist in health systems. This practice was implemented with four nutrition leaders in the Western States.

CORE COMPONENTS & PRACTICE ACTIVITIES

This TA mentored practice uses the I+PSE Conceptual Framework for Action (see *Appendix: Figure 1; Tagtow et al, 2021*). The I+PSE Conceptual Framework for Action is inspired by the [Spectrum of Prevention model](#) and was first presented at the Nutrition Leadership Network (NLN) meeting (Tagtow, 2017 – see description below of the NLN). I+PSE change strategies are defined at the following levels:

¹ <https://www.preventioninstitute.org/tools/spectrum-prevention-0>



- **Individual change** may include direct services, specifically evidence-based interventions designed for individuals and families that support increased knowledge and positive behaviors.
- **Policy change** may occur at organization, community, and/or public policy levels, including modifications to procedures or organizational practices, creation of laws, ordinances, resolutions, mandates, regulations, or rules.
- **System change** results from adjustments to the infrastructure and/or operations that impacts all elements of an organization or institution. System change may also result from the combined effects of individual, policy, and environmental changes.
- **Environmental change** is the result of modifications to built or natural settings, including physical spaces within organizations, institutions, or public areas. This may also include changes to ecological resources, landscapes, and ecosystems that impact soil, water, climate, biodiversity, and energy.

The I+PSE Conceptual Framework for Action (see *Appendix: Figure 1; Tagtow et al, 2021*) can be used to guide HEAL strategies that strengthen individual knowledge and skills; promote community education; educate providers; foster coalitions and networks; change organizational practices; modify physical spaces and natural settings; and inform policy and legislation (see [I+PSE Approaches to Childhood Obesity Prevention in Rural Communities: Team Capacity Building and Action Planning Workbook](#)). Table 1 below shows the activities and core components of the I + PSE TA activity that was conducted with four MCH Nutrition leaders from the Western States.

Core Components & Practice Activities		
Core Component	Activities	Operational Details
<u>Concept Acquisition:</u> UMN online training modules	Registration for and completion of five modules on PSE approaches.	Upon completion of each module, reflection sheets and evaluation assessments are completed to assess comprehension and application of materials.
<u>Concept Application:</u> Workbook: Individual + Policy, System, and Environmental (I+PSE) Conceptual Framework for Action to Healthy Eating Active Living Initiatives	Complete tailored action sheets in workbook: I+PSE conceptual framework for action and HEAL strategies in local setting	Application of I + PSE approaches with team of MCH public health practitioners to local setting. Serve as building blocks for development of action plan.



<p><u>Co-learning/Capacity Building:</u> Participation in Community of Practice (CoP) Discussions</p>	<p>Conduct CoP group discussions and individual coaching</p>	<p>Coaching and technical assistant sessions to discuss lessons learned and barriers encountered. These sessions took place once monthly for 6 months. Schedule is set by group. The CoP discussions support co-learning and resource sharing. Coaching sessions use systematic reflection and action learning as tools to support capacity building, iteration, and system change.</p>
<p><u>Implementation:</u> I + PSE Strategic Plan for Obesity Prevention (and other PH issues)</p>	<p>Development of strategic plan for application in local setting</p>	<p>Using principals and information gained through online modules, workbook with tailored action sheets, and community of practice discussions, teams develop, review and implement a strategic action plan for local settings.</p>

HEALTH EQUITY

This mentored TA practice addresses health equity by connecting the food system with other intersecting systems to develop strategies to address important health issues affecting the most vulnerable populations. These populations include limited resource communities, racial and ethnic minorities, rural populations and in the West in particular, American Indian and Alaskan Native populations. MCH nutritionists improve health equity by improving food access, increasing food security, and improving dietary quality through greater access to nutrient-dense foods such as fruits and vegetables. By connecting the food system with, for example, the educational system, the transportation system, and/or the health system, initiatives can be developed that are uniquely positioned and integrated at the community level to be sustainable. This also supports a life course perspective to address these challenging issues and seeks to address health disparities at their root causes.

EVIDENCE OF EFFECTIVENESS

Evaluation of this mentored TA practice included: 1) Notes from CoP and individual coaching calls with each of the MCH State team participants; 2) A midpoint survey to assess the number, types and levels of relationships formed as a result of the practice; 3) A final survey at completion of the practice to assess progress and how TA participants included I+PSE in their State strategic plans, organizational and individual readiness to advance I+PSE into initiatives, expectations for individual and organizational readiness to change; 4) The development of an action plan to include I+PSE approaches; and 5) A qualitative interview to assess expectations and outcomes from participation in the practice, barriers and facilitators to implementing I+PSE approaches, and recommendations for



improvement of the TA practice. The resources section below has a copy of surveys and interview guides.

Results from the qualitative interviews shared a brief summary of the information available. Semi-structured, in-depth interviews were conducted post TA delivery with MCH nutrition leaders in the four States participating in the TA activity. Interviews were audio-recorded, transcribed, and themes and subthemes characterized by two, independent coders through qualitative analysis. Thematic coding was used to triangulate themes and subthemes for coaching and CoP meeting notes.

See [Appendix Figure 2: Themes and Quotes from Interviews of Four State Teams Participating in the I + PSE Pilot TA Program for evaluation data.](#)

Section 2: Implementation Guidance

STAKEHOLDER EMPOWERMENT & COLLABORATION

The most important partners in the implementation of this practice were the participants from the State programs, who are nutrition leaders in their State agencies. Key to TA participants being able to participate in this TA practice was upstream support from their administrators to take the time to engage in this practice as well as their support for capacity-building training to make improvements in the efficiency and scope of their work including forming partnerships with individuals and organizations outside their own. These partnerships included sectors in addition to health such as early education care, the Indian Health Service, school systems, and transportation to name a few.

Tools/Processes:

Requiring a signed letter of support for practice participants outlining the specific supports that would be offered to them from their upstream administrators is integral to successful administration of this practice and also its scale, spread, and sustainability within an organization.

In addition, the use of iterative exercises (e.g. worksheets from a workbook tailored for the audience of participants), community of practice (CoP) discussions, and coaching maintained engagement and sustained involvement of nutrition leadership. Exercises culminated in a draft implementation plan that was discussed among CoP TA participants where they received peer feedback and recommendations.

REPLICATION

This project has not yet been replicated.



INTERNAL CAPACITY

Personnel to support this practice include one program coordinator with evaluation experience (25% time) to assist with facilitating module registration, setting up calls, and providing general logistical support and one facilitator/coach trained in I + PSE approaches to lead the community of practice and also offer individual coaching (25% time). Both of these personnel would need to be available for a total of 12 months to complete the program from start to finish including evaluation and report writing/follow-up with upstream collaborators.

Personnel who delivered this practice already had leadership skills experience working in and/or with State agencies, and evaluation experience. Personnel who would lead this practice would benefit from similar skill sets, but the practice could also be delivered through a peer network of similar individuals as long as they had experience in the field in leadership development, evaluation conduct and the organizational structure of the relevant agencies.

PRACTICE TIMELINE

Phase: Planning/Pre-Implementation		
Activity Description	Time Needed	Responsible Party
Development of workbook with tailored action sheets and planning tools. May need additional adaptation depending on participants.	Month 1 20 hours	Facilitator/Coach
Obtain signed letter of support/commitment from upstream administrator	Month 1 1 hour	Program Coordinator Practice Participant
Administration of evaluation measure(s). May need additional adaptation depending on participants.	Month 1 20 hours	Program Coordinator



Phase: Implementation

Activity Description	Time Needed	Responsible Party
<u>Concept Acquisition:</u> UMN online training modules	Months 2 – 6 5 hours	Practice Participant
<u>Concept Application:</u> Workbook: Individual + Policy, System, and Environmental (I+PSE) Conceptual Framework for Action to Healthy Eating Active Living Initiatives	Months 2 – 6 5 hours	Practice Participant
<u>Co-learning/Capacity Building:</u> Participation in Community of Practice (CoP) Discussions	Months 2 – 6 5 – 10 hours	Program Coordinator Facilitator/Coach Practice Participant
Midpoint Evaluation	Months 3, 7 20 hours	Program Evaluator
<u>Implementation:</u> I + PSE Strategic Plan for Obesity Prevention (and other PH issues)	Month 7 2 – 5 hours	Practice Participant



Phase: Sustainability

Activity Description	Time Needed	Responsible Party
Continued Meetings of CoP	Months 8 and beyond 1 hour/bi-monthly	Program Coordinator Facilitator/Coach Practice Participant
Program Evaluation	Months 8 – 12 20 hours/month	Program Evaluator

PRACTICE COST

Budget

Activity/Item	Brief Description	Quantity	Total
UMN Systems Approaches for Healthy Communities Community License Package (\$4000/200 licenses) Time: Licenses valid for 12 months; can be extended for additional cost	Access to online modules, two basic toolkits, and implementation guide.	1	\$4000
Project Coordinator (25% time) Time: 12 months	Facilitate module registration, schedule calls and provide general logistical support	1	TBD (Could be graduate)



			student – approx. \$5000)
Facilitator/Coach (25% time) Time: 12 months	Trained in I + PSE approaches to lead the community of practice and also offer individual coaching	1	TBD (Amount depends on training – approx. \$15,000)
Project Evaluator (25% time) Time: 6 months (need 6 weeks at start & midpoint, 3 months at completion)	Trained in I + PSE Evaluation techniques. Administers evaluation(s), follows up, manages data, analyzes data, reports data.	1	TBD (Could be graduate student – approx. \$5000)
Total Amount:			≈ \$29,000

LESSONS LEARNED

One of the most important assets of this practice approach was the time teams devoted to relationship-building and the value realized by building these relationships for future work and moving their work from downstream to upstream approaches. The TA group activities and individual coaching supported team member learning and sharing, which led teams to understand the evolution of the relationships they were building and how they could be leveraged to create more capacity.

Challenges to implementing this practice were the time needed to do the modules, participate in the Community of Practice (CoP), and implement some of the ideas that were generated through the TA activities. In addition, some team members had to work on their own and did not have others to collaborate with.

To mitigate some of these challenges, a letter supporting participation in the CoP was requested from the supervisor prior to beginning the TA practice. However, we learned that the letter needed to be more detailed including more information about the expected outcomes as well as include the supervisor as part of the practice. Some teams invited their supervisors to complete the modules, while others held regular meetings with their supervisors to provide them updates on their progress. Those that engaged their supervisors in this manner experienced greater buy-in and support. Supervisor support led to more upstream support in general and the ability to move activities upstream as well. For future implementation of this practice, it is advisable for all team members to



receive both approval from supervisors as well as set up a regular schedule of status updates to keep supervisors involved and knowledgeable.

NEXT STEPS

We are continuing to scale and spread this effort with other members of the Nutrition Leadership Network (NLN), which comprises the State Title V/MCAH Nutrition representatives in the 13 Western States, cross-sectoral partners (e.g. early education, school systems, transportation, parks and recreation, etc.), and the partner organizations that they engage - including local health jurisdiction nutritionists and other health professionals

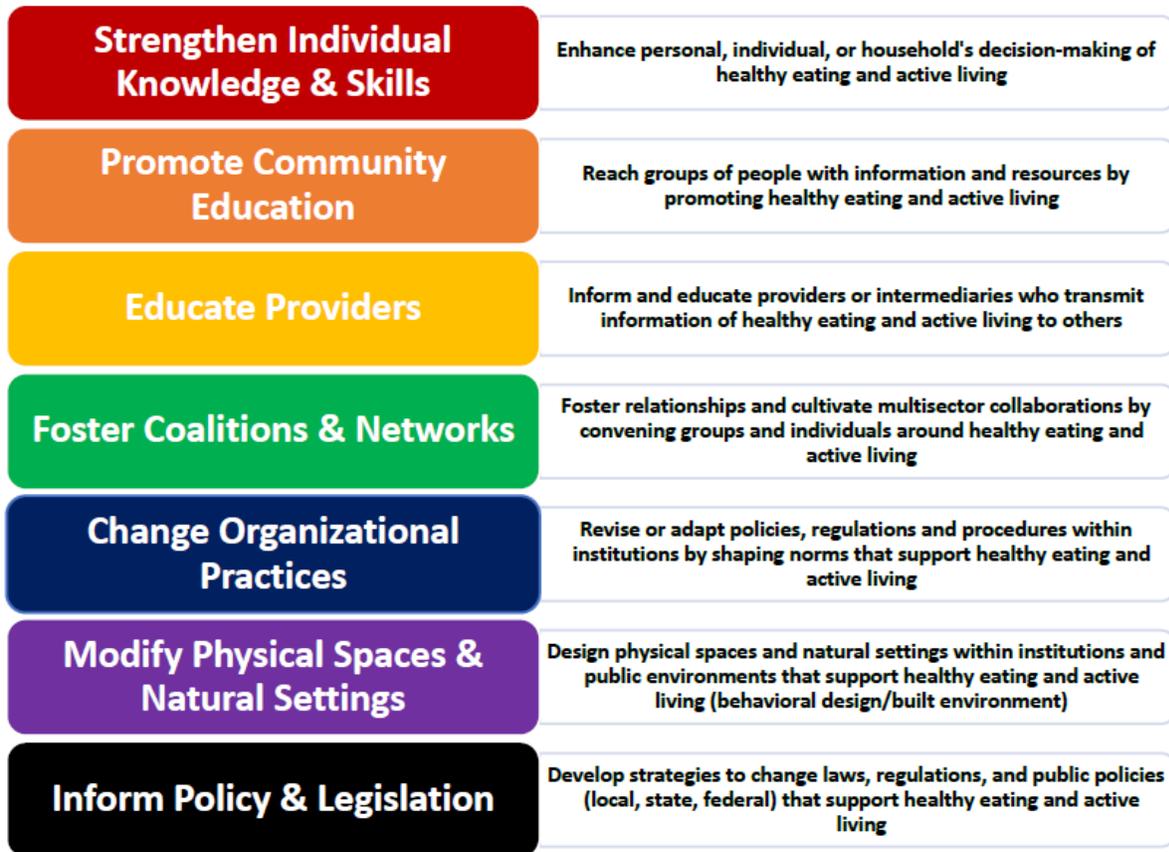
RESOURCES PROVIDED

- See the workbook and evaluation survey instruments below:
 - [I+PSE Approaches to Childhood Obesity Prevention in Rural Communities: Team Capacity Building and Action Planning Workbook](#)
 - [Enhancement Midpoint Check-in Team Leaders](#)
 - [Enhancement Post Survey to Team Leaders](#)
 - [Interview Guide for MCH Enhancement](#)
- [Systems Approaches for Healthy Communities, UMN PSE Modules](#)



APPENDIX

- **Appendix: Figure 1:** Application of the Individual + Policy, System, and Environmental (I+PSE) Conceptual Framework for Action and to Healthy Eating Active Living Initiatives (Tagtow A. Nutrition Leadership Network Annual Meeting, 2018).



- **Appendix Figure 2:** Themes and Quotes from Interviews of Four State Teams Participating in the I + PSE Pilot TA Program

Theme	Interview Quote
<p>Expectations: All four teams reported they received useful guidance and direction from the TA practice, especially the CoP sharing and the individualized coaching.</p>	<p>"...the experience met my expectations, plus more, I really appreciated the modules and the format of it, ... discussion of the worksheets, and it was very understandable,"</p> <p>"I thought it was a great opportunity for us to gain insight into what would be the best foundation for us to start with, in trying to eventually get to where our goal is."</p>



<p>Outcomes: Teams recognized the possibilities and realities for expansion of I+PSE approaches within their work and that the TA effort helped them recognize the importance of relationship building and also to be more forward- thinking</p>	<p>“I do think this experience really did challenge me to expand my thinking about my approaches ..., so I could see myself using that framework again ...to check in and ...see if there’s any gaps to fill”</p> <p>“I’ve definitely gained perspective on what early childhood education work entails—engaging with partners and building relationships is part of the work with early learning and that perspective has been very helpful for motivating me when I felt like I was being stagnant, and I wasn’t able to make progress.”</p>
<p>Barriers: Barriers cited included time limitations to incorporate I+PSE approaches into the work that TA participants were doing, lack of capacity or infrastructure, and that progress was slower than they would have liked.</p>	<p>“I encouraged participation of other teammates and colleagues, but they just didn’t have the bandwidth and so that was an issue.”</p> <p>“I was limping along for a while compared to other state teams but in the end it all came together.”</p>
<p>Facilitators: Facilitators to including I+PSE approaches in States’ ongoing initiatives were mentorship offered by the TA practice and encouragement provided by upstream support at work.</p>	<p>“Monthly calls with the team as a whole that were facilitated, ...,we had good dialogue across the teams and I learned from other teams which allowed me to change my plan.”</p>



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