

How a National Evaluation Framework Addresses the Complex Challenge of Demonstrating Policy, Systems, and Environmental (PSE) Change—Maine’s Utilization of the USDA’s “SNAP-Ed Evaluation Framework” to Measure Obesity Prevention Strategies



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THEORY-DRIVEN EVALUATION QUESTION:

“To what extent does SNAP-Ed programming facilitate access and create appeal for improved healthy eating and physical activity choices in the settings where people eat, learn, live, play, shop, and work?”

— SNAP-Ed Evaluation Framework, Environmental Settings¹

PROGRAM OVERVIEW

The **Supplemental Nutrition Assistance Program - Education (SNAP-Ed)** is the country’s largest nutrition education and obesity prevention program. It is funded through the United States Department of Agriculture (USDA). SNAP-Ed’s public health approaches are designed to ensure that the investment in SNAP works, while addressing food insecurity and creating environments and community systems that help prevent obesity.

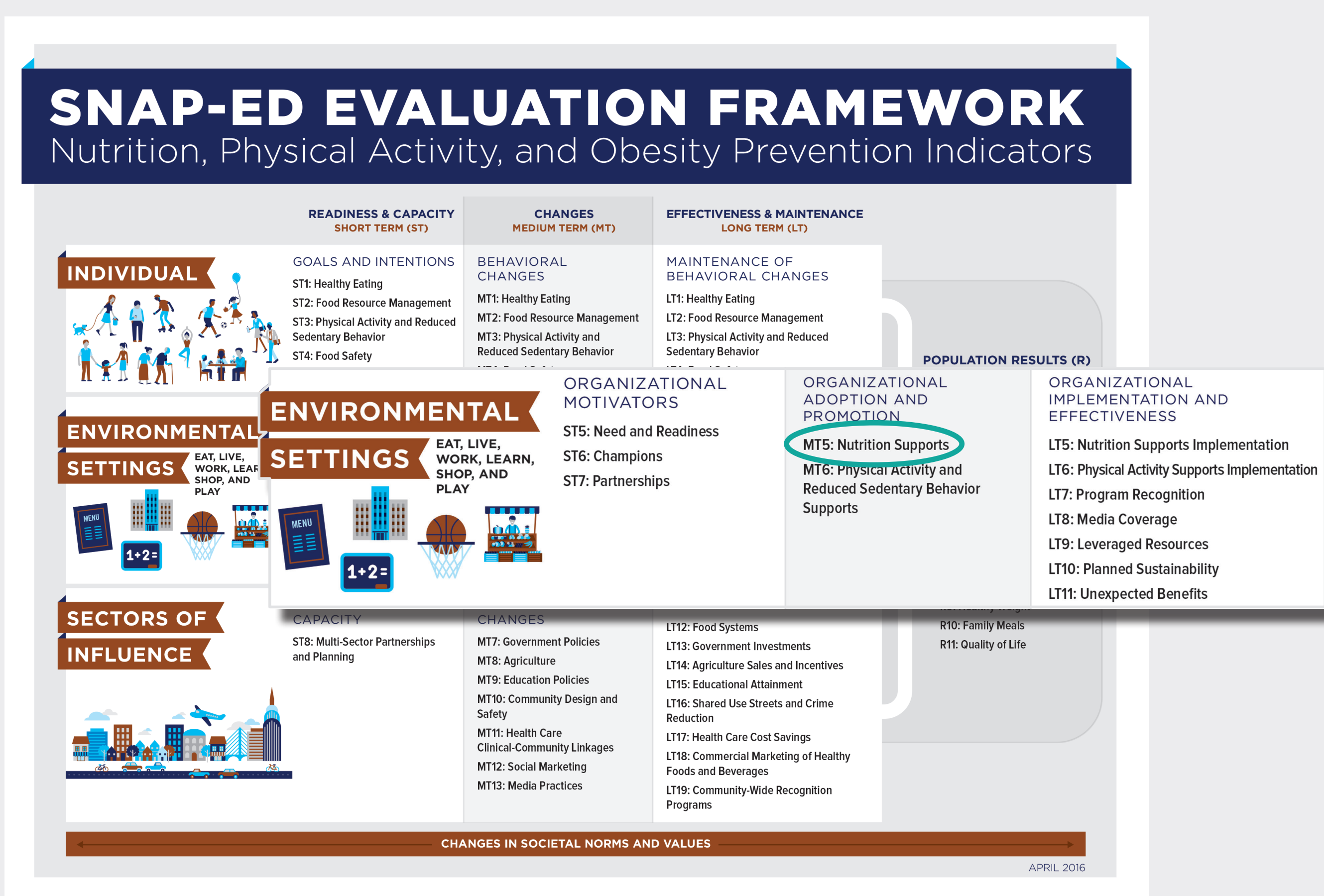
Maine SNAP-Ed uses evidence-based nutrition education, social marketing, and policy, systems, and environmental change strategies to help Maine families shop, cook, and eat healthy on a budget. The University of New England (UNE) administers the SNAP-Ed contract through the Maine Department of Health and Human Service’s Office for Family Independence. Through sub-contracts with community-based organizations, 37 highly trained nutrition educators reach low-income Mainers in all 16 counties.

INTERVENTION OVERVIEW

Maine SNAP-Ed has been implementing **policy, systems, and environmental (PSE) change strategies** throughout Maine communities since 2015. PSE change is a public health approach to modifying the environment to make healthy choices practical and available to all community members. Nutrition educators select two annual objectives for implementation, developing local partnerships to adopt and promote obesity-prevention supports that respond to local need and can be sustained through lasting policies and local champions. PSE change efforts occur in qualified SNAP-Ed sites (e.g., emergency food agencies, public housing sites), primarily where educators are implementing direct education.

Maine SNAP-Ed’s **9 PSE intervention categories:**

- Childcare Wellness
- School Wellness
- School Gardens
- Encourage Federal Food Assistance Participation for Youth
- Community Gardens
- Increase Access to Fruits and Vegetables
- Healthy Retail
- Worksite Wellness
- Healthcare Clinical-Community Linkages

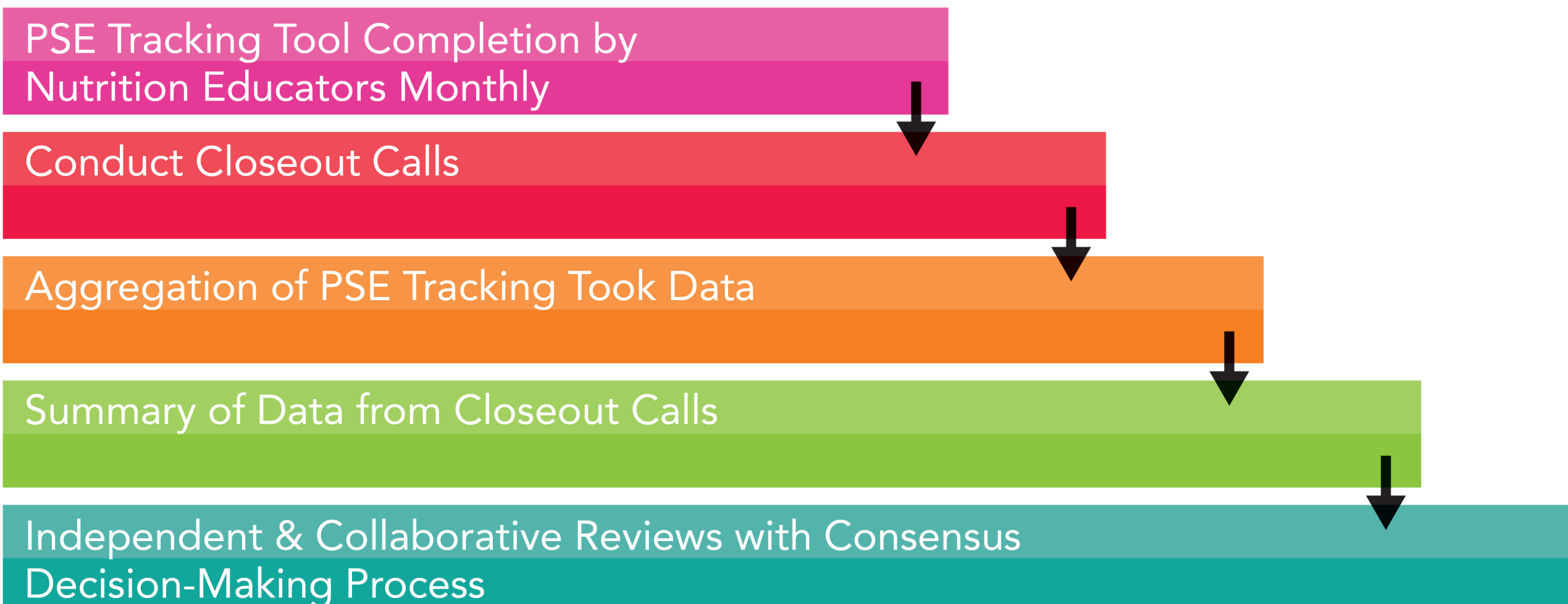


METHODS

Program data are aggregated annually by objective using a monthly **Excel-based tracking tool** completed by nutrition educators. The tracking tool includes drop-down menus for strategy selection, setting/site, monthly activities, promotion, and other planning and implementation steps.

The UNE evaluation team conducts semi-structured close-out interviews with each educator to supplement tracking tool data. Analysis is inclusive of more than 50 objectives and their associated settings and systems. **Independent and collaborative reviews** of aggregate annual data with a **consensus decision-making process** determine results for MT5: Nutrition Supports. **Photographic evidence** contributed by educators or collected during site visits supports determination of adoption.

MAINE SNAP-ED PSE EVALUATION METHODS



Reach estimates for supports adopted are calculated using settings data from the tracking tools, nutrition educator report, and/or publicly available data for SNAP-Ed eligible populations (e.g., US Census data for community settings, free/reduced meal data for school settings, food pantry client data, etc.).

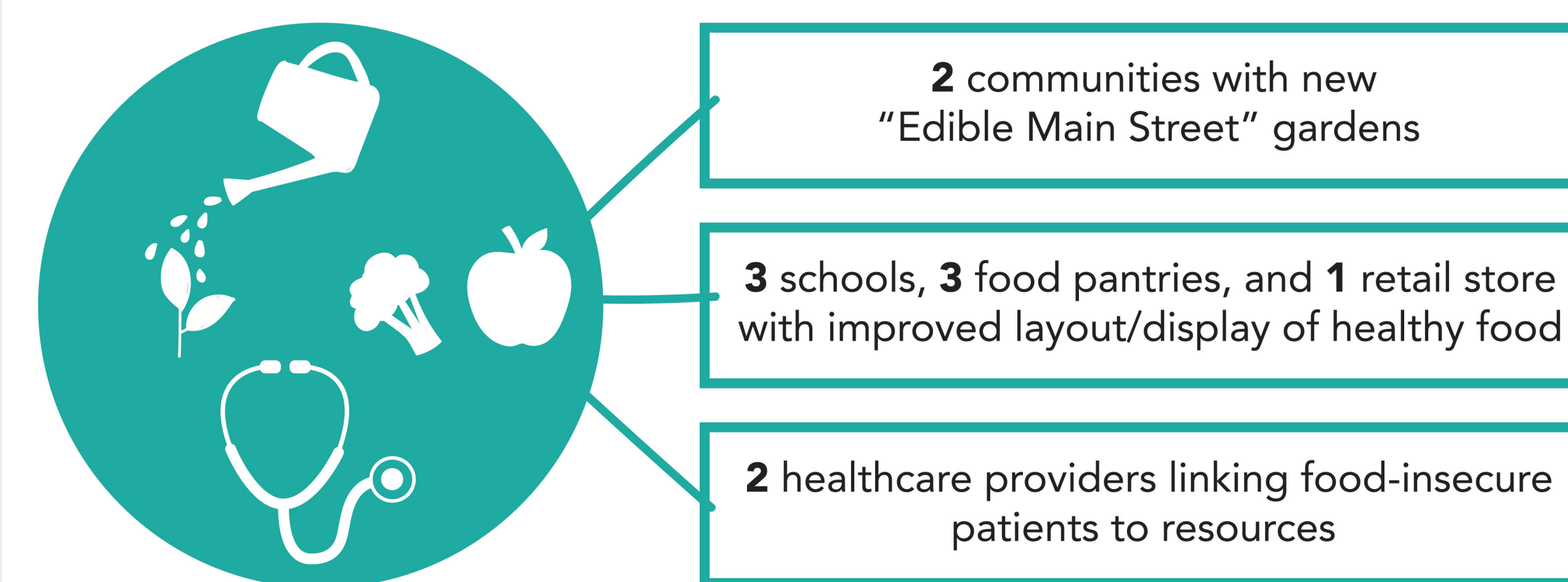
RESULTS

The outcome measure for Environmental Level MT5: Nutrition Supports refers to a change in policy or practice to expand access or improve appeal for healthy food and beverages and “takes place when SNAP-Ed sites or organizations put into effect an evidence-based PSE change...”¹

The outcome measures (MT5a-f) along with **Maine SNAP-Ed FY 2018** results are presented in the table below.

MT5: Nutrition Supports Adopted—Outcome Measures	FY 2018 Results
MT5a. Number of sites or organizations that make at least one change in writing or practice to expand access or improve appeal for healthy eating	48 settings/sites impacted
MT5b. Total number of policy changes	0 (no policy changes)
MT5c. Total number of systems changes	15 systems changes
MT5d. Total number of environmental changes	30 environmental changes
MT5e. Total number of promotional efforts for a PSE change	33 promotional efforts
MT5f. Reach: Total potential number of persons who encounter the improved environment or are affected by the change on a regular/typical basis and are assumed to be influenced by it.	19,740 Mainers reached

EXAMPLES OF MT5d.—ENVIRONMENTAL CHANGES



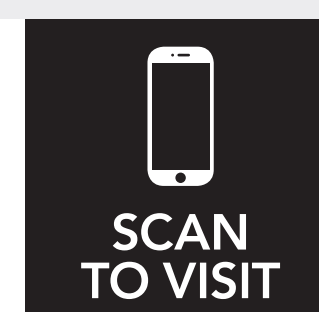
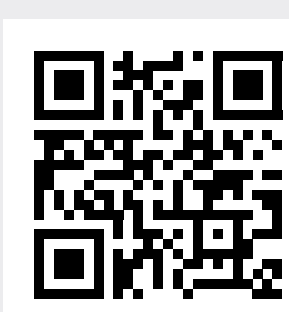
INCREASING ACCESS TO FRUITS AND VEGETABLES: COLLABORATION WITH USDA’S COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP)

CHALLENGES AND NEXT STEPS

The challenges of quantifying and reporting on outcomes for the complex environmental interventions implemented by SNAP-Ed programs are many-faceted and may need to be examined through the **Implementation Science** lens.³ The UNE team will explore this approach.

Future analyses will consider the following evaluation challenges:

- To what degree are changes adopted attributable (or not) to Maine SNAP-Ed?
- How to estimate reach for interventions that utilize population-level screening and provide systemic supports (e.g., F&V prescriptions).
- How to measure:
 - Individual-level **behavioral outcomes** related to environmental changes.
 - **Dose** for multi-level interventions (direct ed. + PSE + social marketing) and **dosage** for multi-year interventions.
 - **Sustainability** of changes, particularly if intent is to transfer efforts to local champions.



SNAP-Ed TOOLKIT
Obesity Prevention Interventions and Evaluation Framework

¹ USDA Food and Nutrition Service’s SNAP-Ed Evaluation Framework <https://snapedtoolkit.org/framework/index/environmental-settings>
² Andy Naja-Riese, Kimberly J M Keller, Pamela Bruno, et al., The SNAP-Ed Evaluation Framework: demonstrating the impact of a national framework for obesity prevention in low-income populations, Translational Behavioral Medicine, October 2019, Volume 9, Issue 5, Pages 970-979, <https://doi.org/10.1093/tbm/tbz115>
³ Taren Swindle, PhD; Geoff M. Curran, PhD; Susan L. Johnson, PhD, Implementation Science and Nutrition Education and Behavior: Opportunities for Integration June 2019, Volume 51, Issue 6, Pages 763-774.e1