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Publication Date

2019-09-01

DOI

10.1016/j.pmedr.2019.100901

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Contextual assessment of the breadth and level of investments made by prevention initiatives to improve nutrition and prevent obesity in Los Angeles County, 2010–2015

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ARTICLE INFO

Keywords:

Obesity
SNAP-Ed
Community health planning
Nutrition education
Policy, systems, and environmental change interventions

ABSTRACT

To better characterize and understand local investments made by prevention initiatives to address poor nutrition and obesity during 2010–2015, the Los Angeles County Department of Public Health partnered with an evaluation firm in 2014 to conduct a context scan of nutrition education programs (NEs) and policy, systems, and environmental change interventions (PSEs) in Los Angeles County (LAC). Using fiscal year 2012–2013 (FY12–13) as a midpoint for a before/after comparison based in part on the timeline of the last USDA Supplemental Nutrition Assistance Program Education (SNAP-Ed) funding cycle, the scan included both SNAP-Ed and non-SNAP-Ed initiatives.

Systematic searches of peer-reviewed and grey literature, relevant organizations' websites and materials, and results from 51 key stakeholder interviews, were completed to help develop a context scan database for LAC.

Thematic and content analyses of the context scan and interview data generated a “snapshot” of NE and PSE investments in the region. During the sampled period, at least \$210 million was invested countywide to combat poor nutrition and obesity. Before FY12–13, 29 NEs and 33 PSEs were implemented. The PSEs included active transportation policies, healthy retail store conversions, and physical activity programming. NEs and PSEs increased to 50 and 98, respectively, after FY12–13.

The context scan described the breadth and content of past and ongoing NEs and PSEs implemented by several prevention initiatives in LAC to improve nutrition and prevent obesity. Results suggest opportunities where SNAP-Ed can further tailor NE/PSE resources to address the needs of its target population.

1. Introduction

In fiscal year 2012–2013 (FY12–13), the California Department of Social Services through the California Department of Public Health awarded a multi-year United States Department of Agriculture (USDA)²

Supplemental Nutrition Assistance Program Education (SNAP-Ed)³ contract to the Los Angeles County Department of Public Health (DPH)⁴ to deliver nutrition education programs (NEs)⁵ and implement complementary policy, systems, and environmental change interventions (PSEs)⁶ in Los Angeles County (LAC).⁷ The project sought to address

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¹ Affiliation at the time of the project.

² USDA = United States Department of Agriculture.

³ SNAP-Ed = Supplemental Nutrition Assistance Program Education.

⁴ DPH = Los Angeles County Department of Public Health.

⁵ NEs = Nutrition education (programs).

⁶ PSEs = Policy, systems, and environmental change interventions.

⁷ LAC = Los Angeles County.

conditions that impede healthy eating and physical activity among SNAP-Ed eligible populations – i.e., households that live at or below 185% of the Federal Poverty Level (FPL).⁸ To better characterize and understand this local landscape, DPH partnered with an evaluation firm in 2014 to conduct a context scan of prevention initiatives that implemented NEs and PSEs in LAC during a 5-year period: 2010–2015. The scan included NEs and PSEs that began prior to the sampled period (e.g., from 2008) and those that will extend into or beyond 2018.

Prior to this landscape analysis, little was known about the local context or community conditions that may have influenced services design and public receptivity to nutrition and obesity prevention programming. Because such an analysis could help inform services planning and facilitate quality improvement, DPH partnered with Ad Lucem Consulting to inventory and study the context in which NEs and PSEs was delivered to target populations. Using FY12–13 as the midpoint for the scan, the evaluation team compared the healthy eating and physical activity programs and interventions before and after the start of the last cycle of SNAP-Ed funding. The context scan served many purposes, including an extraordinary opportunity to historically (retroactively) examine a range of planning, program design, and investment activities that took place during 2010–2015. For the purposes of this paper, the definition of “investments” included programmatic activities and financial costs associated with program and intervention delivery. DPH examined the information gathered and applied it towards the design/redesign and implementation of future NEs and PSEs for the next cycle of SNAP-Ed funding, October 2016 to September 2019.

2. Methods

The context scan encompassed two parts: (1) an inventory of NEs and PSEs in LAC, and (2) stakeholder interviews about these community-based interventions including costs. All inventory and interview materials and protocols were reviewed and approved by the DPH Institutional Review Board prior to fieldwork.

2.1. Inventory of NEs and PSEs

The NE and PSE inventory database captured nutrition education and obesity prevention implementation efforts across LAC during 2010–2015. While many of the projects began earlier or were extended beyond this timeframe (e.g., 2008 onward or target completion date is after 2016), the goal was to produce a “snapshot” of major activities within the sampled five-year period. This timeframe was purposefully selected to reflect DPH's start-up activities and the significant ramp-up of SNAP-Ed programming after FY12–13. Setting the midpoint at October FY12–13 also made operational sense and created an opportunity to conduct a ‘before and after’ comparison of NEs and PSEs in the region.

Key classification terminology and constructs that were used in this inventory included “nutrition education”, “policy, systems, and environmental change strategies”, “nutrition/healthy eating/healthy food”, “physical activity”, and “obesity prevention.” Additionally, the USDA and the California Department of Public Health proposed 13 core PSEs that became a permanent fixture in LAC's SNAP-Ed workplan. These 13 PSEs were used to guide the subsequent searches and reviews of programs and interventions in the region. They included childcare centers; school wellness policies; farm to school/fork efforts; joint/shared use agreements; healthy retail store conversions; restaurants/mobile vending; physical activity programs; gardens; worksite programs; active transportation policies; farmers markets; healthy food and beverage standards; and parks programming.

The completed inventory was a database that housed an assortment of programmatic and costs data – e.g., name of program's funder; its

budget; types and numbers of NE and/or PSE implemented (including combinations); goals, objectives and outcomes; populations served; key partners; geographic focus; and type(s) of evaluation conducted (if any). The inventory also included details about NE activity type and PSE design, format, and primary topic(s) being addressed.

Although a general inventory of NEs and PSEs was compiled for the entire county, a special emphasis was placed on oversampling investments in two high-needs areas – South Los Angeles and East Los Angeles. These two areas contained several communities that were targets of SNAP-Ed programming. Both had among the highest rates of poverty, food insecurity, obesity, and obesity-related diseases in LAC (LACDPH, 2013).

The boundaries for South Los Angeles were defined by Service Planning Area (SPA)⁹ designation 6, which included the communities of Athens, Compton, Crenshaw, Florence, Hyde Park, Lynwood, Paramount, Watts, and Inglewood. The boundaries for East Los Angeles were defined by SPA designation 7, which included the communities of Bell, Bellflower, Bell Gardens, Cerritos, City of Commerce, City Terrace, Cudahy, Downey, East LA, Hawaiian Gardens, Huntington Park, La Habra Heights, Lakewood, La Mirada, Los Nietos, Maywood, Montebello, Norwalk, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Vernon, Walnut Park, and Whittier.

Overall, the inventory database was divided by (a) programs occurring countywide, or in communities outside of South Los Angeles or East Los Angeles; and (b) programs occurring in either or both of these high-needs areas.

To better triangulate information and derive context from the inventory, the evaluation team reviewed key organizations' resources (e.g., websites, reports, other sources), documentation provided by program funders, and information provided by the organizations themselves. The evaluation team also carried out systematic searches of the peer-reviewed and grey literature to find evidence about intervention implementation and best practices. Finally, the evaluation team conducted several key stakeholder interviews to gather contextual information about how NEs and PSEs were actually implemented and what challenges were encountered. Methods for these interviews, which were performed in parallel to the inventory process, are presented below.

2.2. Stakeholder interviews

A total of 51 interviews were conducted with professionals working on NEs and PSEs in LAC. These stakeholders (interviewees) came from a variety of sectors and backgrounds, including: academics; regional/statewide non-profits; place-based non-profits; government agencies/contractors; funders; and community clinics/insurance providers. The first part of each interview was structured to focus on key characteristics of interviewees and their organizations' NE and PSE investments. The second part of the interview utilized a semi-structured interviewing guide to inquire about the context or manner in which each of the NEs and/or PSEs was implemented, including: what the professionals themselves felt were the greatest challenges to implementation; the value of their partnerships in helping this process; the resources that were most available to them; the most effective NE and PSE approaches in the field; and ways in which DPH can play a role in supporting future implementation efforts.

All prospective interviewees were recruited through email invitation and follow-up by a phone call (for some more than one phone call was needed). While the first set of interviews were with existing prevention initiatives that have partnered with DPH in the past – there were seven of them, other interviewees were identified through a snowball sampling process. During this recruitment, one prospective interviewee declined to participate and another did not respond to the

⁸ FPL = Federal Poverty Level.

⁹ SPA = Service Planning Area.

invitation. All interviews were conducted over the phone by a trained interviewer, and notes regarding the interviewee responses were typed up by the interviewer during the call. Each interview required approximately 45 min to complete and the interviewees did not receive any compensation for their participation. All interviewees were assured confidentiality and the interviews were not audio recorded. All interviews were conducted between September and December 2014.

2.3. Analysis of interview data

Qualitative data analysis was performed using the software ATLAS.ti to analyze the stakeholder interview transcripts. Based upon the key themes embedded in the interviewing guide as well as additional sub-themes that arose from the interviews, a list of thematic “codes” was generated for use during analysis. The interview data was grouped based on subject matter categories: NEs or PSEs. Based on the groupings, they were analyzed separately and had a separate “codebook” for each category. In total, 28 interviews were analyzed for NE content and 27 interviews were analyzed for PSE content. For those cases in which interviewees spoke about both NEs and PSEs, the content was summarized based on the subject matter category discussed and not combined as a separate mixed category.

3. Results

From September to December 2014, a total of 70 NEs and 111 PSEs were inventoried. Program characteristics are described in Table 1.

Table 1

Characteristics of nutrition education programs (NEs) and policy, systems, and environmental change interventions (PSEs) in Los Angeles County: results from the Context Scan, 2010–2015.

Characteristics	Nutrition education programs (n = 70 NEs)	Policy, systems and environmental change interventions (n = 111 PSEs)
	% (n)	% (n)
Organization implementing program/initiative		
CBO	11.4 (8)	17.1 (19)
Non-profit	37.1 (26)	53.2 (59)
Funder	NA	1.8 (2)
Government Agency	14.3 (10)	17.1 (19)
Faith-based	2.9 (2)	0.9 (1)
Organization		
Health Services Provider	27.1 (19)	NA
Academic	7.1 (5)	7.2 (8)
Other	NA	2.7 (3)
Target geography		
Countywide or other	48.6 (34)	53.1 (59)
South LA	18.6 (13)	27.9 (31)
East LA	15.7 (11)	10.8 (12)
South LA & East LA	17.1 (12)	8.1 (9)
Target age		
No specific age targeted	32.9 (23)	81.1 (90)
Children and/or youth	14.3 (10)	3.6 (4)
Adults	11.4 (8)	5.4 (6)
Children and adults	30.0 (21)	8.1 (9)
Seniors	4.3 (3)	0.9 (1)
All ages	7.1 (5)	0.9 (1)
Target race/ethnicity		
No specific race/ethnicity targeted	57.1 (40)	88.3 (98)
Latino	21.4 (15)	2.7 (3)
African American	1.4 (1)	0 (0)
Asian/Pacific Islander	2.9 (2)	3.6 (4)
Multiple ethnicities	17.1 (12)	5.4 (6)

LA = Los Angeles.

CBO = community-based organization.

NA = not applicable.

Along with the inventory database, the thematic and content analyses of the interview data generated an overall “snapshot” and a comparison of LAC’s NE and PSE investments before and after FY12–13. Before this midpoint, there were a total of 29 NEs and 33 PSEs in the community, with active transportation policies, healthy retail store conversions, and structured physical activity programs being the most common PSE interventions. After the midpoint, NEs and PSEs increased to 50 and 98, respectively, with the latter addressing primarily healthy food and beverage standards, parks programming, and structured physical activity programs. There were 19 NEs and 12 PSEs where the start or end date could not be fully verified. Fig. 1 provides details regarding the various types and numbers of PSEs implemented before and after FY12–13.

3.1. NE findings

At least 43 unique organizations implemented 70 NEs in LAC. The majority were implemented by non-profits and community-based organizations (CBOs)¹⁰ (34), followed by clinics/health services providers/insurance companies (19) and government agencies (10). Sixty-seven percent (47 out of 70) identified a target age group, with “families” being the most common, as compared to “children”, “adults”, or “seniors.” Forty-three percent (30 out of 70) identified a target race/ethnic group, with Latino being the most common. Seventy-one percent (50 out of 70) offered education in Spanish and 5% offered it in Asian languages. Most NEs were held in community centers, clinics, and schools (Fig. 2). The most common NE topic was “promoting healthy weight” (49), followed by “fruit and vegetable consumption” (42), with 81% (57 out of 70) addressing multiple topics. Sixty-one percent (43) promoted and/or incorporated physical activity instruction or activities.

Almost all NEs (62 out of 70) offered group classes. Sixty-four percent (45 out of 70) provided multiple types of program activities, i.e., group classes with taste test/cooking demonstrations, and/or with peer-to-peer/*promotores* counseling. The most common NE activity format was multiple classes/series (61), followed by single classes (29) and events (12). Twelve NEs provided activities in two or more formats, i.e., both multiple classes/series and single classes. CBOs responsible for at least 42 of the NEs did not conduct an evaluation of their program(s). An internal or external evaluation was conducted for 28 others.

3.2. PSE findings

At least 63 unique organizations implemented 111 PSEs in LAC. The majority were implemented by non-profits and CBOs (78), followed by government agencies or local elected officials’ offices (19) and academic institutions (8). More than half of the PSEs (58%) included a combination of interventions. Twenty-one PSEs implemented all three types: policy, system-level modification, and environmental change strategy. The most common type of PSEs were environmental changes (68), followed by system-level changes (64) and policies of multiple types (57). Most policy interventions focused on organizational (33) or regulatory policies (32), followed by school policies (13) and internal government agency policies (6). Most PSEs did not identify target population characteristics such as age, race/ethnicity, socioeconomic status, and/or primary language. Only 21 PSEs explicitly identified the age group of the target population(s), with “families” being the most common, as compared to “children”, “adults”, or “seniors.” Thirteen PSEs explicitly identified the target ethnic groups, with “multiple ethnicities” being the most common. The latter included a combination of two or more of the following: Latino, African American, Asian/Pacific Islander.

Almost one-third of all PSEs included interventions focused on both

¹⁰ CBOs = Community-based organizations.

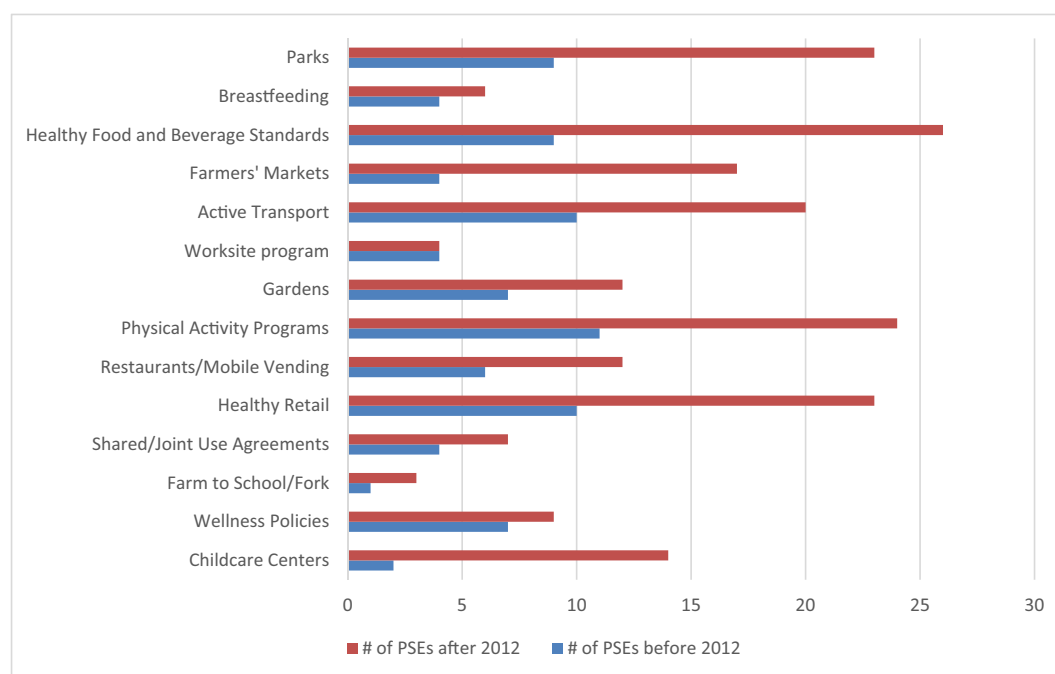


Fig. 1. Types and numbers of policy, systems, and environmental change interventions (PSEs) implemented in Los Angeles County before and after fiscal year 2012–2013 ($n = 111$).

*All PSEs were initiated between 2010 and 2015.

**PSE initiatives ($n = 111$) may have addressed more than one type of PSE which is why the total numbers in the figure exceeded 111.

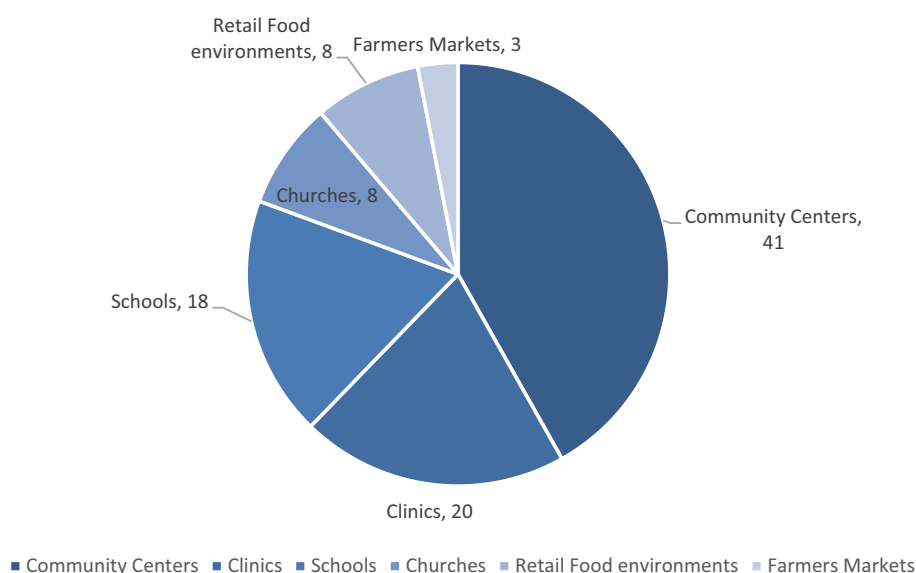


Fig. 2. Number of nutrition education programs (NEs) by type of setting in Los Angeles County, 2010–2015.

*Forty-two percent (29 out of 70) NEs were held in two or more settings, i.e., community centers and schools.

nutrition and physical activity. The most common goal of these PSEs was to “increase access to healthy foods and beverages” (81). Almost half of them (48) have identified two or more goals, e.g., to “increase access to healthy foods and beverages” and “improve access to physical activity opportunities.” Healthy food and beverage standards (27), parks programming (26), healthy retail store conversions (24), physical activity programs (24), active transportation policies (23), and farmers markets (20) were generally the most common types of PSEs implemented during 2010–2015. A total of 50 PSE initiatives had not conducted program evaluation on their PSEs to date. An internal or external evaluation was conducted for 48 others. At the time of the inventory, evaluation for another 13 interventions was just getting

underway.

3.3. Financial investments

During the sampled period, at least \$210 million was invested countywide to combat poor nutrition and obesity; ~\$34 million for NEs and ~\$189 million for PSEs. Budget information for this analysis was only available for 23 of the 70 NEs (33%) and 82 of the 111 PSEs (74%). Of the information available, roughly half was self-reported, whereas the other half was pulled from other documentation. Of the 70 NEs, 4 had multiple funders; of the 111 PSEs, 21 had multiple funders. The Centers for Disease Control and Prevention and the three largest local

philanthropic organizations (i.e., a non-private medical center, a large foundation, and a large non-profit backed by state funding) invested the most dollars in NEs and PSEs in LAC. For confidentiality and proprietary reasons, the names of these funding organizations are not disclosed here.

3.4. South Los Angeles and East Los Angeles

More NEs were implemented in South Los Angeles (13), as compared to East Los Angeles (11). Twelve NEs reached populations in both South Los Angeles and East Los Angeles, while 34 reached populations countywide or in other geographic areas. Overall, an estimated \$4 million was invested in NEs in South Los Angeles and East Los Angeles, as compared to \$34 million countywide.

A larger number of PSEs were implemented in South Los Angeles (31), as compared to East Los Angeles (13). Nine reached populations in both areas, while 59 were implemented countywide or in other communities/municipalities. Overall, \$100 million was invested in South Los Angeles and East Los Angeles. At least \$110 million was invested in communities other than South Los Angeles and East Los Angeles.

The largest proportion of PSEs implemented in South Los Angeles were related to parks programming (13), physical activity programs (11), active transportation policies (10), and healthy retail store conversions (10). The largest proportion of PSEs implemented in East Los Angeles were related to physical activity programs (10), followed by early childhood/child care centers (8), healthy food and beverage standards (7), and parks programming (4).

3.5. Key informant interviews about NEs

The most commonly identified resources that a local health department (LHD)¹¹ can provide to help CBOs/stakeholders overcome challenges in NE implementation included: (a) guidance regarding the use of simple, evidence-based and culturally appropriate NE curricula and messages; (b) sharing of notifications of funding opportunities, including for those from the LHD; and (c) training and technical assistance for NE providers to help them train peer educators, develop educational curricula, and manage inter-disciplinary work. The most commonly identified assistance that an LHD can provide to help facilitate community-focused collaborations included: (a) using its positive reputation and resources to convene diverse organizations; (b) ensuring that collaboratives and task forces are “community-driven” or led by qualified CBOs; and (c) hosting a common/shared calendar for organizations to use, compatible with their digital platforms, networks, and locations. Almost all interviewees expressed strong interest in collaborating with each other and most perceived the LHD as the ‘right’ entity to facilitate this collaboration – i.e., “DPH is a key player... in the continuum of care.”

Several interviewees suggested that the LHD should take the lead in compiling and disseminating a list of NEs and obesity prevention program providers to CBOs, organized by geography. They also suggested that innovations such as nutrition education/classes/ programming that are focused on addressing the social determinants of health such as housing, food insecurity, neighborhood safety, and legal aid for the poor should be emphasized. These and other interview comments are summarized in Table 2.

3.6. Key informant interviews about PSEs

The most commonly identified resources that a LHD can provide to help CBOs/stakeholders overcome challenges in PSE implementation included: (a) training and ongoing technical assistance on the design and scale of interventions (e.g., having one-on-one consultations,

making standard templates and toolkits available for CBO/stakeholder to use, access to timely and accurate health data); (b) being more strategic with funding allocations – for example, providing smaller dollar amounts to a larger number of organizations to increase the pool of CBOs that can do the work, spread out over a larger geographic area; and (c) ensuring intervention sustainability by requiring larger organizations to fund or work with smaller organizations to support PSEs in high-needs areas. Interviewees also recommended that an LHD like DPH should learn to delegate convening activities to a trusted CBO, especially for situations where a policy innovation may be politically charged, or due to historic reasons, significant mistrust among disenfranchised communities may still exist. These and other interview comments are summarized in Table 2.

4. Discussion

A context scan can provide a unique opportunity to systematically inventory and assess the key characteristics of prevention initiatives in a local jurisdiction, generating a broad but yet detailed landscape of NEs and PSEs implemented in the field. The scan is usually comprised of multiple parts (qualitative as well as quantitative) and can contribute to a better understanding of how programming are delivered to target populations. In the present project, the evaluation team found several noteworthy findings that were relevant to SNAP-Ed and non-SNAP-Ed initiatives alike. For example, beginning in FY12–13, the scan showed a sizable increase in funding support for prevention activities that targeted environmental and community factors. This funding trajectory remained present even after accounting for SNAP-Ed investments. While reasons for this observation is unclear, emerging evidence suggests that a growing interest in addressing the social determinants of health likely paved the way for this increase in financial support of NE and PSE innovations (Hill and Peters, 1998; Stokols, 1992; Marmot, 2005). However, despite this infusion of funding, limited coordination of various operational areas remains for NE and PSE implementation, posing a major barrier to program/intervention fidelity.

In its response to the context scan data, DPH recently initiated a strategic planning process that utilizes a more data-driven, quality improvement framework to select, develop, and implement NEs and PSEs. The process was initiated as part of the Department's preparation for the next cycle of SNAP-Ed funding (October 1, 2016 to September 30, 2019). As an example, DPH applied results from California's *Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention* Project to inform and guide the development of its latest Request for Proposal (RFP), which now requires all applicants to include community asset mapping as part of their scopes of work. This new framework also asked applicants to develop plans to collect data and demonstrate health impact at each level of the Socio-Ecological Model.

Finally, based on the scan's findings, DPH changed its approach to managing SNAP-Ed subcontractors. For example, in this next cycle of funding, selected subcontractors will be required to meet regularly with other agencies and organizations in the target communities; conduct peer learning and knowledge transfer across funded partners; utilize practice-based learning to advance interventions; and leverage existing committees or task forces to engage and mobilize community residents around relevant issues.

4.1. Differences in PSE distribution

In the present project, a larger number of PSEs were implemented in South Los Angeles (31), as compared to East Los Angeles (13). This level of investment in South Los Angeles may reflect the area's higher rates of poverty, food insecurity, obesity, and obesity-related chronic conditions, as compared to East Los Angeles and other areas of the county. In 2011, 30% of all South Los Angeles households with incomes < 300% FPL were food insecure, 33% were obese, and 10% were diagnosed with

¹¹ LHD = Local health department.

Table 2
Key findings from the stakeholder interviews (*n* = 51).

Themes	Sub-themes	Supporting quotations
Interviewee feedback to DPH regarding NEs in Los Angeles County		
Resources	Provide guidance regarding the use of simple, evidence-based NE curricula and messages Provide funding and notify of funding opportunities	“There's a need for simplicity...have at most three messages and make them simple” “The county could do more outreach—for any funding opportunity through the county...”
Facilitating collaboration	Provide training and technical assistance Take advantage of DPH's influence (i.e., prestige and size of county) to convene Ensure collaboratives and task forces are “community-driven” or led by CBOs	“We need capacity building, strategic planning, and help with curricula...” “To oversee these projects and ensure that projects are available in areas of highest needs, and facilitating collaboration between projects...” “Be intentional about including organizations that DPH has identified, whether by working directly with, and/or including CBOs that do NE in their planning discussions. Make sure their strategies and the path they go down is informed by the people who do the work on the ground.”
Innovative NE strategies	Use convening power to set common goals/develop countywide strategic plan Promote NE programs or strategies that address social determinants of healthy eating	“How do you know that you're making an impact? That's what I'm getting at with common metrics and goals.” “Are there opportunities to integrate either mental health components to health and nutrition, and opportunities to create physical spaces for community access, and what are other ways to help community members shift their behavior? Could you have opportunities for people to talk how they feel? Are there questions around safety, transportation that we could provide...”
NE advocacy	Support research regarding effectiveness of NE approaches in diverse communities Promote NE programs to ensure increased funding opportunities, including tracking and disseminating NE impacts	“Really, really low-income communities is something totally different, they require different strategies... The literature has not addressed the diversity of low-income communities.” “I would invite them to think about healthy and obesity prevention, and whether there are data points that would be useful to you and the groups you're working with. A lot of times small nonprofits can't truly validate their impact because they don't have the structure for data collection.”
Interviewee feedback to DPH on how to support PSE implementation in Los Angeles County		
Resources	Provide training and technical assistance Provide timely and accessible data and information Provide funding and guidance more strategically	“True TA is really being more of a partner than someone who responds to stuff, and historically that's how I've seen it done. It'd be really great to have more of a liaison, someone out there working with the CBOs. Not in an auditor role, or in a monitor role, but really give them TA on an ongoing basis...if it's done in a real authentic way.” “When there is a policy issue that is far along—the DPH bringing data to the table can be very useful. And they need to free the data, make it available to high-level advocacy groups in a timely rapid-response way.” “The issue is about creating efficiencies and creative partnerships—and the need to combine process and content expertise. Pair organizations with these different types of capacities.”
Facilitating collaboration	Delegate convening activities to CBOs (“know when not to engage”)	“LADPH needs to be extremely cautious about when it [serves as a convener] and why...when they are interested in creating a sustainable community collaborative, they should not be a convener—because there is a unique set of community-friendly and CBO-convening skills and in those instances with a CBO collaborative, the DPH role should be about support.”
Communication and community engagement	Conduct self-assessment regarding “how to relate to the word of CBOs” Invest in diverse communities and geographies, including smaller CBOs	“The county has to think about how it wants to relate to the CBO universe, and how it can most effectively build trust, relationships.” “DPH can play a role in being the convener and also think beyond the major players who can write great grants and also set aside funds for the smaller groups”

CBOs = community-based organizations; DPH = Los Angeles County Department of Public Health; NE = nutrition education; TA = technical assistance.

diabetes. Only about 11% consumed 5 or more servings of fruit and vegetables daily (LACDPH, 2013). Unfortunately, by 2015, many of these same indicators had stayed the same or had worsened. The number of households with incomes < 300% FPL that were food insecure, obese, and/or diagnosed with diabetes increased to 32.4%, 34.1%, and 12.3%, respectively. Only 9.6% reported consuming 5 or more servings of fruit and vegetables daily (LACDPH, 2017). Suffice it to say, more time may be needed to see if the prevention efforts implemented in South Los Angeles during 2010–2015 will eventually lead to a salutary health impact in target populations.

The context scan represents an important first step to describing and attaining a better understanding of how NEs and PSEs were implemented in LAC during the sampled period. Future initiatives can build upon these lessons learned and use them to inform the next series of SNAP-Ed programming. These lessons could play an important role for advancing PSEs locally, by allowing for opportunities to further refine these interventions so they can better complement and/or reinforce the knowledge and skills taught by NEs.

While it is known that individual behavior change is difficult to achieve without addressing the environment in which people make

decisions (US DHHS, 2001; Frieden, 2010), the evidence for many of the PSEs inventoried in the present context scan is still only emerging – i.e., the body of work is at its infancy (Olstad et al., 2017; Honeycutt et al., 2015; Brenna et al., 2011; Van der Horst et al., 2007). For this and other reasons, repeated context scans may be necessary in the future to help inform and aid mid-course corrections. Future research and evaluation should consider assessing the collective health impacts of these complementary interventions, e.g., by demonstrating how they are working together to synergistically improve nutrition and reduce obesity rates in target populations.

4.2. Context scan limitations

Despite the information gained, the context scan has several limitations. First, obtaining budget information was challenging; i.e., budget information was only available for 23 of the 70 NEs (33%) and 82 of the 111 PSEs (74%). Second, in several cases, NEs and PSEs had multiple funders. And due to the interviewees' desire to maintain confidentiality about their funding sources, attributing program dollars (amounts) to specific funder was a difficult task. Avoiding double

counting was another difficult task for this reason. Third, because more budget information was readily available for PSEs than were for NEs, assessment accuracy for these two intervention types were skewed in favor of PSEs. Fourth, the inventory captured data using several websites and reviews of documents that were likely outdated, limiting the ability to accurately characterize all of the NEs and/or PSEs in non-SNAP-Ed initiatives. Fifth, most of the budget information was self-reported, suggesting some degree of reporting bias. In addition, the inventory was not exhaustive in its scope, capturing only information from major, viable prevention initiatives in the region. As such, data from the context scan should not be interpreted as a comprehensive, longitudinal landscape analysis of NEs and PSEs in LAC. Finally, PSEs can vary widely, even among the same type of intervention. Thus, a standard categorization of these interventions was necessary and was utilized to facilitate PSE comparisons and efficient communication among program implementers and evaluators. This categorization effort is described elsewhere in the literature (Thompson et al., 2019).

5. Conclusions

To the best of our knowledge, this is the first regional effort to inventory past and ongoing NEs and PSEs implemented in a large, urban jurisdiction in the United States. The context scan provides a wealth of information about gaps and areas where further improvements could be made, especially for establishing or strengthening programming that can support new SNAP-Ed and non-SNAP-Ed initiatives. For the former, the scan has the potential to influence strategic planning and innovative programming for the next cycle of federal funding. It documents the complexities and the lessons learned (e.g., pragmatic solutions to complex real world problems) that can be applied to the design and implementation of forthcoming SNAP-Ed resources in LAC.

Disclosure

The authors report no financial disclosures or conflicts of interest.

Acknowledgments

This project was supported in part by the United States Department

of Agriculture's Supplemental Nutrition Assistance Program Education through a contract from the California Department of Public Health (#12-10170). The content of this paper is the responsibility of the authors and do not necessarily represent the official views of the United States Department of Agriculture, the Los Angeles County Department of Public Health, or any other organization mentioned in the text.

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