

# Local-Level Implementation of Evidence-Based Policies to Address Obesity Disparities

**PRC-StL Core Research Project** 

Alexandra Morshed, PhD, MS | March 9, 2020

a.b.morshed@wustl.edu

# **Presentation overview**

- Background
- Project team and advisors
- Theoretical underpinnings
- Study aims and methods
- Implications

# **Background**

- Policies are important for obesity prevention
- Disparities in obesity-related environments persist
- Policy translation gap exists, despite existence of evidence
- Policy dissemination research
  - the study of the targeted distribution of scientific evidence to policymakers to understand how to promote the adoption and sustainment of evidence-based policies (Purtle et al. 2018)
  - a.k.a. knowledge transfer and knowledge exchange (Canada, U.K., Australia)
- Building on previous PRC-StL policy dissemination research:
  - Audience studies, policy communication intervention studies

# **Examples of Policy Translation Challenges**

- For the policy maker:
  - 1. Poor timing
  - 2. Ambiguous findings & lack of relevant data
- For the researcher:
  - 1. Mismatch of randomized thinking with nonrandom problems
  - 2. Lack of control over the independent variable

## **Three Fundamental Questions**

- 1. Is there a problem (what fuels it)?
- 2. Do we know how to fix it (intervention)?
- 3. How much will it cost (financially, politically)?

- What do all of these questions mean in the context of where we live and work [and the EVIDENCE]?

# **PRC-STL TEAM**

### **PRC Core Administrative Team**



Ross Brownson
Director



**Amy Eyler** Deputy Director



**Cheryl Valko**Associate Director



**Mary Adams** Financial Manager



Alex Morshed Core Research Project Manager



**Linda Dix**Administrative
Coordinator

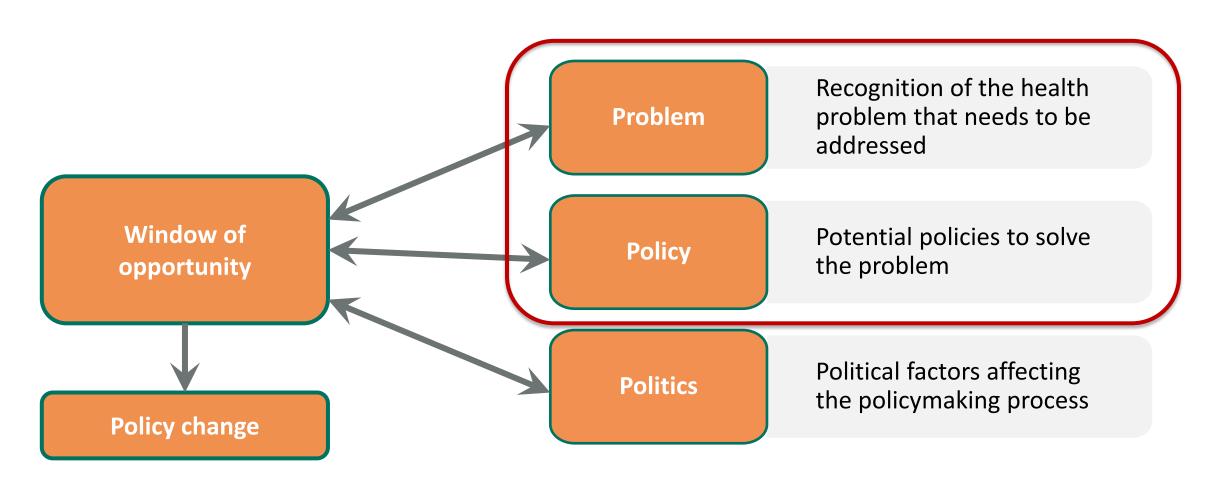


Valerie Madas Graduate Research Assistant

# **Community Advisory Board**

| Level/sector                        | Expertise   |
|-------------------------------------|---|
| Stakeholders from study communities | Local implementation, disparities                               |
| Local/planning & transportation     | Local policy change, public health decision making, disparities |
| Local/regional development          | City planning, public-private partnerships, disparities         |
| Local/government                    | Local policy change, active living                              |
| Local /public health practice       | Public Health practice and advocacy                             |
| State/public health                 | State programs in chronic disease prevention and control        |
| State/policy                        | State policy change, public health decision making              |
| State/non-profit                    | Local policy maker engagement/advocacy                          |
| National/public health              | Dissemination, implementation, capacity building                |
| National/public health              | Dissemination, implementation, capacity building                |

# THEORETICAL BACKGROUND



Three Streams of the Policy Process, adapted from Kingdon

## **Domains of Evidence-Based Public Health Policy**

| Domain  | Objective   | Data Sources  |
|---------|---|---|
| Process | To understand approaches to enhance the likelihood of policy adoption | <ul><li>Key informant interviews</li><li>Case studies</li></ul>   |
| Content | To identify specific policy elements that are likely to be effective  | <ul><li>Systematic reviews</li><li>Content analyses</li></ul>   |
| Outcome | To document the potential impact of policy                            | <ul> <li>Surveillance systems</li> <li>Natural experiments<br/>tracking policy-related<br/>endpoints</li> </ul> |

Source: Brownson, Chriqui, & Stamatakis (2009)

# Research project framework

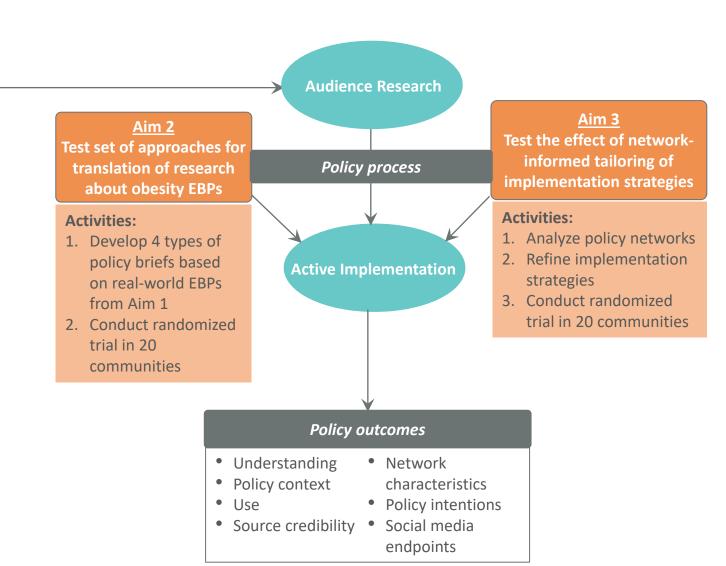
#### Aim 1

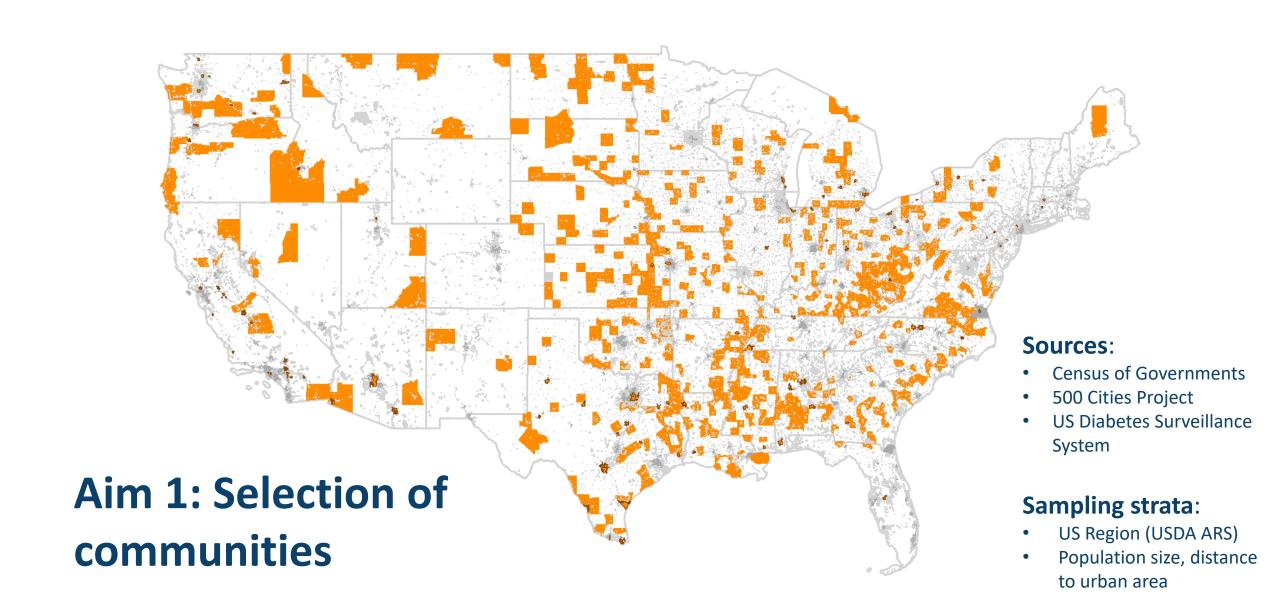
Describe the prevalence and contextual determinants of local-level EBPs

#### **Policy content**

#### **Activities:**

- Identify communities with high obesity prevalence
- 2. Assess presence of EBPs
- 3. Conduct stakeholder interviews with elected and appointed officials in 10 communities.





## Aim 1: Local policy presence and context

#### Identification and assessment of presence

- Compilations of evidence, systematic reviews
- Health equity policies
- Data extraction—tools adapted from previous studies (e.g., Haire-Joshu et al.)
- Presence, evidence-based components, addressing disparities

#### **Stakeholder interviews**

- Key informant interviews, subset of communities
- Elected and appointed local officials
- Purposive sampling, goal is saturation
- Main domains:
  - Sources of information
  - Information framing preferences
  - Policy determinants
  - Ability to focus on disparities

# Aims 2 and 3: Translation strategies

| Area                    | Construct/rationale  |  |
|-------------------------|--|--|
| Local data              | <ul> <li>Brings statistics to a level that affects daily lives</li> <li>Makes information more relevant for local policy makers</li> <li>Supports local action</li> </ul>          |  |
| Narrative communication | <ul> <li>Introduces story elements (plot hook, emotional intensity, realism, universal appeal, and relevance)</li> <li>Makes a risk factor or health condition personal</li> </ul> |  |
| Risk framing            | <ul> <li>Uses both verbal and visual displays of data</li> <li>Uses evidence-based risk/benefit communication</li> <li>Provides source and date of data and evidence</li> </ul>    |  |
| Social context          | <ul> <li>Identifies how key players communicate and collaborate</li> <li>Provides leverage points based on local circumstances</li> </ul>  |  |

## Aim 2: RCT of translation approaches via policy briefs

- 20 communities: elected and appointed officials
- Design: 2x2 factorial, random allocation
- Use of 2 types of communication in policy briefs:
  - 1. Narrative
  - 2. Risk framing
- Outcomes:
  - Decisionistic variables: understanding, context, use, source credibility
  - Policy implementation (secondary)

|                            |     | Risk-framing communication                                       |   |  |
|----------------------------|-----|--|---|--|
|                            |     | No   | Yes   |  |
| Narrative<br>communication | No  | <b>1. Usual care</b> Traditional for health experts              | 3. Risk framing Use decision sciences to frame data in meaningful and accessible ways |  |
| Nar                        | Yes | <b>2. Narrative</b> Crafts story connecting characters to events | <b>4. Combination</b> Both narrative and risk framing communication                   |  |

# Aims 2 and 3: Translation strategies

| Area                    | Construct/rationale  |  |  |
|-------------------------|--|--|--|
| Local data              | <ul> <li>Brings statistics to a level that affects daily lives</li> <li>Makes information more relevant for local policy makers</li> <li>Supports local action</li> </ul>          |  |  |
| Narrative communication | <ul> <li>Introduces story elements (plot hook, emotional intensity, realism, universal appeal, and relevance)</li> <li>Makes a risk factor or health condition personal</li> </ul> |  |  |
| Risk framing            | <ul> <li>Uses both verbal and visual displays of data</li> <li>Uses evidence-based risk/benefit communication</li> <li>Provides source and date of data and evidence</li> </ul>    |  |  |
| Social context          | <ul> <li>Identifies how key players communicate and collaborate</li> <li>Provides leverage points based on local circumstances</li> </ul>  |  |  |

# Use of social network analysis in implementation design and evaluation

RESEARCH ARTICLE

## Social Network Analysis for Program Implementation

Thomas W. Valente<sup>1\*</sup>, Lawrence A. Palinkas<sup>2</sup>, Sara Czaja<sup>3</sup>, Kar-Hai Chu<sup>1</sup>, C. Hendricks Brown<sup>4</sup>

- 1 Preventive Medicine, School of Medicine, University of Southern California, Los Angeles, CA, United States of America, 2 School of Social Work, University of Southern California, Los Angeles, CA, United States of America, 3 School of Medicine, University of Miami, Miami, FL, United States of America, 4 School of Medicine, Northwestern University, Chicago, IL, United States of America
- \* tvalente@usc.edu

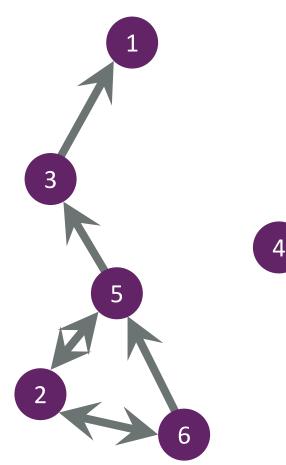
|  |           | Implementation stage  |  |  |  |
|--|-----------|---|--|--|--|
|  |           | Exploration   | Adoption   | Implementation   | Sustainment  |
|  | Questions | Who is recruited to design the intervention?  Who defined the needs?                      | Who delivers the intervention and what is the social network of its receipt? | What is the network position of early adopters/users?        | Does the network exhibit changes conducive to continued program success? |
|  | Outcomes  | Document network position and structure of those providing input into problem definition. | Select network properties of intervention design.                            | Use network data to inform and modify intervention delivery. | Ensure continued program use by important network nodes.                 |

Aim 3: RCT of translation approaches informed by network

characteristics

Sample: 20 communities

- Social network analysis
  - obesity policy networks assessed at years 2, 3, and 4
- Design: 2 condition RCT
- Intervention: Menu of implementation strategies
  - Aims 1+2, network data, CAB input, IS literature
- Outcomes:
  - Network variables
  - Policy intentions and actions
  - Social media endpoints



# **Implications**

- Sparse scientific knowledge about effective policy translation, esp. at local level
- Dissemination and translation plans—ensuring results are accessible to:
  - Practitioners
  - Policymakers
  - Community leaders
- Better use of sparse resources
- Higher potential for impact on health and equity

# Questions / Discussion:

- 1. Obesity policies focused on health equity?
- 2. Use of social network analysis for interventions?
- 3. Other?



in St. Louis

**Promoting Healthy Communities**