

Measuring community change for comprehensive community initiatives

Vicki Collie-Akers, Ph.D., M.P.H.. University of Kansas Work Group for Community Health and Development

Objectives

- Discuss a measurement system for understanding community change brought about in comprehensive community initiatives
- Explore an example of applying the measurement system

Addressing “wicked problems”

- Caused by complex set of factors that span personal and environmental conditions and are challenging to address¹
- Requires multi-level, multi-strategy intervention or comprehensive community initiatives working at the population level²

¹ Kreuter et al., 2004

²Institute of Medicine, 2012

Challenges in evaluating comprehensive community initiatives

- Many evaluation frameworks focused on a single program, policy, or environmental change
- Difficult to isolate the impact of a single program, policy, or environmental change in this context
 - Attempts to do so may leave out important parts of the intervention that influenced the observed outcomes

Challenges in evaluating comprehensive community initiatives

- Emphasis on collective impact at the population level
- Emphasis on “moving the needle”
- Intermittent availability of data reflecting longer-term outcomes
- Need for usable evaluation information for understanding and adjustment

Components of a measurement system

- Focuses measurement on the many programs, policies, practices and environmental changes taking place
- Applies a weighting so that all things are not measured equally
- Provides information for improvement and adjustment
- Supports understanding of contribution

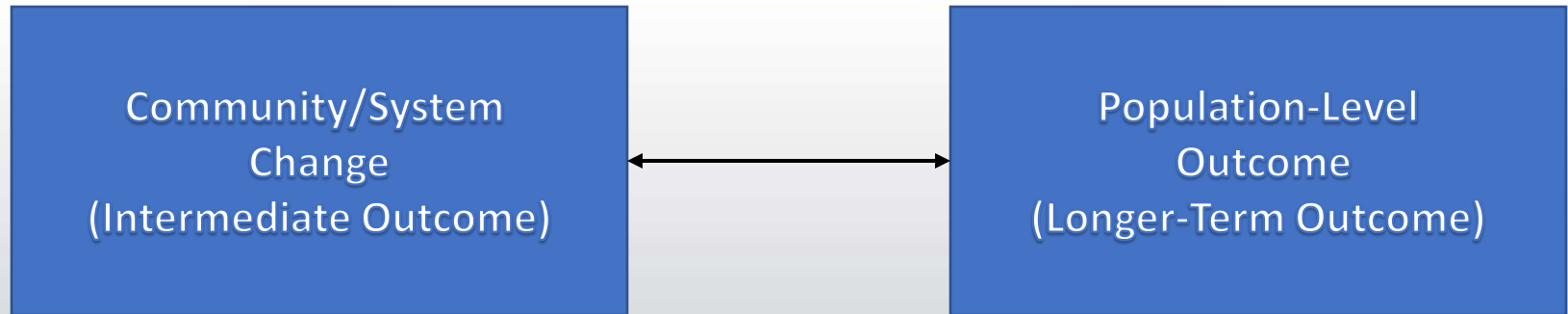
Components of a measurement system



Components of a measurement system

- **An operationalized definition for a primary type of activity:**
- **Community/System changes-** New or modified programs, policies, environmental changes, or practices in the community, system, or organization, related to the initiative's goals and objectives.
 - Have occurred (and be the first occurrence)
 - Are related to the initiative's goals and objectives
 - Brought about by people who are part of the initiative or are acting on behalf of the initiative

Components of a measurement system



- Programs
- Policies
- Practices

- BMI Levels
- Engagement in physical activity

When of sufficient:

Intensity

- Goals
- Strategy
- Duration

Penetration

- Reach
- Targets
- Sectors
- Places

Components of a measurement system

Dimension	Item	Score
Strategy ^{3, 4, 5}	Providing information & enhancing skills	0.1
	Enhancing services & support	0.55
	Modifying access, opportunities, & barriers	1.0
	Changing consequences	1.0
	Modifying policies & systems	1.0
Duration ^{4, 5, 6}	One-time event	0.1
	More than once	0.55
	Ongoing	1.0
Reach ⁵	Low (0-5% of the population)	0.1
	Medium (6-20% of the population)	0.55
	High (21% of the population)	1.0

³ Institute of Medicine, 2003

⁴ Institute of Medicine, 2005

⁵ Roussos and Fawcett, 2000

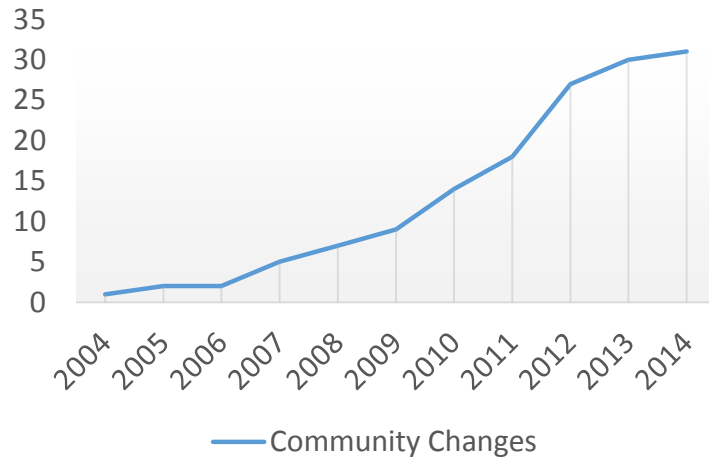
⁶ Frieden, 2010

Components of a measurement system

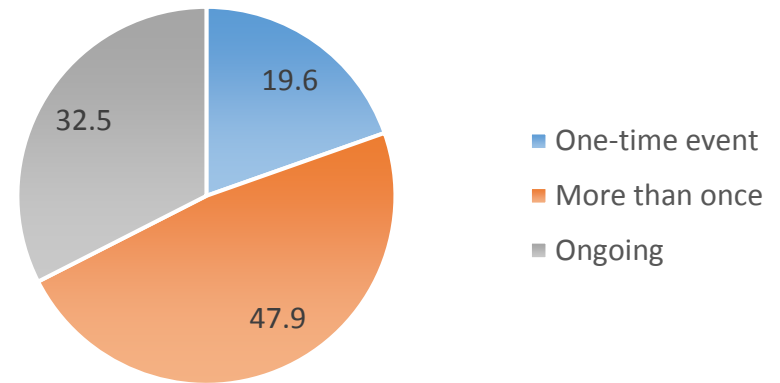
CPP	Years	Strategy	Duration	Reach	Individual Intensity Score
Research & Extension distributed nutrition information at the annual health fair	2008-2011	Providing information & enhancing skills (0.1)	One-time event (0.1)	Low (0.1)	$\frac{(0.1+0.1+0.1)}{3} = 0.1$
School adopted a policy eliminating vending machines	2005-Present	Modfying policies (1.0)	Ongoing (1.0)	Medium (0.55)	$\frac{(1+1+0.55)}{3} = 0.85$
After-school program established a Marathon Club that takes place once a week	2010-Present	Enhancing services and support (0.55)	More than once (0.55)	Medium (0.55)	$\frac{(0.55+0.55+0.55)}{3} = 0.55$
The Boys and Girls Club conducts a yoga program twice a week	2004-2007	Enhancing services and support (0.55)	More than once (0.55)	Low (0.1)	$\frac{(0.55+0.55+0.1)}{3} = 0.4$
The school district passed a policy prohibiting loss of recess as a punishment.	2008-Present	Modfying policies (1.0)	Ongoing (1.0)	High (1.0)	$\frac{(1.0+1.0+1.0)}{3} = 1.0$

Components of a measurement system

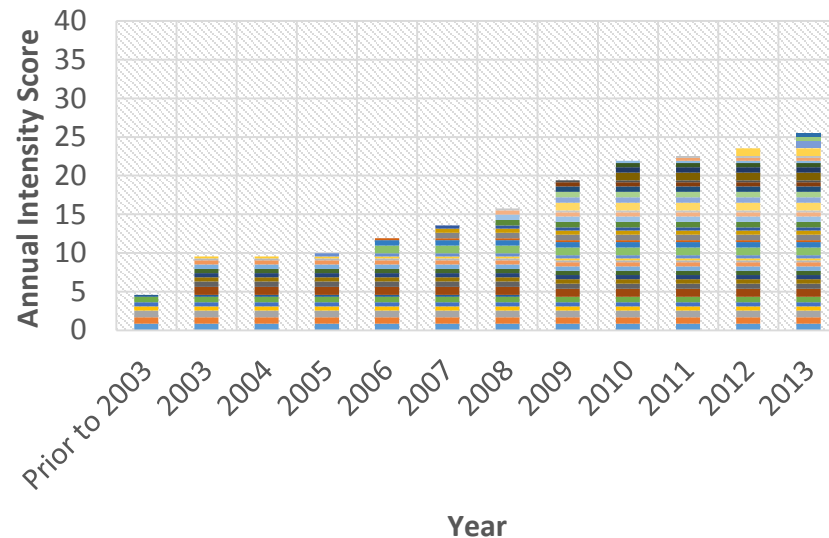
Distribution of Community Changes Over Time



Distribution of Community Changes by Duration



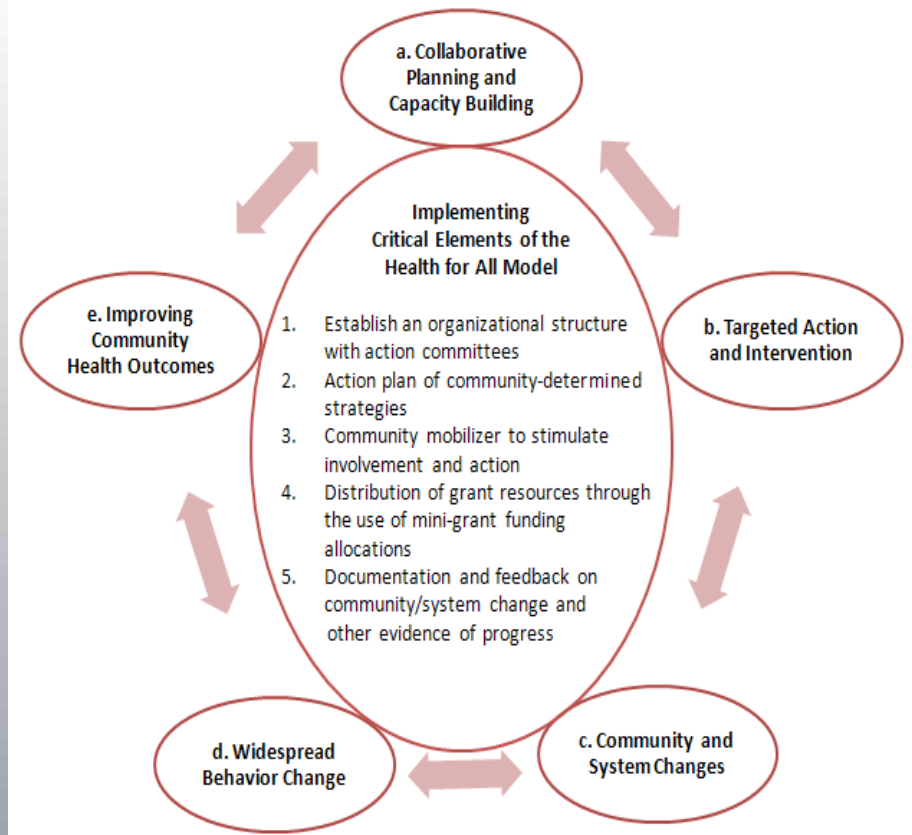
Example Community



An example: Latino Health for All Coalition

Background:

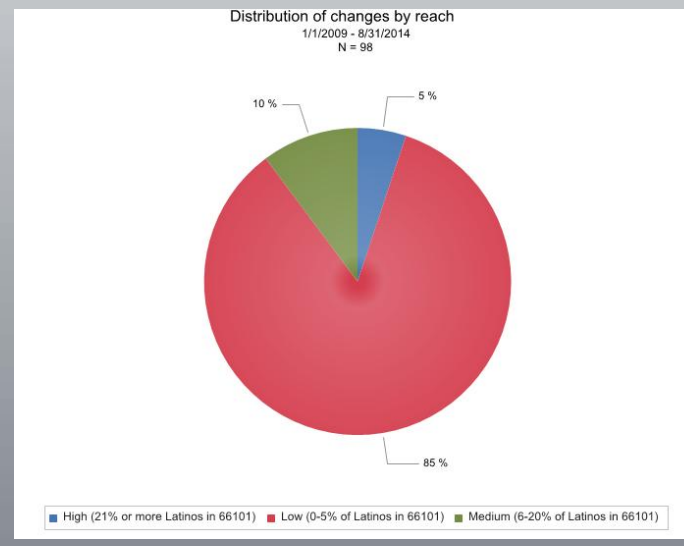
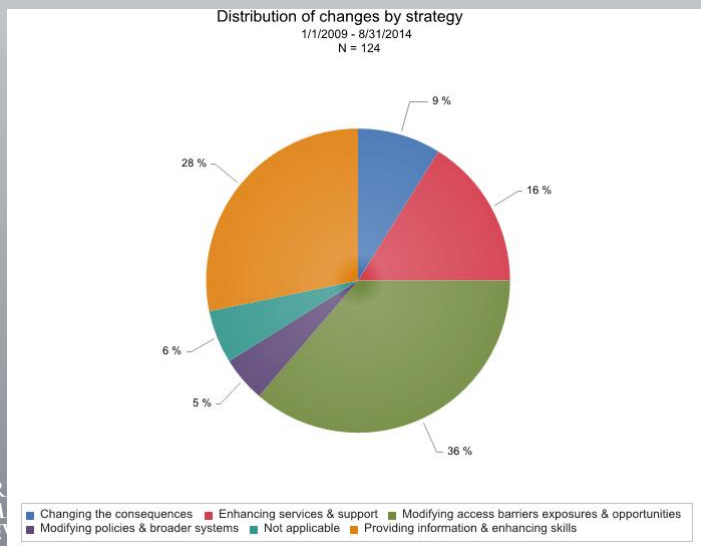
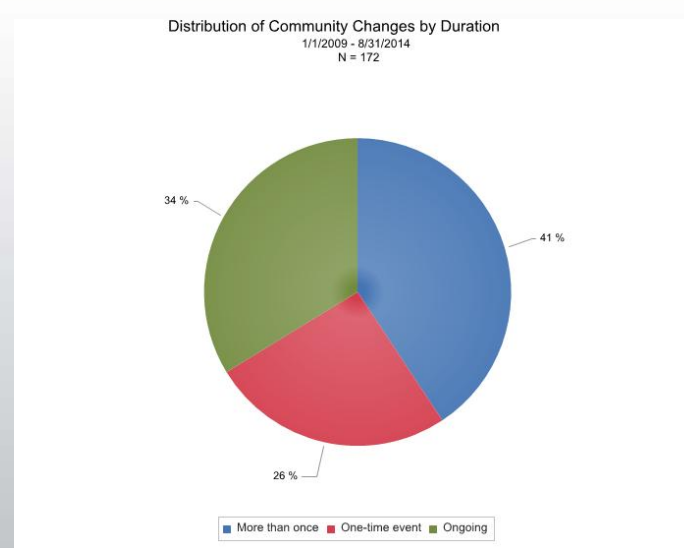
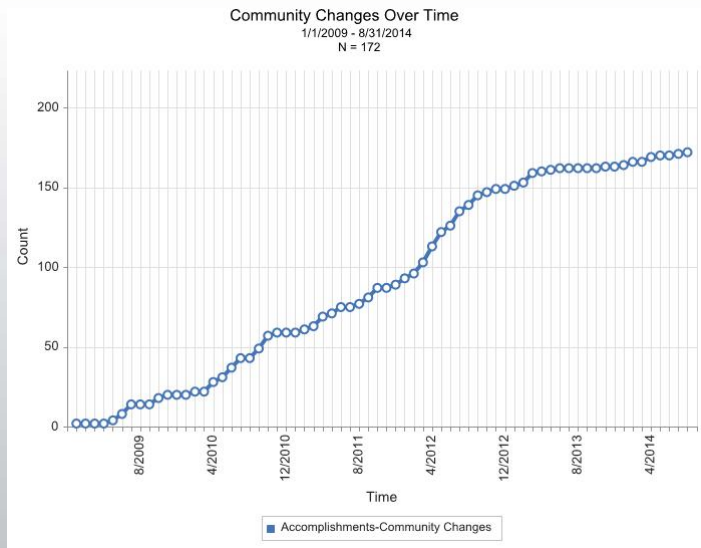
- Created in 2008 to address health disparities in CVD and diabetes experienced by Latinos in Kansas City, KS
- Focus on nutrition, physical activity, access to health services
- 48% of Latino adults engage in no leisure time activity; 16.4% consume 5 or more servings of fruits and vegetables;
- Partners have documented policy, programs, practices and environmental changes over the history of the Coalition



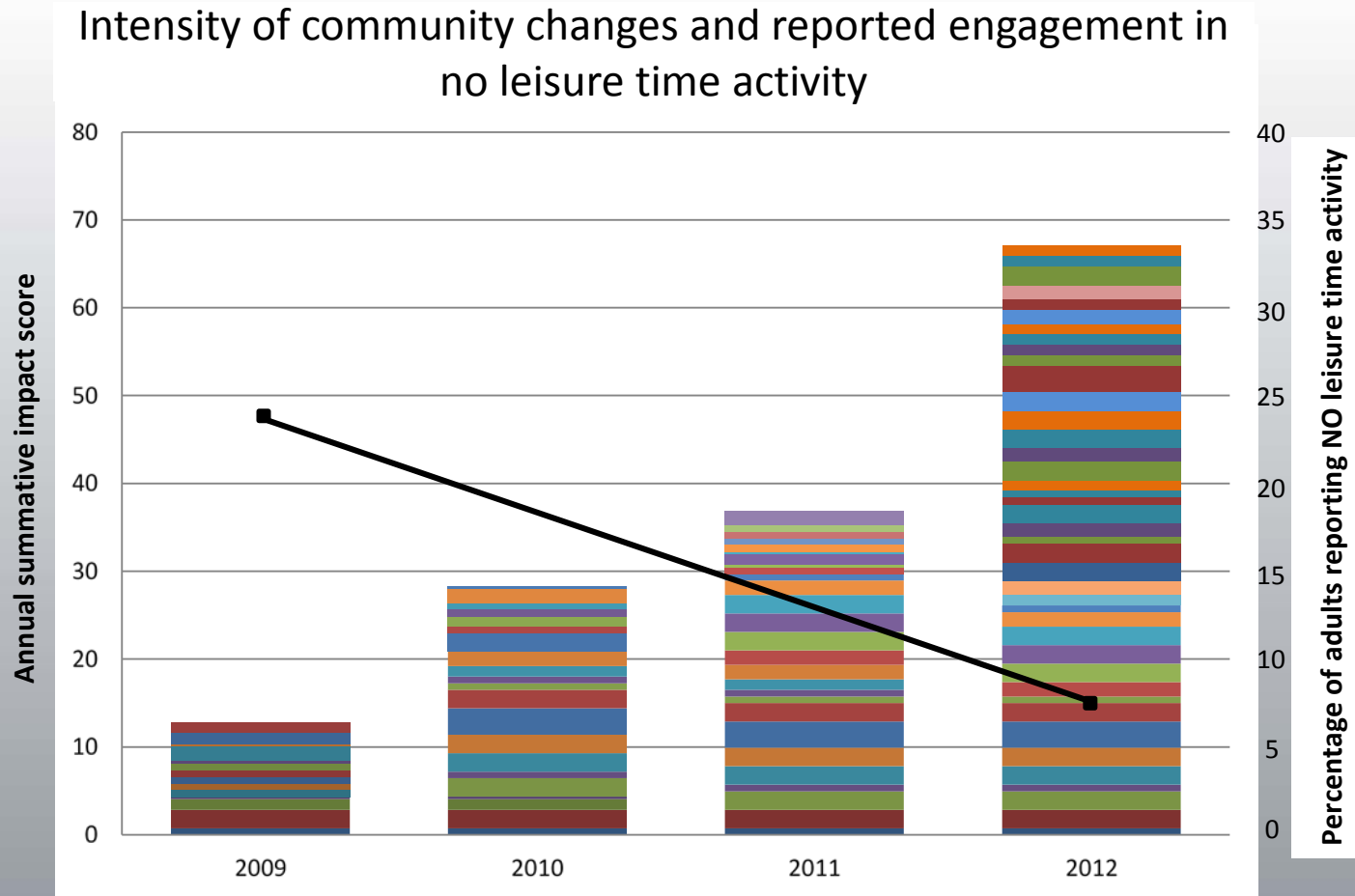
Illustrative Community and Systems Changes

- Refrigerator units and baskets with low-cost fruits and healthy foods were placed in local tiendas (corner stores) to promote access to healthy foods.
- A previously unused space at the 8th St. Park was converted to a soccer field; this was a collaboration between the Coalition and the City Parks and Recreation Department.
- A training was provided to community members to promote advocacy for policy change and implementation.
- Coalition staff provided training to community members and organizations on grant-writing to build capacity for sustaining their efforts.
- The Coalition and the Housing Authority collaborated to implement a service to transport elderly residents to farmers' markets and community gardens in Kansas City.
- Celebrating Healthy Families held a large health fair for Latino families that provided health screenings for diabetes and linkages to follow-up services for those who need them.

Resulting data about implementation



Latino Health for All Coalition



Implications for research and evaluation

- A method for understanding the contributions of many stakeholders
- Opportunity to better understand the many programs, policies, practices, and environmental changes
- Future refinement of the intensity score formula through existing work