

Evaluation of Healthy Kids, Healthy Communities

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ravstria

translate evidence
transfer skills
transform health

ACTIVE LIVING RESEARCH CONFERENCE



Healthy Kids, Healthy Communities National Program



Childhood obesity, healthy eating, and active living

Policy, system, and environmental strategies

“High touch, low \$”

Leading sites (n= 9)
\$400,000, 4 years

Round II sites (n= 40)
\$360,000, 4 years

Coaching, national networks

Healthy Kids, Healthy Communities National Evaluation

Healthy Kids, Healthy Communities Logic Model



Collaborative, participatory evaluation

Comprehensive, dynamic logic model

Mixed-methods, systems science,

Advise on local efforts to evaluate health, behaviors, and related individual-level factors

Focus on policy, practice, and environmental changes

Assess social systems and transformational processes (i.e., partnership and community capacity, social determinants)

HKHC Cross-Site Strategies

Active Transportation: Increase active transportation (e.g., walking, biking, using public transit) in the public right-of-way (e.g., sidewalks, streets).

Parks and Play Spaces: Increase recreational physical activity in public parks, playgrounds, recreational facilities, or other public places (e.g., play equipment in blocked off streets).

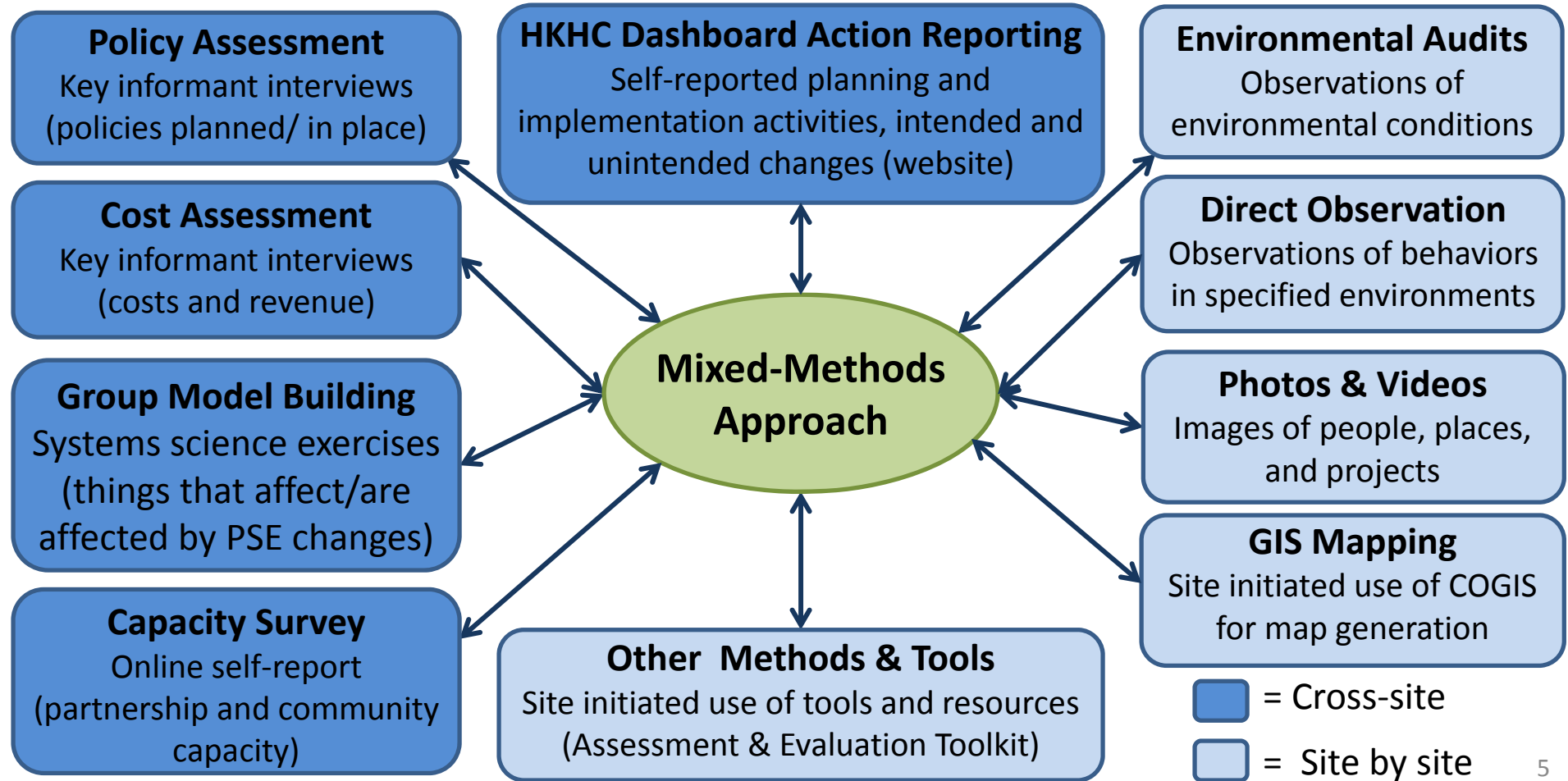
Child Care Physical Activity Standards: Increase moderate and vigorous levels of activity in public or private child care settings (e.g., outdoor play, classroom curricula).

Corner Stores: Increase purchase and consumption of healthy foods and beverages (or limit foods and beverages with minimal nutritional value) in corner or convenience stores (e.g., refrigeration for fresh produce, accepting SNAP, installing EBT).

Farmers' Markets: Increase purchase and consumption of fruits and vegetables in local farmers' markets (e.g., new markets or vendors, accepting WIC).

Child Care Nutrition Standards: Increase consumption of nutritious meals, snacks, and beverages (or limit foods and beverages with minimal nutritional value) in public or private child care settings (e.g., kitchens, cooking equipment, vending).

HKHC Evaluation Methods



Reach X **E**ffectiveness X **A**doption X **I**mplementation X **M**aintenance

= Public health impact

Glasgow RE, Vogt TM, Boles SM. Evaluating the public health impact of health promotion interventions: The RE-AIM Framework. *Am J Public Health*. 1999;89: 1322-7.

Green LW. Making research relevant: if it is an evidence-based practice, where's the practice-based evidence? *Family Practice* 2008; 1-5.

HKHC Data Analysis: Intervention Reach

Variable	Definition	Ratings
Population Reach	Estimated size of population reached by the intervention	<ul style="list-style-type: none"> • Very small populations (< 2,500) • Small populations (2,500 – 9,999) • Medium populations (10,000 – 49,999) • Large populations (\geq 50,000)
High-Risk Population Reach	Estimated size of high-risk population reached by the intervention	<ul style="list-style-type: none"> • < 25% racial, ethnic, or poverty populations • 25% to < 50% racial, ethnic, or poverty populations • 50% to < 75% racial, ethnic, or poverty populations • \geq 75% racial, ethnic, or poverty populations

HKHC Data Analysis: **Intervention Scale**

Variable	Definition	Measures, Ratings, or Algorithms
Size	Size of intervention setting	<ul style="list-style-type: none"> # of feet (active transportation) # of sq. feet (parks and play spaces) # of staff (child care standards)
Accessibility	Access to intervention setting	<ul style="list-style-type: none"> • Annual hours of operation / Total hours in a year (child care standards, parks and play spaces) • 100% access (active transportation)
Effect	Direct or indirect effects on health outcomes	<ul style="list-style-type: none"> • Effect on healthy eating or active living • Effect on intervention (e.g., delivery, sustainability) • Effect on knowledge, skills, attitudes, abilities
Applicability	High-risk populations	<ul style="list-style-type: none"> • Yes • No
Scale	Extent of the intervention's influence	Size X Accessibility X Effect X Applicability

HKHC Data Analysis: **Intervention Implementation**

Variable	Definition	Measures, Ratings, or Algorithms
Stage	Stage of implementation	<ul style="list-style-type: none"> • Policy or practice adopted • Funds allocated to change/modification • Implementation of change/modification • Enforcement/maintenance of change/modification
State	State of completion	<ul style="list-style-type: none"> • Partially complete • Fully complete
Quality	Quality of implementation	<ul style="list-style-type: none"> • Low quality • High quality
Inclusiveness	Inclusion of residents in decision-making and implementation	<ul style="list-style-type: none"> • Uni-directional input (little or none from residents) • Some bi-directional input • Full bi-directional input
Implementation	Strength of the intervention's execution	Stage X State X Quality X Inclusiveness

HKHC Data Analysis: **Intervention Dose**

Variable	Definition	Algorithms
Dose (general population)	Intervention potency for the general population	Scale (general population) X Implementation
Dose (high-risk population)	Intervention potency for high-risk populations	Scale (high-risk population) X Implementation

HKHC Data Analysis: Intervention Impact

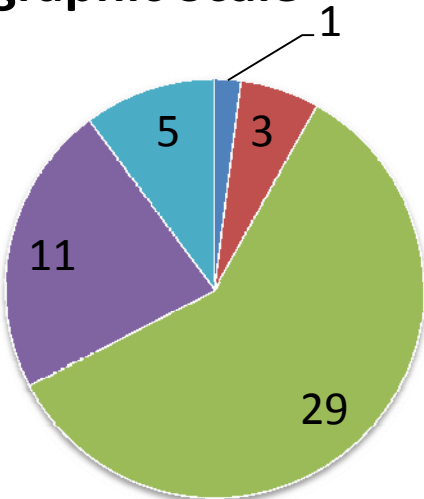
Variable	Definition	Algorithms
Population Impact	Likely population impact of the intervention	Dose (general population) X Population Reach
High-Risk Population Impact	Likely high-risk population impact of the intervention	Dose (high-risk or general population) X High-Risk Population Reach

HKHC Community Partnerships (n = 49)

Population size

- Median = 227,282
- Range = 731 – 3,971,659

Geographic Scale



- Unincorporated Rural
- Micropolitan areas
- Metropolitan areas
- Counties
- Multiple counties

High-risk populations

- African American
 - Median = 14.7%
 - Range = 0.2% – 60.2%
- Hispanic/Latino
 - Median = 10.6%
 - Range = 1.1% – 99.1%
- Lower Income
 - Median = 18.9%
 - Range = 0.1% – 43.3%
- Non-English Speaking
 - Median = 17.1%
 - Range = 2.3% – 89.6%

HKHC Subpopulations (State, County/City, Organization; n = 537)

Number of subpopulations

- Median = 9
- Range = 1 – 48

Population size

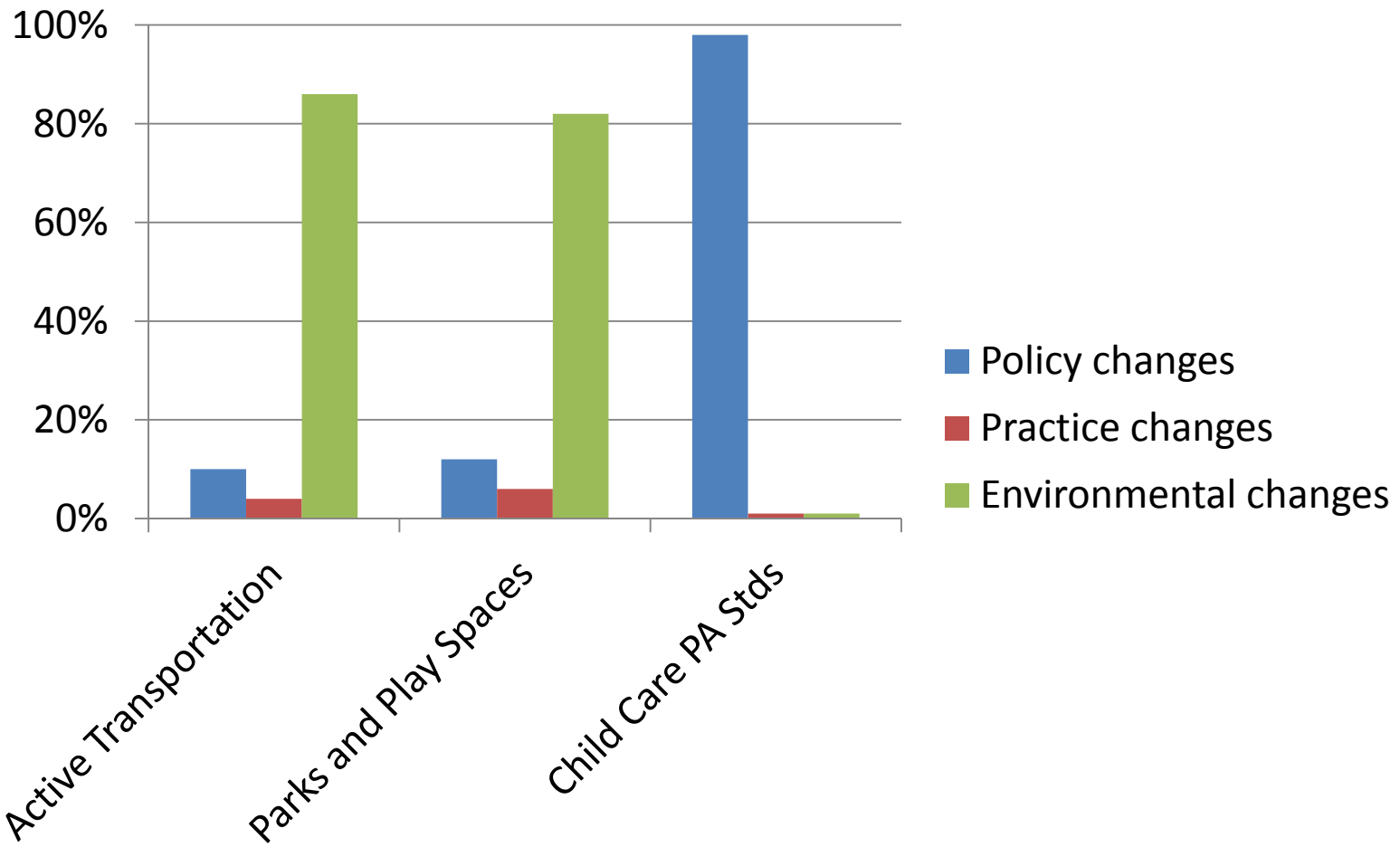
- Median = 14,907
- Range = 5 – 306,603,772

These data were the basis for the intervention setting populations.

High-risk populations

- African American
 - Median = 24.5%
 - Range = 0.0% – 97.6%
- Hispanic/Latino
 - Median = 18.0%
 - Range = 0.0% – 99.1%
- Lower Income
 - Median = 22.4%
 - Range = 0.0% – 97.7%
- Non-English Speaking
 - Median = 53.0%
 - Range = 0.0% – 91.3%

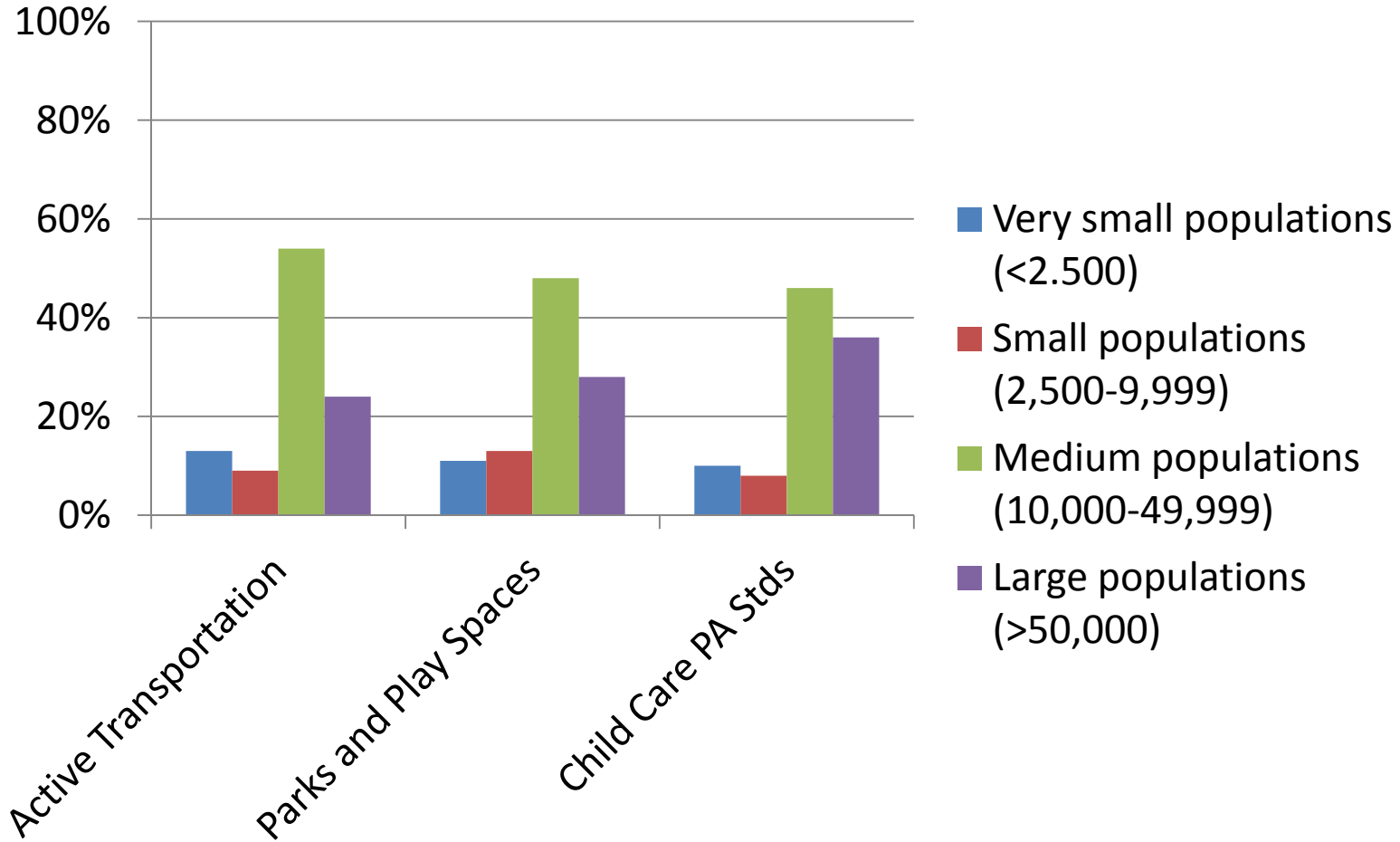
HKHC Policy, Practice, and Environmental Changes



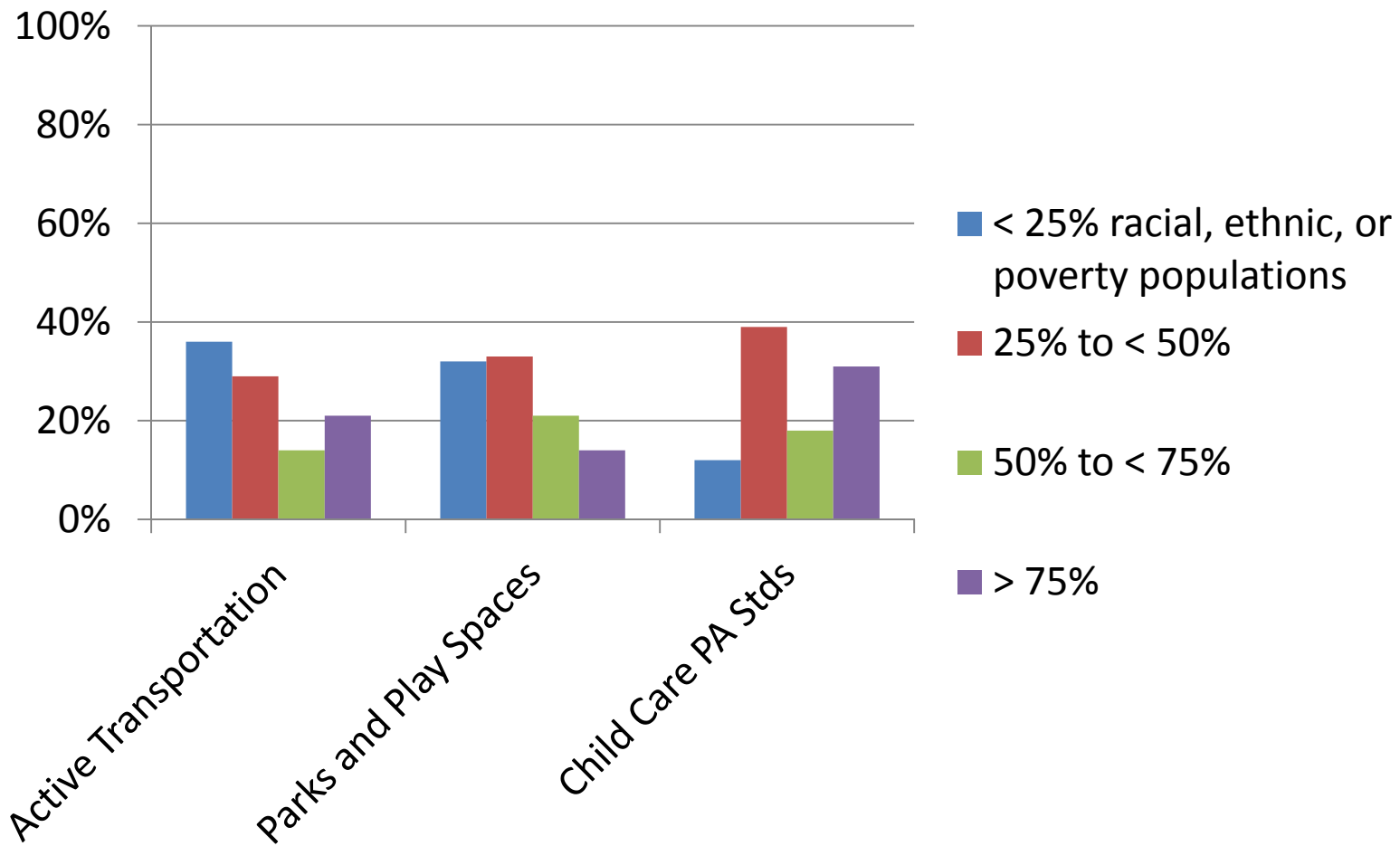
HKHC Levels of Policy, Practice, and Environmental Changes

Level	Active Transportation Examples (n = 687)	Parks & Play Spaces Examples (n = 145)	Child Care PA Standards Examples (n = 967)
Level 1 Community-scale (larger)	12% <ul style="list-style-type: none"> Environment (Miles of Bike Lanes) 	10% <ul style="list-style-type: none"> Practice (Budget Allocation for Park Maintenance) 	9% <ul style="list-style-type: none"> Policy (Child Care Licensing Regulations)
Level 2 Intervention setting-scale	18% <ul style="list-style-type: none"> Sidewalks Speed Limits Transit Services 	40% <ul style="list-style-type: none"> Zoning Land for Park New Playground ADA Access 	90% <ul style="list-style-type: none"> Physical Activity Curriculum Hours of Operation
Level 3 Part of intervention setting	70% <ul style="list-style-type: none"> Bike Parking/Storage Transit Stop 	50% <ul style="list-style-type: none"> Recreation Program Financial Assistance 	1% <ul style="list-style-type: none"> Amenities (Outdoor Water Fountains, Trees)

Population Reach of PPEs within Intervention Settings



High-Risk Population Reach of PPEs within Intervention Settings



HKHC Policy, Practice, and Environmental Changes within Intervention Settings

Characteristic	Active Transportation Settings Mean (Range)	Parks & Play Spaces Settings Mean (Range)	Child Care PA Standards Settings Mean (Range)
Policy, practice, or environmental changes	3.69 (1.00-189.00)	1.84 (1.00-20.00)	2.61 (1.00-9.00)
Scale – gen. population	13.87 (0.01-100.00)	12.27 (0.00-100.00)	9.39 (0.09-100.00)
Scale – high-risk pop.	13.87 (0.01-100.00)	12.30 (0.00-100.00)	9.39 (0.09-100.00)
Implementation	0.42 (0.08-1.00)	0.50 (0.08-1.00)	0.16 (0.04-0.50)
TOTAL	186	79	370

HKHC Policy, Practice, and Environmental Changes within Intervention Settings

Characteristic	Active Transportation Settings Mean (Range)	Parks & Play Spaces Settings Mean (Range)	Child Care PA Standards Settings Mean (Range)
Dose – gen. population	11.29 (0.00-149.49)	5.58 (0.00-50.00)	3.95 (0.03-33.00)
Dose – high-risk pop.	11.29 (0.00-149.49)	5.61 (0.00-50.00)	3.95 (0.03-33.00)
Impact – gen. population	9.61 (0.00-149.49)	4.55 (0.00-49.50)	3.71 (0.01-24.75)
Impact – high-risk pop.	6.87 (0.00-81.54)	2.88 (0.00-25.00)	2.09 (0.01-33.00)
TOTAL	186	79	370

Implications for Policy and Practice

- Increases understanding of ways to “count” policy, practice, and environmental changes in the context of intervention reach, dose, and impact
- Offers measures for reach, dose, and impact of policy, practice, and environmental changes are feasible and can be systematically collected
- Analyzes quantitative and qualitative data to facilitate comparisons across intervention strategies and intervention settings
- Complements other research and evaluation work in the field to measure the effectiveness of healthy eating and active living intervention strategies

Active Living By Design Products

- Growing a Movement: Healthy Kids, Healthy Communities Final Report
www.activelivingbydesign.org/resources/growing-a-movement
- Lessons for Leaders: Navigating the Process of Healthy Community Change
www.activelivingbydesign.org/lessons-for-leaders
- Investing in Healthy Community Change: A Resource for Funders
www.activelivingbydesign.org/resources/investing-in-healthy-community-change

In addition, please visit their recently updated [website](#) with a new design and structure that makes it easier to find these new resources and other helpful information.



www.transtria.com/hkhc.php

- Logic model
- Group Model Building Handbook
- Enhanced Evaluation tools, protocols, and training
- Value Framework Manual and Strategy Briefs
- 49 case reports
- 49 causal loop diagram storybooks

Journal of Public Health Management and Practice supplement (April/May 2015)

- Background, Collaboration, Community Dashboard, and Methods articles
- Four Enhanced Evaluation community briefs
- Four Group Model Building community briefs
- Cross-site Enhanced Evaluation and Partnership and Community Capacity briefs
- Cross-site Group Model Building and Implementation and Impacts articles

Questions?

Thank you!

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