

Partners for prevention: Collaboration for sustainable change in low-income urban schools

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greater rochester
Health
foundation



Rochester, New York



- 9 county Finger Lakes region
- 1.2 million residents, over ½ in Monroe County
- City of Rochester poverty rate: 33%
- 56% of children live in poverty in the City of Rochester
- Top 75 metro areas, only 3 cities - Detroit, Cleveland, Dayton - have higher childhood poverty rates
- 1st in extreme poverty
- Black and Hispanic children have disproportionate rates of poverty in Rochester & Monroe County

- Health conversion/legacy foundation established in 2006 through purchase of not-for-profit health care plan
- Assets ~\$240M; annual distribution ~\$10-12M
- **Mission:** To improve the health status of residents of the Greater Rochester community, including people whose unique health care needs have not been met because of race, ethnicity, or income.
- Serves a nine-county area in the Finger Lakes Region

greater rochester

Health *foundation*



Strategy Summary

Goal: Increase the Prevalence of Healthy Weight to 85%, as Measured by Body Mass Index (BMI), in Monroe County Children Ages 2-10 over a 10-Year Period

Duration: 2007-2018

Funding: ~\$22.8 M

Key Strategies:

- Increase physical activity and improve healthy eating in schools, home and community
- Advance policy and practice solutions
- Execute a community communications campaign
- Engage the clinical community

Strategy Revised: 2012-2018

5·2·1·0

5 Fruits and
veggies
every day

2 Hours of screen
time...TVs and
computers

1 Hour of
active play

0 Sweetened
beverages

Healthy Weight Strategy Revision (2012)

Outcomes and Learnings

- Mixed effects on nutrition and physical activity, BMI
- High awareness but little behavior change from 5210 media campaign
- No improvement in overweight/obesity between 2007-2012
- *Need for greater synergy and focus*
- *Need for better parent engagement*

Strategic Review Process

- Comprehensive review of research- and practice-based evidence
- Expert consultation and national context (PSE & SDoH)

Strategy Changes

- Scope: City of Rochester, children ages 4-10
- Focus on urban school-based obesity prevention
- Track interim metrics in addition to BMI
- Comprehensive evaluation with additional BMI analyses

Multicomponent Approach

Physical activity and nutritional programs & practices

- Expanded recess, classroom PA, nutrition education, equipment, physical enhancements

Staff training

- Playworks, Cafeteria staff, Math & Movement; Action-based learning

Advocacy

- Daily recess policy, better school food, water access, safe play

Out-of-school time programs and parent engagement

- YMCA, afterschool sports, free health-focused summer camp, family health fairs

Communications Campaign

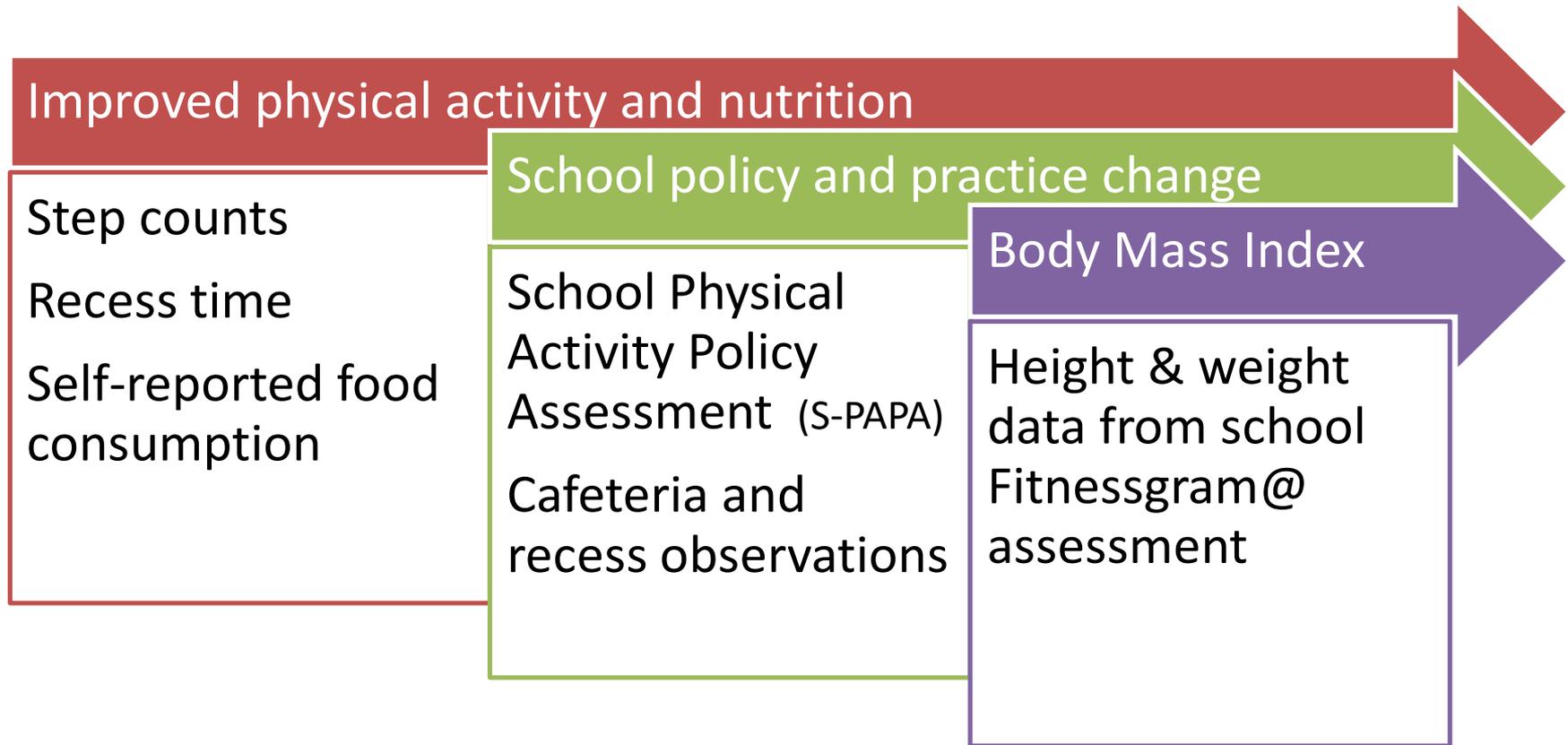
- 5210 / Be a Healthy Hero Media, workshops/displays; Street Team



Healthy Weight Partners



Healthy Weight Outcomes Framework



Child Weight Status

**Comparison of weight status by age group, gender and location
in Monroe County, 2007 & 2012**

	2007			2012		
	Normal	Overweight	Obese	Normal	Overweight	Obese
All	69.9%	15.0%	15.1%	68.4%	16.4%	15.2%
2-10 yrs	71.5%	14.3%	14.3%	68.5%	16.4%	15.1%
11-18 yrs	67.3%	16.2%	16.5%	67.9%	16.5%	15.6%
Male	69.3%	14.8%	16.0%	67.8%	16.9%	15.3%
Female	70.6%	15.3%	14.1%	68.9%	15.9%	15.2%
Suburban	74.5%	13.9%	11.6%	71.0%	16.1%	12.9%
Urban	61.1%	17.1%	21.8%	62.2%	17.1%	20.7%

BMI Analyses: 2013-2018



Comparison

Compared students in intervention to all other RCSD K-6 schools



Sample

N=~8,000



Limitations

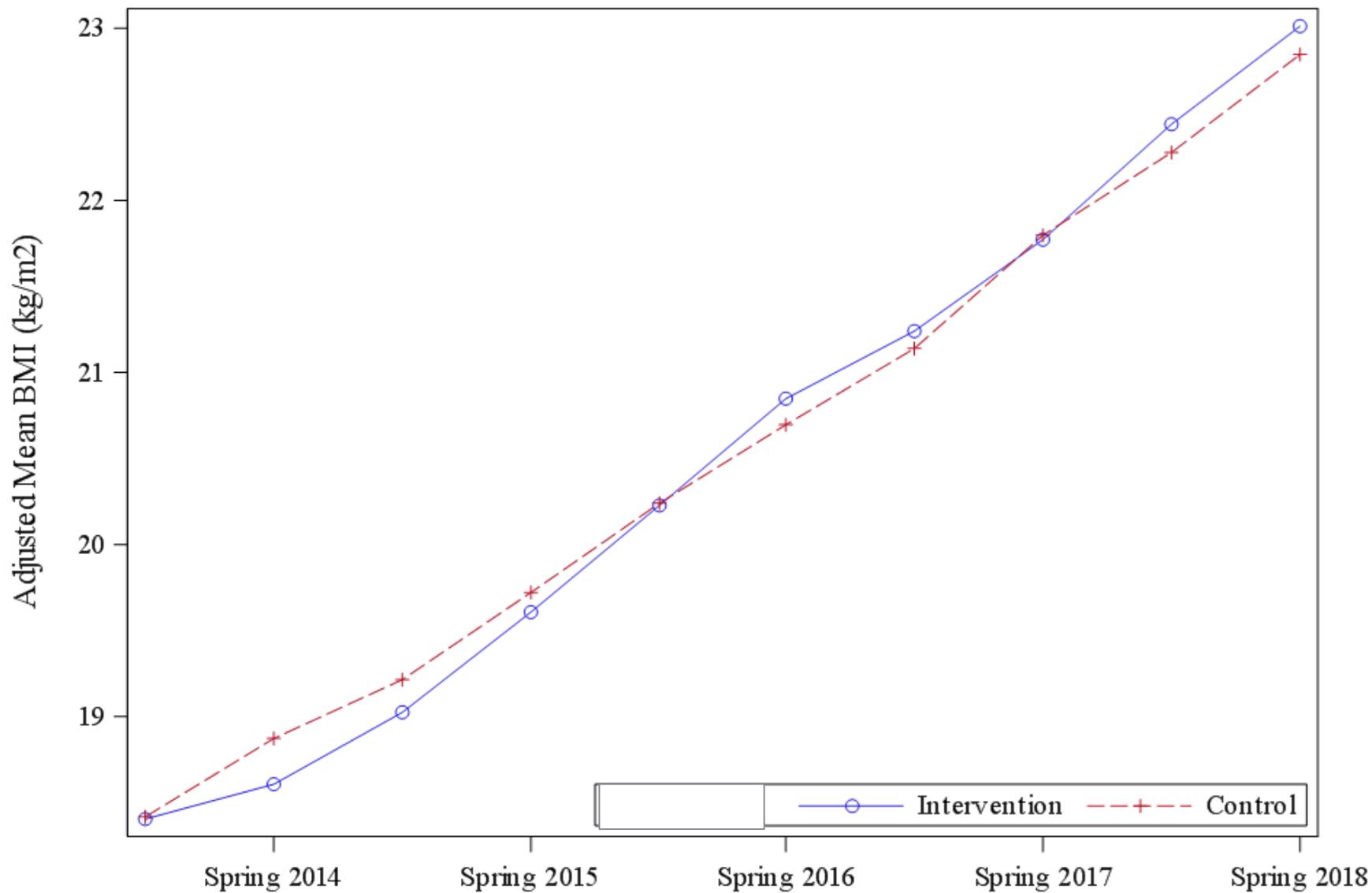
Non-randomized design
High level of missing data



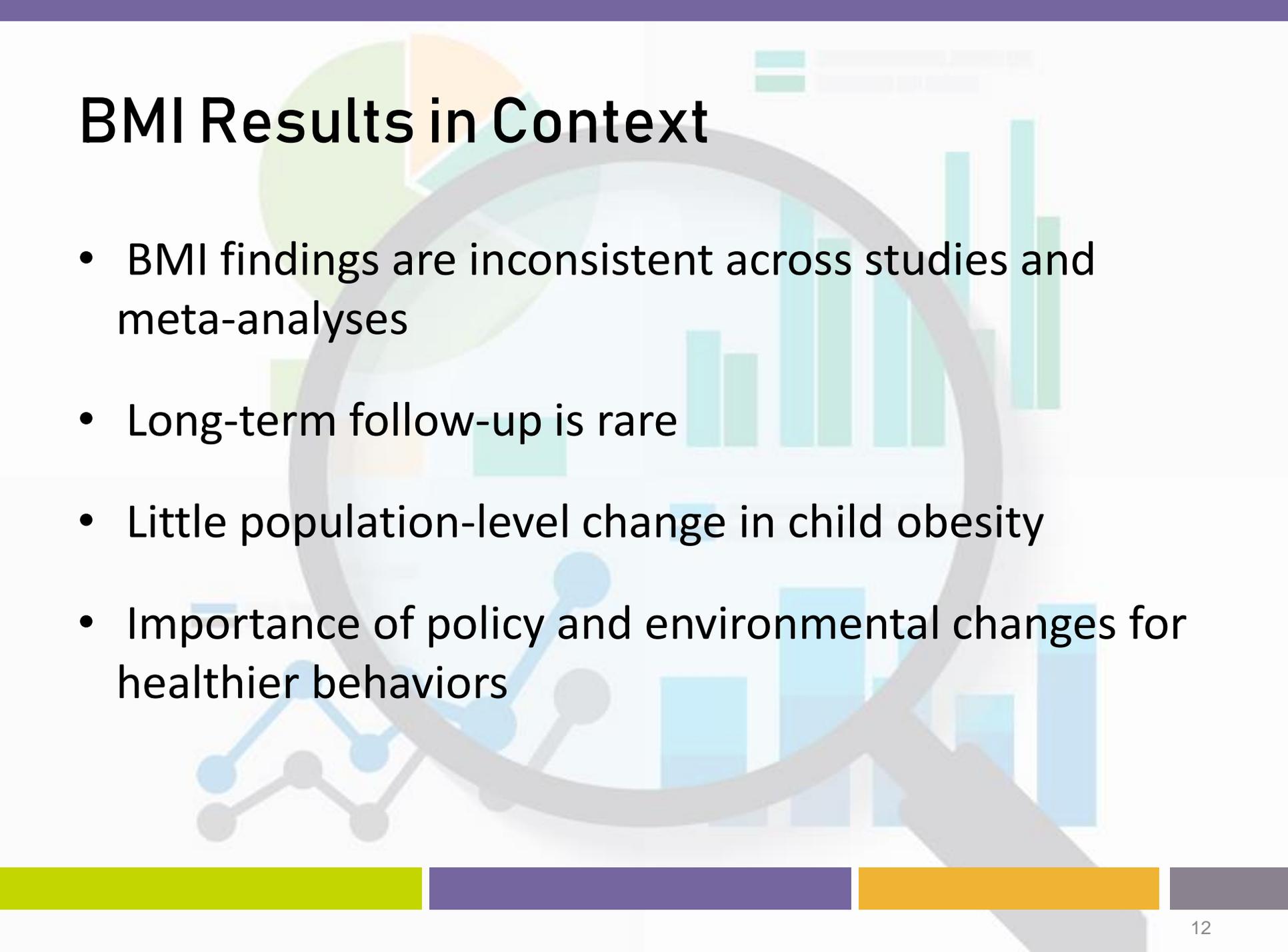
Sensitivity analyses

Mixed model with covariate control and propensity score matched samples
BMI & BMI z-score
Subgroup analyses (gender, initial weight, duration)

BMI Results: 2013-2018



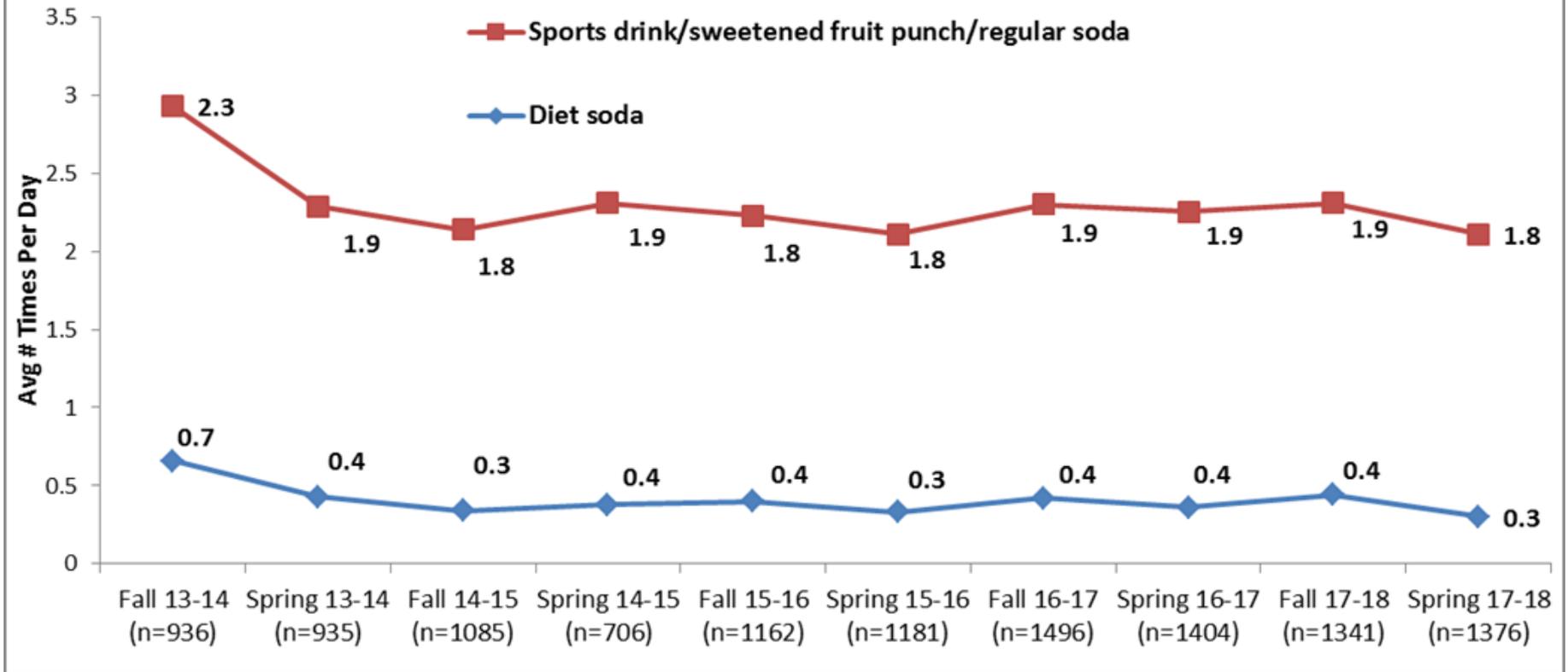
BMI Results in Context



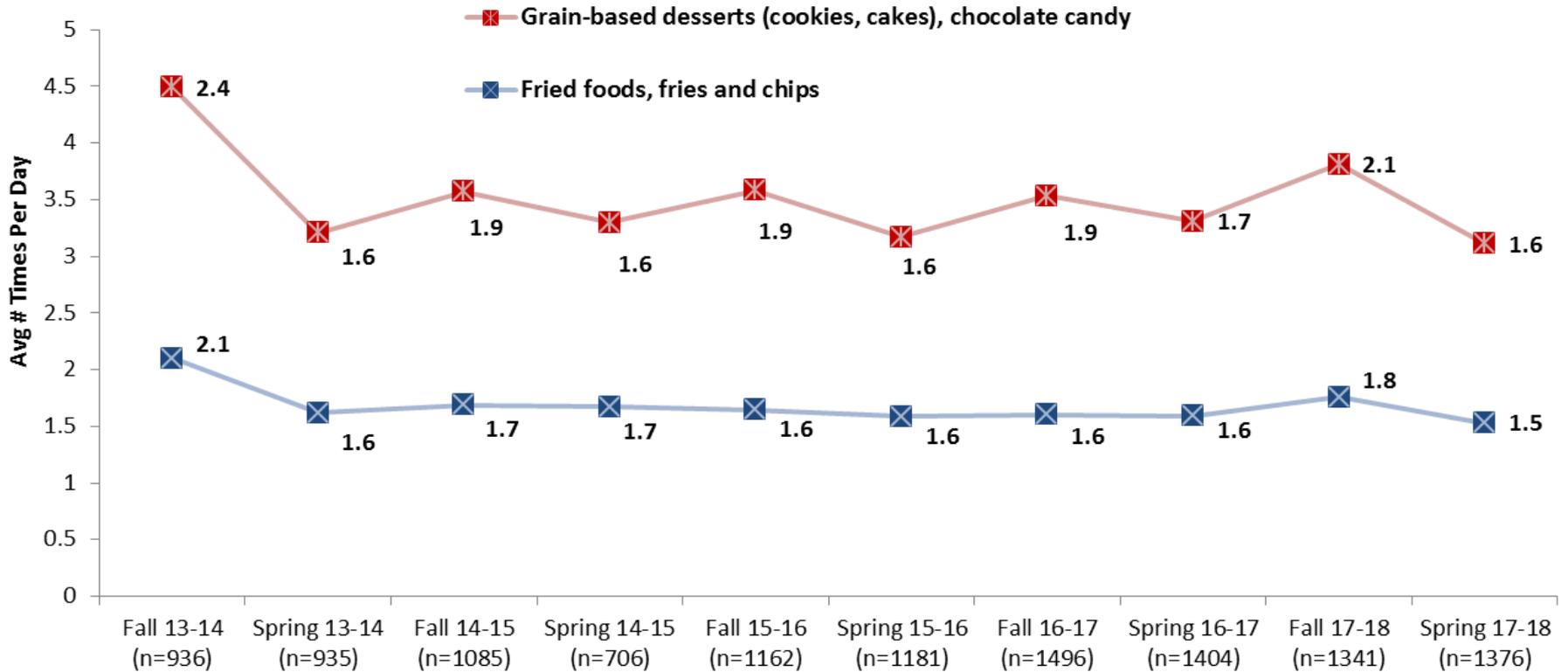
- BMI findings are inconsistent across studies and meta-analyses
- Long-term follow-up is rare
- Little population-level change in child obesity
- Importance of policy and environmental changes for healthier behaviors

PA & Nutritional Outcomes

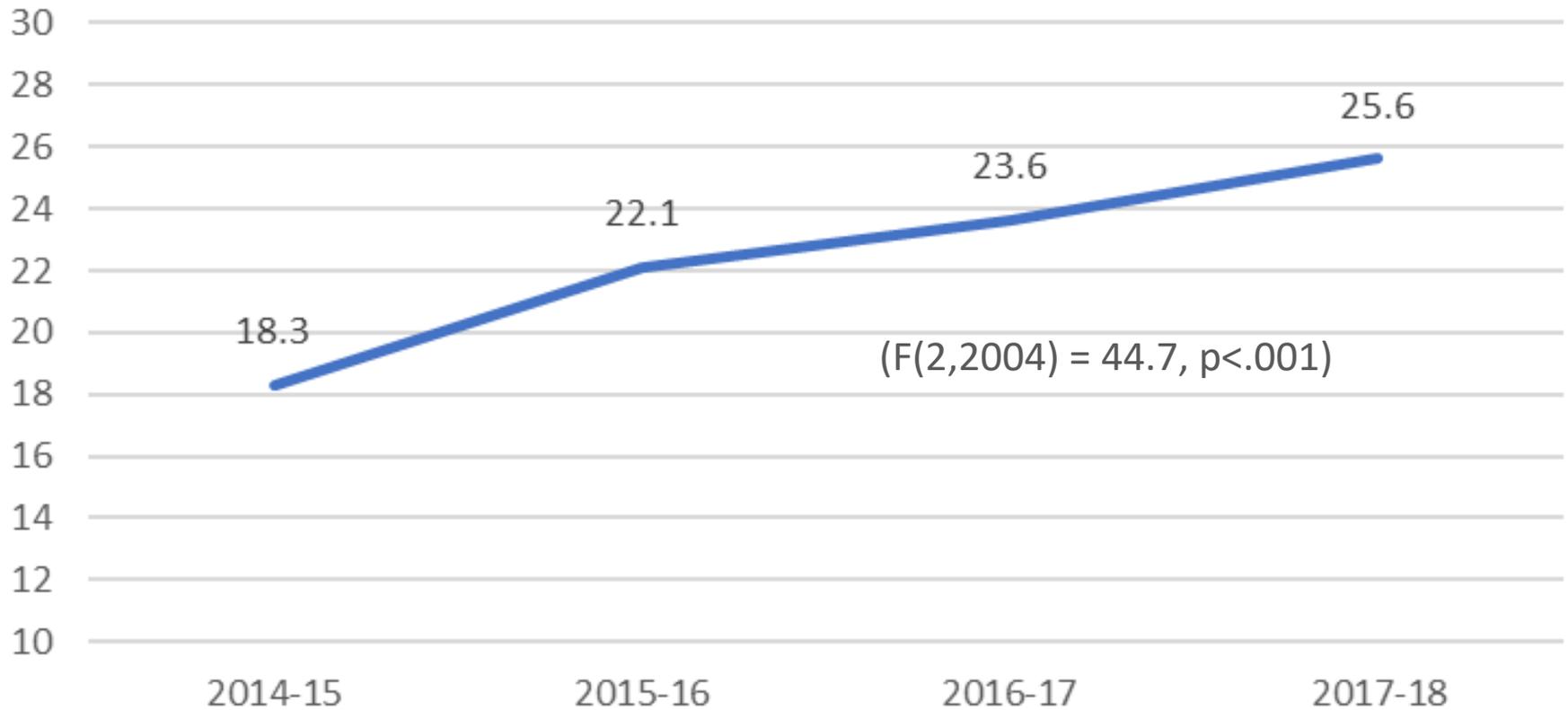
Child Survey: Healthy Schools Questionnaire



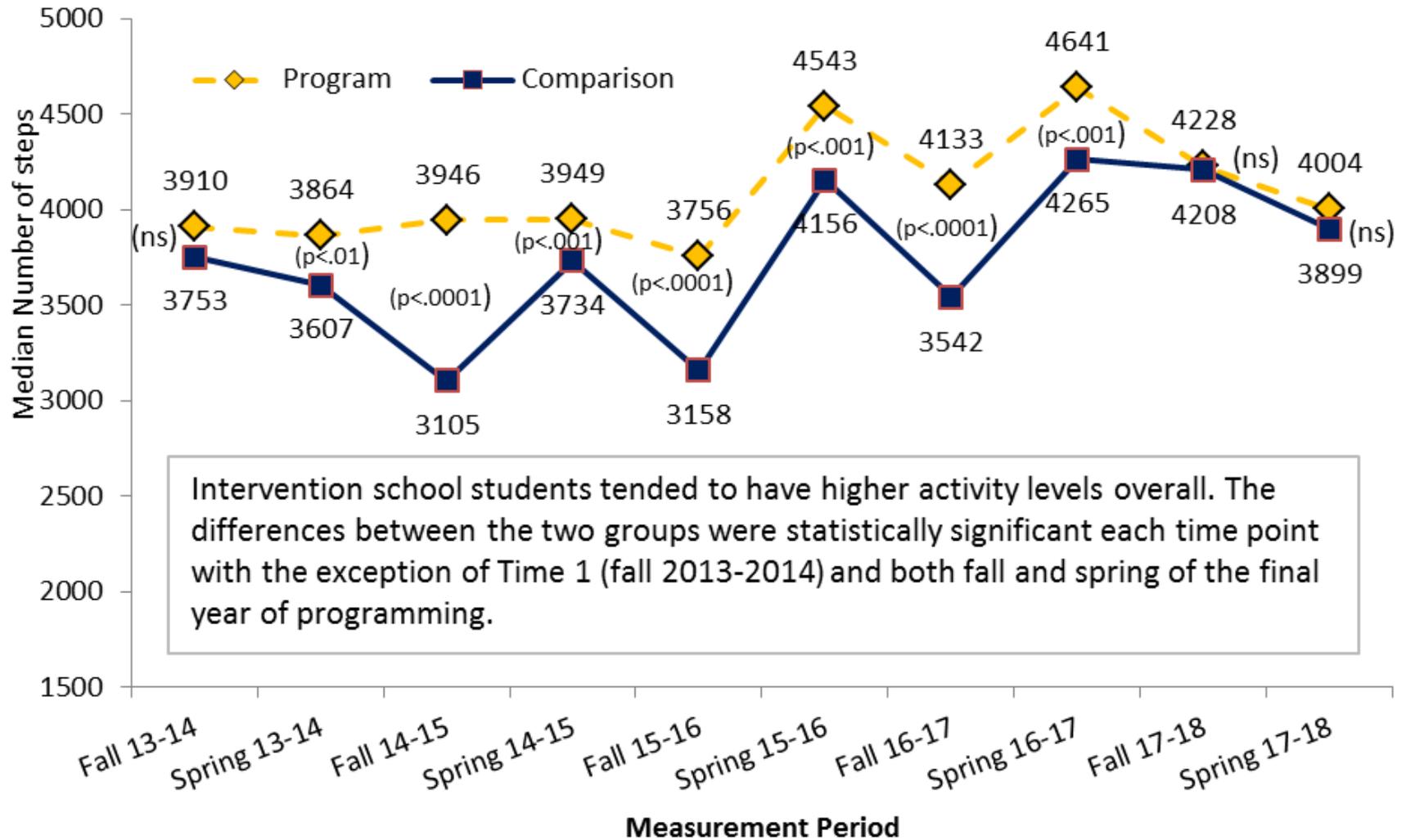
Child Survey: Healthy Schools Questionnaire



Average # Minutes of Recess Time: Across Intervention Schools



Activity Level Measured as Steps per School Day



Qualitative Observations



Smoother transitions between recess



Improvements in quality recess (e.g., cooperative games, SE supports) linked with Playworks training



More orderly cafeteria environment



Cafeteria staff encouraging students to make healthier choices

Policy and Practice Changes

- Pediatric practice changes
- Daily recess mandate in RCSD wellness policy
- Expanded recess at building level
- Increased access to healthy food options- installation of salad bars, Hybrid kitchens
- Playful sidewalks
- Ongoing community partnerships (Playworks, Foodlink, City of Rochester 2034)



Lessons Learned: Role of Funders



Board dynamics, “impact”, push for BMI; appropriate outcomes and timeframes



BMI change, level of analysis, addition of GWU



Convening/coordinating partnerships: training, advocacy, technical assistance



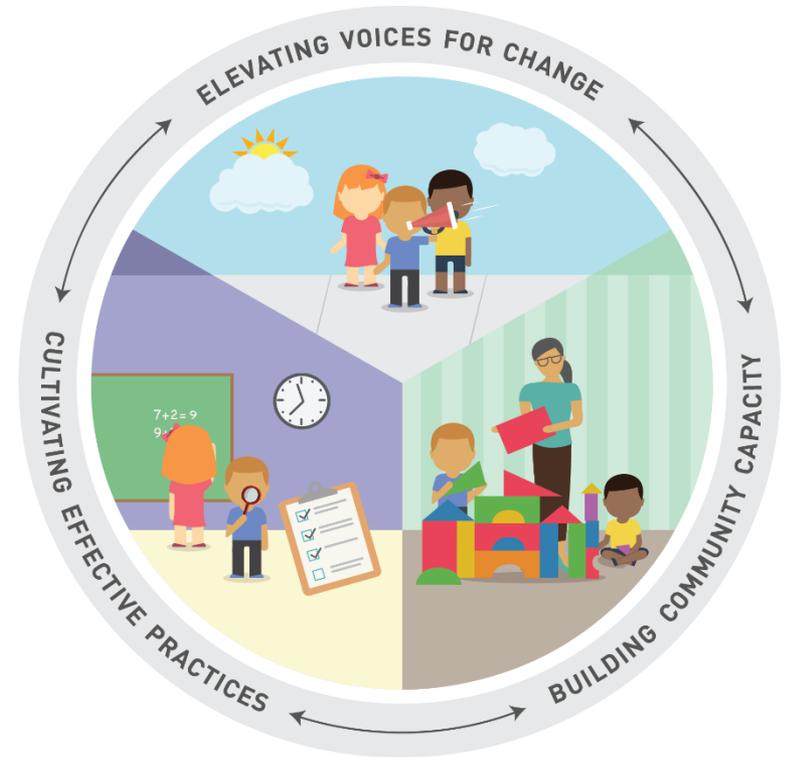
Building relationships to secure & support school stakeholder engagement and buy-in

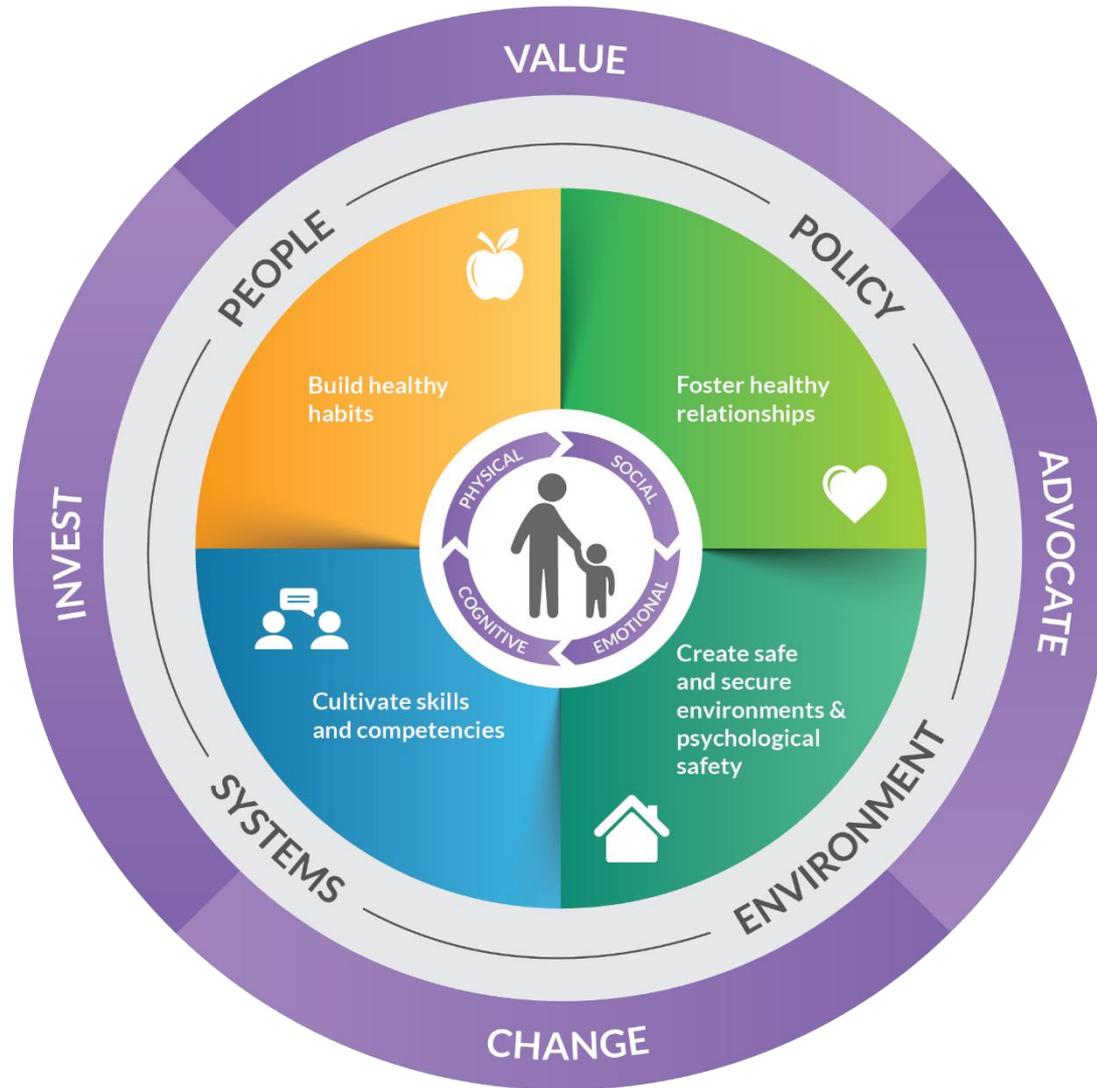


Culture and policy change are key to sustainability

Whole Child Health & Schools

- Build on progress and partnerships with schools
- Adopt whole child approach
- Shift focus from implementation of grant-funded interventions to systemic and culture change
- School teams (vs grant coordinators) leading WCH work





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