Lessons Learned from Kaiser Permanente’s Community Health Initiative (CHI) Evaluation

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Our Community Health Initiative—over 50 and growing …

- Portland, OR
  - 6 HEAL Zone sites & 1 local partnership site

- Georgia
  - 32 Livewell Colorado sites statewide
  - 6 HEAL Zone sites & 3 local partnership sites

- Prince Georges County, MD

- Atlanta, GA

★ Community Health Initiative sites
● Joint initiatives with other funders
Communities are transforming
CHI cross-site logic model

INPUTS
- Baseline Conditions
- Existing Community Assets
- KP Assets
- Design Principles

PROCESS
- Effective Intervention Strategies
- Community Capacity Building Strategies
- Health Promoting System Changes

Short-term
- Changes in Individuals
- Changes in Community Capacity

Intermediate
- Activity
- Nutrition
- Improved Biometric (e.g., BMI) & Physiologic Measures

Long-term
- Health
- Thriving, Empowered Communities

Sustainability
Learnings for the field: refining evaluation design

Key Learning 1: interventions need to be more impactful
   Adjustment: translated dose into practice

Key Learning 2: focus more on intermediate outcomes
   Adjustment: refined measurement strategies
Introducing dose

Dose = Reach \times \text{Strength of the touch}

Number of lives touched
Innovation/contribution of population dose method

If we don’t have dose, we are not likely to have impact—at the population level.

Role in planning and quality improvement that can lead to stronger overall interventions

An approach to quantifying the impact of initiatives to use in a logic model framework

Estimating/projecting impact when the impacts are likely to be small and population surveys may not have adequate power to detect change
Using dose for planning, program improvement across sectors

**Healthy Eating**
- 50% healthy vending slots
- Vending ban
- Whole school reform
- School + corner stores

**Active Living**
- Walk to school day
- Walk to school year
- Complete streets
- Streets + school PA
Individual strategies are having an impact — in multiple sectors

- **Neighborhoods**
  - Worksite wellness
  - Community gardens

- **Schools**
  - Salad bars
  - Healthier school menus

- **PHYSICAL ACTIVITY**
  - Infrastructure improvement
  - Community center program expansion

- **Schools**
  - Safe Routes to School
    - PE curriculum enhancements
    - Classroom physical activity

- **FOOD**
Strategies that make a difference: safe routes to school

Safety enhancements and walk to school days increased number of children walking to school from 24% to 36% two years later
Strategies that make a difference: salad bar

Installing a salad bar in an elementary school cafeteria increased consumption of fruits and vegetables by 13%
## Physical activity

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revised PE curriculum</td>
<td>5.0%</td>
</tr>
<tr>
<td>Action based learning in classrooms</td>
<td>2.3%</td>
</tr>
<tr>
<td>Active transport to school</td>
<td>1.1%</td>
</tr>
<tr>
<td>School wellness policies promoting PA</td>
<td>0.5%</td>
</tr>
<tr>
<td>After school physical activity</td>
<td>0.45%</td>
</tr>
<tr>
<td>Overall dose of school PA strategies</td>
<td>9.35%</td>
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</tbody>
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Comparing estimated dose to actual population health impact

Physical activity

Estimated impact

- 9% increase in PA minutes based on dose calculations

Measured impact

- 4% increase in PA minutes
  - $p < .05$

Benchmark trend

- 0.5% increase in having 1+ day with 60 minutes MVPA
  - $NS^1$

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$^1$Youth Risk Behavior Surveillance Survey data, Colorado, 2009-2011
Bringing it all together: Measuring population health

1. Estimate the impact of a group of strategies targeting the same outcomes

2. Conduct surveys to measure changes in key outcomes relative to benchmarks

3. Look for associations between estimated and measured impact
Where we are headed.....
Implications for the field

• Evaluate both population health and intermediate outcomes
  ■ Population-level impact, measurement challenging, but critical
  ■ Intermediate outcome measurement, key for understanding/communicating impact
  ■ Provide immediate data for QI and assessment of impact

• Continue to build evidence, including what doesn’t work
  ■ Continue to test and refine dose methodology
  ■ Promising area for multi-sectoral collaboration: schools