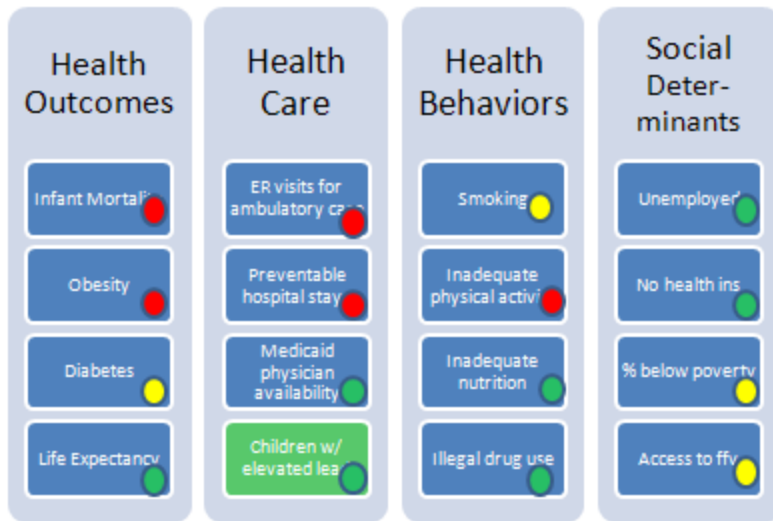


Community Health Dashboard



Presentation to Health Services Research Seminar

Amy R. Sheon, PhD, MPH
Executive Director, Urban Health Initiative
CWRU School of Medicine

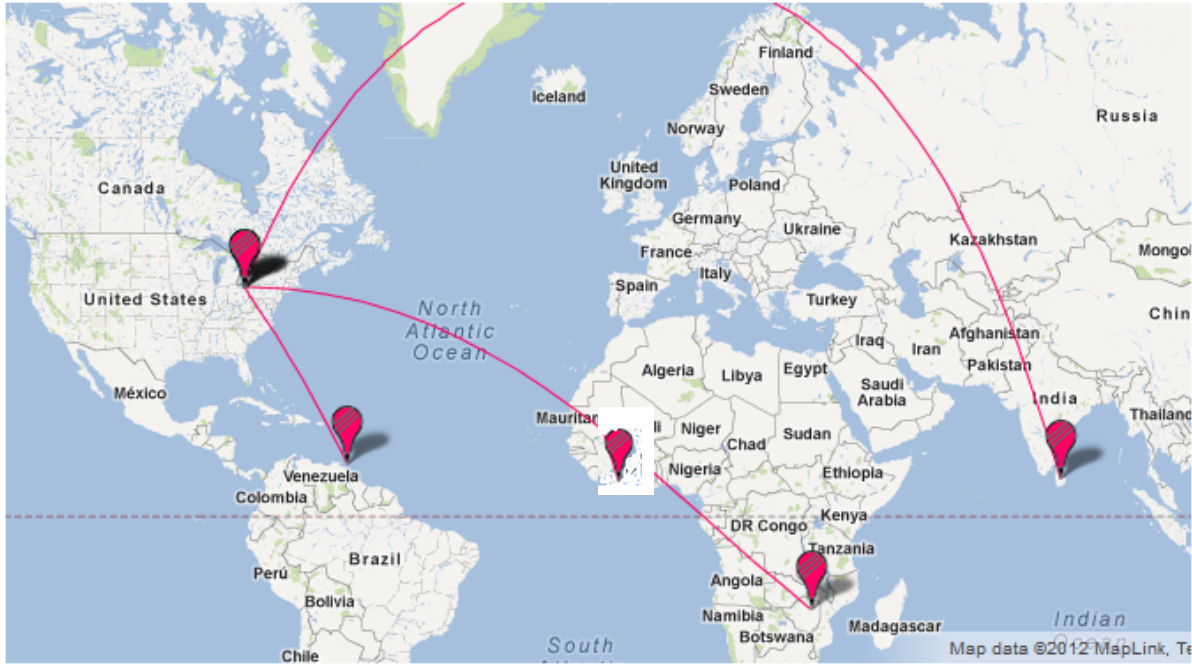
March 9, 2012



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Introduction



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RFA: 89-AI-21

P.T. 34; K.T. 0715008, 0710070, 0411005, 0760003, 0710030

National Institute of Allergy and Infectious Diseases

Anticipated RFA Availability Date: November 1, 1989

Anticipated Application Receipt Date: March 30, 1990

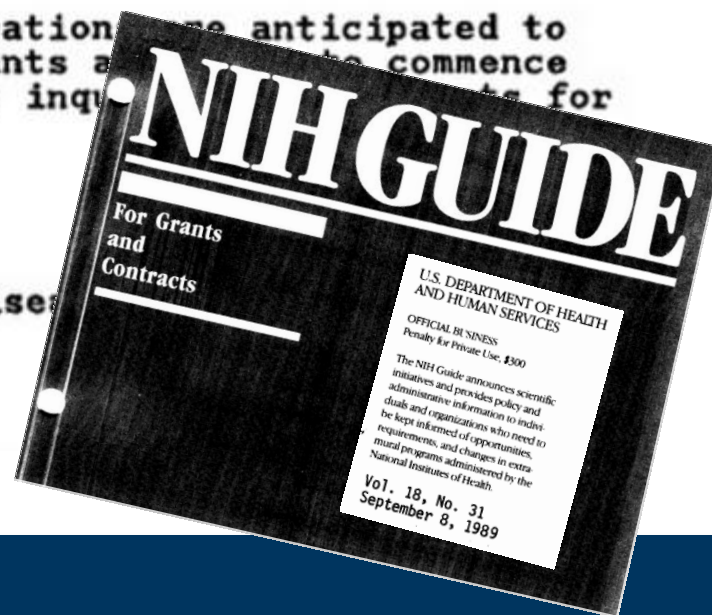
INTRODUCTION

The purpose of this announcement is to alert the scientific community to the proposed issuance of a Request for Applications (RFA) for international collaborations in AIDS research.

INQUIRIES

Because establishment of international collaboration is anticipated to require several months of negotiations, applicants are encouraged to commence discussions as soon as possible. Please direct inquiries for information to:

Amy R. Sheon, M.P.H.
Epidemiology Branch
Division of AIDS
National Institute of Allergy and Infectious Diseases
6003 Executive Blvd.
Rockville, Maryland 20892
Telephone: (301) 496-6177



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Learning Objectives

- Understand context for a Community Health Dashboard
 - Case Western Reserve University
 - Other stakeholders
 - Data resources
- Understand strengths and limitations of aggregate EHR and hospital data for surveillance purposes
- Provide feedback on concept
- Increase awareness of how to participate



Session Outline

- Urban Health Initiative rationale & activities
- Community Health Data Dashboard concept and key partners
 - Health Alliance
 - Health Improvement Partnership-Cuyahoga
- Potential models
- Discuss potential for use of aggregate hospital & EHR data

Urban Health Initiative

*Vision: Cuyahoga County is a place where all residents live, work, learn and play in safe, healthy, sustainable and prosperous communities.**

Mission: Foster improved health of community residents through strategically leveraging the research, teaching and services resources of Case Western Reserve University in partnership with community stakeholders.

**HIP-Cuyahoga*

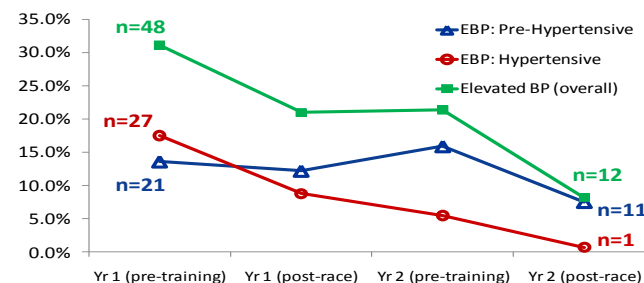
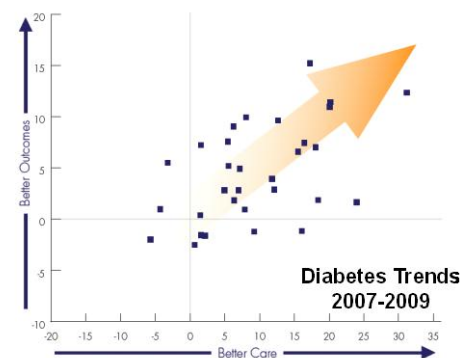


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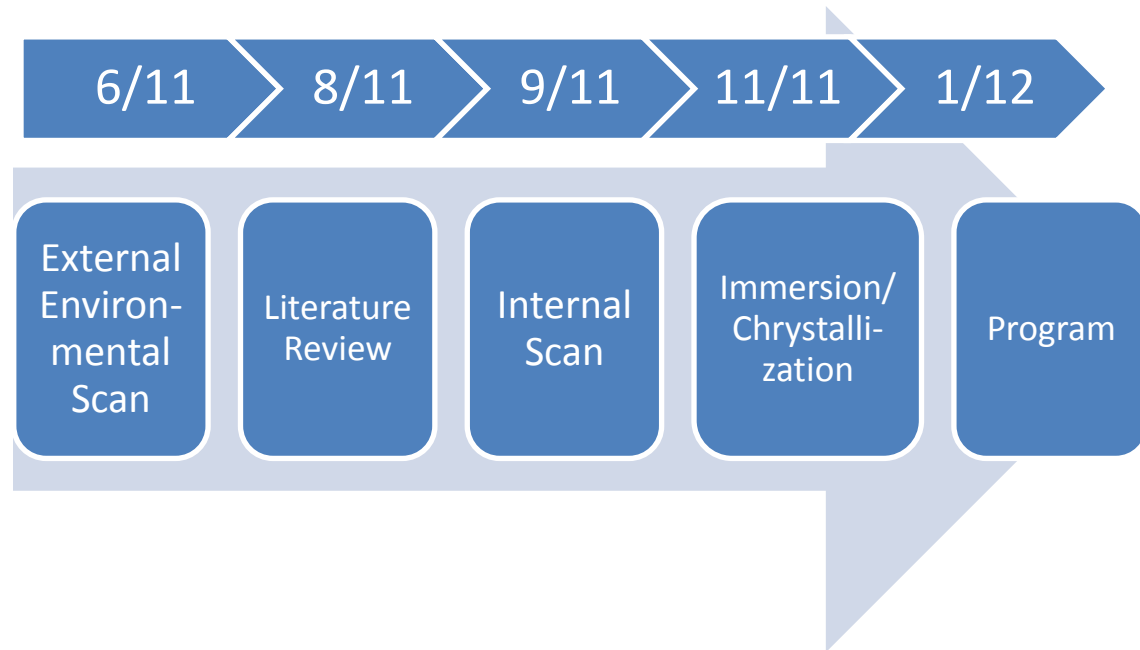
Urban Health Initiative Rationale

- Positive research results:
 - Better Health, Greater Cleveland: Better care & better outcomes
 - We Run This City: reduced BP in children
- We can do more



Creating UHI: The Plan

- Scan internal and external environment
- Literature Review
- Align needs and opportunities

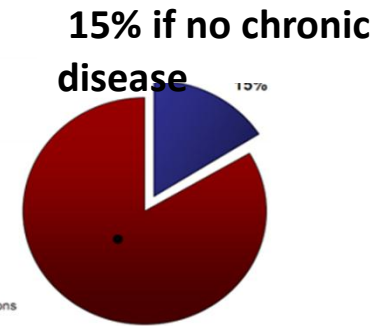


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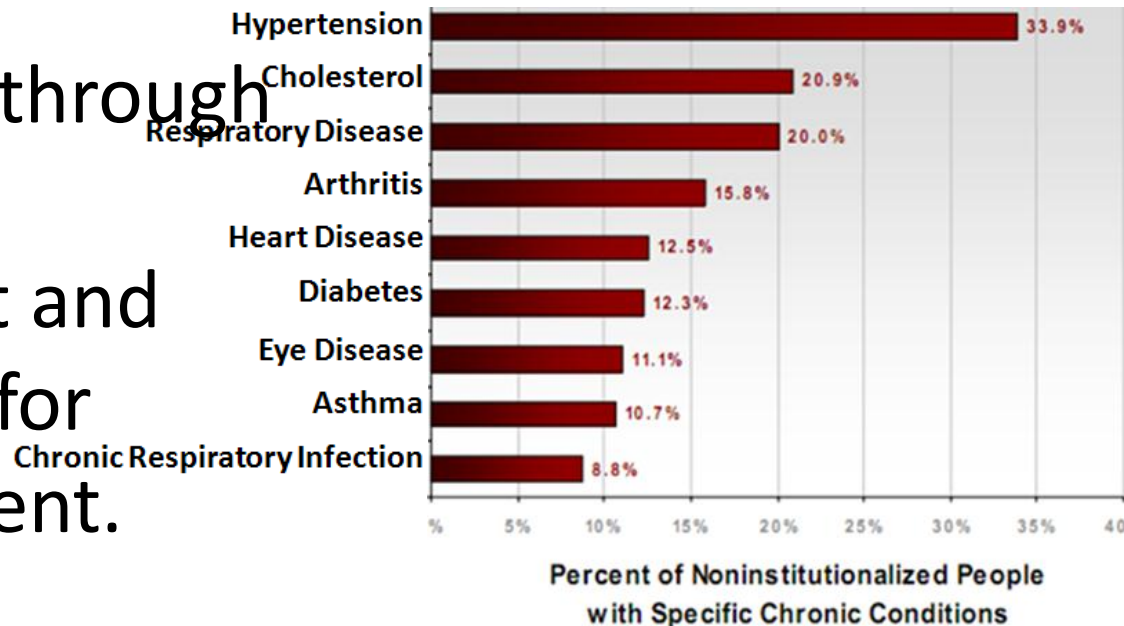
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Literature Review

- Prevalent, chronic diseases drive health care costs.
- Can be prevented through behavior change.
- Care improvement and patient activation for disease management.

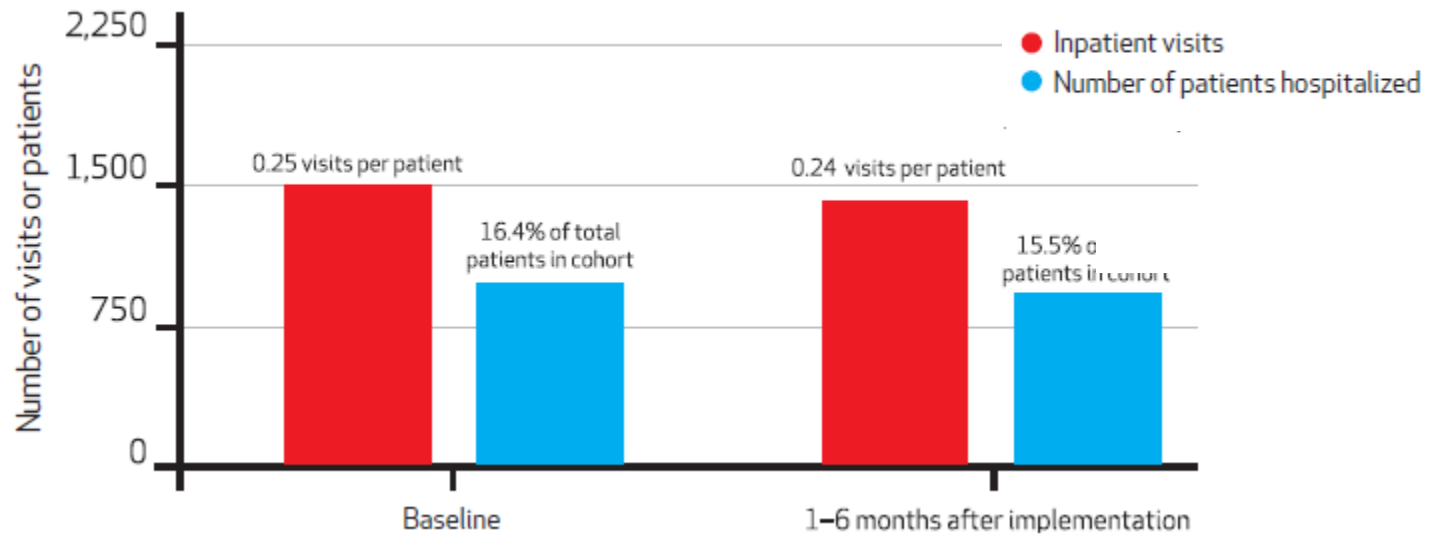


Health Expenditures by Chronic Disease



Promising Interventions

Hospitalizations Of Patients With Diabetes, Asthma, Or Congestive Heart Failure, New York-Presbyterian Hospital, 2010-11



J. Emilio Carrillo, Nida Shabbir Shekhani, Emme Levin Deland, Elaine M. Fleck, Jaclyn Mucaria, Robert Guimento, Steven Kaplan, William A. Polf, Victor A. Carrillo, Herbert Pardes and Steven J. Corwin
A Regional Health Collaborative Formed By NewYork-Presbyterian Aims To Improve The Health Of A Largely Hispanic Community
Health Affairs, 30, no.10 (2011):1955-1964

doi: 10.1377/hlthaff.2011.0635



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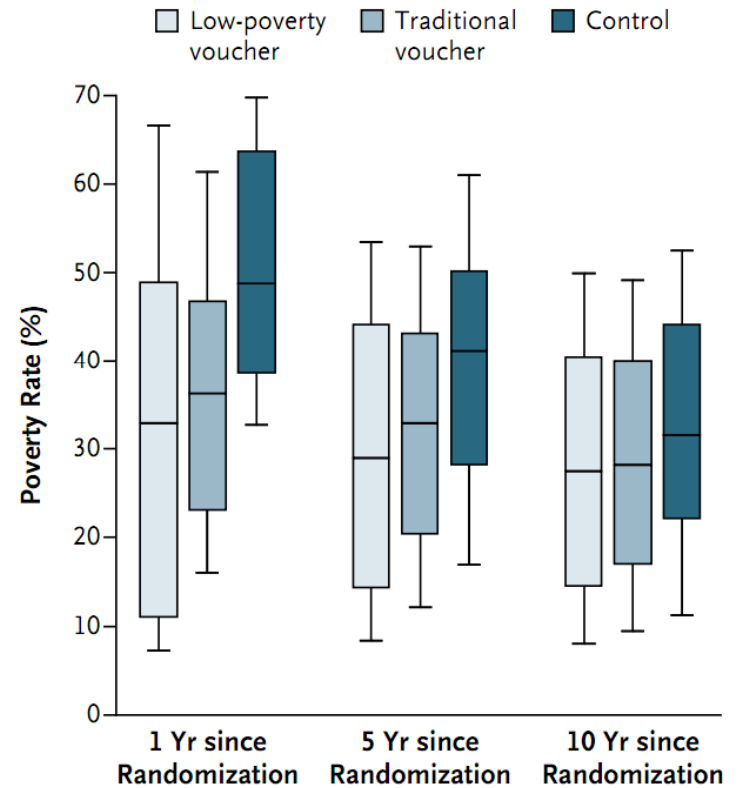
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Promising Interventions

The NEW ENGLAND JOURNAL of MEDICINE

Neighborhoods, Obesity, and Diabetes —
A Randomized Social Experiment

“The opportunity to move from a neighborhood with a high level of poverty to one with a lower level of poverty was associated with modest but potentially important reductions...in extreme obesity and diabetes. The mechanisms...remain unclear...”



N Engl J Med 2011;365:1509-19.

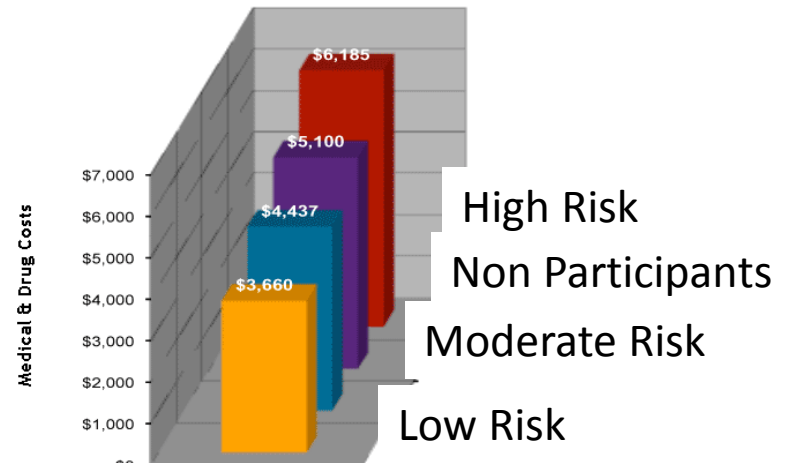
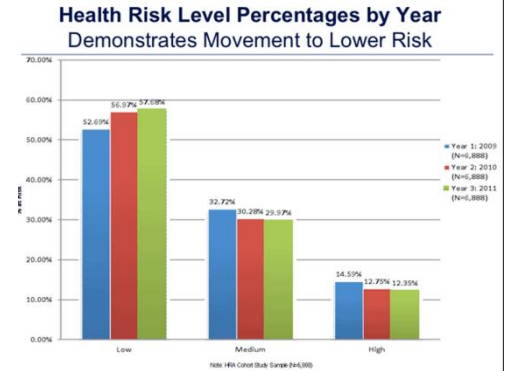


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Promising Interventions

- Evidence-based worksite wellness can show strong ROI
- Spreading in local area
- Smoking cessation is priority



Mhealthy Leadership Update <http://www.hr.umich.edu/mhealthy/>

New Surveillance Opportunities

- Surveillance and monitoring are being used to improve health
- Approach integrates social, behavioral, & access issues
- Strong local data are available

The Community as a Learning System: Using Local Data To Improve Local Health

A Report of the
National Committee on Vital Health Statistics



U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES



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HIP-Cuyahoga & Health Equity

- According to the RWJ County Health Rankings, Cuyahoga County is ranked **69th** (of 88 Ohio counties) in overall health outcomes
 - **81st** in Physical Environment
 - **78th** in Morbidity
 - **67th** in Social & Economic Factors
 - **57th** in Mortality

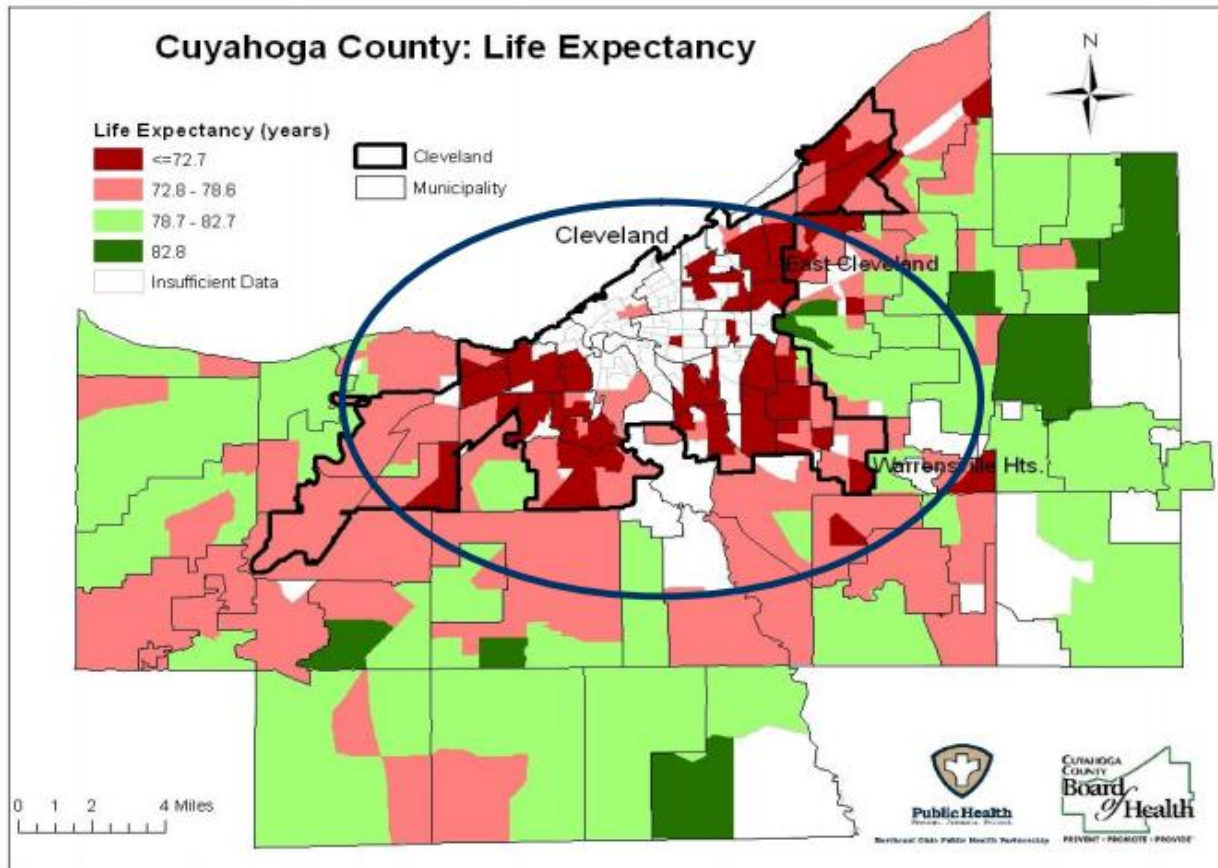
<http://www.countyhealthrankings.org/ohio/cuyahoga>



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HIP-Cuyahoga & Health Equity



A recent data analysis by CCBH revealed that there is a **twenty-four (24) year difference** between those that live the longest in Cuyahoga County and those whose lives are the shortest



Institutional Strengths

- Improved research capacity through CTSC
- Growing institutional cooperation



Institutional Strengths

Health Professional Education: SOM

- Block 1
- Urban Pathway
- MPH Program
- Student-Run Free Clinic
- House Calls
- Interprofessional Training



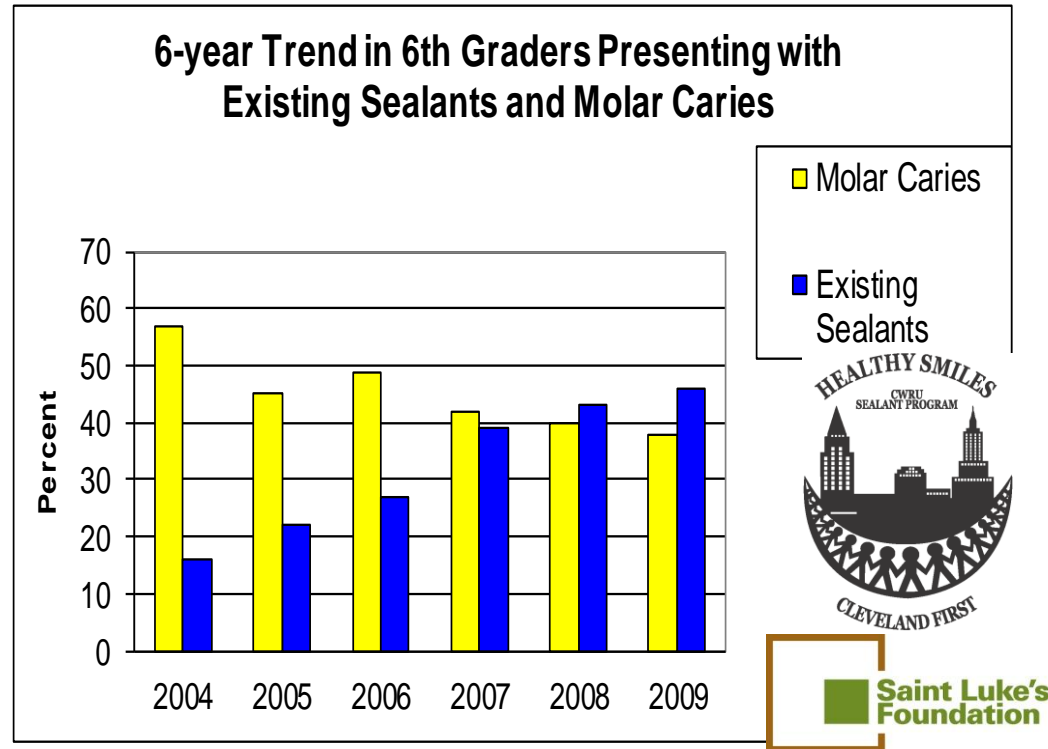
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Institutional Strengths

School of Dental Medicine: Healthy Smiles Sealant Program:

- increasing sealants
- decreasing cavities
- Public Health dentistry program



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Institutional Strengths

FPB Nurses in Schools benefits:

- Trainees
- Schools
- Students
- Families
- Local & state policy-makers



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Institutional Strengths

Community Engagement Resources:

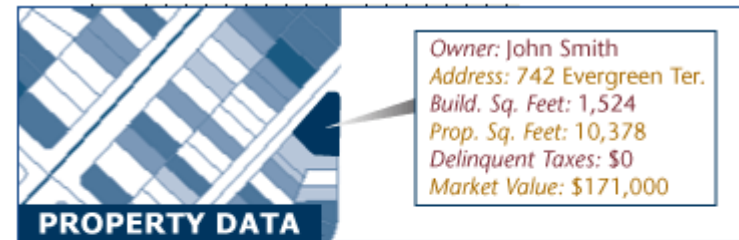
- Expertise in health promotion and prevention
- Food availability and physical activity
- Methods of community engagement
- Network of Community Advisors
- Risk assessment and surveillance
- Intervention & evaluation



Institutional Strengths

Data and partnerships around social determinants of health

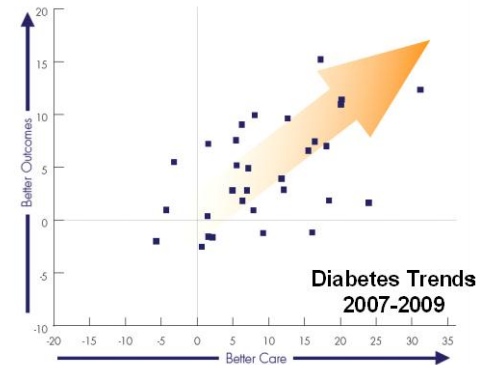
- Policy focused
- Engaged partners



Institutional Strengths

Quality Improvement & Clinical data

- Clinical quality improvement network
- Regional Extension Center (REC) signed up 1400+ providers for EHRs
- Practice-based research network
- Aggregation of clinical data
- Health Informatics and Comparative Effectiveness Research



PBRN Primary Care
Practice-Based Research Networks



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Environmental Factors

Significant changes in local employment environment due to aggressive employee wellness efforts elsewhere

Get healthy or pay higher insurance rates, Cleveland Clinic employees are told

Published: Sunday, February 12, 2012, 9:00 PM Updated: Tuesday



By Evelyn Theiss, The Plain Dealer

Follow



DRIVING EMPLOYEE WELLNESS

HOW CLEVELAND CLINIC CURTAILED EMPLOYEE HEALTH COSTS

Topics: [Employee Engagement](#), [Workforce](#), [Health and Wellness](#), [Benefits](#), [Labor Expense](#), [Cost Management](#), [Margin Performance](#), [Finance](#)

[Save in Library](#)

October 21, 2011



Hiring Non-Tobacco User Policy:

University Hospitals continually strives to provide the healthiest environment for our employees, physicians and patients. In keeping with our mission, effective January 1, 2012, UH will no longer hire external



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SWOT Analysis

Internal

External

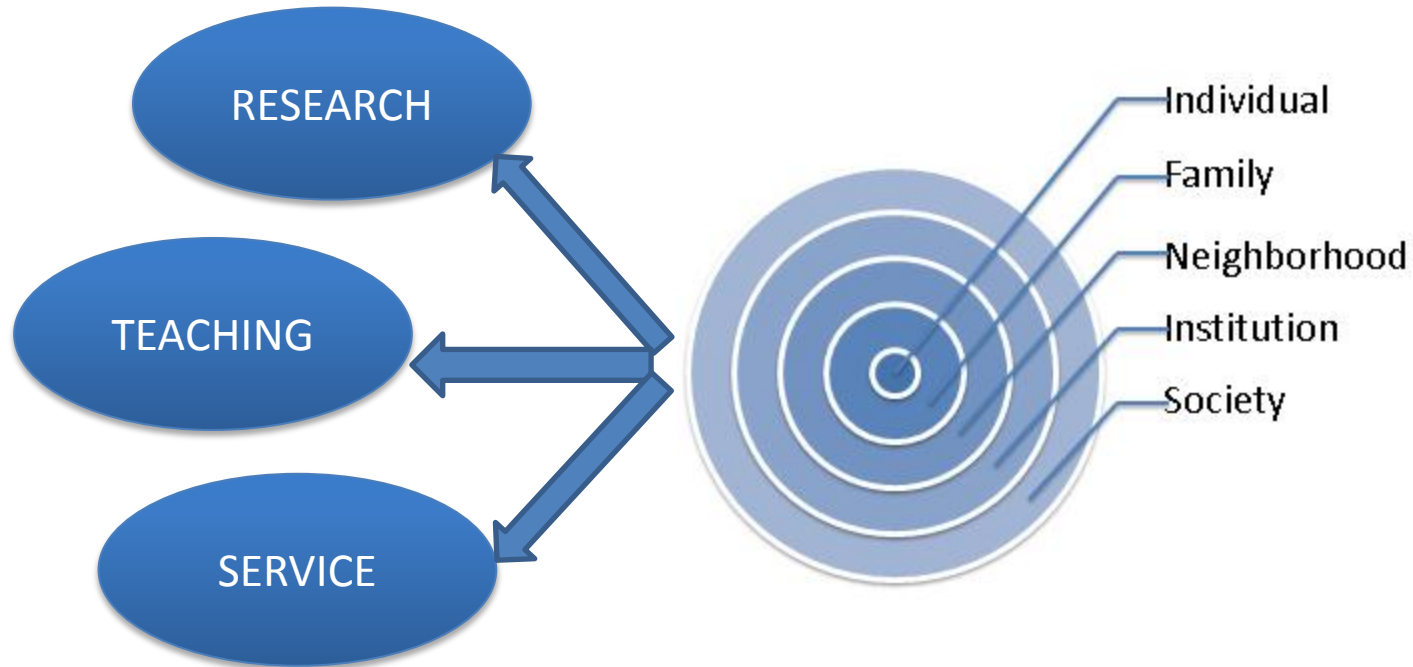


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Strategies to Increase Impact:

1) Infuse socio-ecologic awareness into research, teaching and service

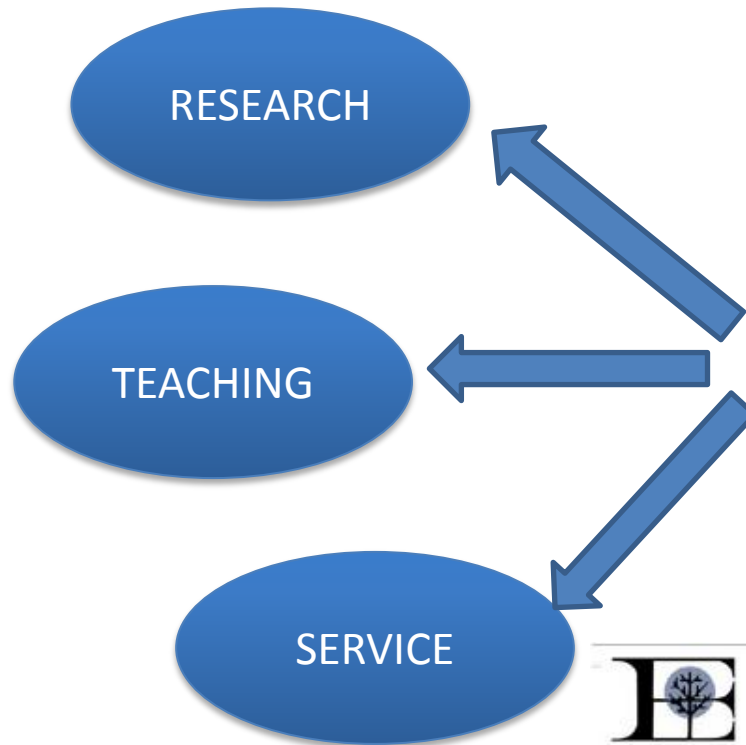


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Strategies to Increase Impact:

2) Engage Community Perspectives



Eliza Bryant Village

A Community of Caring – Rooted in Tradition



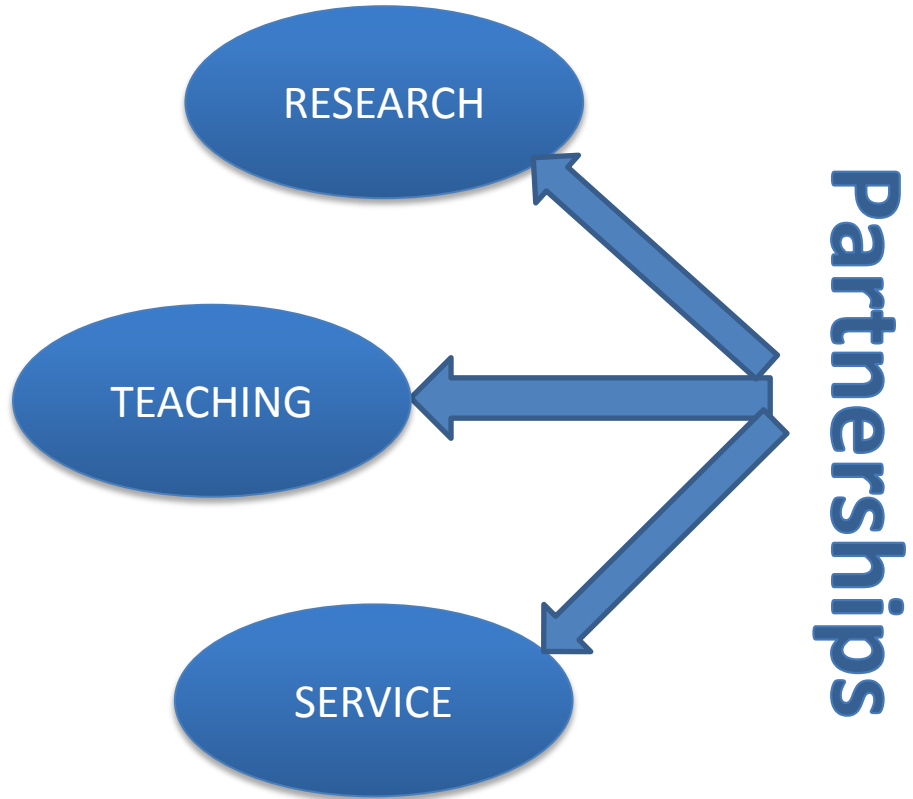
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Strategies to Increase Impact.

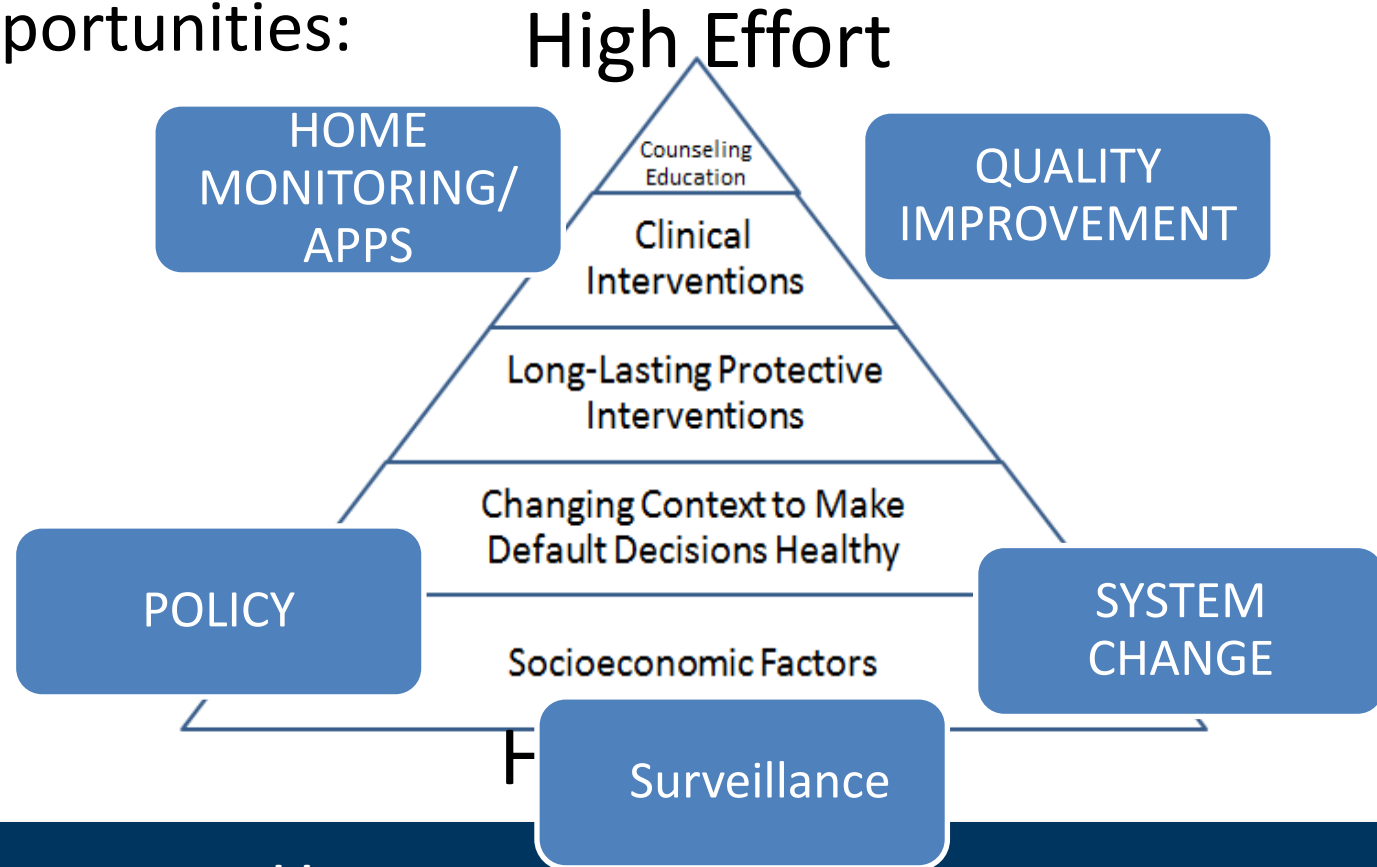


3) Create strategic partnerships



Strategies to Increase Impact:

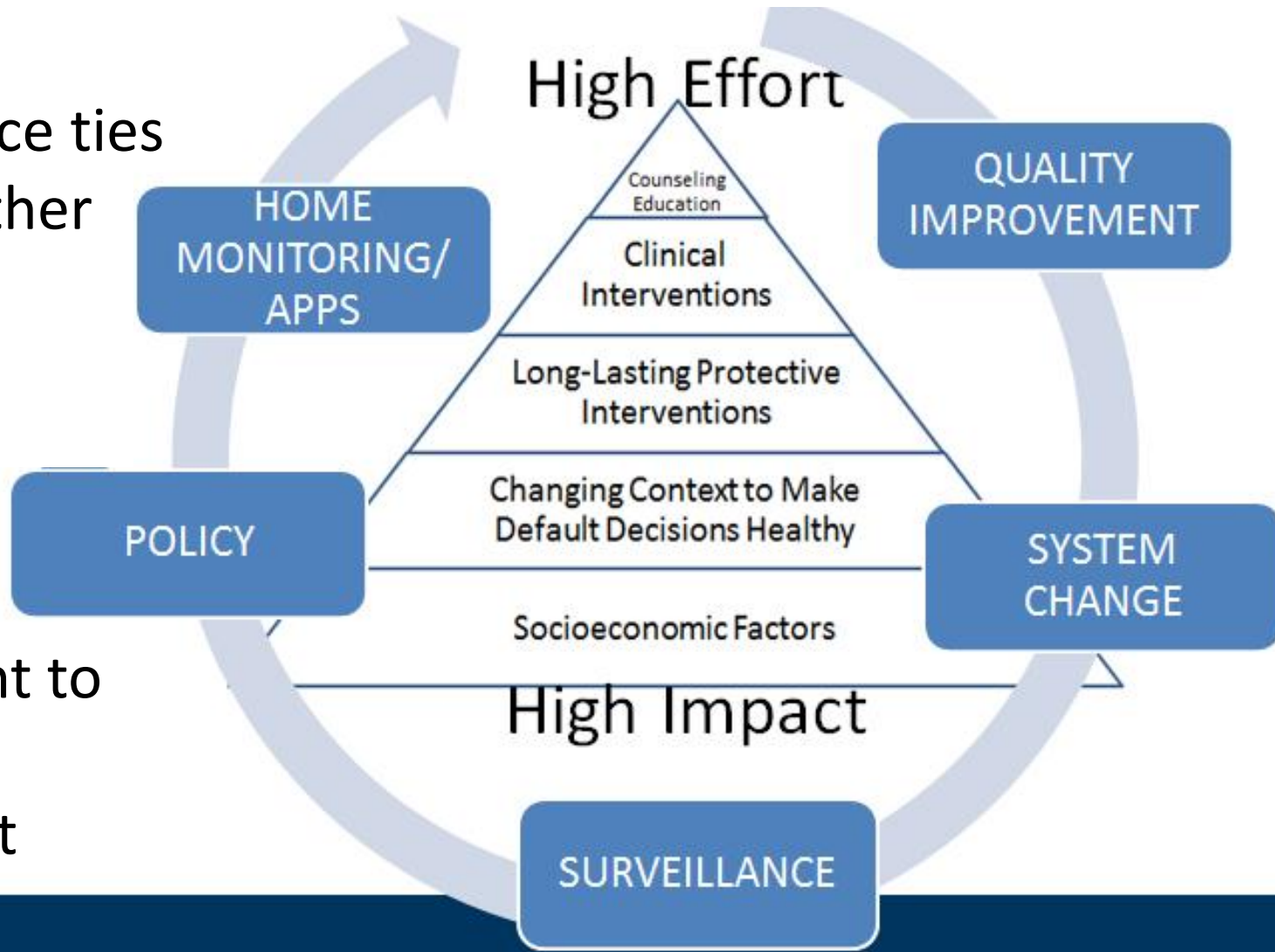
4) Focus resources on higher impact/
lower effort opportunities:



Health Impact Pyramid,
Frieden, 2010 AJPH

Strategies to Increase Impact:

- Surveillance ties it all together



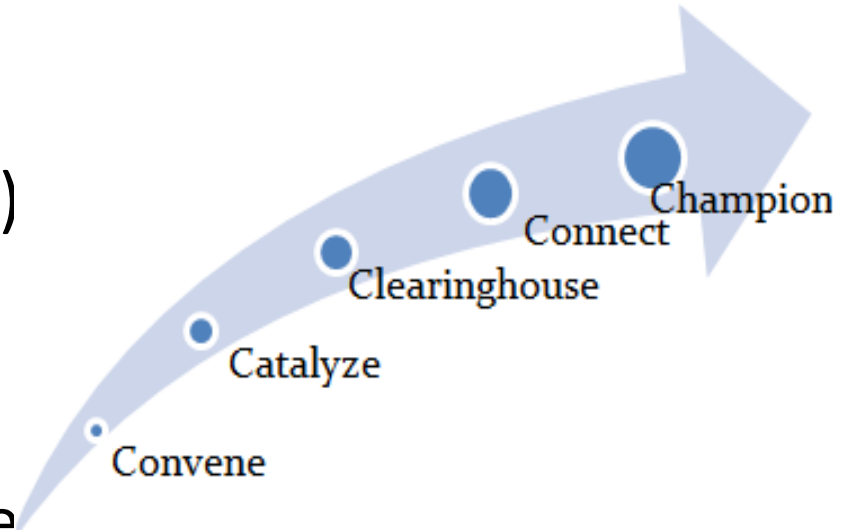
- If you want to change it, measure it





Initial Activities

- Coordinating Committee
- Internal Support
- Pilot Grant Program (CTSC)
- Partnership Showcases
- Program Inventory
- Campus Wellness Initiative
- County Health Dashboard



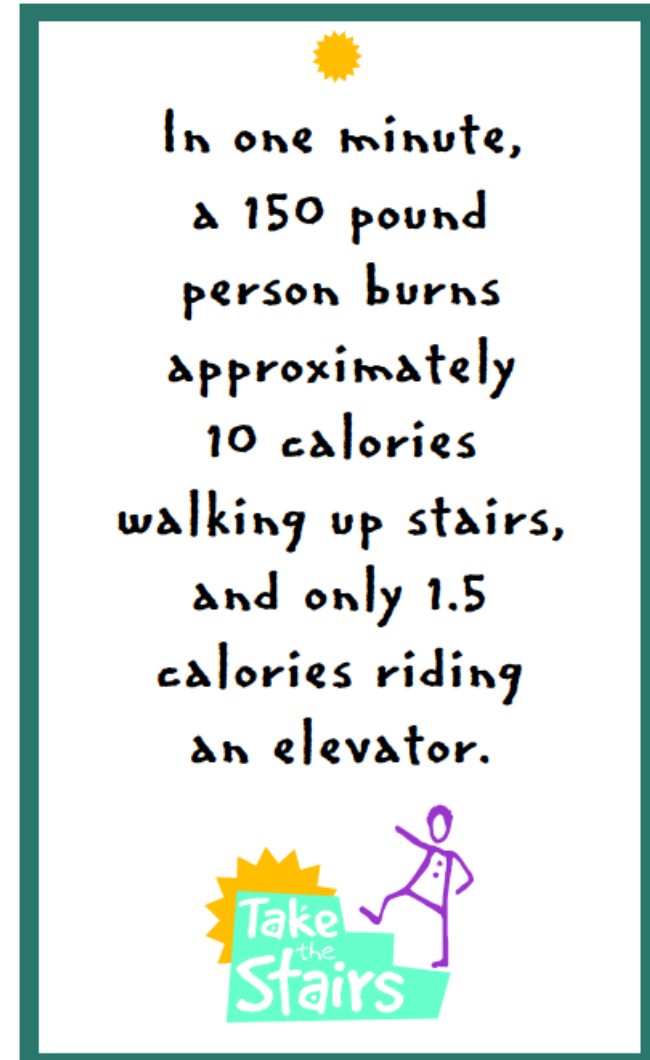
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Case Comprehensive Workplace Wellness

Rationale:

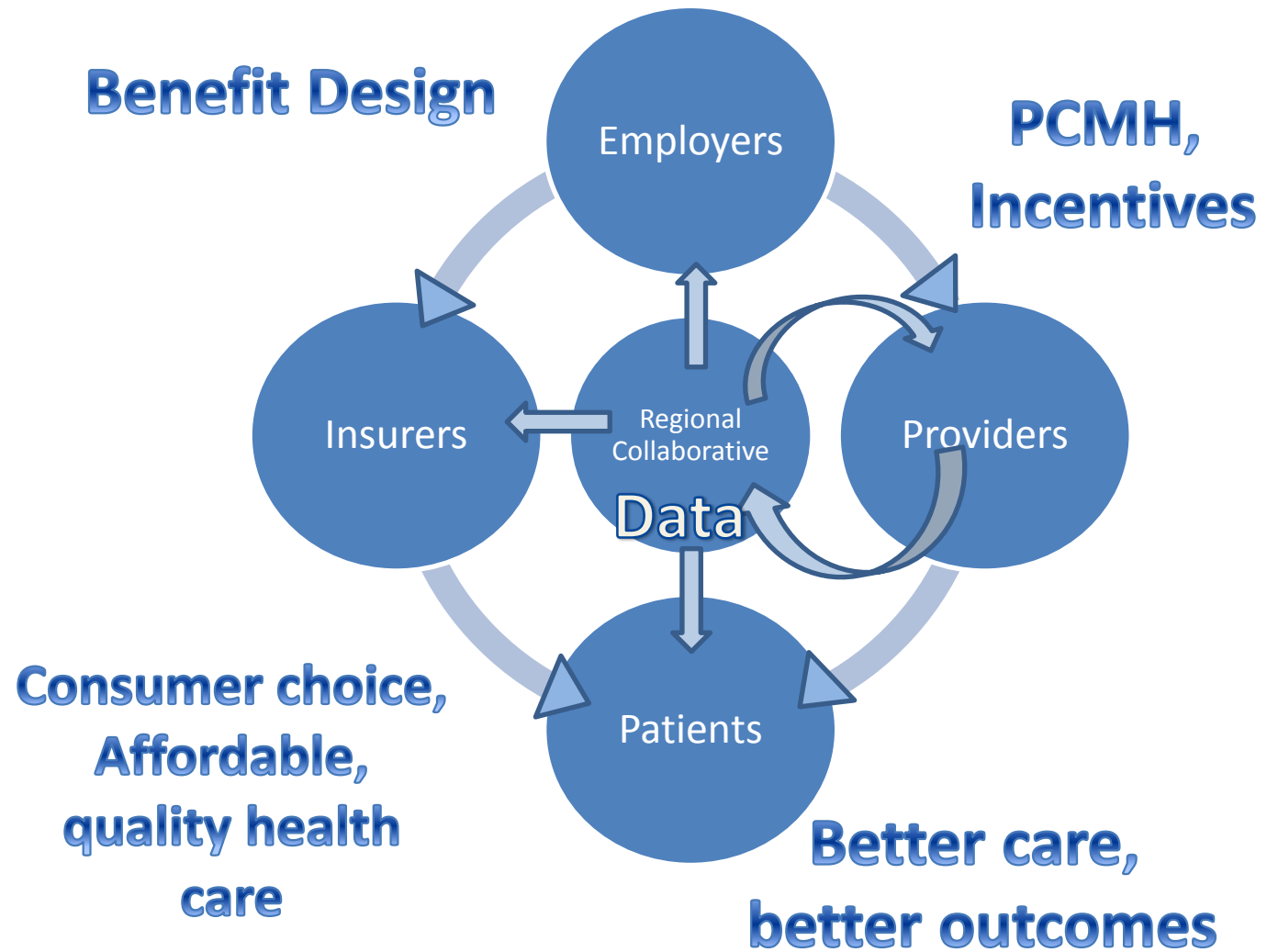
- Needed
- Possible
- Strategic
 - Impact on employees+ families+dependents
 - CWRU issues mirror community
 - Opportunity to connect with County initiative
 - Responsive to broader environmental trends



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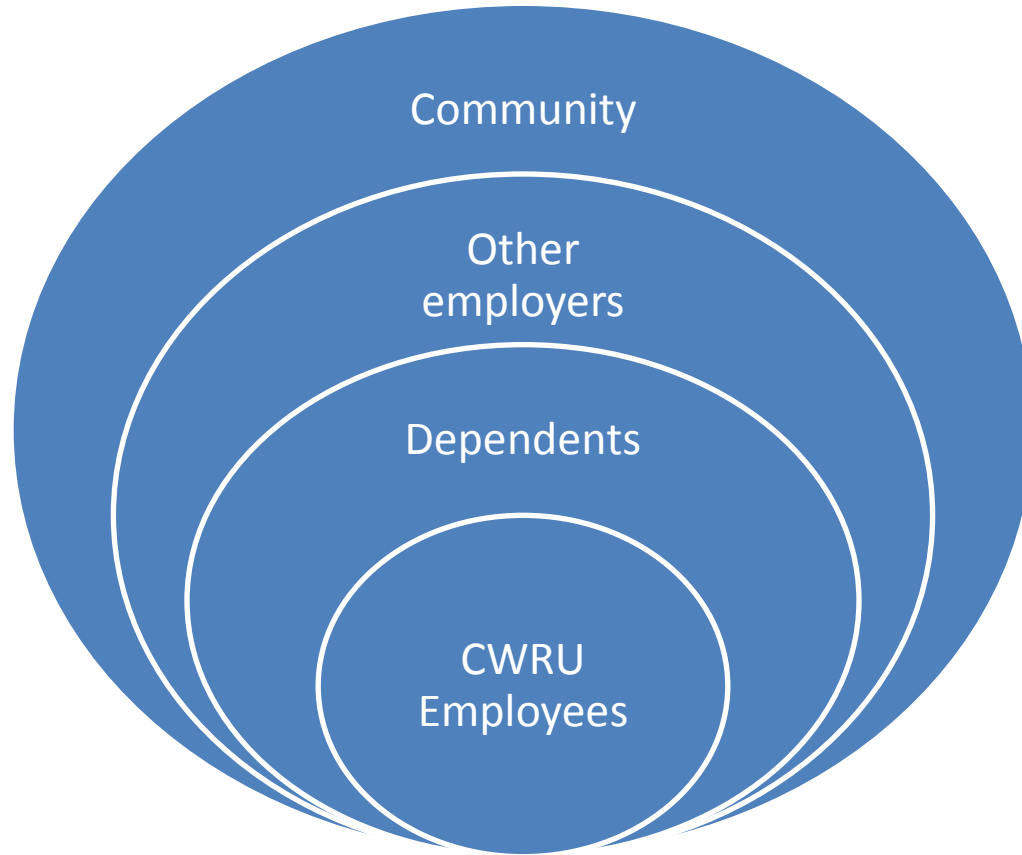
Why
worksite
wellness &
urban
health?



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Health Alliance Leverages Impact of CWRU Worksite Wellness



Key Strategic Partnership: County Health Alliance

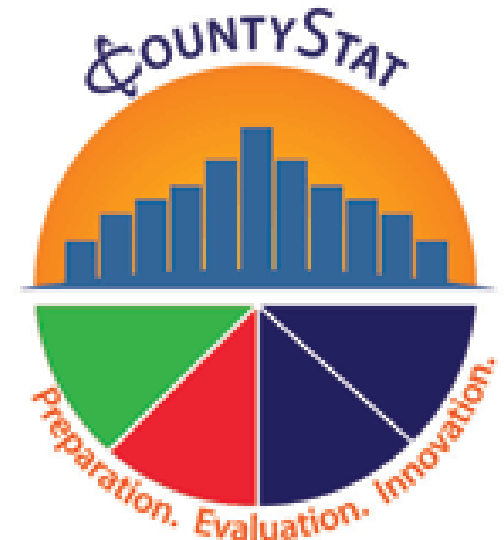
Cuyahoga County Health Alliance

- Address health improvement through regional collaboration, innovation and accountability
- Pilot in 10 communities
- Focus on worksite wellness (Borawski)
- Data Dashboard (Sheon)



Community Health Dashboard

- Began as effort to evaluate impact of Health Alliance on population health
- Connect with County Stat—performance measures



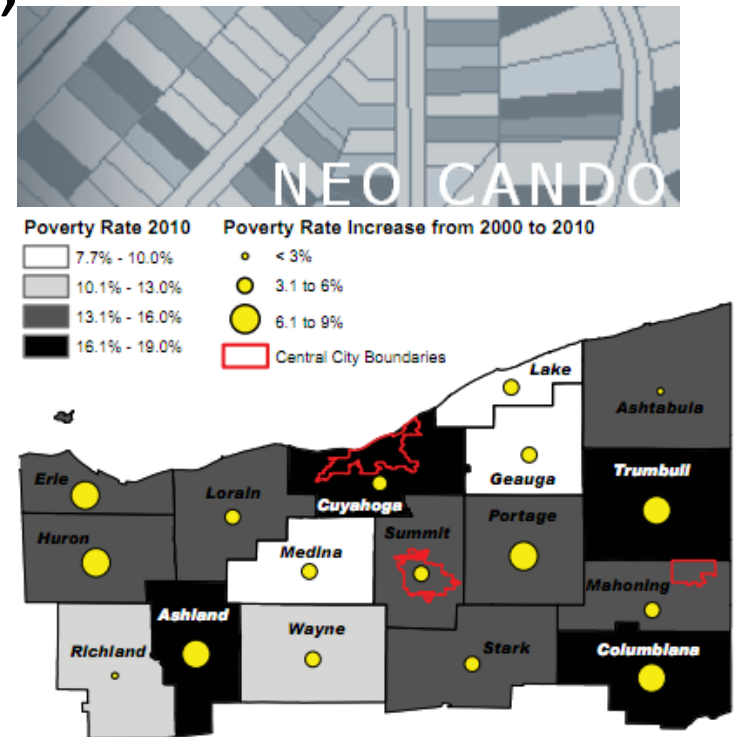
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County Health Dashboard



- Connects with existing data, and
- Connects with required community needs assessments



How Nonprofit Hospitals Must Prepare for IRS Changes

[Comment](#) [Email](#) [Print](#) [RSS](#) [ShareThis](#)

Karen Minich-Pourshadi, for HealthLeaders Media, January 31, 2011

It shouldn't come as any surprise to healthcare financial leaders that when the Patient Protection and Affordable Care Act passed last year, legislators managed to work in a few provisions about requirements for nonprofit hospitals, including a new requirement to have...



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What is HIP-Cuyahoga?

HIP-Cuyahoga is a collaborative, countywide planning process focused on developing a comprehensive guide for improving the health status & quality of life for all people who *live, work, learn, and play* in Cuyahoga County, OH



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What is HIP-Cuyahoga?

The Players...

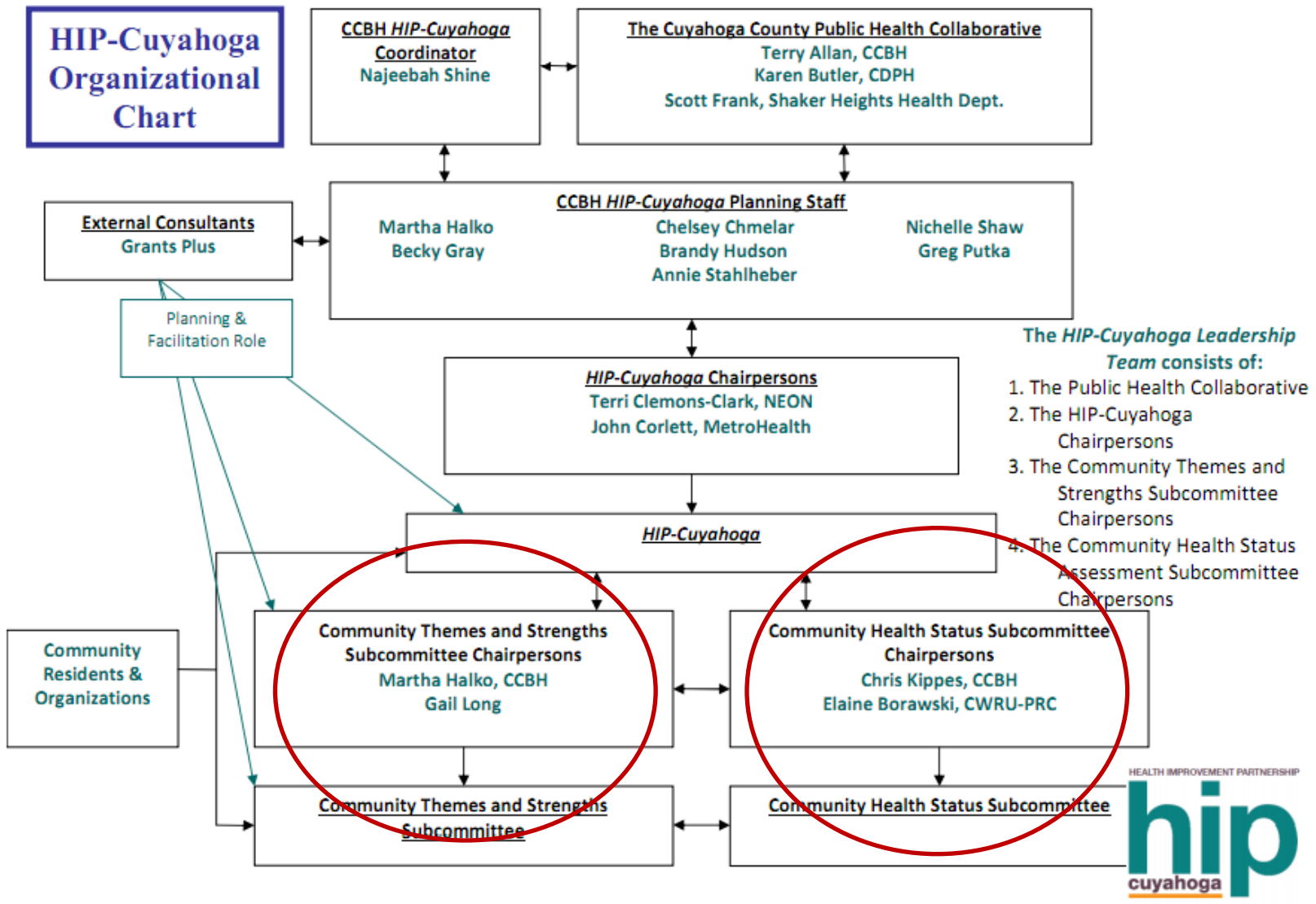
- ❑ Public Health Collaborative
- ❑ Core Team (Staff)
- ❑ Consultants
- ❑ Roughly 40 Community Partner Organizations



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HIP-Cuyahoga Organizational Chart



- The HIP-Cuyahoga Leadership Team consists of:**
1. The Public Health Collaborative
 2. The HIP-Cuyahoga Chairpersons
 3. The Community Themes and Strengths Subcommittee Chairpersons
 4. The Community Health Status Assessment Subcommittee Chairpersons

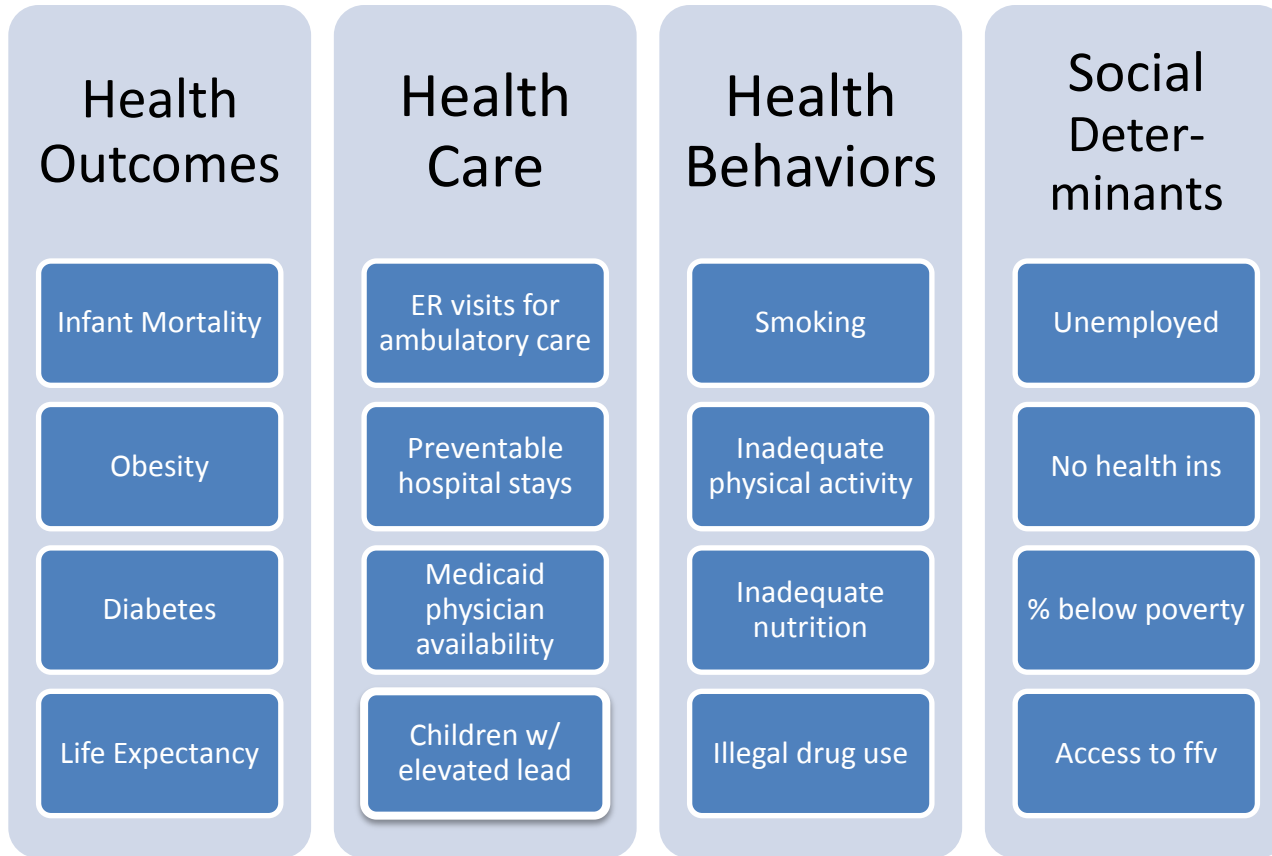


Preliminary Analysis for Cuyahoga County

- Top FIVE Health Issues
 1. Alcohol and Drug Abuse (44%)
 2. Overweight and obesity (41%)
 3. Mental health issues (31%)
 4. Violence (30%)
 5. Aging Issues (29%)
 5. Tobacco use (29%)

Trapnl, HIP-C presentation 3/12

CHD: What it is



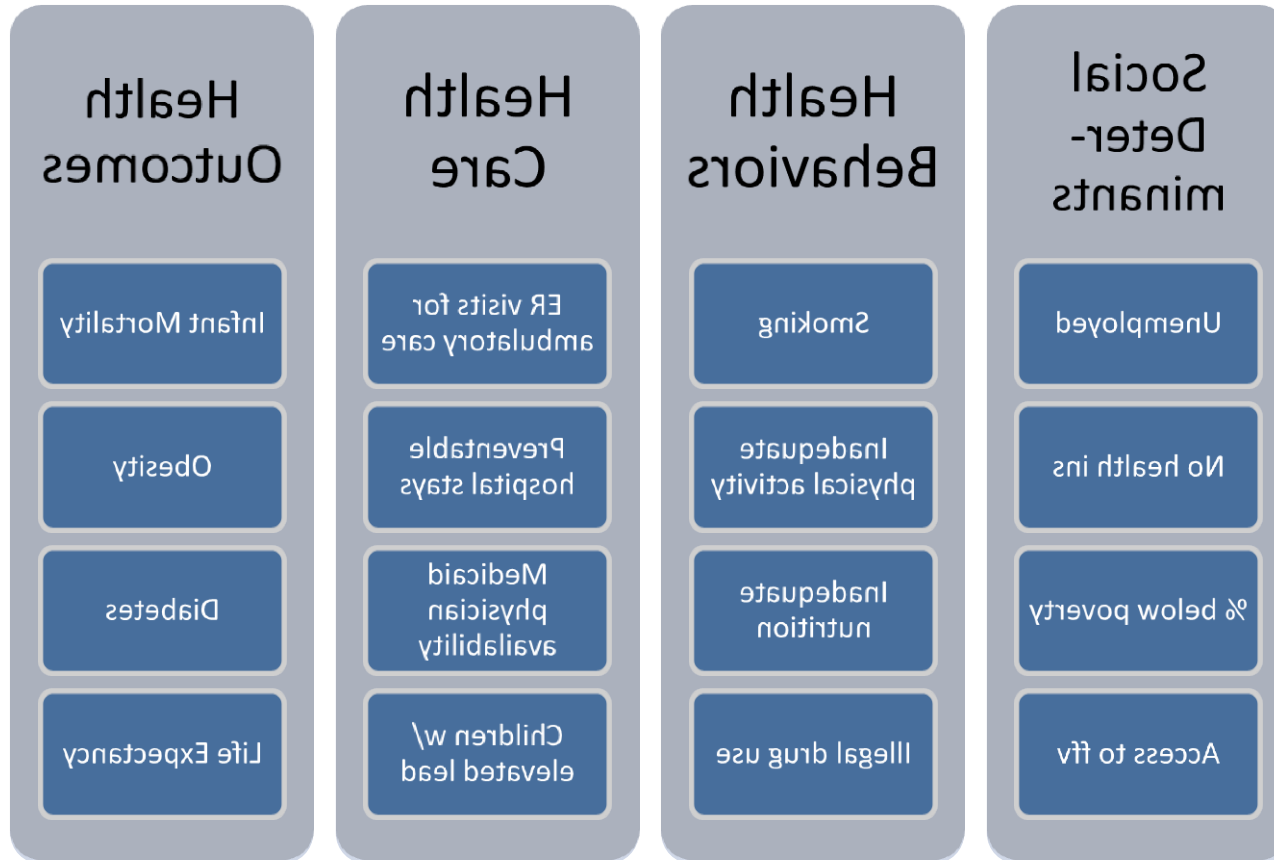
Main features

- Indicators prioritized by stakeholders
- Based on standard measures
 - County Health Rankings
- Routine updates
- Some demographic & geographic breakdowns
- Benchmarked
 - Healthy People 2020

| Indicator | Potential Data Source (e.g. URL, contact person, etc...) | Smallest Geographic Level Available |
|---|--|-------------------------------------|
| Average life expectancy | www.countyhealthrankings.org | county |
| Medicaid physician availability: ratio | HRSA - HPSAs, MUAs | census tract |
| Access to healthy food | BRFSS through PRCN | |
| Proportion of persons satisfied with the quality of life in the community | BRFSS through PRCN | |



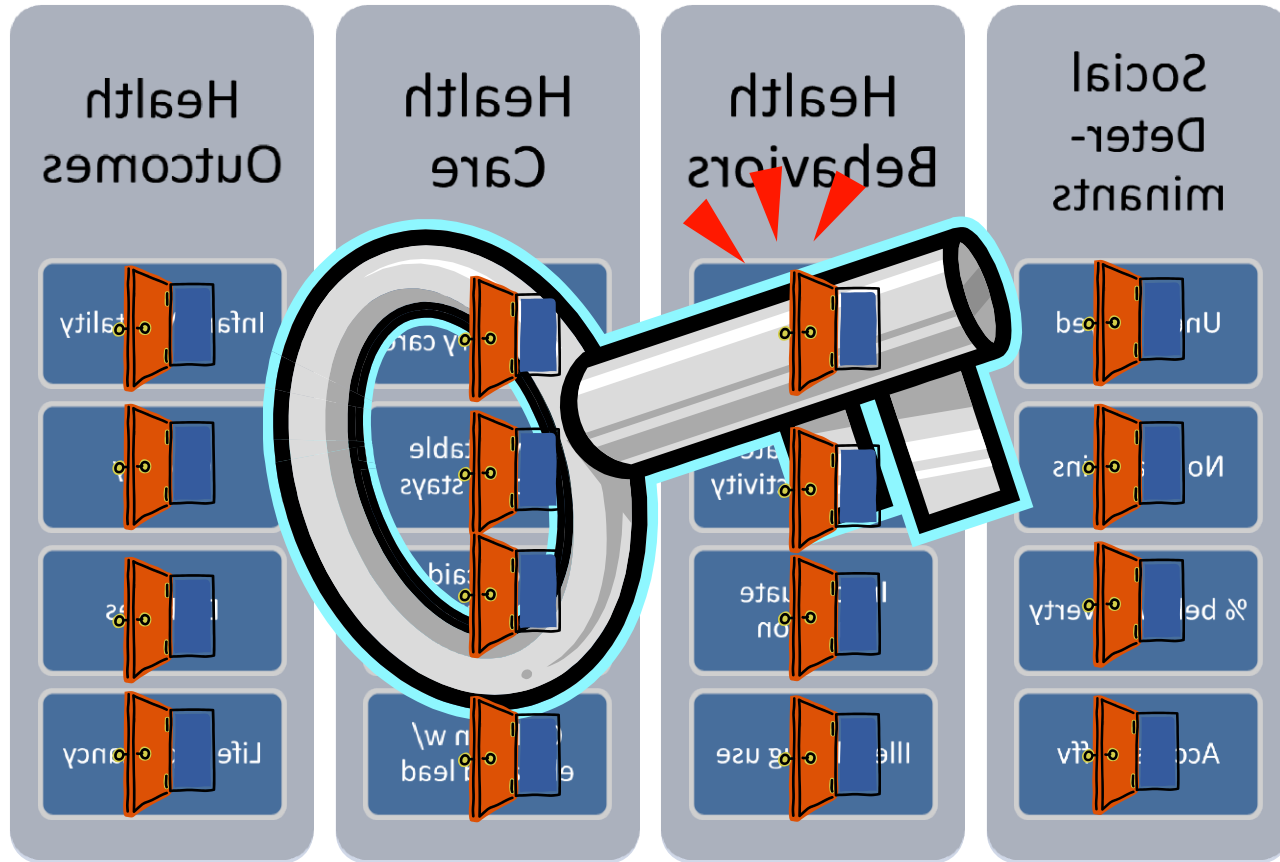
CHD: How it works



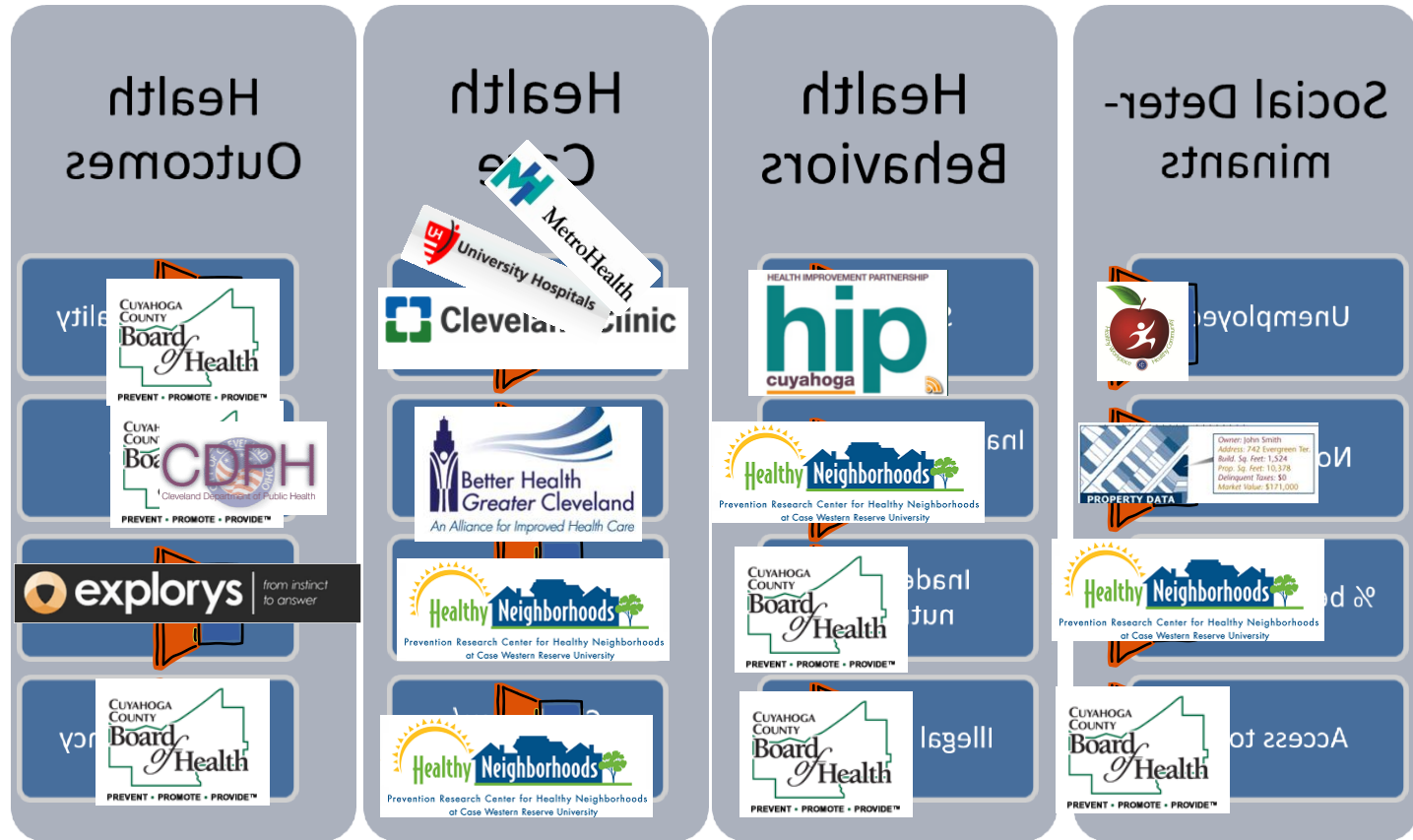
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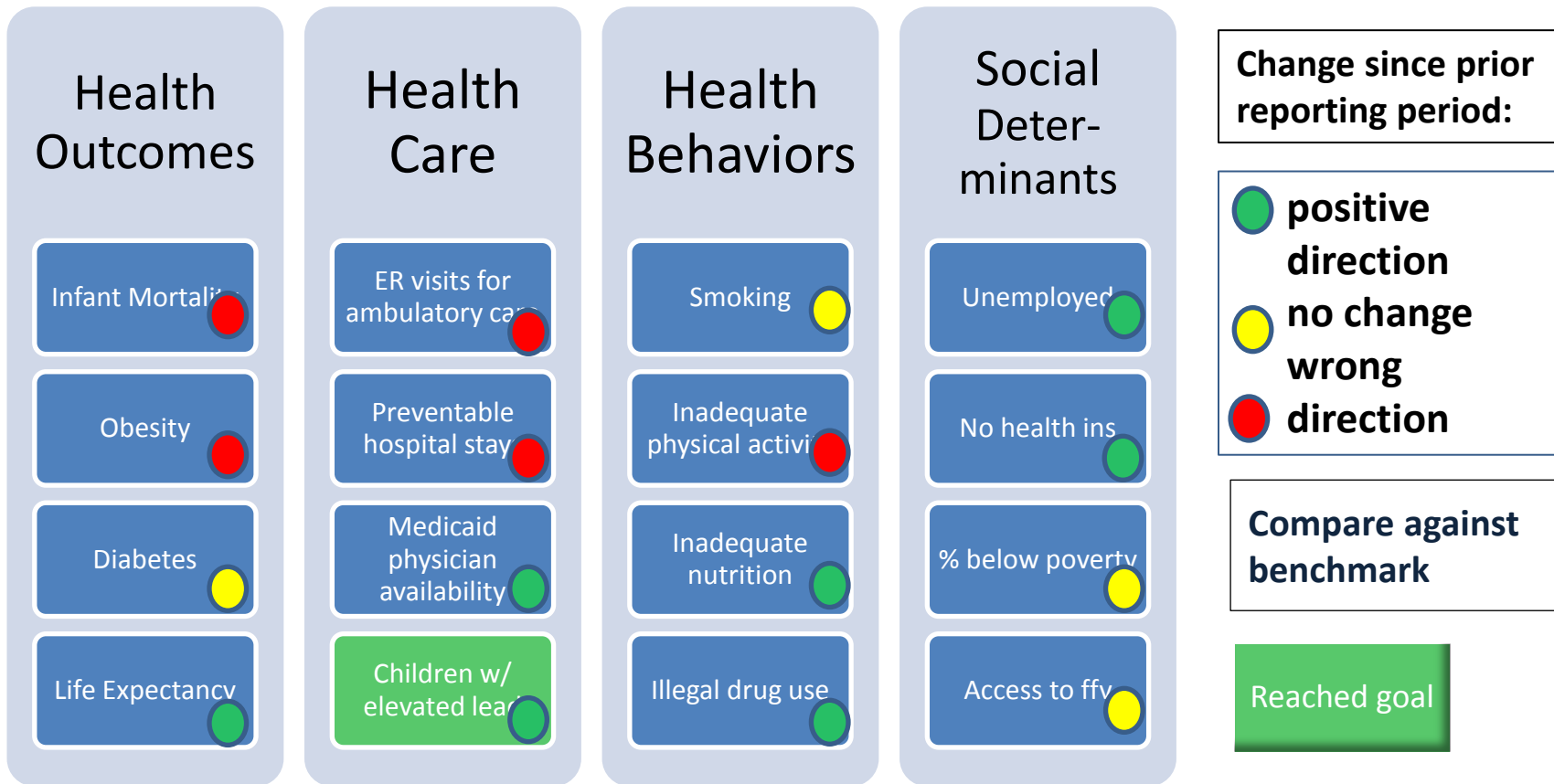
CHD: How it works



CHD: Where data come from



CHD: How it's used



Modeled on Existing Dashboards

- Include disparities and trends http://www.ewashtenaw.org/government/departments/public_health/health-promotion/hip
- Include community resources <http://www.michigan.gov/midashboard>
- Michigan Government <http://www.healthysonoma.org/>
- Healthy Communities Network <http://www.healthycommunitiesinstitute.com/>
- HIP-Washtenaw <http://www.whatcomcounts.org/whatcom/index.php>



Questions for discussion

- What are the biggest cost drivers in inpatient and outpatient care?
 - Of public funds?
 - What are the best indicators?
 - Health outcomes, treatment, costs
 - What are the best data sources?
- Are there indicators of health care quality to include?
- How to show we're making a difference?



Deeper Dive on Clinical Data

- What are the biggest cost drivers in inpatient and outpatient care?
 - What are the best indicators?
 - Health outcomes, treatment, costs, appropriate use
 - What data are already being tracked?
- Are there indicators of health care quality to include?
- How to show we're making a difference?

County:

- Crawford
- Cuyahoga**
- Darke
- Defiance
- Delaware
- Erie

Year:

- 2008**
- 2007
- 2006
- 2005



Ohio Live Births: Trimester of Entry into Prenatal Care
By Year, County

| | | 2008 | |
|-----------------|-------------------------|-------|------|
| | | Count | % |
| CUYAHOGA | First Trimester | 8,978 | 65.9 |
| | Second Trimester | 3,513 | 25.8 |
| | Third Trimester | 935 | 6.9 |
| | None | 193 | 1.4 |
| | | 2,630 | 16.2 |

Ohio.gov

Department of Health



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Thank You!

Join Data Dashboard Steering Group!



Urban Health Initiative

CWRU SOM

Office: 216-245-CWRU (2978)

urbanhealth@case.edu

Urbanhealth.case.edu



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EXTRA SLIDES FOLLOW

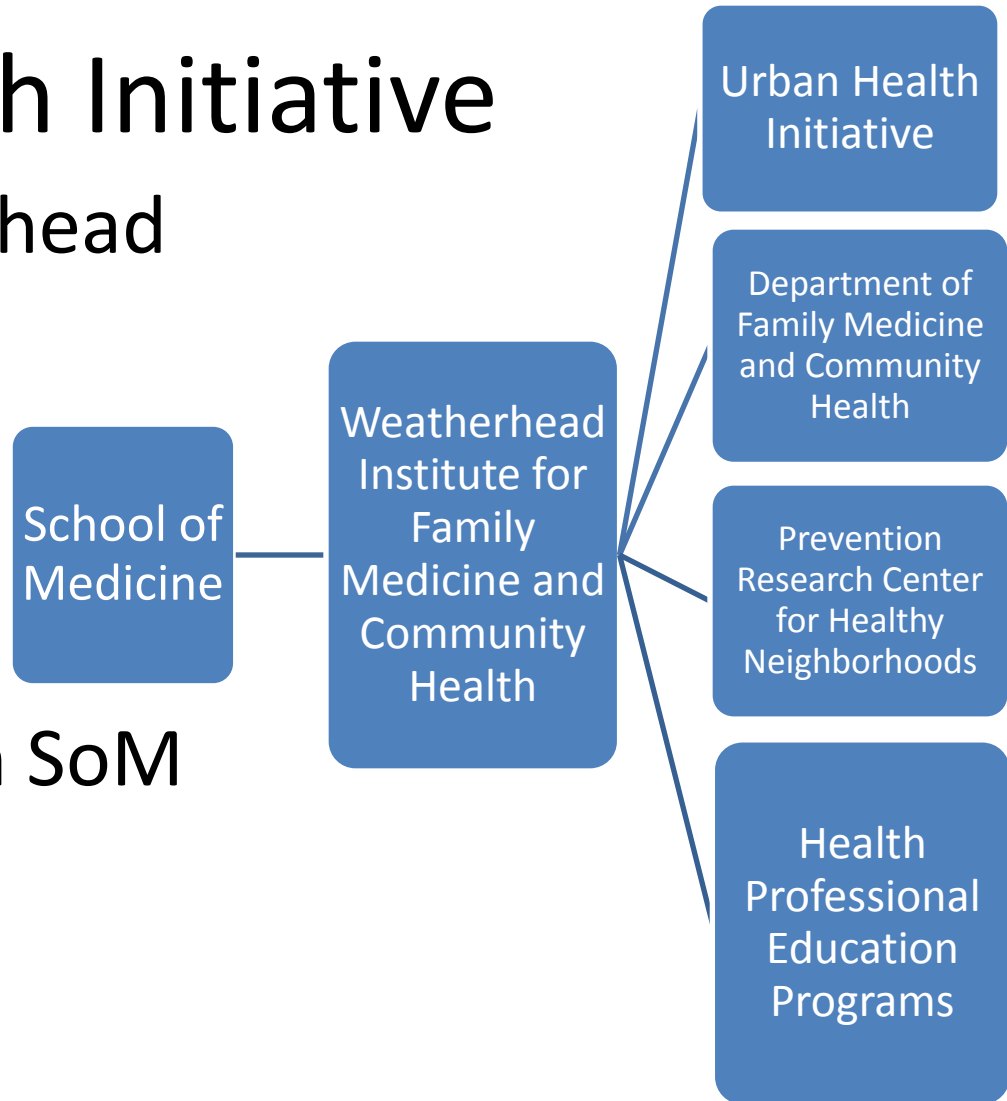


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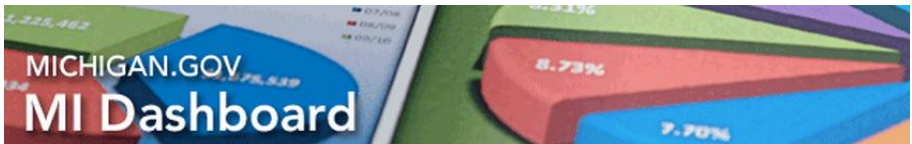
Urban Health Initiative

- Part of Weatherhead Institute
- Coordinating, not managing programs
- Established with SoM funding



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- MI Dashboard
- Education Dashboard
- Health & Wellness Dashboard
- Infrastructure Dashboard
- Talent Dashboard
- Financial Health



Measuring Michigan's Performance

Performance Key:

- Performance improving
- Performance staying about the same
- Performance declining

| Access to Health Care | | | |
|--|--------|----------|----------|
| | Prior* | Current* | Progress |
| Uninsured adults | 12.7% | 13% | |
| Primary care physicians (per 100,000 population) | 115.2 | 117.8 | |
| Veterans enrolled in Veterans Administration health care | 26.5% | 30.1% | |

| Health Indicators | | | |
|--|-------|---------|----------|
| | Prior | Current | Progress |
| Average life expectancy at birth -- Leading causes of death | 77.3 | 77.4 | |
| Preventable hospital stays (per 1000 Medicare enrollees) | 73.4 | 74.2 | |
| Infant mortality (per 1,000 births) | 7.6 | 7.7 | |
| Attempted Suicide and self-inflicted injury | 5,288 | 5,483 | |

| Healthy Communities | | | |
|--|-----------|-----------|----------|
| | Prior | Current | Progress |
| Percentage of schools selling healthy foods | - | 33% | |
| Food stamp sales at Michigan's farmers markets | \$297,078 | \$705,969 | |

Health Behaviors

| | Prior | Current | Progress |
|-----------------------------------|-------|---------|----------|
| Obesity in the population (adult) | 30.3% | 31.7% | |



Obesity in the population (schoolers)

Sufficient adult physical
Adequate daily consumption
fruits and vegetables

Routine checkups in past
Recent dental visits

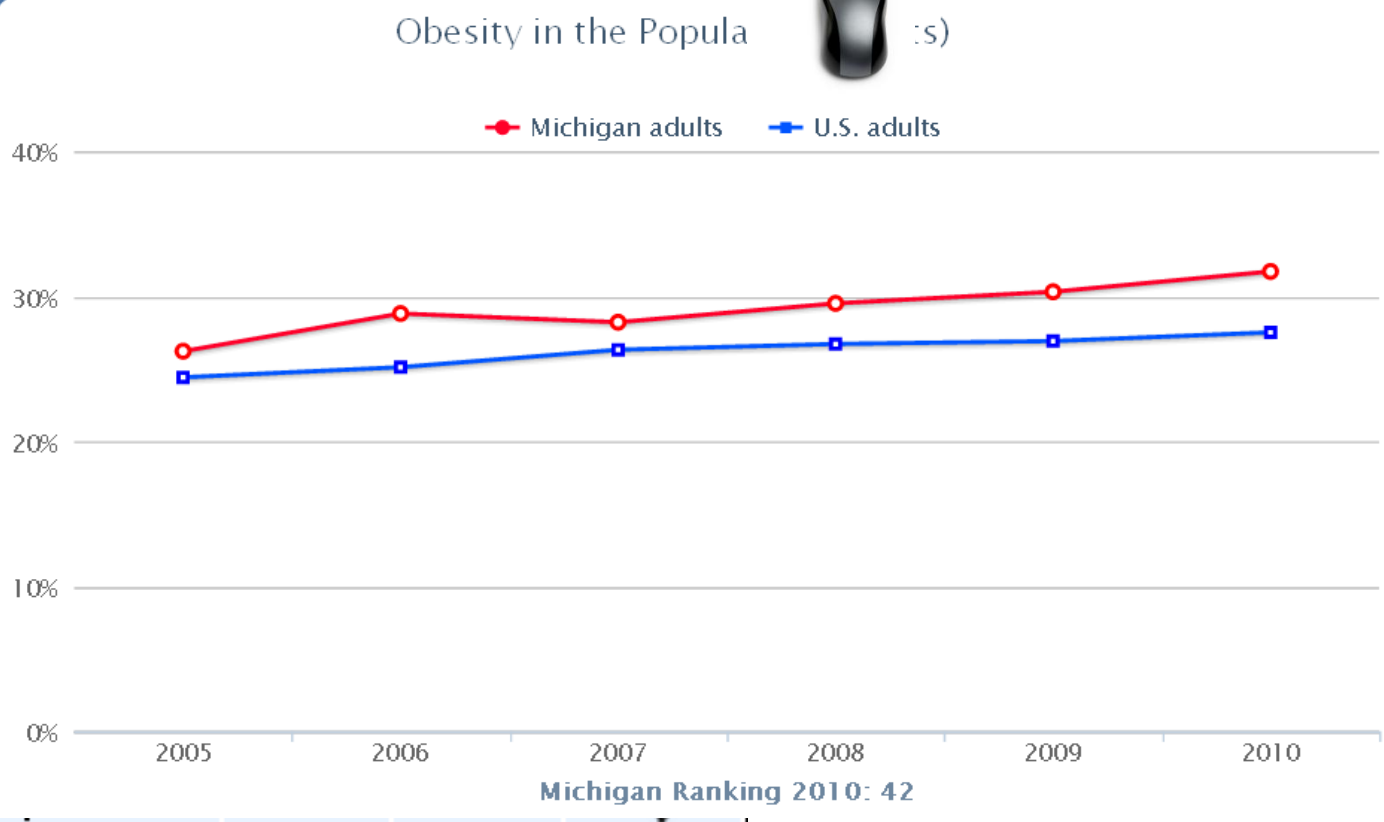
Childhood immunization

Teen birth rate (births per
women ages 15-19)

Adult smokers

Excessive alcohol consumption

Sexually transmitted disease -
chlamydia (per 100,000
population)



| | | |
|-----|-----|--|
| 483 | 504 | |
|-----|-----|--|



- Considering off-the-shelf software
- Standard metrics
- Progress toward goals

| Health | | |
|---|-------------------------|--|
| Access to Health Services | | |
| Adults with Health Insurance | Comparison: WA Counties | |
| Adults with Personal Healthcare Provider | Comparison: WA Counties | |
| Adults with Unmet Medical Need | Comparison: WA Counties | |
| Physicians per 1000 Population | Comparison: Prior Value | |
| Cancer | | |
| All Cancer Incidence Rate | Comparison: WA Counties | |
| Bladder Cancer Incidence Rate | Comparison: WA counties | |
| Breast Cancer Incidence Rate | Comparison: WA Counties | |
| Cervical Cancer Incidence Rate | Comparison: WA counties | |
| Colon Cancer Screening | Comparison: WA Counties | |
| Colorectal Cancer Incidence Rate | Comparison: WA counties | |
| Liver and Bile Duct Cancer Incidence Rate | Comparison: WA counties | |
| Lung and Bronchus Cancer Incidence Rate | Comparison: WA Counties | |
| Mammogram History | Comparison: WA Counties | |
| Melanoma Incidence Rate | Comparison: WA counties | |
| Non-Hodgkin Lymphoma Incidence Rate | Comparison: WA counties | |
| Oral Cavity and Pharynx Cancer Incidence Rate | Comparison: WA counties | |
| Pap Test History | Comparison: WA Counties | |
| Prostate Cancer Incidence Rate | Comparison: WA Counties | |
| Diabetes | | |
| Adults with Diabetes | Comparison: WA Counties | |
| Age-Adjusted Death Rate due to Diabetes | Comparison: WA Counties | |
| Exercise, Nutrition, & Weight | | |
| 10th Graders who are Overweight | Comparison: WA Counties | |

[Employment](#)
NEW

[High School](#)
Degree

[Oral Cancer](#)
Incidence
Rate

[See all indicators](#)

Did You Know?

According to the Healthy Youth Survey in 2006 in Whatcom County, 16.4% of 8th graders had consumed alcohol in the previous 30 days.

Air Quality Index

Bellingham

Current Conditions

Good

Pollutant: Particles (PM2.5)

Observed at:
03/01/12 5:00 PST

[Air quality indicator](#)
[Detailed conditions](#)

Provided by

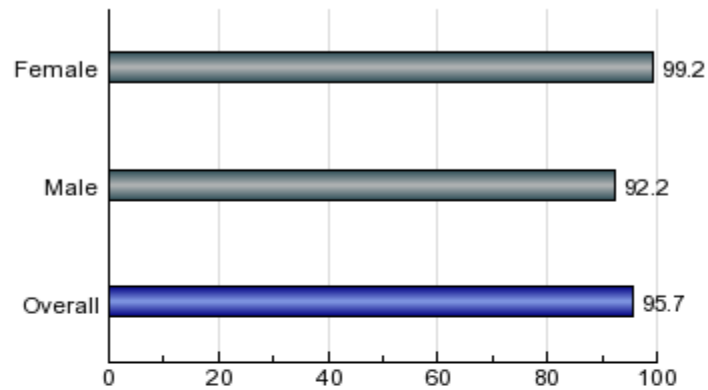
Quotes

"This is a valuable community tool. This website can present information in a way that engages people and can inspire them to informed action."

-- Regina Delahunt, Director,
Whatcom County Health
Department (2006)

- Disparities
- Promising practices

Children with Health Insurance by Gender



Relay for Life - American Cancer Society

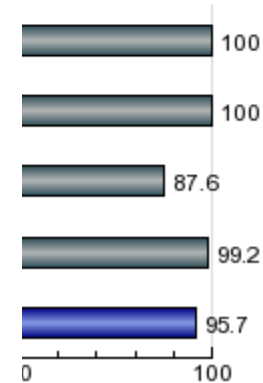
Category Health / Cancer

Contact Website: <http://relay.acsevents.org/site/TR/RelayForLife/RelayForL...>

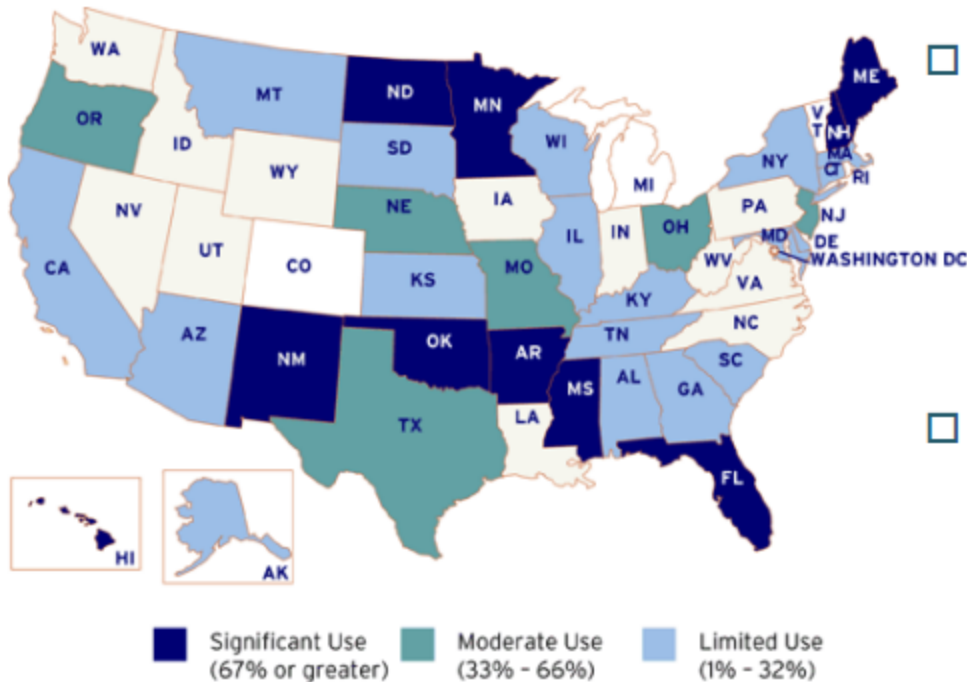
Organization Description Relay for Life - 21 years of this race in our community; Relay For Life® signature event is a fun-filled overnight experience designed to bring together those who have been touched by cancer. People from within the community gather to celebrate survivors, remember those lost to cancer, and to fight back against this disease. Participants raise money and awareness to support the American Cancer Society in its lifesaving mission to eliminate cancer as a major health issue. Teams of people gather at schools, fairgrounds, or parks and take turns walking or running laps. The events are held overnight to represent the fact that cancer never sleeps. Through the survivors' lap and the luminaria ceremony, we honor the people who have faced cancer first hand, and we remember those who have been lost to this disease.

Return to Local Resources Home

by Race/Ethnicity



The Framework - MAPP



- MAPP has been identified as a best practice for strategic community health improvement planning efforts
- Hundreds of communities across the U.S. have used this model since its introduction in 2001

<http://www.naccho.org/topics/infrastructure/MAPP/map/index.cfm>

Accomplishments to Date (cont'd)

- Initial prioritization of health indicators (CHSA)
- Development of a quality of life (QOL) survey for community residents (CTSA)
 - Preliminary data just reported

hip cuyahoga

Cuyahoga County Community Survey

For each question please select the answer option of your choice by completely filling in the circle to the left, or neatly printing in the boxes.

Example: My Answer My Answer My Answer

7. Do you live or work in Cuyahoga County?
 Yes, Live Yes, Live and Work No

8. City and/or Neighborhood you live in (please print):

9. Zip code where you live: [] [] [] [] [] [] [] [] [] []

10. How long have you lived in your community?
 Less than 2 years 2-5 years 6-10 years More than 10 years

11. For the next set of statements, please think about your life in the community where you live. Please select how much you agree or disagree with the following statements.

12. I am satisfied with the quality of life in my community. (Consider your sense of safety, well-being, participation in community life)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

13. I am satisfied with the health care in my community. (Consider access, cost, availability, variety, options in health care)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

14. My community is a good place to grow old. (Consider elder-friendly housing, transportation to medical services, churches, elderly day care, social support for the elderly living alone, meals on wheels)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

15. My community is a good place to raise children. (Consider school quality, day care, after school programs, recreation)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

16. There is economic opportunity in my community. (Consider locally owned and operated businesses, jobs with career growth, job training/higher education opportunities, affordable housing, reasonable commute)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

17. My community is a safe place to live. (Consider safety in the neighborhood, the workplace, schools, playgrounds, stores, neighbors know and trust one another and look out for one another)
 Strongly Agree Agree Neutral Disagree Strongly Disagree

18. In general, residents in my community think that they can make it a better place to live.
 Strongly Agree Agree Neutral Disagree Strongly Disagree

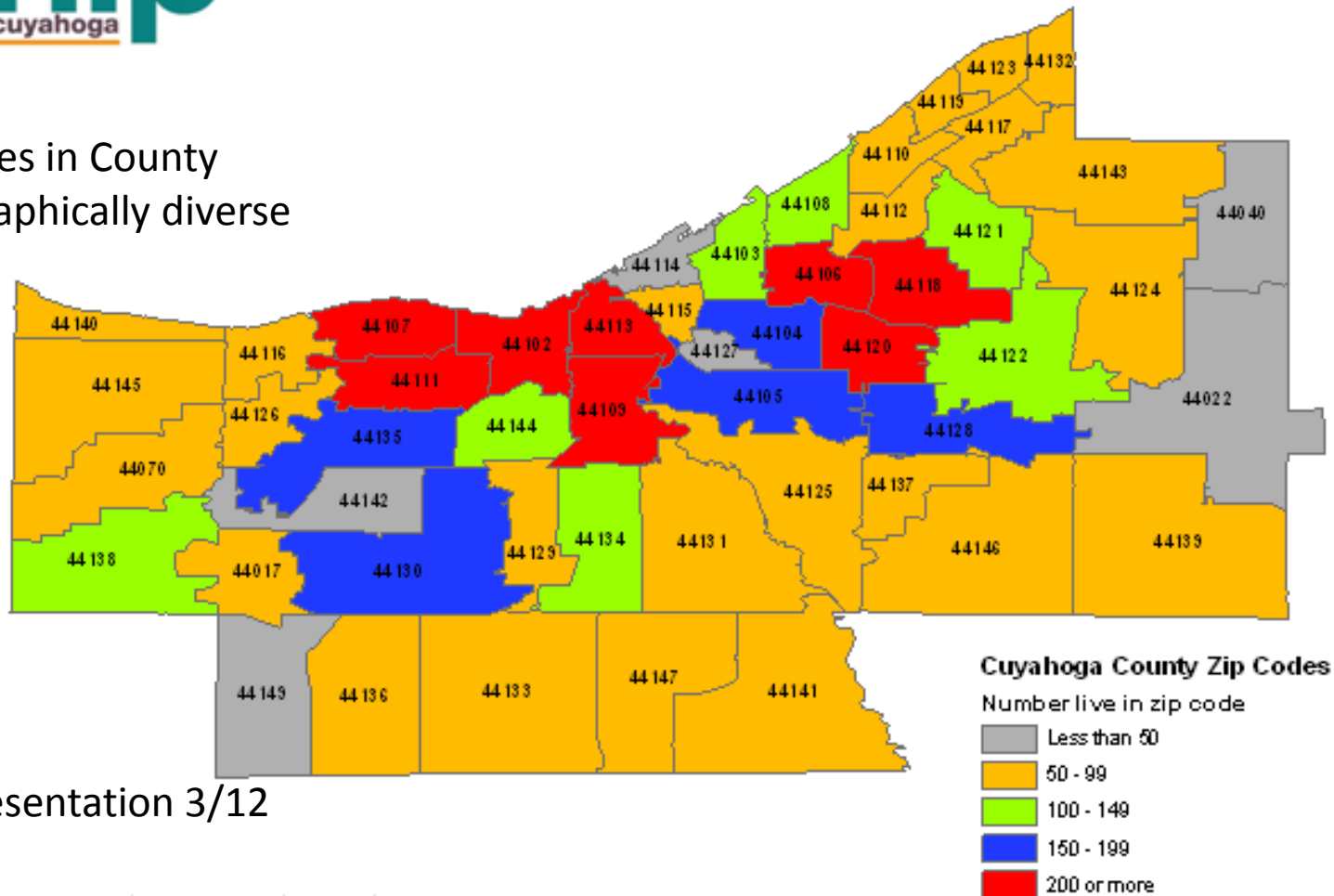
19. In general, community members and groups have the opportunity to contribute to improving the quality of life in my community.
 Strongly Agree Agree Neutral Disagree Strongly Disagree

HEALTH IMPROVEMENT PARTNERSHIP

hip cuyahoga

Final HIP-C Survey Responses

5,706 responses in County
 Socio-demographically diverse



Trapnl, HIP-C presentation 3/12

Created by Prevention Research Center for Healthy Neighborhoods, February 28, 2012



| Rank | What are the strengths of your community? | What could improve your community? |
|------|---|---|
| 1 | Responsive police, fire and rescue; Access to parks and recreation (44%) | Good job opportunities (52%) |
| 2 | | Quality education and schools (37%) |
| 3 | Walkable, bikeable community (41%) | Safe neighborhoods (35%) |
| 4 | Affordable Housing (32%) | Programs, activities, support for youth in non-school hours (35%) |
| 5 | Quality education and schools (31%) | Low violence (27%) |

Trapnl, HIP-C presentation 3/12

