



UNIVERSITY OF WISCONSIN

Population Health Institute

*Translating Research into Policy and Practice*

# WHO CAN OR WILL BE THE POPULATION HEALTH INTEGRATOR?

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School of Medicine and Public Health

IHI Triple Aim Toronto Ontario  
February 11, 2010



# SUMMARY OF PRESENTATION

- Triple Aim medical care reforms of improving the experience and reducing percapita costs of care are essential and challenging themselves
- They alone will not produce optimal population health outcomes



- The third aim of improving population health is even more challenging because it requires a Balanced Investment Portfolio across the other determinants of health like education, income, behaviors, and the physical environment



- Most of these are outside of traditional medical care control
- It is likely to require a broad multi-sectoral integrator with appropriate financial incentives and resources
- Can Triple Aim organizations be or support this integrator?



The verdict is out but  
the need is substantial  
and the opportunity  
great for promising  
practices and  
leadership.....



# So What is Population Health ?

“The health outcomes of a group of individuals, including the distribution of such outcomes within the group”

Kindig and Stoddart, AJPH, 2003



**OUTCOMES**

**DETERMINANTS**

**Mean**

**Disparity**

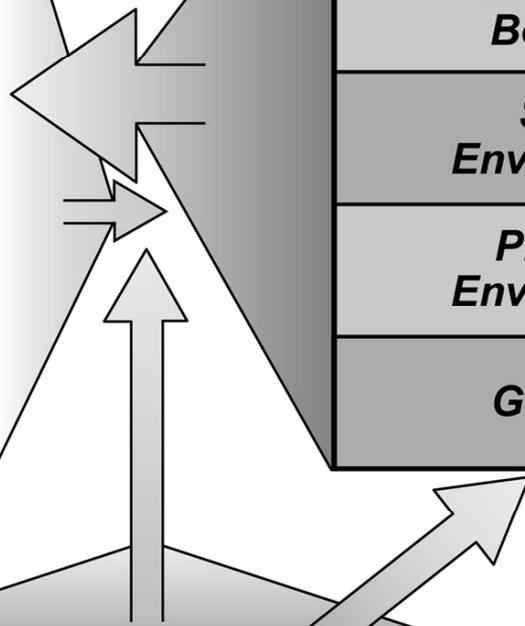
*Mortality*

*Health  
Related  
Quality  
of Life*

<i>Mortality</i>	<i>Race/Ethnicity</i>
	<i>SES</i>
	<i>Geography</i>
	<i>Gender</i>
<i>Health Related Quality of Life</i>	<i>Race/Ethnicity</i>
	<i>SES</i>
	<i>Geography</i>
	<i>Gender</i>

<i>Medical Care</i>
<i>Individual Behavior</i>
<i>Social Environment</i>
<i>Physical Environment</i>
<i>Genetics</i>

**SPECIFIC  
POLICIES AND  
INTERVENTIONS**



“ How much, then, should go for medical care and how much for other programs affecting health, such as pollution control, fluoridation of water, accident prevention and the like.

There is no simple answer, partly because the question has rarely been explicitly asked. ”

Victor Fuchs, 1974



# Balance of Determinants: Medical Care

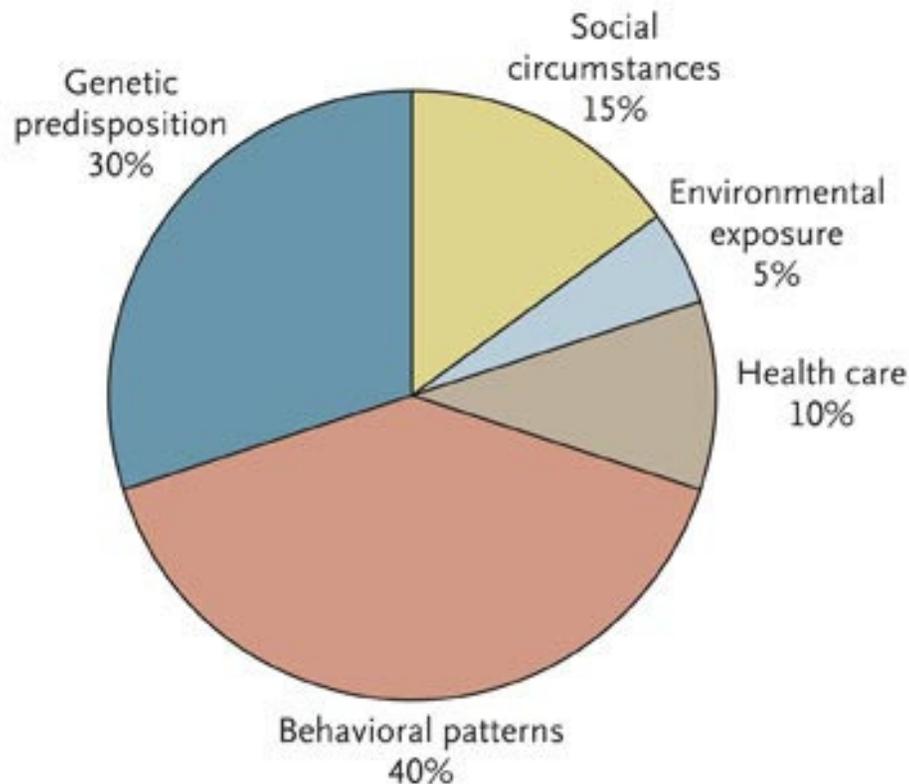
Cutler (2006) assumed advances in medical care produced 50% of increased life expectancy 1960-2000

Concluded: “Current increases are associated with a high cost per year of life gained...The current rise in spending should be balanced by attention to health benefits gained.”



# Balance of Health Determinants

Proportional Contribution to Premature Death



“...Thus one could question a funding scheme that places so much emphasis on medical care and not on prevention”

- McGinnis 2002



# America's State Health Rankings

- Clinical Care 21%
- Personal Behaviors 36%
- Public Health Policies 18%
- Community Environment  
25%



# THE “FANTASY EQUATION”

Stoddart 1996

“at present we but vaguely understand the relative magnitude of the coefficients on the independent variables that would inform **specific policies** rather than broad directions”.



# ALL STATES CAN IMPROVE SINCE NO STATE IS #1 IN ALL DETERMINANTS

## America's Health Rankings 2008

	Massachusetts #6	Minnesota #4	Vermont #1	Wisconsin #17
Smoking	4	5	12	24
Obesity	2	24	6	18
HS Graduation	22	6	4	2
Uninsured	1	4	10	3
Immunization	8	7	29	31

\*



# How Healthy Could A State Be?

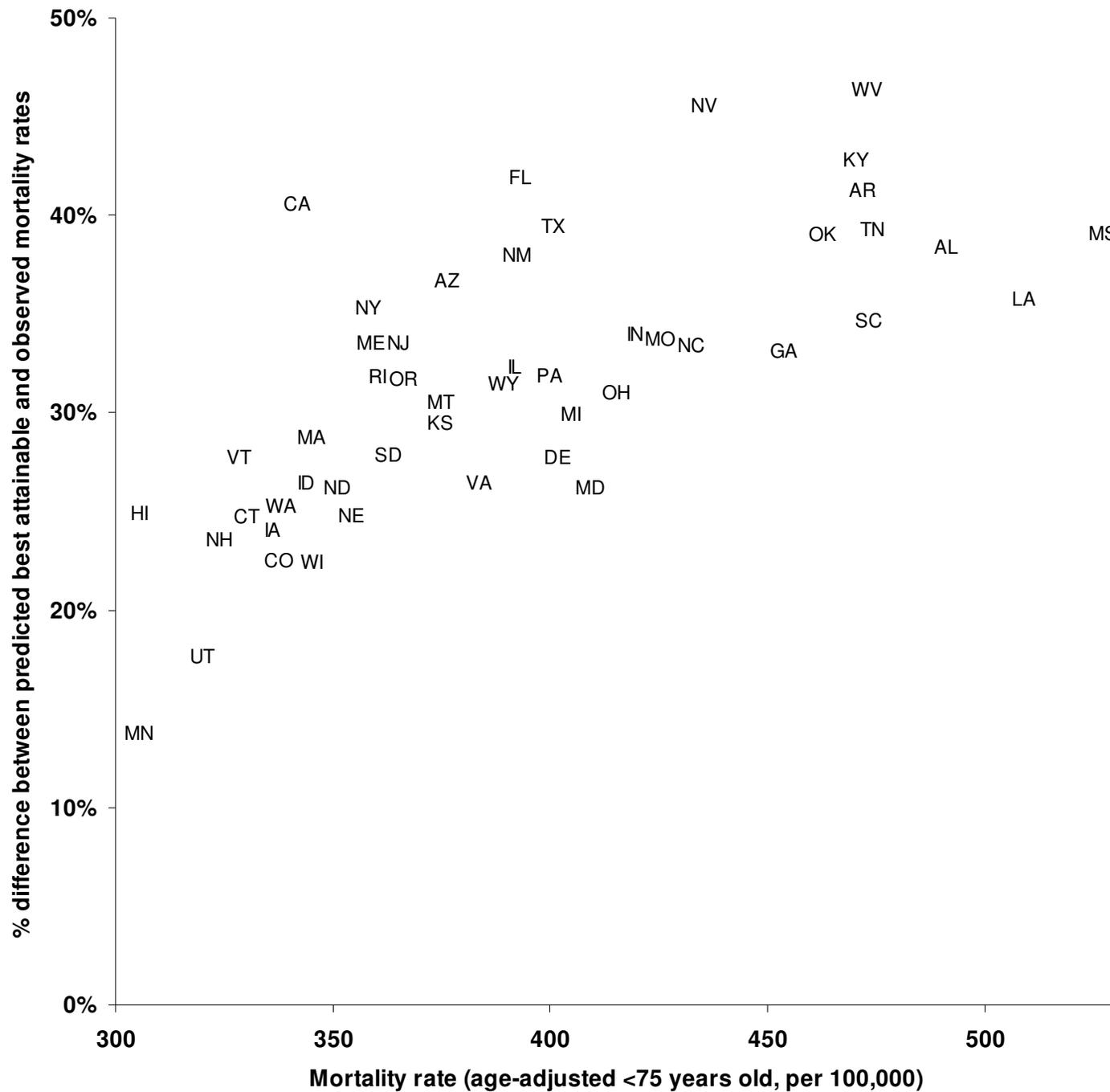
## “NonModifiable” Variables

- Race
- Age
- Gender
- Rural/Urban
- Immigrant

## • “Modifiable” Variables

- Uninsured
- Education level
- Income
- Employment
- Living Alone
- Activity level
- Smoking
- Obesity





# Purchasing Population Health

PAYING FOR RESULTS

DAVID A. KINDIG, MD, PhD



“The fundamental assertion of this book is that population health improvement will not be achieved until appropriate financial incentives are designed for this outcome.”

Kindig 1997



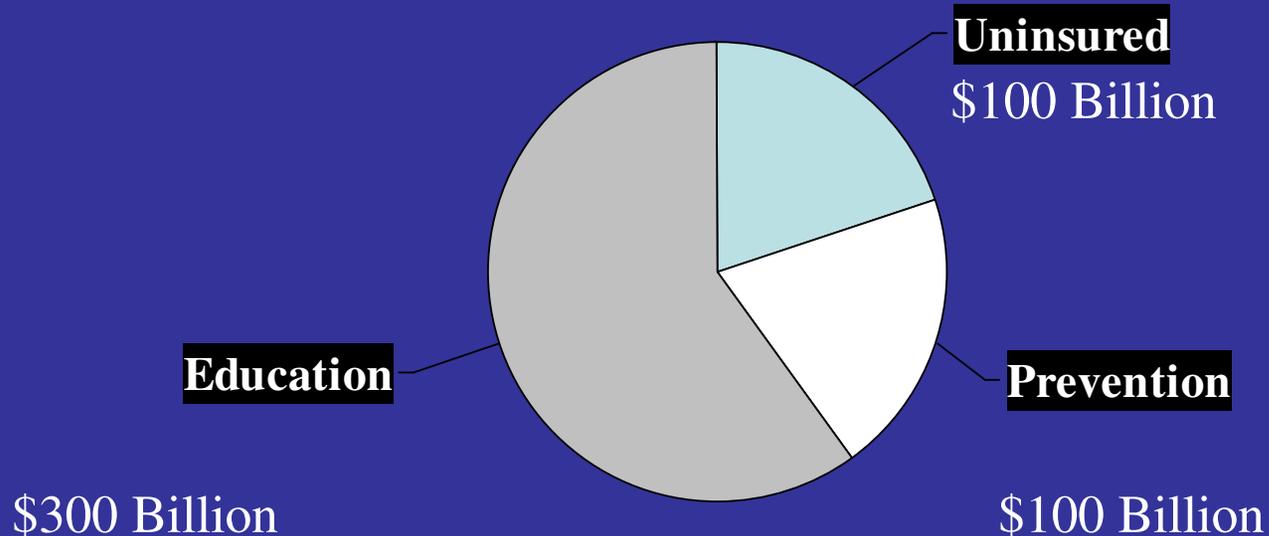
“Redirecting resources means redirecting someone’s income...most students of population health cannot confidently answer the question... *Well, where would you put the money?*”

Evans and Stoddart, 2003



# IF I WERE CZAR, AND HAD TO WORK WITH EXISTING RESOURCES

I would take the 25% of health care expenditures that are thought to be ineffective (\$500 Billion), and reallocate as below:



# What Works? Policies and Programs to Improve Wisconsin's Health

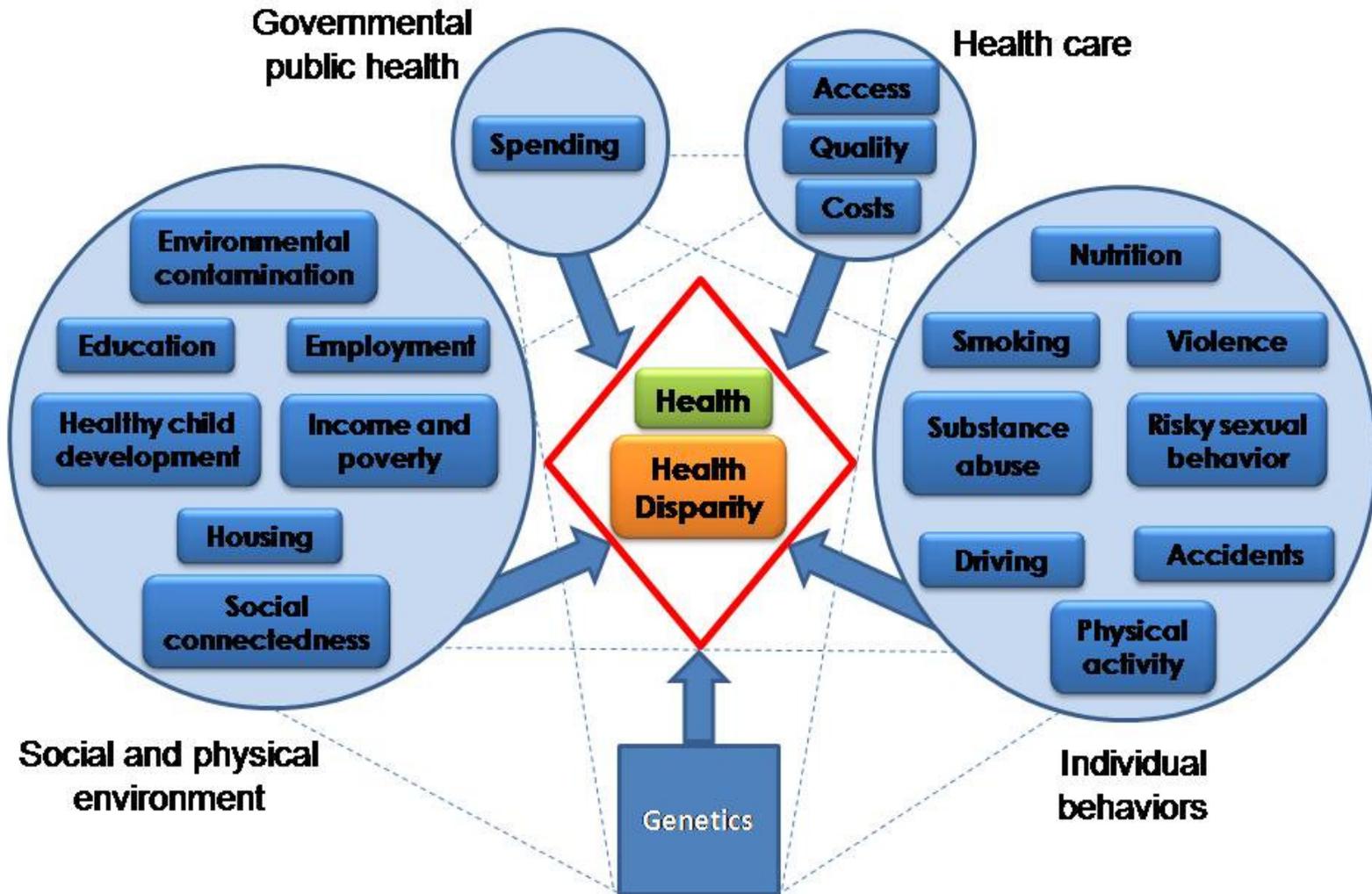


June 2009

<http://www.pophealth.wisc.edu/uwphi/pha/healthiestState.htm>



# A BALANCED INVESTMENT PORTFOLIO



# A Multi-Sectoral Approach

## Physical Activity and Nutrition

PROGRAM (\$) OR POLICY	Strength of Evidence	Potential Population Reach	POTENTIAL DECISION MAKERS				
			Government	Education	Health care	Business	Community Organizations
<b>Increase access to healthy food options</b>							
Allocate funding to expand WIC and Senior Farmers' Market Nutrition Programs	3						
Make water available; promote consumption	3						
Allocate funding to use electronic methods of payment at farmers' markets	2						
Modify vending machine options to increase healthy beverage choices	2						
Increase availability of fruits & vegetables, nutritious options	2						
Ensure on-site cafeterias follow healthy cooking practices	2						
Offer healthy foods at meetings, conferences, and catered events	2						
Farm-to-school programs	2						
Prohibit the sale of (non-nutritious) food for school fund-raising activities	2						
Tax credits for locating farmers' markets/ farm stands in lower-income neighborhoods	2						



THE UNIVERSITY  
*of*  
**WISCONSIN**  
MADISON



Robert Wood Johnson Foundation

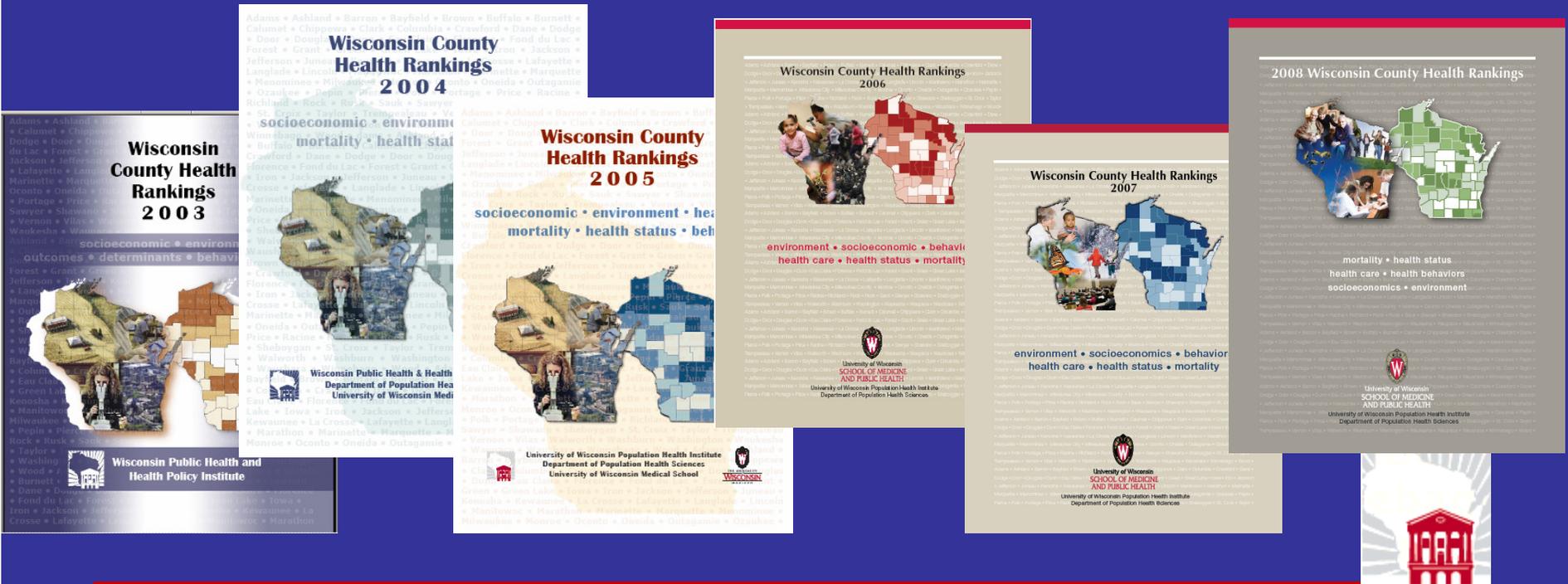
# *The County Health Rankings:* Mobilizing Action Toward Community Health

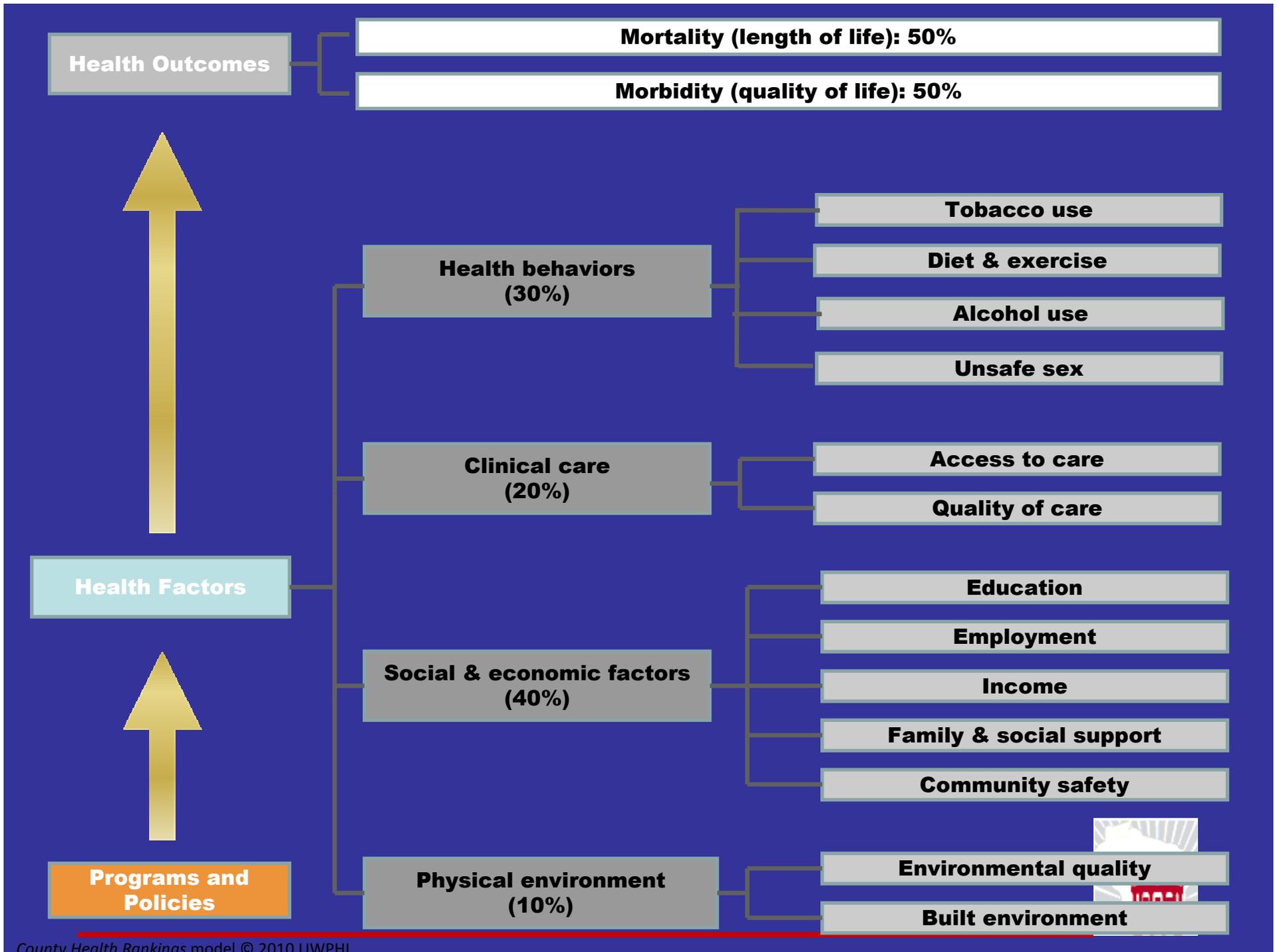
A collaboration between the Robert Wood Johnson  
Foundation and the University of Wisconsin

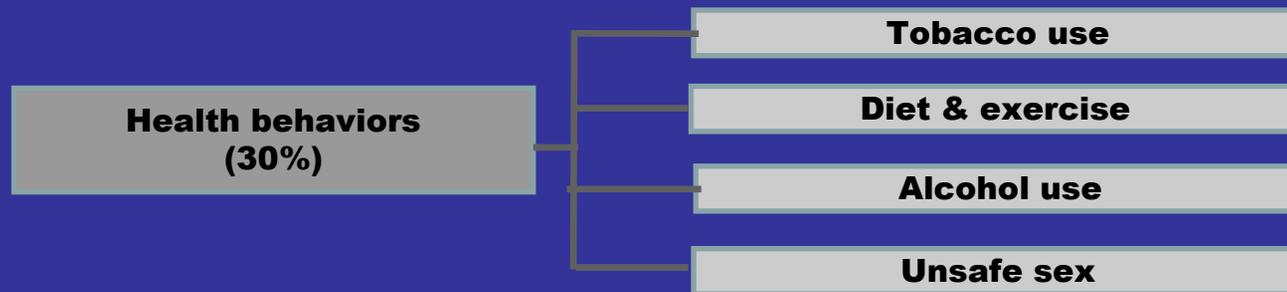


# The County Health Rankings

Building on *America's Health Rankings* which ranks the health of the 50 states, the University of Wisconsin began ranking the health of Wisconsin's counties in 2003.



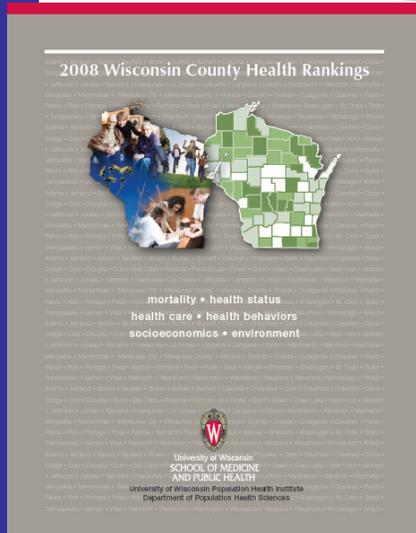
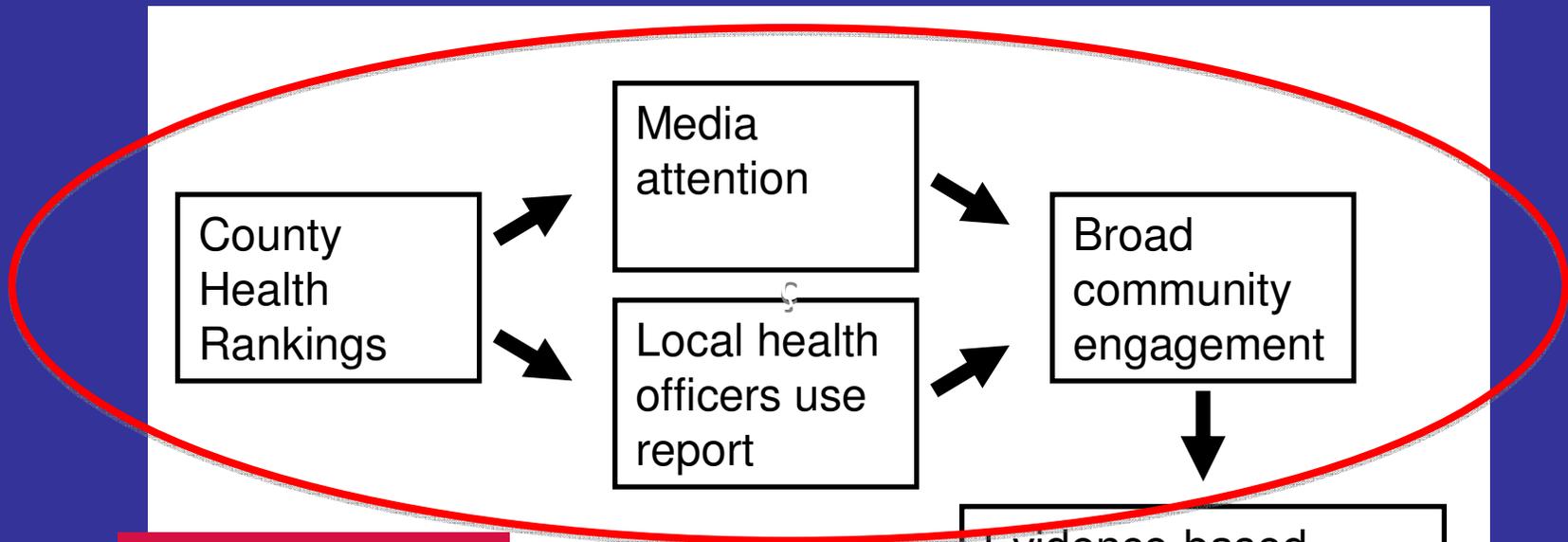




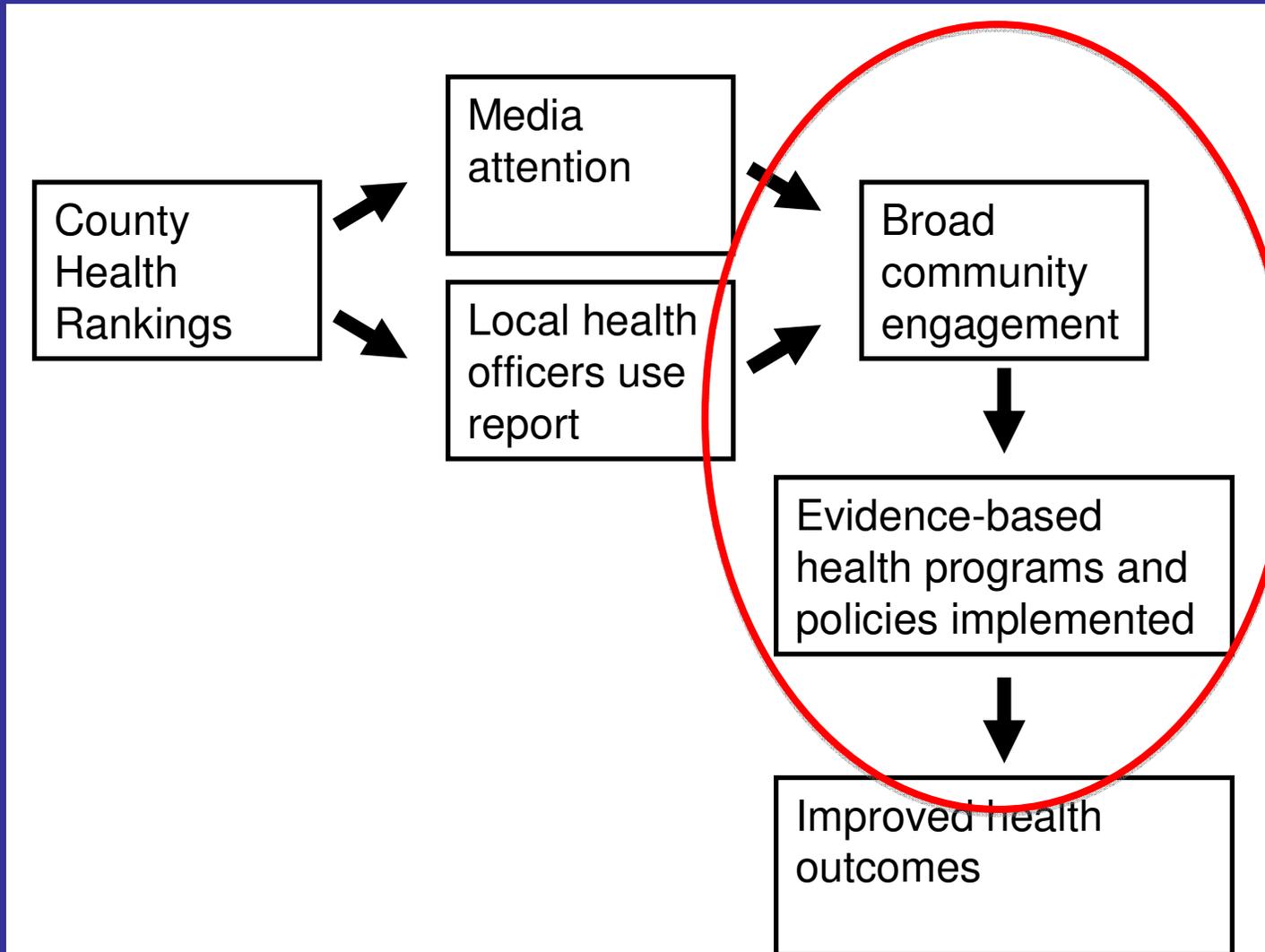
Focus Area	Measure	Source
Tobacco use (10%)	Smoking rate	BRFSS
Diet & exercise (10%)	Obesity rate	BRFSS
Alcohol use (5%)	Binge drinking rate	BRFSS
	Deaths due to motor vehicle crashes	Vital Statistics, NCHS
Sexual behavior (5%)	Sexually transmitted disease rate	Centers for Disease Control and Prevention (CDC), National Center for Hepatitis, HIV, STD, and TB Prevention
	Teen birth rate	Vital Statistics, NCHS



# Mobilize through County Health Rankings



# Action



# Action

*depends on  
stage of  
readiness  
in the county*



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COMMENTARY

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# A Pay-for-Population Health Performance System

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David A. Kindig, MD, PhD

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# SOLID PARTNERSHIPS AND REAL RESOURCES

“What is required is a coordinated effort across determinants between the public and private sectors, as well as financial resources and incentives to make it work”.





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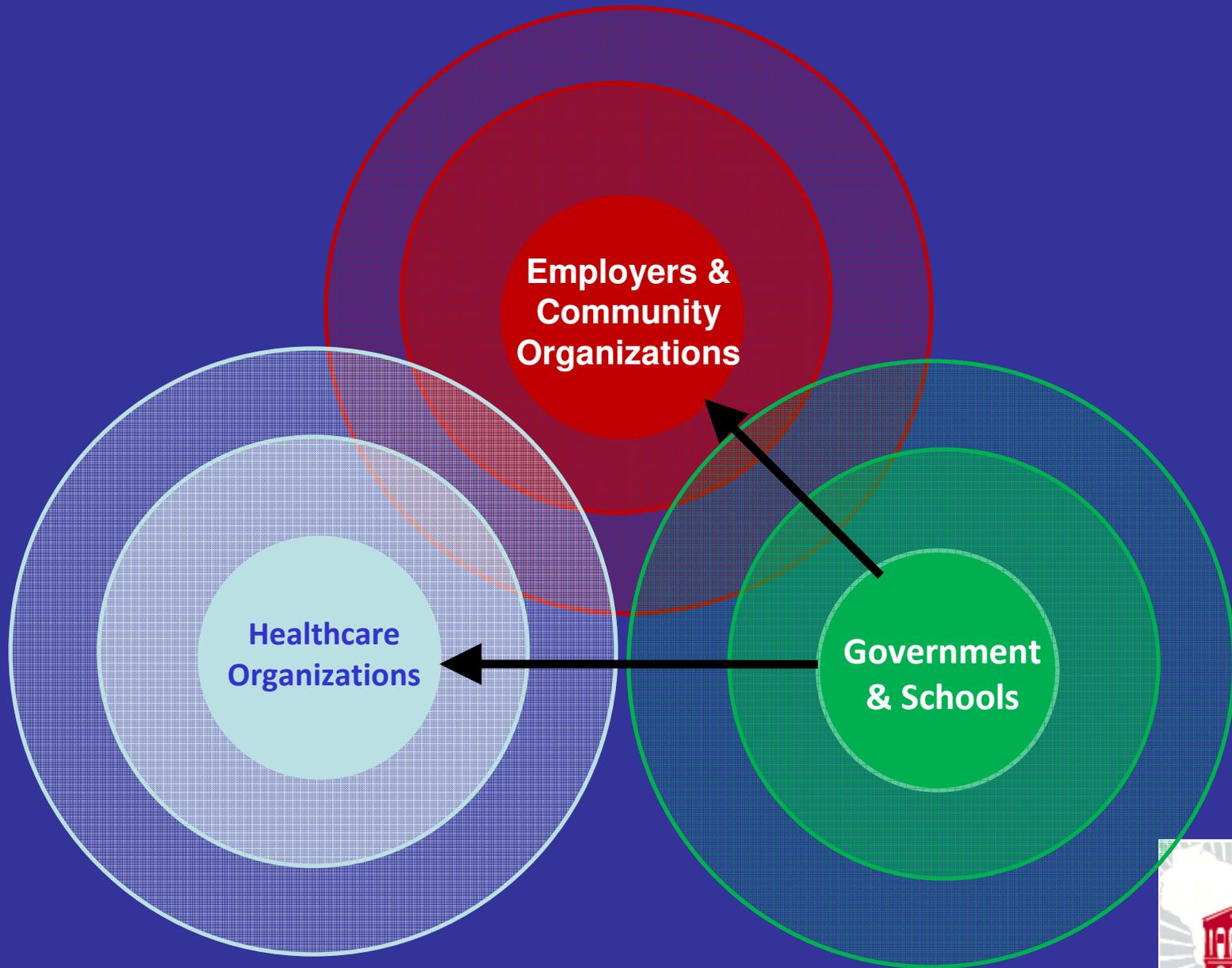
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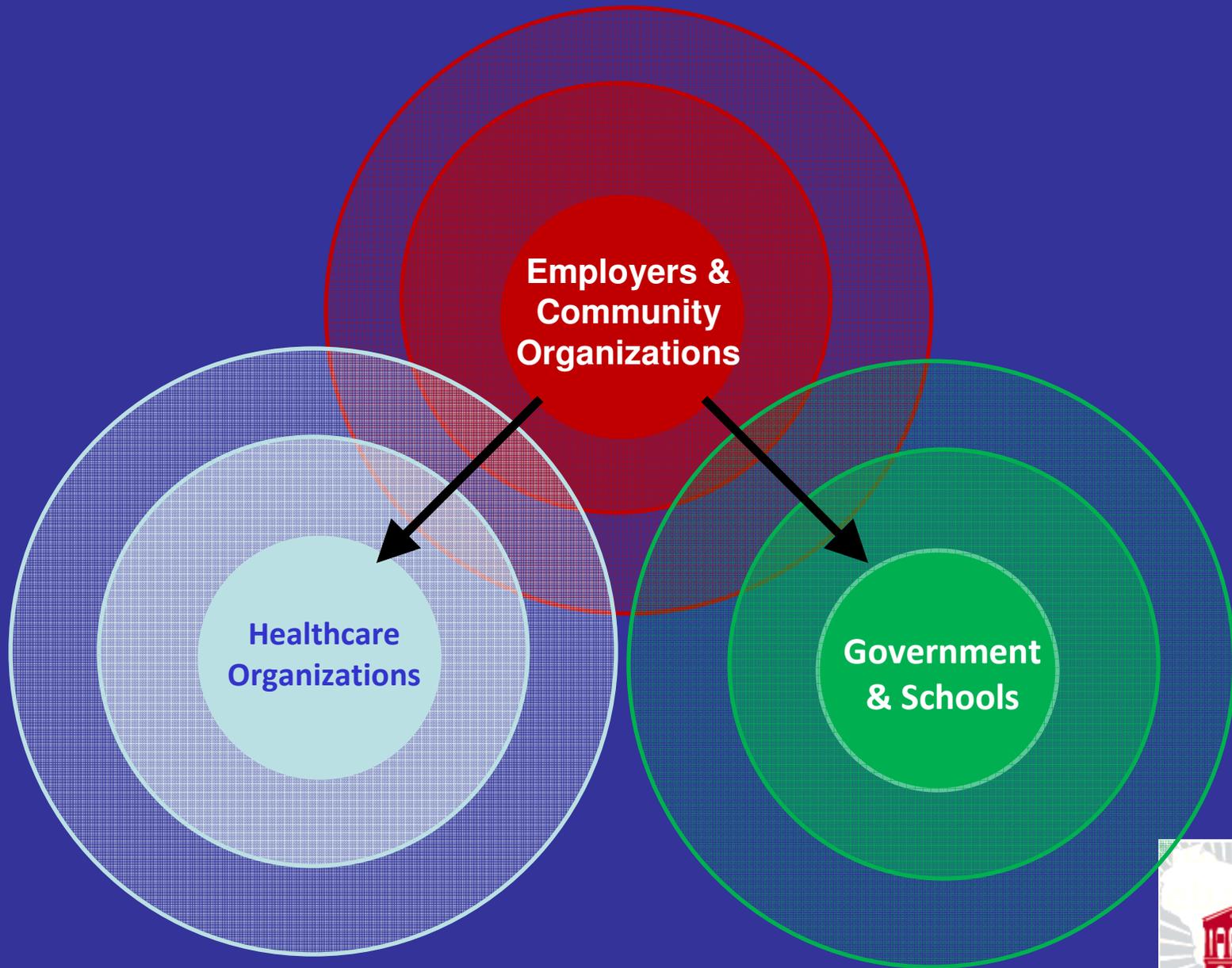
# WHO CAN OR WILL BE THE POPULATION HEALTH INTEGRATOR?



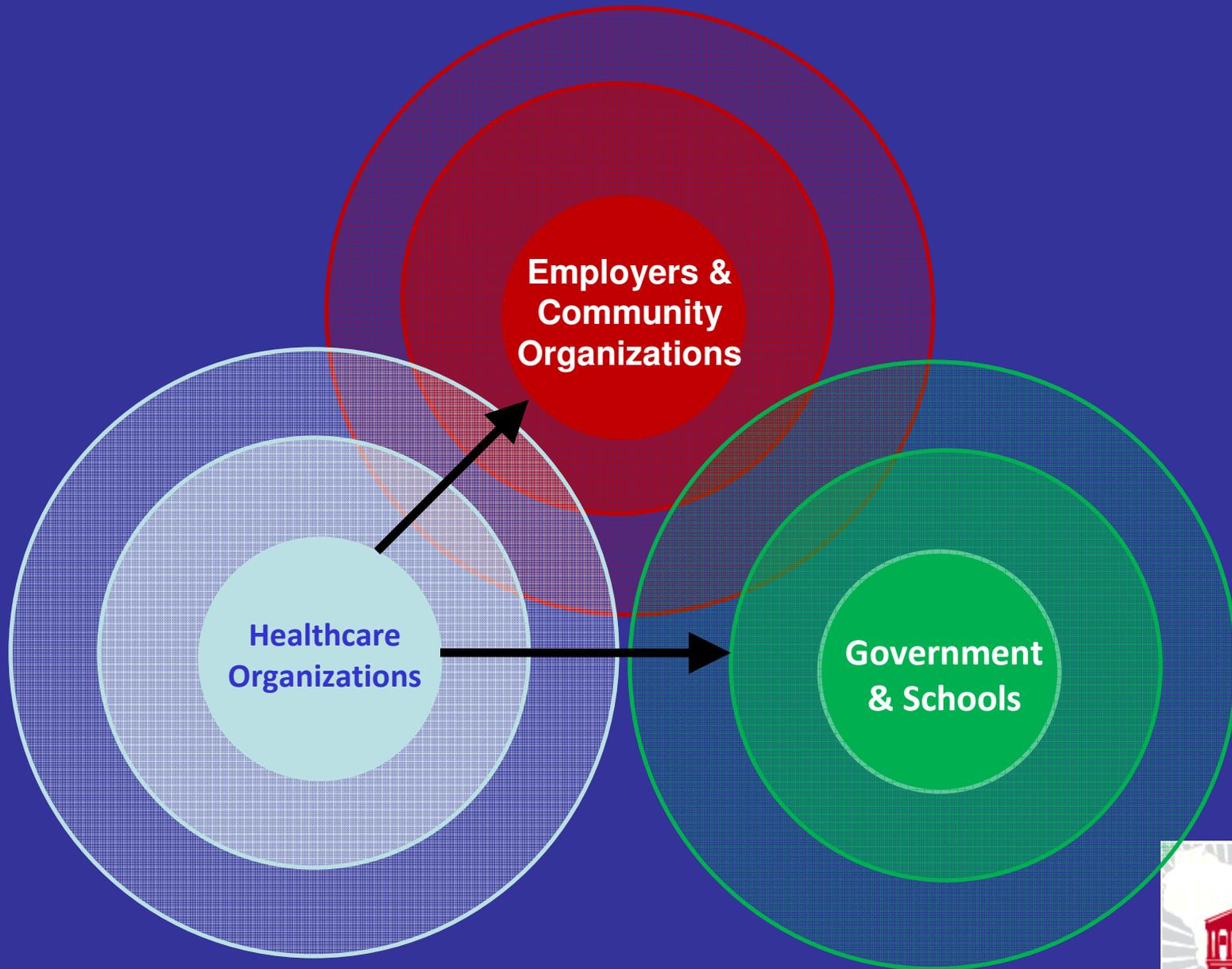
# Population Health Integration



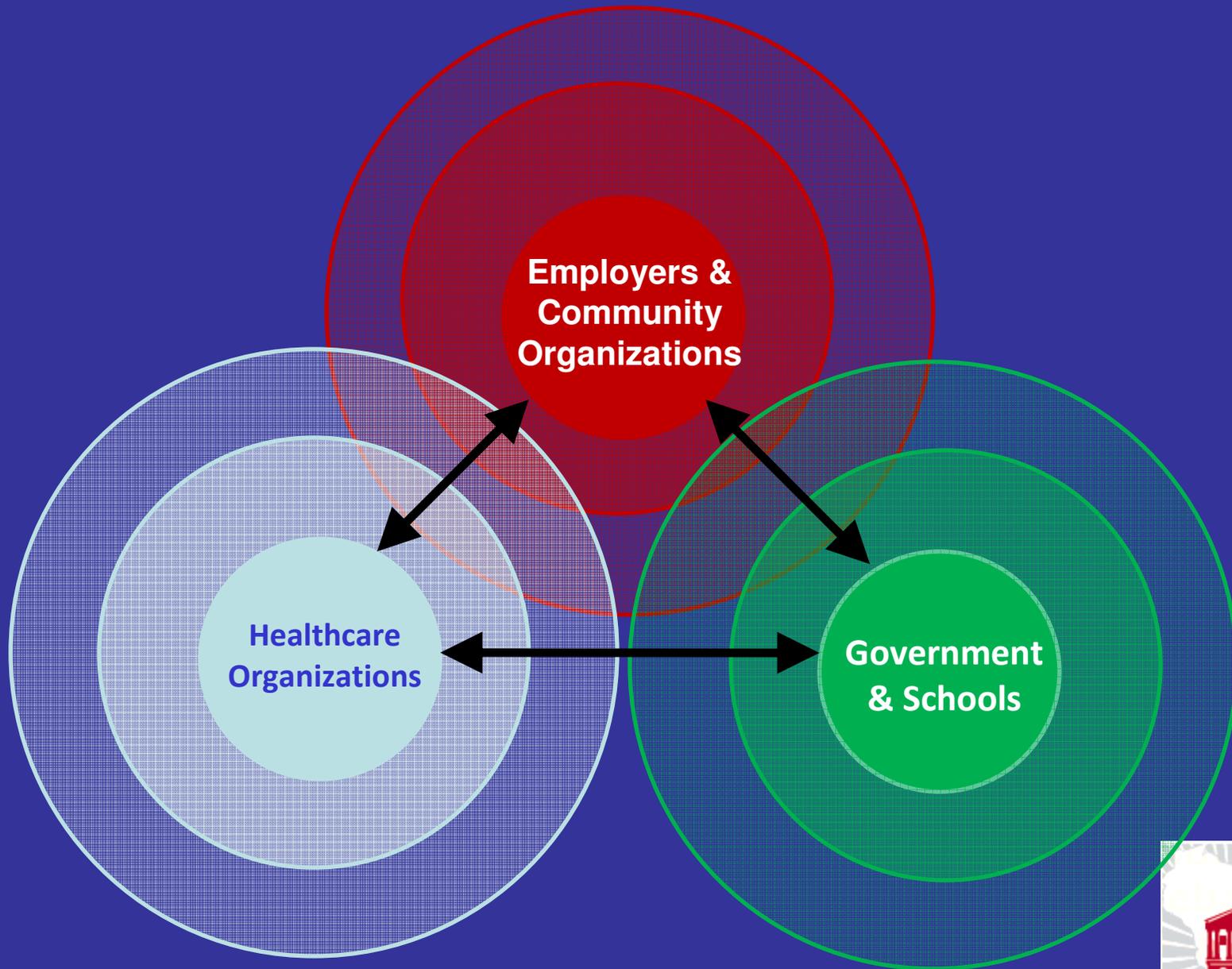
# Population Health Integration



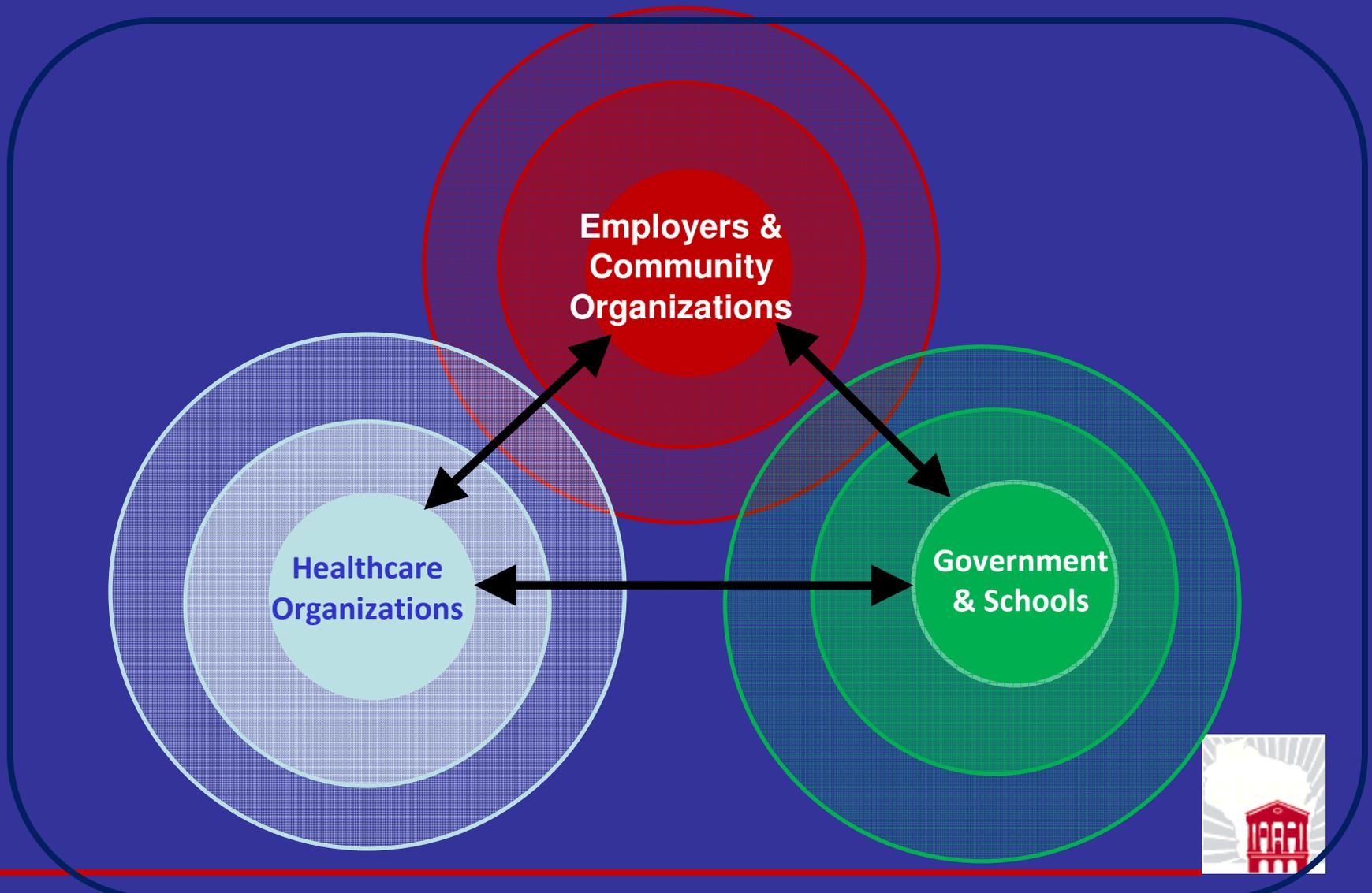
# Population Health Integration



# Population Health Integration



# A Super-Integrator? A Health Outcomes Trust?



- Who will step up and assume this role?
- Can different integrator models work in different communities?
- Can healthcare organizations integrate this broadly?
- Can Accountable Care Organizations generate “shared savings” to become Accountable Health Communities ?
- Can Triple Aim organizations use political capital to leverage needed investment from other sectors?



# THE POPULATION HEALTH AND INTEGRATOR QUESTION IS.....

*“What is the optimal balance of investments (e.g., dollars, time, policies).....*

*in the multiple determinants of health (e.g., behavior, environment, socioeconomic status, medical care, genetics).....*



# THE POPULATION HEALTH AND INTEGRATOR QUESTION IS.....

*.....over the life course.... that will maximize overall health outcomes ...and minimize health inequities at the population level?”*

Kindig/Milbank 2007





*"My question is: Are we making an impact?"*



# For more information

[www.pophealth.wisc.edu/uwphi/pha/healthiestState.htm](http://www.pophealth.wisc.edu/uwphi/pha/healthiestState.htm)

[www.pophealth.wisc.edu/uwphi/research/wi\\_county\\_rankings.htm](http://www.pophealth.wisc.edu/uwphi/research/wi_county_rankings.htm)

[www.pophealth.wisc.edu/uwphi/research/report\\_card\\_2007/report\\_card\\_2007.htm](http://www.pophealth.wisc.edu/uwphi/research/report_card_2007/report_card_2007.htm)

[www.pophealth.wisc.edu/uwphi/research/healthy/opportunities.pdf](http://www.pophealth.wisc.edu/uwphi/research/healthy/opportunities.pdf)

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## Deaths/1000,000 from a 1% effect

- % Uninsured 7.8
- % Living Alone 7.2
- % High School Grad -3.9
- % College Grad -2.7
- % Unemployed 2.0
- Med Family Income -1.9
- % Smoking 1.7
- % Physical Inactivity 1.3



**OUTCOMES**

**DETERMINANTS**

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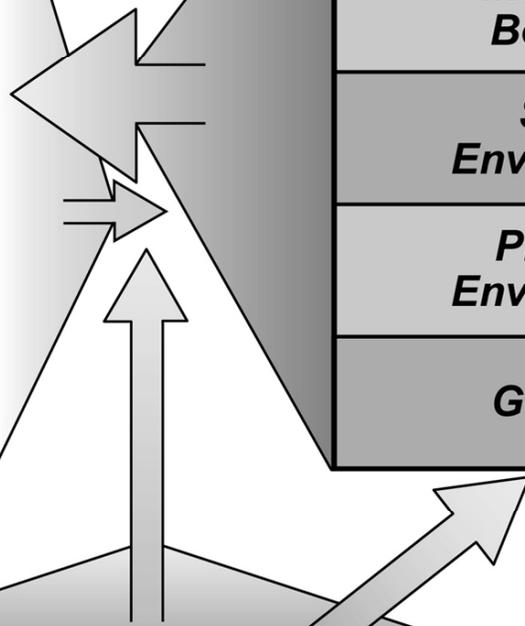
*Mortality*

*Health  
Related  
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<i>Medical Care</i>
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**SPECIFIC  
POLICIES AND  
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# Phases of Population Health Improvement

Phase 1  
(1997-2000)

Debate, acceptance  
and research

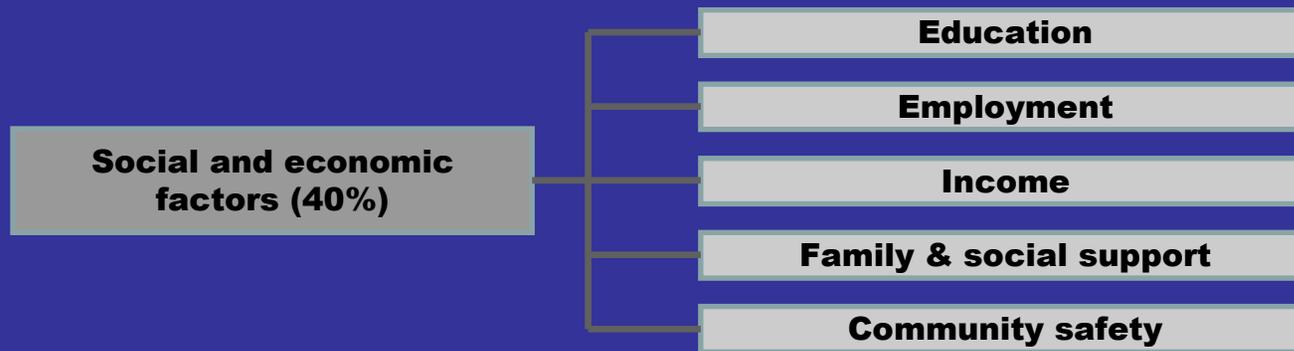
Phase 2  
(2001-10)

Outcome based payment  
for integrated health  
delivery systems

Phase 3  
(2011-20)

Incorporating the  
non medical determinants  
and sectors





<b>Focus Area</b>	<b>Measure</b>	<b>Source</b>
<b>Education (10%)</b>	High school graduation rate	National Center for Education Statistics
	Adults with college degree	Decennial Census, American Community Survey (ACS)
<b>Employment (10%)</b>	Unemployment rate	Local Area Unemployment Statistics,
<b>Income (10%)</b>	Children in poverty	Census/CPS, Small Area Income and Poverty Estimates (SAIPE) Bureau of Labor Statistics
	Income inequality	Decennial Census, ACS
<b>Family &amp; social support (5%)</b>	Social/emotional support	BRFSS
	Single-parent households	Decennial Census, ACS
<b>Community safety (5%)</b>	Violent crime rate or Homicide death rate	Uniform Crime Reporting, NCHS

