



International Partnerships for Improving Health and Reducing Poverty: Human Capital and Health Systems Status in Latin America

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Global Research Begins with Conversations Such as Those Happening Today in this Place

My goal is to jump start the conversation



Global Health Equity

- We engage in global research because we want to find solutions to promote health and reduce burden of disease
- We know its about building capacity and efficiencies in health-producing systems
- A primary challenge is engagement across sectors of public and private stakeholders that must work together
- The most important part of engagement is including our citizens to understand their perspective, gain support, and understand how they are responding to innovations

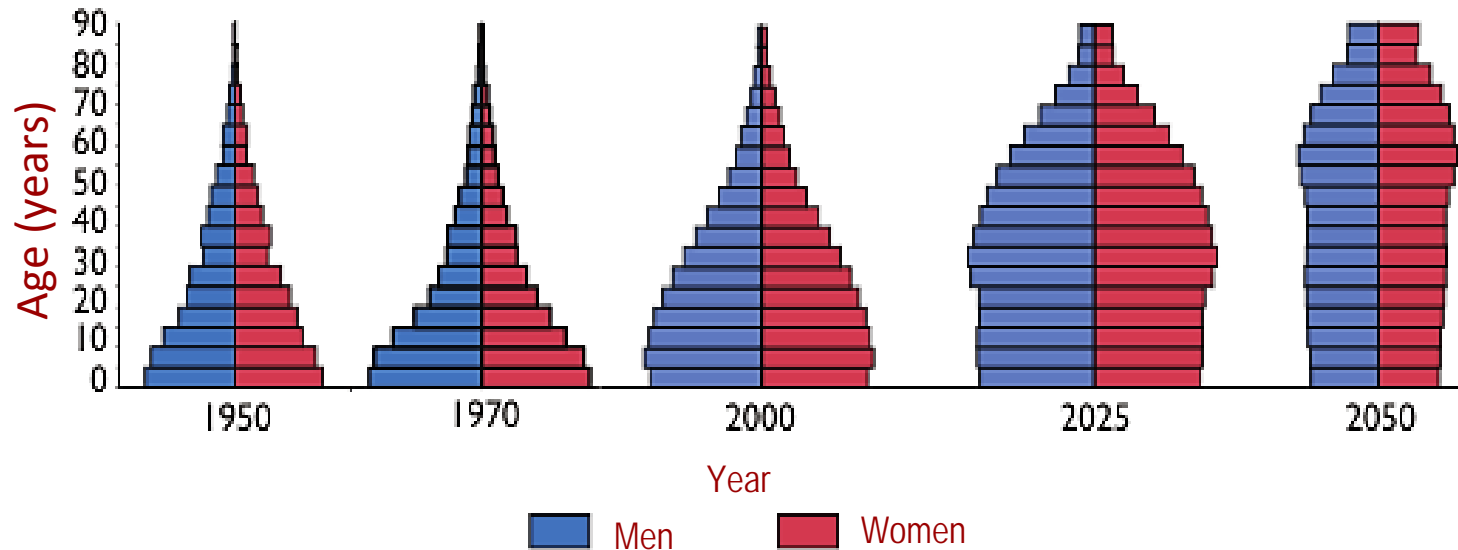


The Global Movement Toward Health Equity

- Creating networks and nodes of research that are transnational supports the development of strategies consistent with the state of the science
- Establishing health equity as a public policy priority is an important message that everybody can understand and creates awareness and engagement
- Health equity is a shared responsibility and provides a foundation for organizing research and effective messaging
- Health equity requires addressing all forms of health across the life course including mental health and substance use



Population Distribution in Mexico, 1950-2050



Source:

INEGI. *Estadísticas Históricas de México*. México. S/A.

INEGI. *XII Censo General de Población y Vivienda 2000*. México. 2001.

Conapo. *Proyecciones de la Población de México, 2000-2050*. México. 2002.



Life Expectancy at Birth (Both Sexes), 2012: Latin America

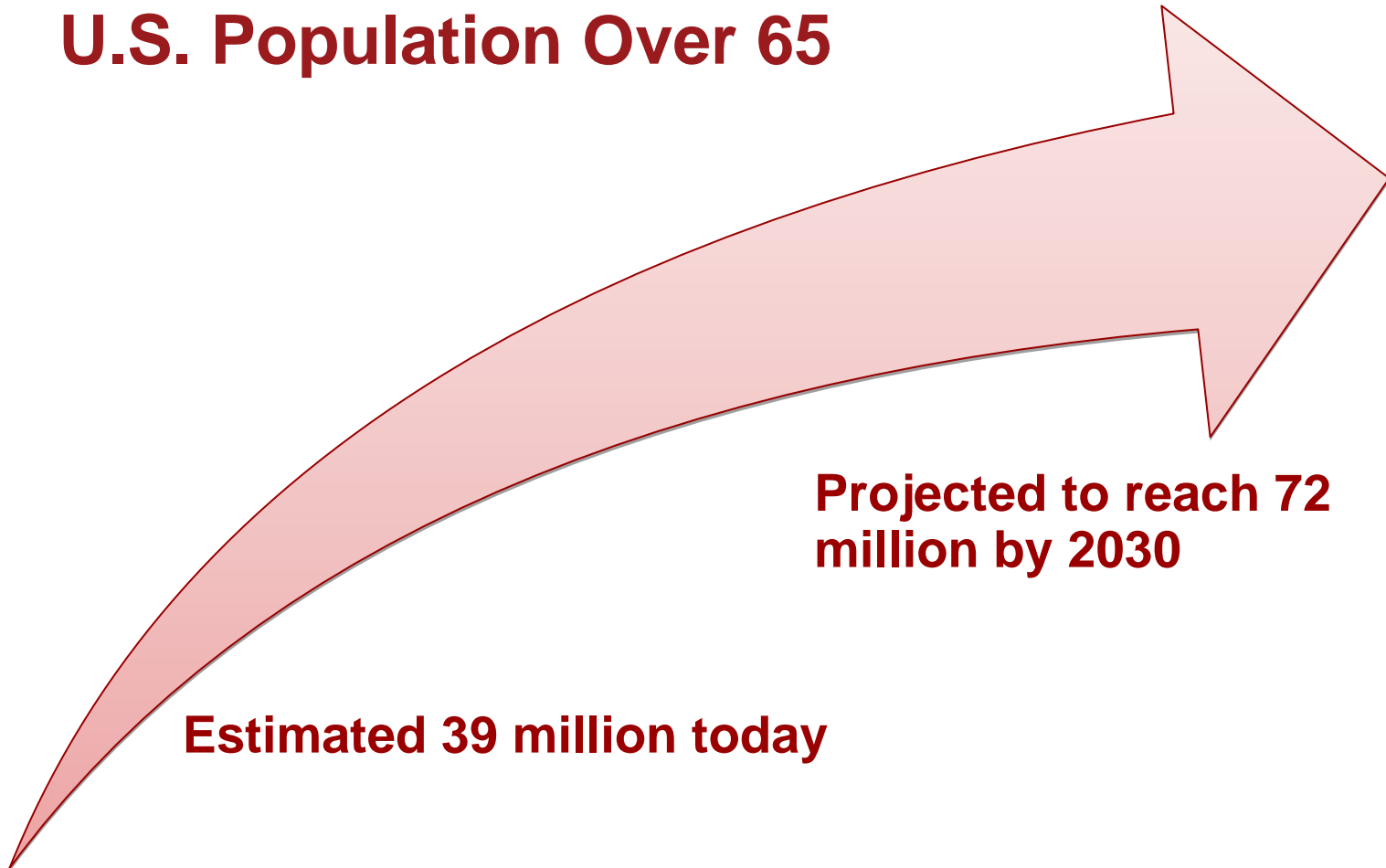
Country	Years
Argentina	76
Bolivia	68
Brazil	74
Chile	80
Colombia	79
Costa Rica	79
Cuba	79
Dominican Republic	77
Ecuador	75
El Salvador	72
Guatemala	72

Country	Years
Haiti	62
Honduras	74
Mexico	76
Nicaragua	73
Panama	77
Paraguay	75
Peru	77
Uruguay	77
Venezuela	76
<i>United States</i>	<i>79</i>

Source: World Health Organization



U.S. Population Over 65





10 Leading Causes of Death in the World: 2000 and 2011

No	Causes of death, 2000	Deaths (million)	% of deaths		No	Causes of death, 2011	Deaths (million)	% of deaths
1	Ischaemic heart disease	5.9	11.2	→	1	Ischaemic heart disease	7.0	12.9
2	Stroke	5.6	10.6	→	2	Stroke	6.2	11.4
3	Lower respiratory infections	3.5	6.7	→	3	Lower respiratory infections	3.2	5.9
4	Chronic obstructive pulmonary disease	3.0	5.8	→	4	Chronic obstructive pulmonary disease	3.0	5.4
5	Diarrhoeal diseases	2.5	4.7	→	5	Diarrhoeal diseases	1.9	3.5
6	HIV/AIDS	1.6	3.0	→	6	HIV/AIDS	1.6	2.9
7	Preterm birth complications	1.4	2.7	↘	7	Trachea, bronchus, lung cancers	1.5	2.7
8	Tuberculosis	1.3	2.6		8	Diabetes mellitus	1.4	2.6
9	Trachea, bronchus, lung cancers	1.2	2.2		9	Road injury	1.3	2.3
10	Diabetes mellitus	1.0	1.9		10	Preterm birth complications	1.2	2.2
11	Road injury	1.0	1.9					
					13	Tuberculosis	1.0	1.8

Source: World Health Organization, Department of Health Statistics and Information Systems



Changes in Future Life Expectancies Related to Obesity and Diabetes

- Life expectancy has steadily increased over the past two centuries
- Current rates of obesity projected could reduce life expectancy gains
- If rates of obesity and diabetes continue to increase at current rates, reductions in life expectancy may be 2 to 5 years+

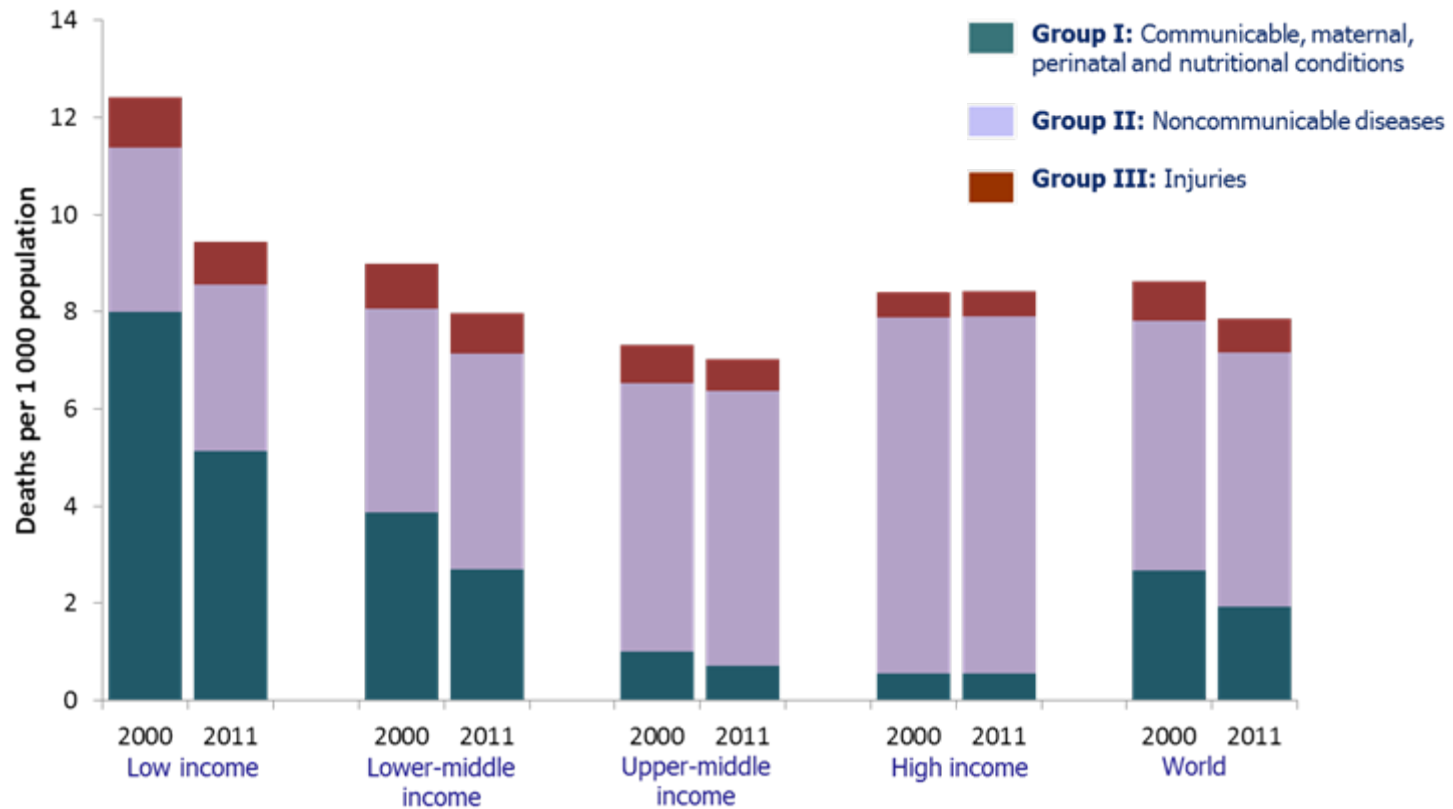
Source: Olshansky et al. *NEJM*
March 17, 2005

Graphic: *The Economist*





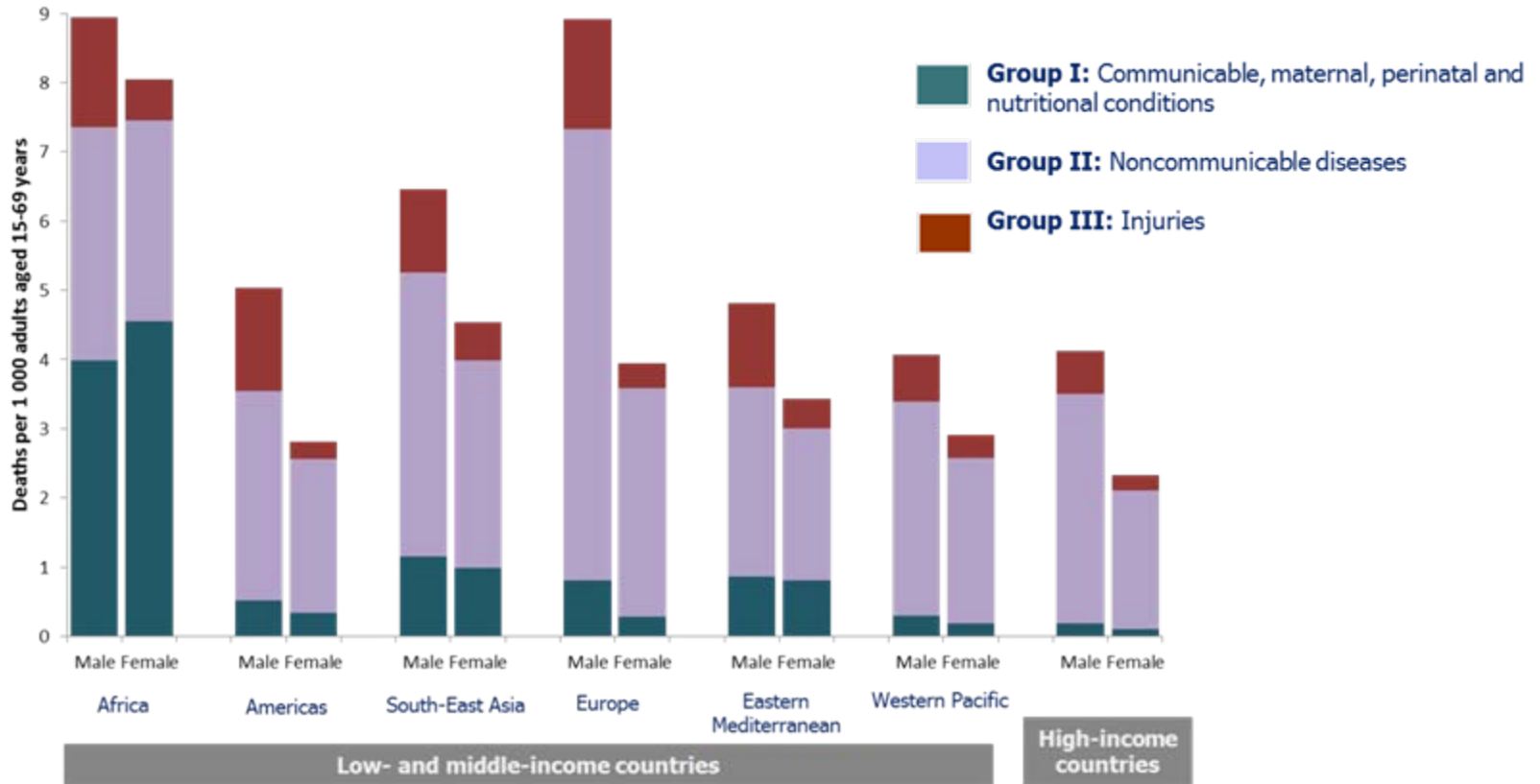
Mortality Rates by World Bank Income Group and Cause-of-Death Group, 2000 and 2011



Source: World Health Organization, Department of Health Statistics and Information Systems



Mortality Rates among Men and Women Aged 15–69 Years, by Region and Cause-of-Death Group, 2011



Source: World Health Organization, Department of Health Statistics and Information Systems



Global Burden of Mental, Neurological and Substance-Use (MNS) Disorders

Rank	Worldwide		High-income countries [†]		Low- and middle-income countries	
	Cause	DALYs [‡] (millions)	Cause	DALYs (millions)	Cause	DALYs (millions)
1	Unipolar depressive disorders	65.5	Unipolar depressive disorders	10.0	Unipolar depressive disorders	55.5
2	Alcohol-use disorders	23.7	Alzheimer's and other dementias	4.4	Alcohol-use disorders	19.5
3	Schizophrenia	16.8	Alcohol-use disorders	4.2	Schizophrenia	15.2
4	Bipolar affective disorder	14.4	Drug-use disorders	1.9	Bipolar affective disorder	12.9
5	Alzheimer's and other dementias	11.2	Schizophrenia	1.6	Epilepsy	7.3
6	Drug-use disorders	8.4	Bipolar affective disorder	1.5	Alzheimer's and other dementias	6.8
7	Epilepsy	7.9	Migraine	1.4	Drug-use disorders	6.5
8	Migraine	7.8	Panic disorder	0.8	Migraine	6.3
9	Panic disorder	7.0	Insomnia (primary)	0.8	Panic disorder	6.2
10	Obsessive–compulsive disorder	5.1	Parkinson's disease	0.7	Obsessive–compulsive disorder	4.5
11	Insomnia (primary)	3.6	Obsessive–compulsive disorder	0.6	Post-traumatic stress disorder	3.0
12	Post-traumatic stress disorder	3.5	Epilepsy	0.5	Insomnia (primary)	2.9
13	Parkinson's disease	1.7	Post-traumatic stress disorder	0.5	Multiple sclerosis	1.2
14	Multiple sclerosis	1.5	Multiple sclerosis	0.3	Parkinson's disease	1.0

*Data from ref. 1. Examples of MNS disorders under the purview of the Grand Challenges in Global Mental Health initiative.

[†]World Bank criteria for income (2009 gross national income (GNI) per capita): low income is US\$995 equivalent or less; middle income is \$996–12,195; high income is \$12,196 or more.

[‡]A disability-adjusted life year (DALY) is a unit for measuring the amount of health lost because of a disease or injury. It is calculated as the present value of the future years of disability-free life that are lost as a result of the premature deaths or disability occurring in a particular year.

Data from table: Examples of MNS disorders under the purview of the Grand Challenges in Global Mental Health initiative. Source: World Health Organization. *The Global Burden of Disease: 2004 Update*. (WHO, 2008).



Grand Challenges for Mental, Neurological and Substance- Use (MNS) Disorders

- Goal A:** Identify root causes, risk and protective factors
- Goal B:** Advance prevention and implementation of early interventions
- Goal C:** Improve treatments and expand access to care
- Goal D:** Raise awareness of the global burden
- Goal E:** Build human resource capacity
- Goal F:** Transform health-system and policy responses

Source: Grand Challenges in Global Mental Health Initiative

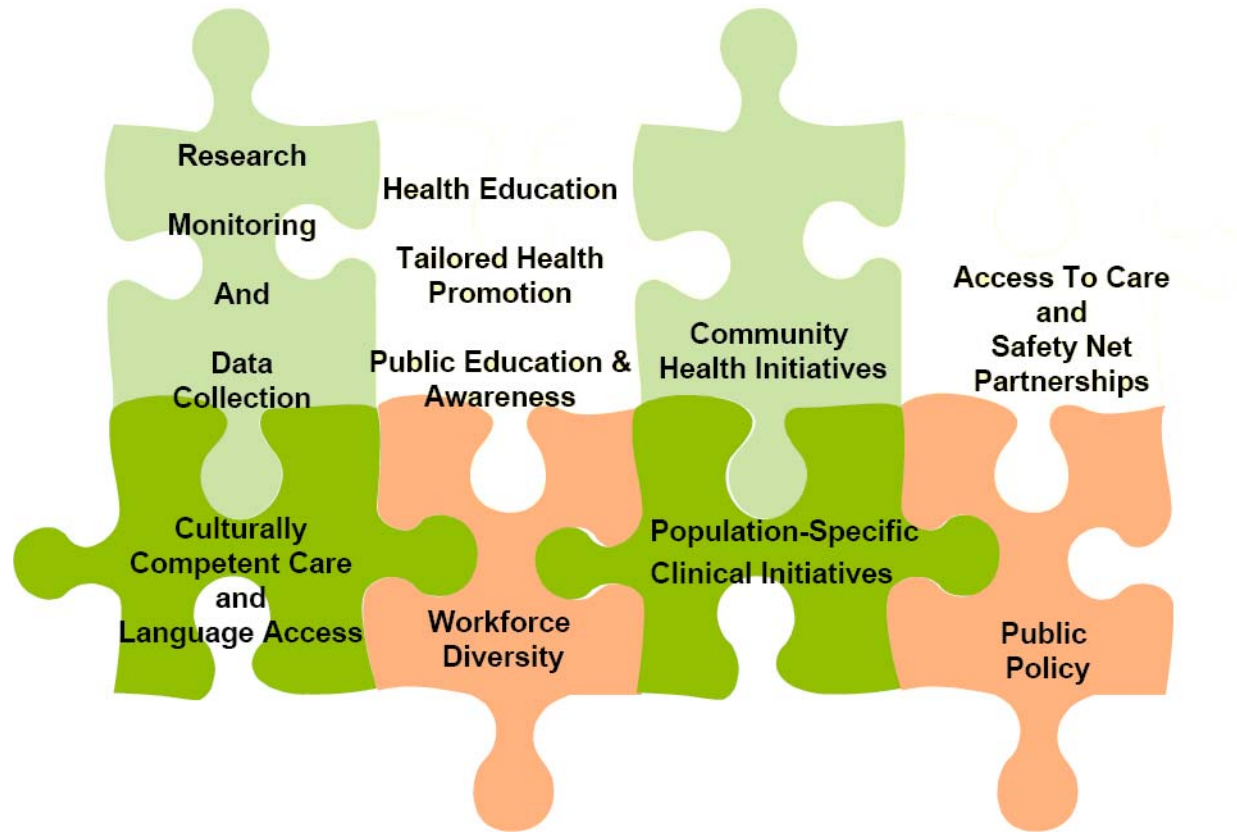


Meeting the Challenge

How do we prevent heart attack, strokes, cancer, and other leading causes of death and disability through evidence- and practice-based policy, environmental, programmatic, and infrastructural changes?



Creating Health Equity: Conquering the Prevention and Quality of Care Gap Requires Engagement of All the Pieces





Creating Societies of Respect and Health Equity: A Twenty-Year Train Ride





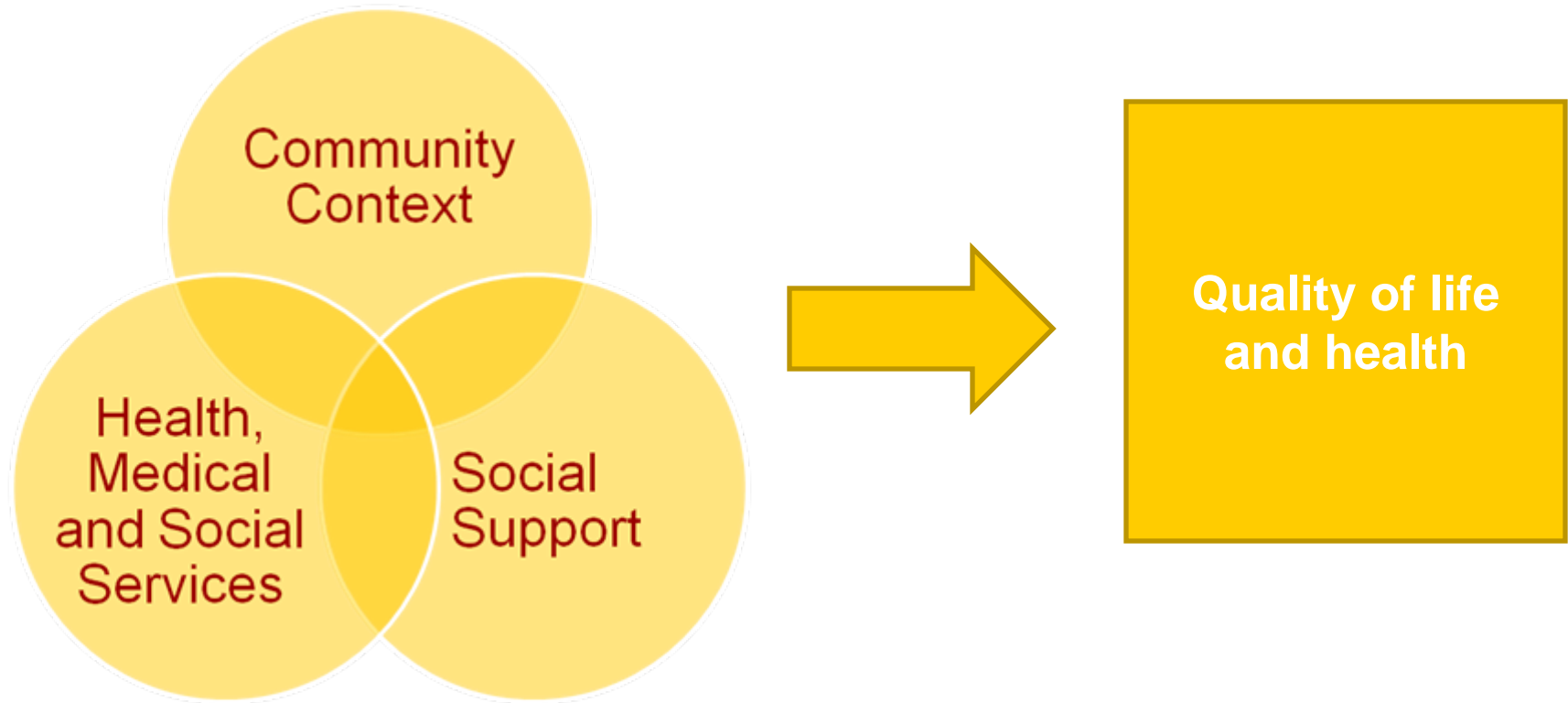
“Every system is perfectly designed to achieve exactly the results it gets.”

-- Donald Berwick





Three Domains Supporting Health





Public Policy and Engagement

- The ultimate challenge will be to integrate the planning and implementation across three domains that historically have had only coincidental connections
- Creating effective communication and linkage between medical and non-medical service sectors
- Establishing initiatives that foster community resident participation, and advocacy, are basic requirements for effectiveness and successful implementation
- Focusing on the language and strategies that foster engagement



“Addressing Societal” Determinants of Health

“Conditions in the social, physical, and economic environment in which people are born, live, work, and age. They consist of policies, programs, and institutions and other aspects of the social structure, including the government and private sectors, as well as community factors.”



Source: Healthy People 2020: an Opportunity to Address Societal Determinants of Health in the U.S., Objectives for 2020, July 11, 2010.



Health and Community Transformation

- Community is where people reside and the physical and social characteristics of a community influence human development, behavior, and health across the life course and ultimately help produce health or disease
- Most disease and mortality in the US is attributable to human behavior in some form: obesity, alcoholism, sexually transmitted disease, drug addiction, smoking, violence, risk taking, that are more prevalent in low income communities in societies that are highly stratified by social position
- The physical attributes of communities increase disease risk through exposures to toxins, physical hazards, public safety problems, and poor food or insufficient supply, and lack of adequate exercise or healthful recreation.



Quality of Care Improvement and Outreach

- Need for flexible referral to specialty care or co-located services for elders with disabilities with emphasis on convenient access
- Need to up-skill primary care in mental health and treatment: Primary care is most common site for initial presentation of patients and specialized knowledge of aging and disability for serving patients is inadequate
- Disconnect between clinical treatment and patient self-management of chronic disease: need for linking clinic to home and community care
- Need for clinical “extenders” and technology assistance to support residential care including automated patient monitoring and support



Grand Challenges in Global Mental Health Initiative: Top Five Challenges

- Integrate screening and core packages of services into routine primary health care
- Reduce the cost and improve the supply of effective medications
- Provide effective and affordable community-based care and rehabilitation
- Improve children's access to evidence-based care by trained health providers
- Strengthen the mental-health component in the training of all health-care personnel

Source: Grand Challenges in Global Mental Health Initiative



Building Capacity and Human Resource Development

- Must develop social care specialists in medical care services and in public health roles
- Professionalization of social workers and pharmacists is needed to support the development of integrated medical and mental health care and community models of health promotion, preventive medicine, and chronic disease management
- Wide use of community health workers for citizen engagement and to promote health literacy and awareness

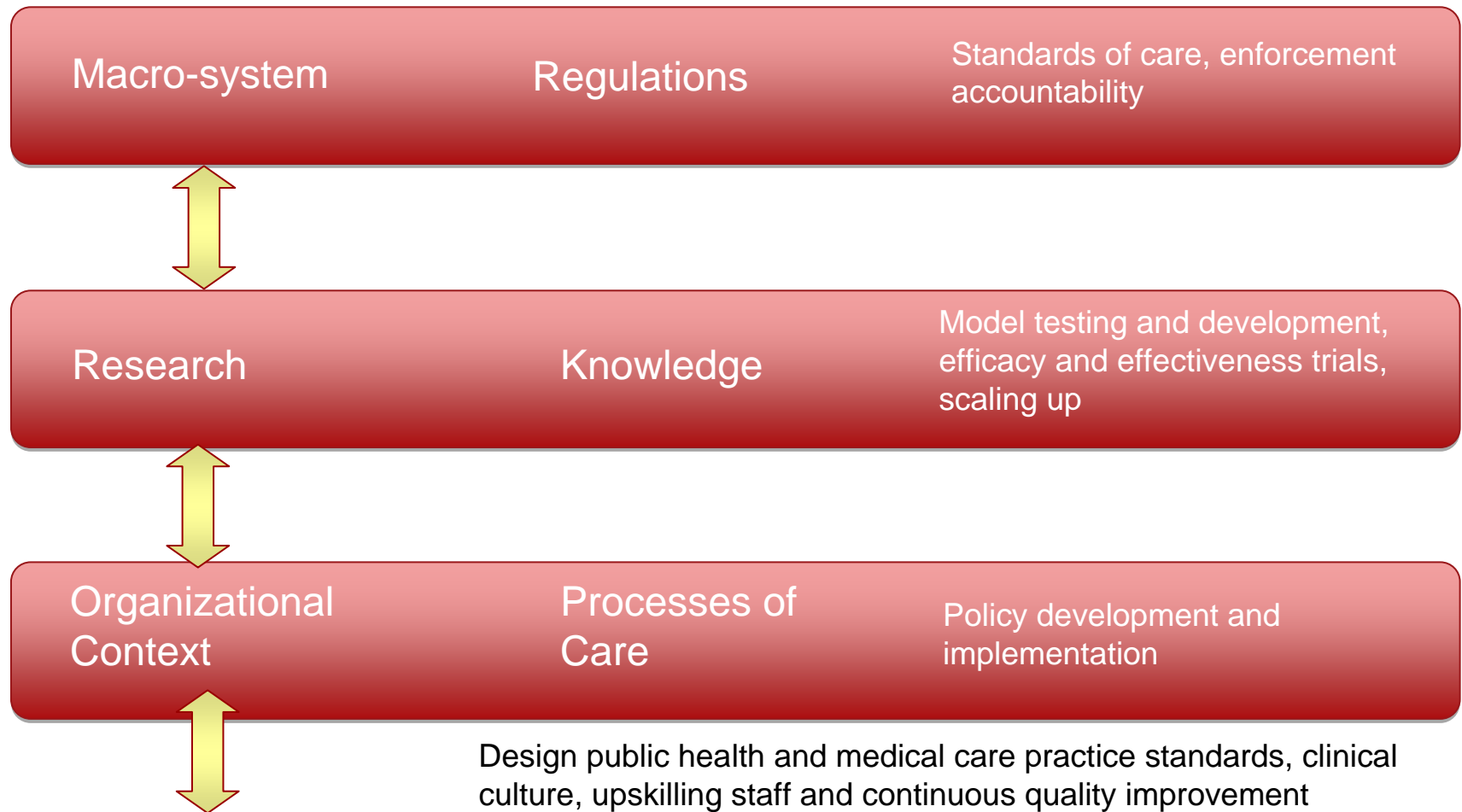


Four Levels of Change Required

- Clarifying national aims for improvement
- Changing the care, itself
- Changing the organizations that deliver care
- Changing the environment that affects organizational and professional behavior



The Chain of Effect in Improving Systems of Care





Levels of Activity: With feedback across levels

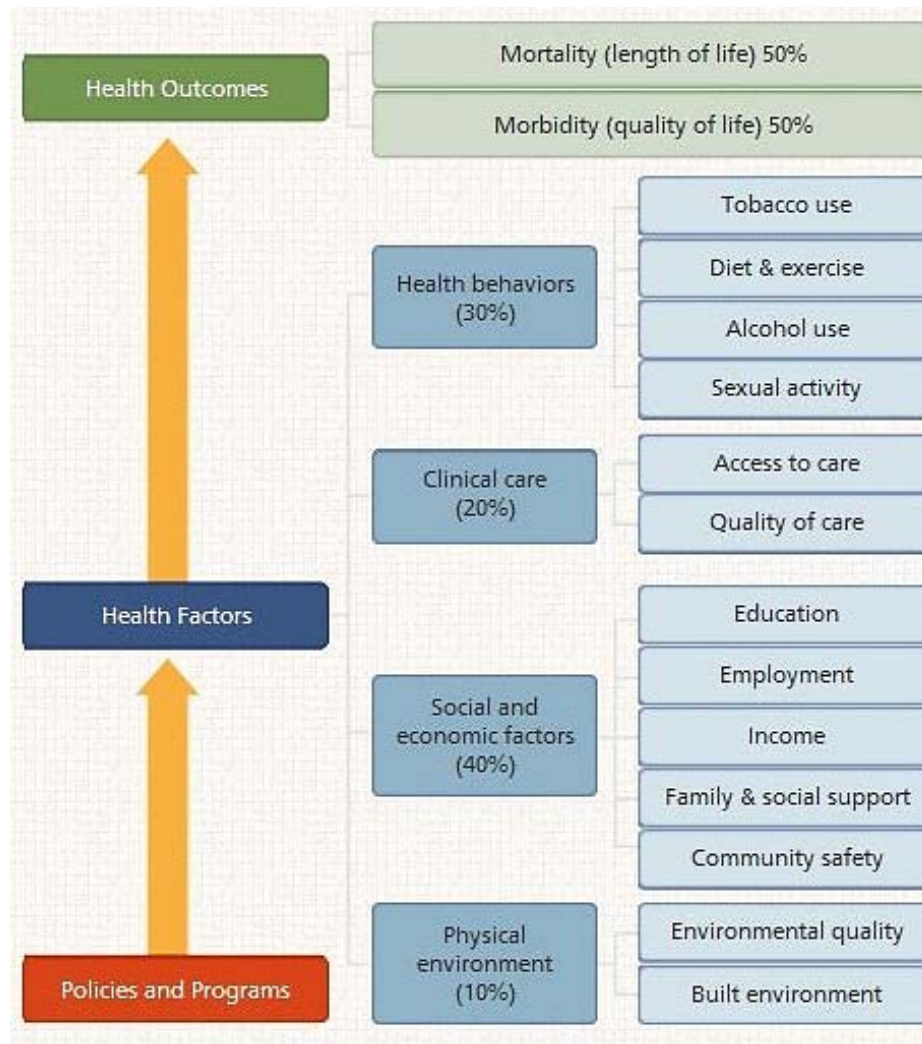
- The regulatory community imposing standards and accountability for systems of care (licensure and accrediting bodies)
- The research community providing theory, implementation models, and evidence of effectiveness
- The health care organizations as the web work controlling access, processes of care and practice innovations, and outreach to patients and community
- Populations and individuals as the nexus of culturally competent models of health promotion and disease management



Metrics are engagement tools

**Assessing health needs is a
community mobilization process**

**Without metrics there is no
accountability or rational policy
foundation**



Regional Health Rankings Model

Source: County Health Rankings



Key New Tool – Health Impact Assessment (HIA)

HIA is tool for systematically evaluating, synthesizing, and communicating information about potential health impacts for more **informed decision-making**, especially in other sectors.



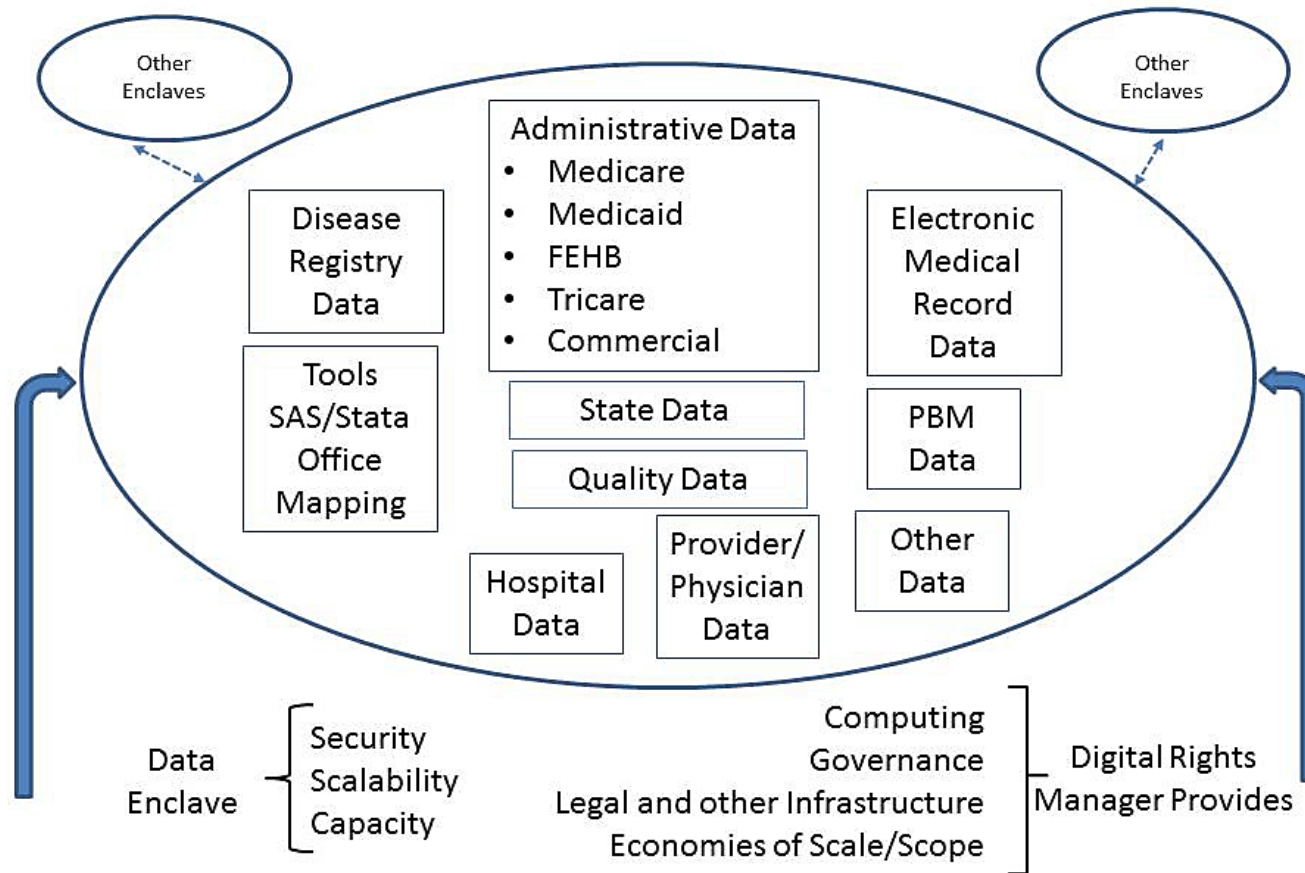


Key New Tool – HIA

- An HIA might ask:
 - What are the health consequences of high rates of students dropping out of secondary school?
 - What elements of school site design are most cost-effective in encouraging physical activity?
- Why use an HIA?
 - To influence decision makers about health issues using evidence – HIA places public health on the agenda
 - To highlight potentially significant health impacts that are unknown, under-recognized, or unexpected
 - To facilitate inter-sectoral planning and public participation in decision making



The Data Enclave for Building Decision Models



Source: *Health Affairs*, David Newman, Carolina Herrera, Amanda Frost and Stephen Parente



Effective Communication of Message

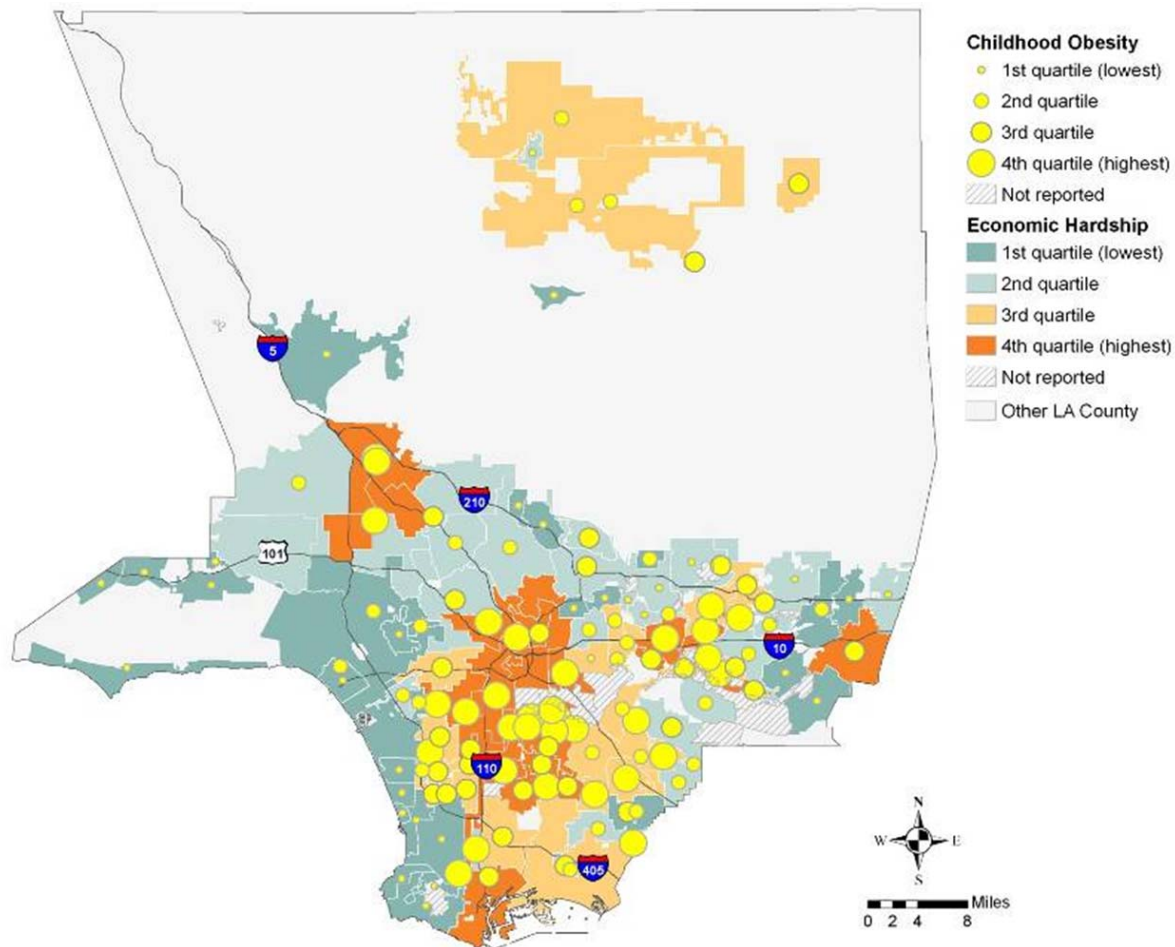
- 4,060 square miles
- 88 incorporated cities and 2 islands
- 9.8 million residents (more than 41 States)
- 48% Latino, 28% White, 14% Asian/Pacific Islander, 9% African American, 1% American Indian
- Over 100 different languages spoken by significant size populations*
- 16% of entire population living in poverty
- 23% of children in poverty**



US Census Bureau: State and County QuickFacts, last revised Nov 2010 ; * July 1, 2008 Population and Poverty Estimates, prepared by Walter R. McDonald & Associates, Inc. (WRMA) for Urban Research; ** 2011 KIDS COUNT Data Book, Annie E. Casey Foundation. datacenter.kidscount.org/data/bystate/Rankings.aspx?state=CA&ind=412

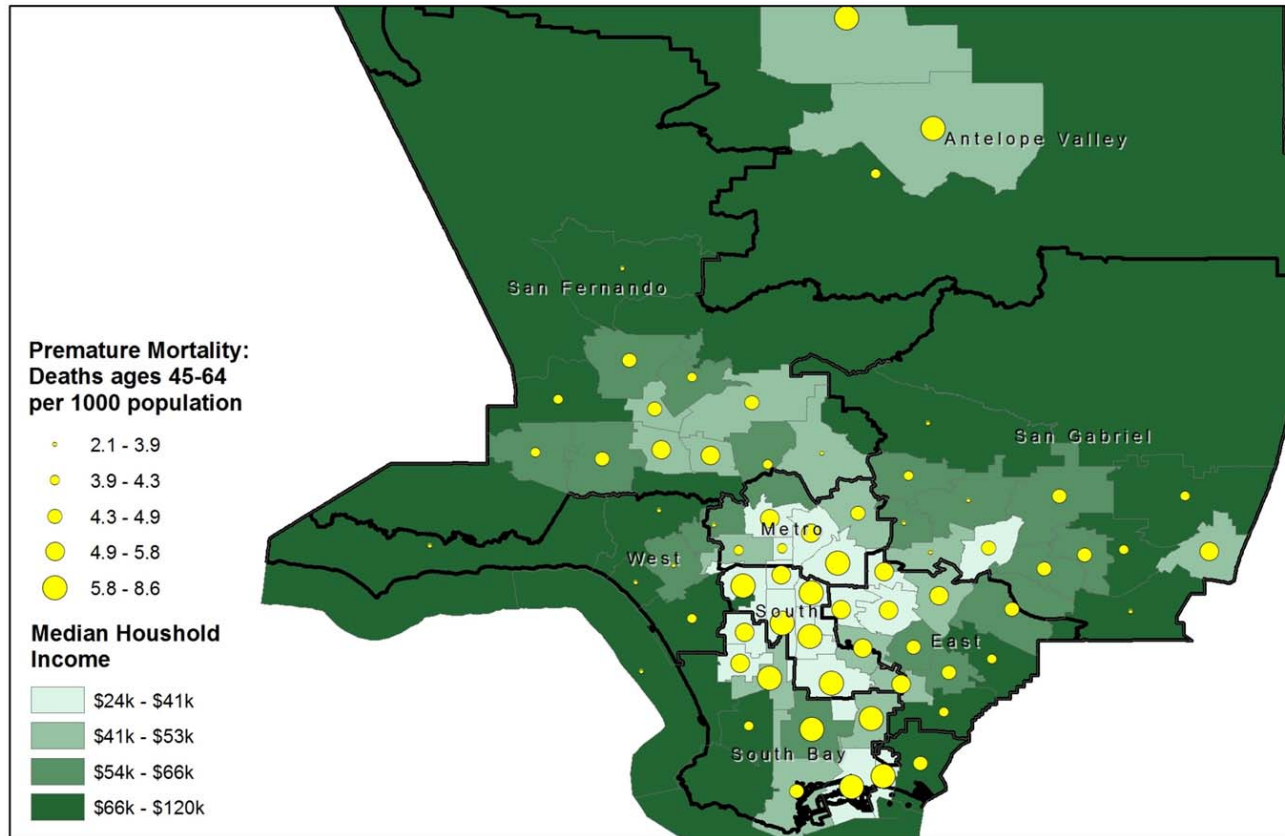


Economic Hardship & Childhood Obesity





Indicators Associated with Household Income in Los Angeles County





Closing Remarks

- Developing the national and regional dialogue about health and the need for change is a long range conversation that requires engaging and linking many sectors and stakeholders
- Strategies for engagement are built around effective communication and issue framing that improves understanding of how:
 - Social and physical environments contribute to health
 - Lowering the burden of disease is a public advocacy process
- Evidence-based practices, quality assurance, and measurable outcomes will be essential to achieving desired outcomes equally in public health and medical care