Metrics that Matter

Steven Teutsch, MD, MPH
Consultant
Senior Fellow, Public Health Institute
Adjunct Professor, UCLA
Senior Fellow, Leonard D. Schaeffer Center for Health Policy and Economics, USC

Overview

- Review metric sets and their characteristics
- Challenges and opportunities
- From metric sets to action

Public Health Surveillance

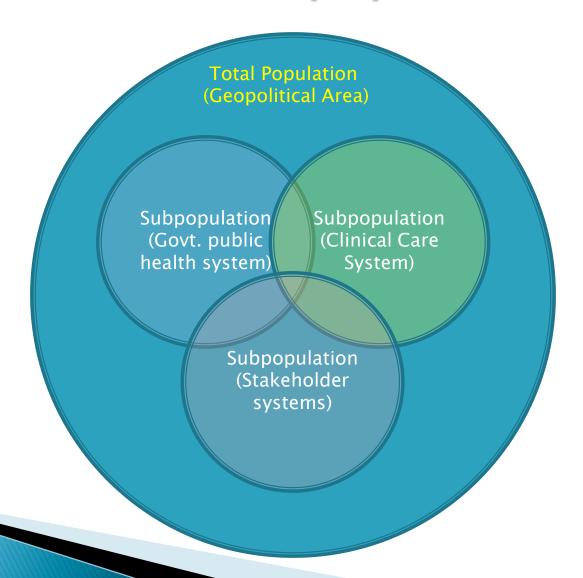
"the ongoing systematic collection, analysis and interpretation of health-related data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know. The final link in the surveillance chain is the application of these data to prevention and control."

Lee LM, Teutsch SM, Thacker SB, St. Louis ME. *Principles and practice of public health surveillance*, 3rd ed. Oxford. New York 2010.

Uses

- To estimate the magnitude of a health problem in a population
- To detect problems
- To document the distribution and extent of a problem
- To generate hypotheses about causes
- To stimulate control activities
- To evaluate control strategies

Measurement of the Total Population and Subpopulations



Committee on Public Health Strategies Recommended that HHS Oversee Development of Standard Indicators for

- The health of communities
- Health outcomes
- A summary measure of population health: health-adjusted life expectancy (HALE)

What is a Healthy **Community?**

A Healthy Community provides for the following through all stages of life:

MEETS BASIC NEEDS OF ALL

- · Safe, sustainable, accessible, and affordable transportation options
- Affordable, accessible and nutritious foods, and safe drinkable water
- · Affordable, high quality, socially integrated, and locationefficient housing
- Affordable, accessible and high quality health care
- · Complete and livable communities including quality schools, parks and recreational facilities, child care, libraries, financial services and other daily needs
- Access to affordable and safe opportunities for physical activity
- · Able to adapt to changing environments, resilient, and prepared for emergencies
- · Opportunities for engagement with arts, music and culture

QUALITY AND SUSTAINABILITY OF **ENVIRONMENT**

- · Clean air, soil and water, and environments free of excessive noise
- Tobacco- and smoke-free
- · Green and open spaces, including healthy tree canopy and agricultural lands
- · Minimized toxics, green house gas emissions, and waste
- Affordable and sustainable energy use
- · Aesthetically pleasing

ADEQUATE LEVELS OF **ECONOMIC AND SOCIAL** DEVELOPMENT

- · Living wage, safe and healthy job opportunities for all, and a thriving economy
- · Support for healthy development of children and adolescents
- · Opportunities for high quality and accessible education

HEALTH AND SOCIAL EQUITY

SOCIAL RELATIONSHIPS THAT ARE SUPPORTIVE AND RESPECTFUL

- Robust social and civic engagement
- Socially cohesive and supportive relationships, families, homes and neighborhoods
- Safe communities, free of crime and violence



California Health in All Policies Task Force. (2010, December 3). Health in All Policies Task Force Report to the Strategic Growth Council. Retrieved from: http://sgc.ca.gov/hiap/docs/publications/HiAP_Task_Force_Report.pdf Used with permission.

What is a Metric Set?

 Organized sets of measures to assess and improve population health and health equity

What is a Core Metrics Set?

A parsimonious set of measures that provide a quantitative indication of current status on the most important elements in a given field, and that can be used as a standardized and accurate tool for informing, comparing, focusing, monitoring, and reporting change.*

*IOM (Institute of Medicine). 2015. Vital signs: Core metrics for health and health care progress. Washington, DC: The National Academies Press.

Good Metric Sets are Compelling

- Reflect the most important aspects of health
- Reflect the most important drivers of health
- Stimulate action

Desirable Characteristics

- Of the set of metrics
 - Comprehensive
 - Parsimonious
 - Easily understood
 - Promote population health, health equity, and systems change
- Of individual metrics
 - Understandable
 - Meaningful
 - Compelling
 - Mutable
 - Technically sound
 - Use available data at national, state, local levels
 - Provide information on subpopulations

Let's Look at Some Sets of Metrics

But before we do

- Realize that what is measured depends on the purpose and perspective.
 - Population health
 - Clinical care system
 - Well-being
 - Economic
 - Comparison
 - Ranking

Leading Health Indicator Topics from Healthy People 2020

- Access to Health Services
- Clinical Preventive Services
- Environmental Quality
- Injury and Violence
- Maternal, Infant, and Child Health
- Mental Health
- Nutrition, Physical Activity, and Obesity
- Oral Health
- Social Determinants
- Substance Abuse
- Tobacco

State of USA Health Indicators

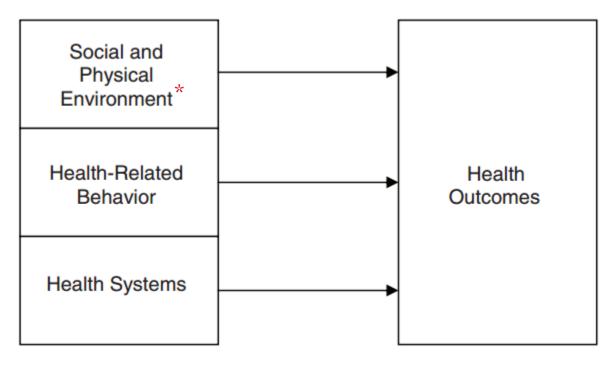
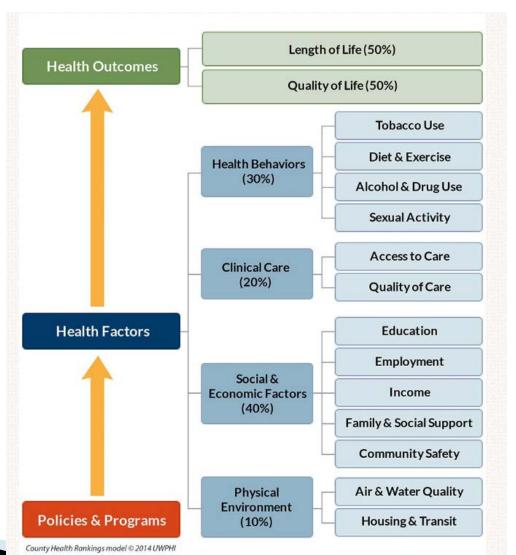


FIGURE 1 Framework for health and health care indicator development.

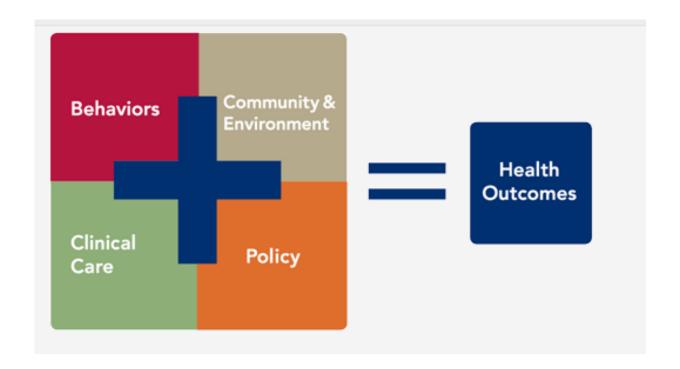
IOM (Institute of Medicine). 2009. State of the USA Health Indicators: Letter Report. Washington, DC: The National Academies Press.

County Health Rankings



County Health Rankings. www.countyhealthrankings.org. University of Wisconsin Public Health Institute

America's Health Rankings Framework



America's HealthRankings. 2015. United Health Foundation. http://www.americashealthrankings.org/

Vital Signs Framework



Other Population Health Metrics Resources

AARP Livability Index

■ HOUSING

Affordability and access



They say home is where the heart is—and the same holds true for the Livability Index. Housing is a central component of livability.

■ NEIGHBORHOOD

Access to life, work, and play



What makes a neighborhood truly livable? Two important qualities are access and convenience.

■ TRANSPORTATION

Safe and convenient options



How easily and safely we're able to get from one place to another has a major effect on our quality of life.

■ ENVIRONMENT

Clean air and water



Good communities maintain a clean environment for their residents. Great communities enact policies to improve and protect the environment for generations to come.

■ HEALTH

Prevention, access, and quality



Community conditions influence health behaviors.

■ ENGAGEMENT

Civic and social involvement



A livable community fosters interaction among residents.

■ OPPORTUNITY

Inclusion and possibilities



America was built on opportunity—and our nation's many thriving communities are no different.

https://livabilityindex.aarp.org

Healthy Communities Network



Facts & Figures

Promising Practices

Resources & Funding

Tools & Wizards

Topic Centers



A County Health Department

Topic Centers



Health



Government & Politics



Education



Social Environment



Public Safety

Economy

Environment



Transportation

Get Started on Think Health LA

Think Health LA tracks hundreds of community health indicators across 8 topic areas, providing programs and strategies for addressing community health challenges



Community Dashboard See how our community stacks up compared to California and the



Healthy People 2020 Tracker Learn how we are doing based on national goals



Indicator Comparison Report Select the indicators you want to compare across regions



Promising Practices Learn about over 2000 health and wellness program from across the country



Demographic Dashboard View demographic data by race, gender and ethnicity



SocioNeeds Index Compare the socio-economic need between zip codes in our region



Report Assistant Create a custom report about the topic you care about most

Gallup Healthways Well-Being Index

- Sense of purpose
- Social relationships
- Financial security
- Relationship to community
- Physical health

National Equity Atlas

- Demographics
- Economic Vitality
- Readiness
- Connectedness
- Economic Benefits

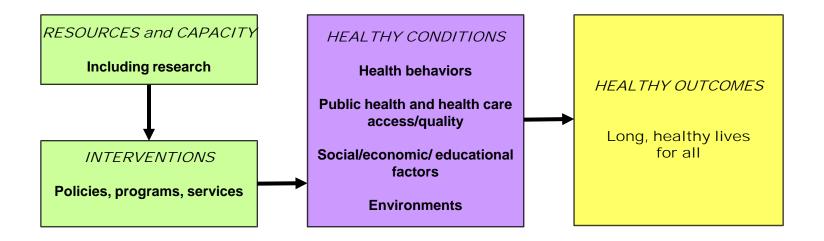
Challenges

- Parsimony vs completeness
 - We need better composite measures (indices)
 - Parsimony promotes focus
- Paucity of good equity measures
 - Current option is to analyze by subgroup
- Outcome measures change too slowly
 - Need to have standard measures to assess progress
 - May need to have a core set of process measures
- Proliferation of "core metric sets"
 - Would benefit from authoritative leadership
- Availability of data at the international, national, state, local, and institutional levels

Linking Metrics to Action

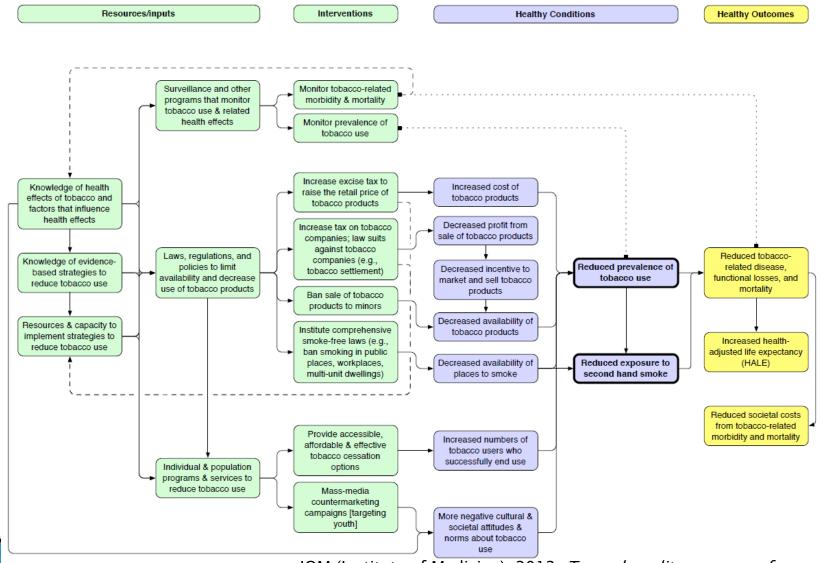
- Connecting measures to interventions
 - County Health Ranking Roadmaps
 - Healthy People 2020
- Taking Action
 - Including actions and systems changes in the actual metrics (the RWJF action framework, for example)
 - Develop more detailed measures for specific interventions

Logic Model from an IOM Report on Quality Measures for the Leading Health Indicators (HP2020)



IOM (Institute of Medicine). 2012. *Toward quality measures for population health and the leading health indicators.* Washington, DC: The National Academies Press.

Applying the Logic Model to Tobacco Use



IOM (Institute of Medicine). 2012. *Toward quality measures for population health and the leading health indicators.* Washington, DC: The National Academies Press.

In Sum

- The best measures are the ones tht drive the greatest health improvement and health equity for the total population.
- Many of the greatest opportunities lie outside the traditional health sector and in systems and policy change
- Measures need to be tied to interventions
- Interventions need to be part of collective action and quality improvement processes

THANKS!

steventeutsch@gmail.com