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## **Measuring Population Health**

HSCRC Performance Measurement Workgroup

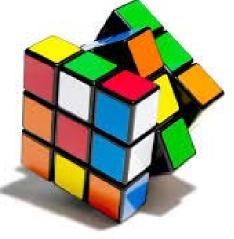
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# Framework for Measuring Population Health

- Definitions
- Principles
- Measure Selection
- Measure Types
- Phasing





- WHO: A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.
- NQF commissioned paper:
  - Improving overall health status and health outcomes of interest to the clinical care system, the government public health system, and stakeholder organizations.
  - Influenced by physical, biological, social and economic factors in the environment, by personal health behavior, and by access to and effectiveness of healthcare services.

Jacobsen and Teutsh (2012)



AFFORDABLE CARE

#### PRIORITIES

**Health and Well-Being** 

**Prevention and Treatment of Leading Causes of Mortality** 

**Person- and Family-Centered Care** 

**Effective Communication and Care Coordination** 

**Patient Safety** 

**Affordable Care** 

HEALTHY PEOPLE/ HEALTHY COMMUNITIES

BETTER CARE

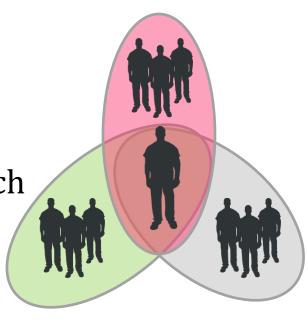
#### **Clinical Care System**

Hospital inpatient, outpatient, emergency, and community services

	Health system regulation, monitoring, and reporting	Assess needs Monitor health status Meet goals	Health screening and education	
Government		Communication	Community	
Public Health		of health needs	Stakeholders	
Federal, state, and local		Granting for	Health education and	
public health policy,		innovative	awareness, school and	
budget, and		community	workplace health,	
administration		initiatives	neighborhood outreach	

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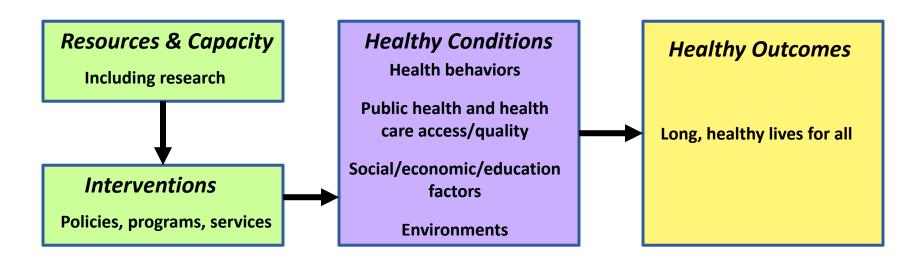
- For hospitals, population health may include:
  - Entire geographic area in which hospital resides
  - Entire medical neighborhood of which the hospital is a part
  - Specific demographics within total population (e.g., elderly, children, chronically ill, low-income)
  - Measures of inpatient, outpatient, and community services



# **Hospitals and Population Health**

- Hospitals have an interest in population health management:
  - □ Caregivers are passionate about promoting health.
  - Length of stay, readmissions, and complications are linked to health and wellness of patients before and after hospital stay.
  - Increased policy efforts to improve care coordination between hospitals, primary care, pharmacy, entire medical neighborhood.
  - Hospital data can be used to assess community health.
  - Community health initiatives build goodwill and reinforce non-profit status.

#### **Measure Selection: IOM Logic Model**



IOM report: Toward Quality Measures For Population Health (2013)



### Measure Selection: IOM Logic Model

- Example: Influenza Vaccination
  - 1. Goal- reduce morbidity/mortality from vaccine-preventable influenza
  - 2. Initiative- support influenza vaccination at the community, provider, and individual levels
  - 3. Measure- influenza vaccination rate
  - 4. Outcome- increased number of vaccinated individuals in the community reduced risk of preventable disease in the population

IOM report: Toward Quality Measures For Population Health (2013)



# **Population Health Measure Types**

- Health Outcomes- high-level indicators
- Access- availability and use of services
- <u>Healthy Behaviors</u>- choices by individuals and communities
- Prevention- screening and early intervention
- <u>Social Environment</u>- health literacy and attention to disparities
- Physical Environment- built infrastructure and natural resources



## Population Health Measure Types-Health Outcomes

Examples

□ Mortality

□ Longevity

Infant mortality; low birth weight; preterm birth

Injuries; accidents; homicide

□ Suicide rate



# Population Health Measure Types-Access

- Health insurance status; primary care access; access to needed services; condition specific hospital admissions
- Examples
  - (NQF #1337) Children with Inconsistent Health Insurance Coverage in the Past 12 Months
  - (NQF #718) Children Who Had Problems Obtaining Referrals When Needed
  - □ (NQF #277) Heart Failure Admission Rate (PQI 8)



# Population Health Measure Types-Healthy Behaviors

- Addictive substances assessment and counseling; weight assessment and physical activity counseling
- Examples
  - NQF #2152) Preventive Care and Screening and Counseling: Unhealthy Alcohol Use
  - □ (NQF #1656) Tobacco Use Treatment Offered at Discharge
  - (NQF #1406) Risky Behavior Assessment or Counseling by Age 13 Years
  - (NQF #421) Body Mass Index (BMI) Screening and Follow-Up



# Population Health Measure Types-Prevention

- Disease and condition screening; immunizations; maternity care; newborn and child development
- Examples
  - □ (NQF #34) Colorectal Cancer Screening
  - □ (NQF #1659) Influenza Immunization
  - □ (NQF #278) Low Birth Weight Rate (PQI 9)
  - (NQF #1385) Developmental screening using a parent completed screening tool
  - (NQF #104) Adult Major Depressive Disorder: Suicide Risk Assessment

#### Population Health Measure Types-Social Environment

- Health literacy; education (e.g., graduation rate); community safety; poverty level; disparitiessensitive measures
- Example
  - (NQF #720) Children Who Live in Communities Perceived as Safe



### Population Health Measure Types-Physical Environment

- Healthy food options, neighborhood walkability, air quality
- Example
  - Image: NQF 1346) Children Who Are Exposed To Secondhand Smoke Inside Home



# Phasing

- Measure healthy behaviors and preventive services for hospital patients
- Assess community health needs and develop measurement strategy
- Collaborate with pubic health officials and community services on measuring progress in addressing community needs



Progress Toward Population Health

## Resources

- IOM report: Toward Quality Measures for Population Health and the Leading Health Indicators (2013)
- NQF commissioned paper: An Environmental Scan of Integrated Approaches for Defining and Measuring Total Population Health (2012)
- NQF report: Multi-Stakeholder Input on a National Priority: Improving Population Health by Working with Communities (2014)





# Thank You

