

The Promise of the Affordable Care Act

# Private Organizations Working to Improve Population Health

You make the Difference!

California Conference of Local Health Officers

**Joe Wilkins, MBA, FACHE**  
Executive Director, Quest Diagnostics  
Chairman, St Joseph Hoag Health

October 3<sup>rd</sup> 2014

# Agenda

- **Mission, Vision and Definition**
- **Essential Public Health Services**
- **The Case for Partnerships , Why your leadership is critical ?**
- **Transformation to Population Health Management**
- **Case Examples**

# Mission and Vision

## Quest Diagnostics

- Empowering Better Health with Diagnostic Insights.
  - We provide crucial diagnostic information that supports and enhances decisions people make to improve patients' health.

## St Joseph Hoag Health

- St. Joseph Hoag Health will be the trusted partner transforming care to create the healthiest communities. We will achieve this vision through **developing new population health based care models** within the context of a sustainable economic business model. The concept of sustainable includes caring for the poor and vulnerable.
  - We will transform the way medical care is provided at home, in the hospital and across the life span, increasing access to all in our communities.
  - The goal of the unified system is to attend to the body, mind and spirit of each person and build communities that remain vital and healthy.



Vision:

*Healthy People in Healthy Communities*

Mission:

*Promote Physical and Mental Health and Prevent Disease, Injury, and Disability*

# Definition Population Health

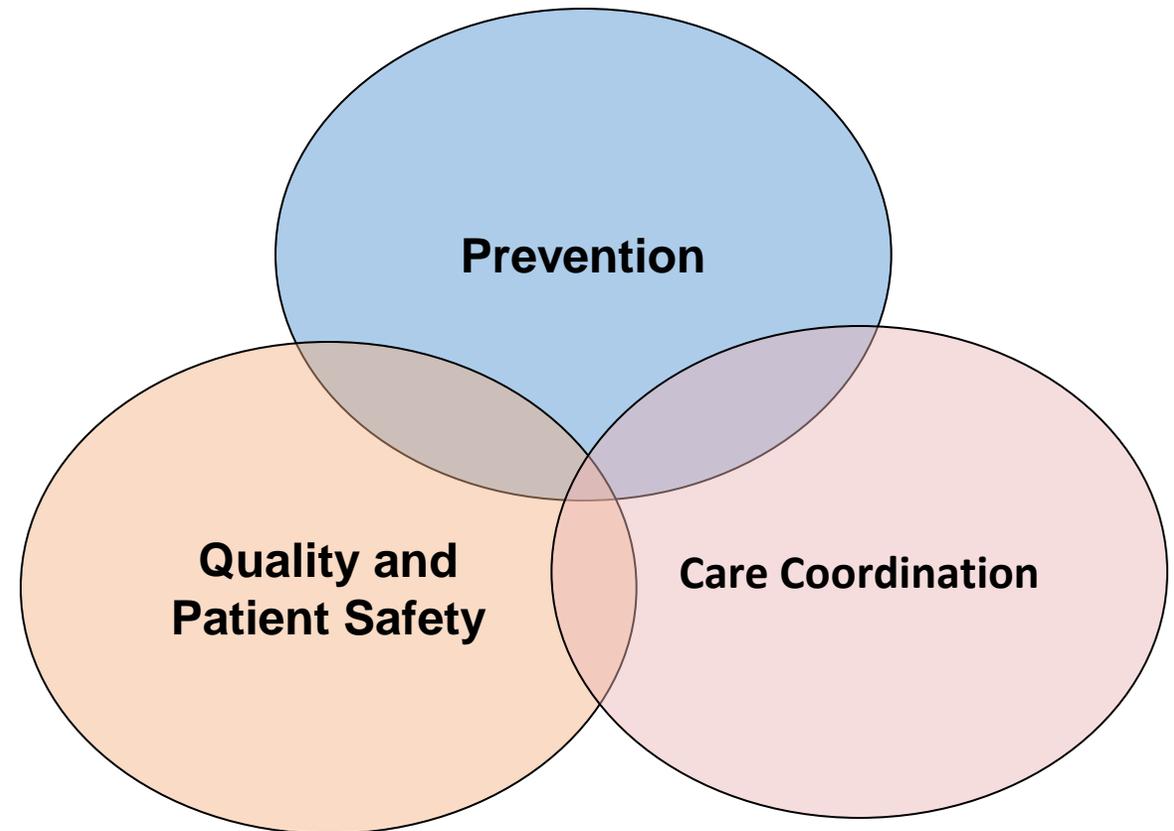
- Population Health is "the health outcomes of a group of individuals, including the distribution of such outcomes within the group" (Kindig and Stoddart, 2003). While not a part of the definition itself, it is understood that such population health outcomes are the product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors, and environmental factors.

# Defining Population Health

Mechanisms to improve population health:

Three correlated stages:

- Identification and analysis of the distribution of specific health statuses and outcomes within a population
- Identification and evaluation of factors that cause the current outcomes distribution
- Identification and implementation of interventions that may modify the factors to improve health outcomes



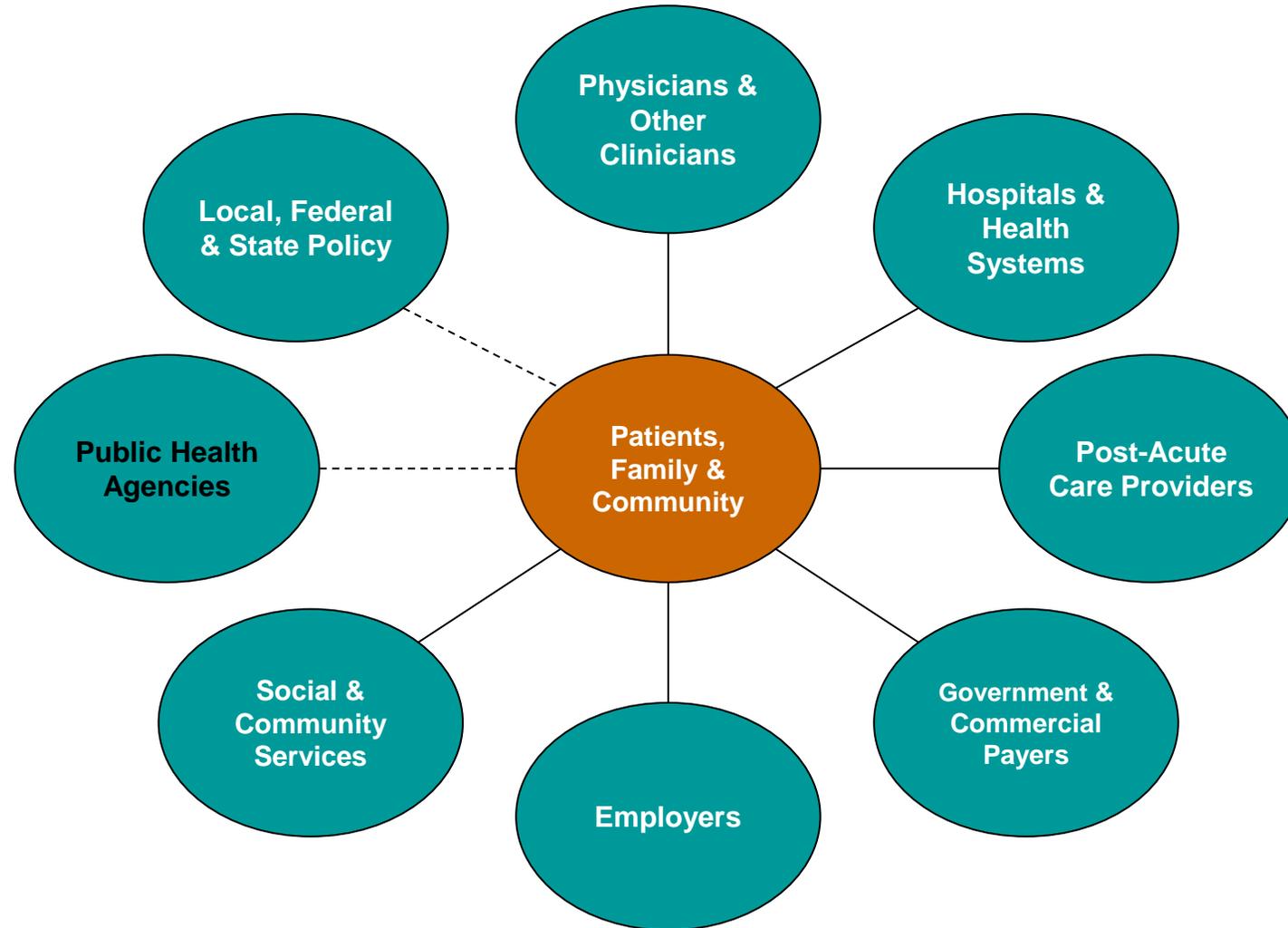
# Driving the Change

## Driving forces for shift to population health management

- Shift in financial arrangements away from fee-for-service to value-based payments (ACA)
- Increase in provider accountability for cost and quality (ACA)
- Increased access to care through the Affordable Care Act (ACA)
- Redesigning care delivery
- Increased data transparency (ACA)
- Economic and legislative pressures to curb health care cost (ACA)
- Demographic changes in the patient population
- Acute medical care is only one aspect of health care

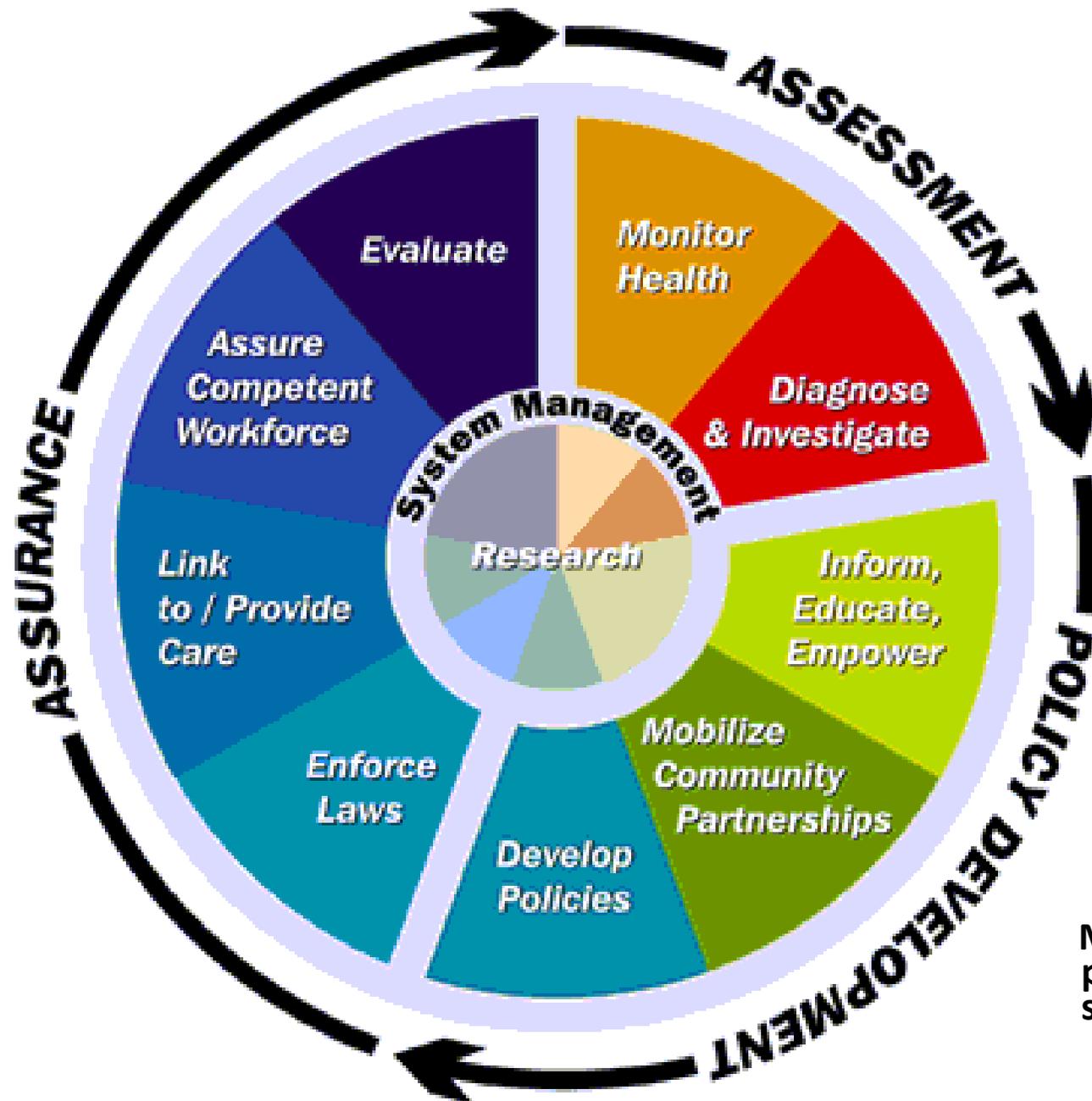
# Stakeholders in Population Health

Population health requires partnerships to improve outcomes



# Public Health Agencies

- Prevents epidemics and the spread of disease
- Protects against environmental hazards
- Prevents injuries
- Promotes and encourages healthy behaviors
- Responds to disasters and assists communities in recovery
- Assures the quality and accessibility of health services



Mobilize community partnerships to identify and solve health problems

# Essential Public Health Services

- **Monitor health status to identify community health problems**
- **Diagnose and investigate health problems and health hazards in the community**
- **Inform, educate, and empower people about health issues**
- **Mobilize community partnerships to identify and solve health problems**
- **Develop policies and plans that support individual and community health efforts**
- **Enforce laws and regulations that protect health and ensure safety**
- **Link people to needed personal health services and assure the provision of health care when otherwise unavailable**
- **Assure a competent public health and personal health care workforce**
- **Evaluate effectiveness, accessibility, and quality of personal and population-based health services**
- **Research for new insights and innovative solutions to health problems**

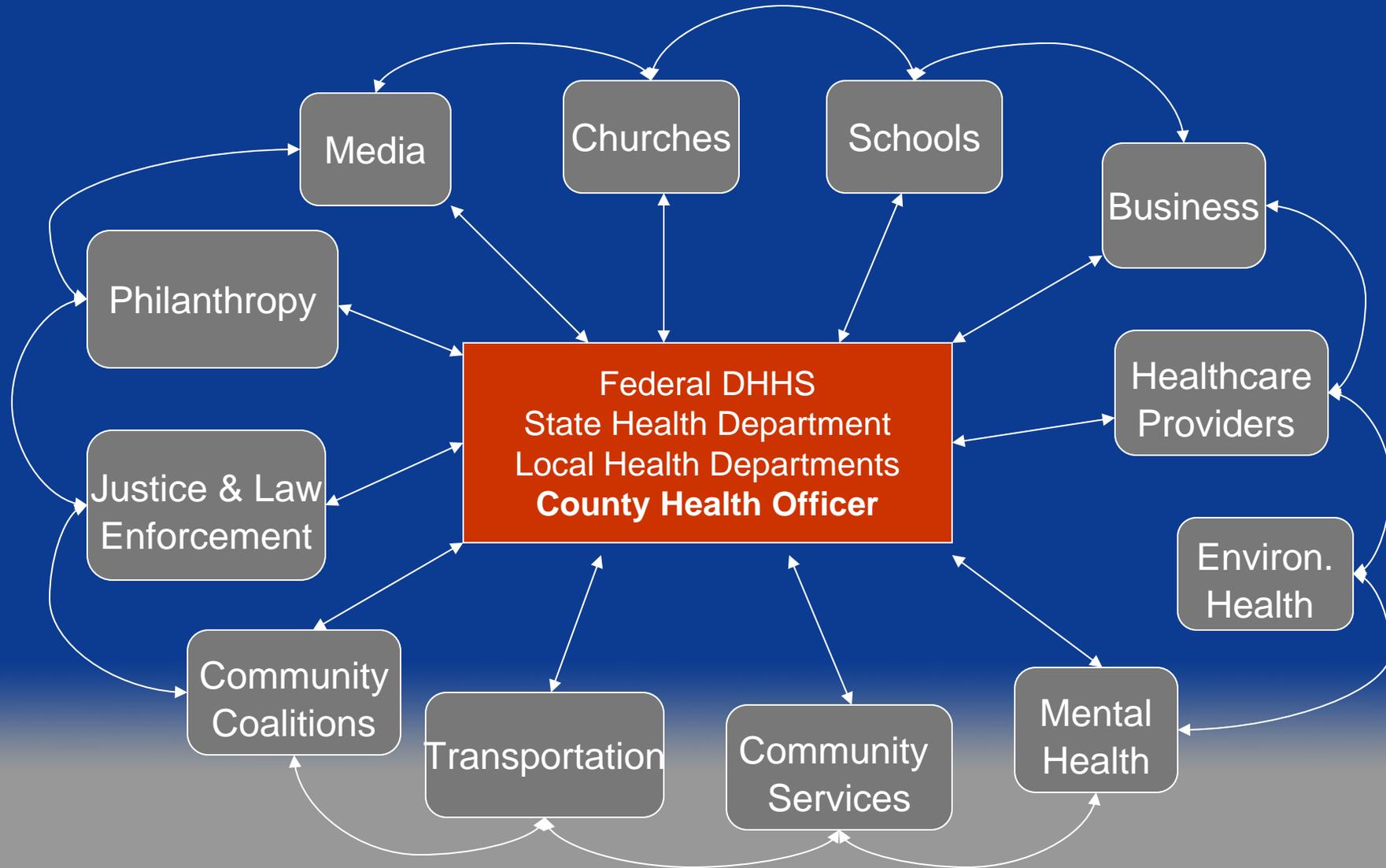
# Case for Private - Partnership in Population Health

- All too often governments lacks the skill, the will and the wallet to meet its missions.
  - Schools fall short of the mark
  - Roads and Bridges fall into disrepair
  - Government Budgets bleed red ink, cost of services outstrips taxes
  - Healthcare cost too much and delivers too little
- Private Public Partnerships offer solutions to overcome insurmountable problems and achieve public goals more effectively.

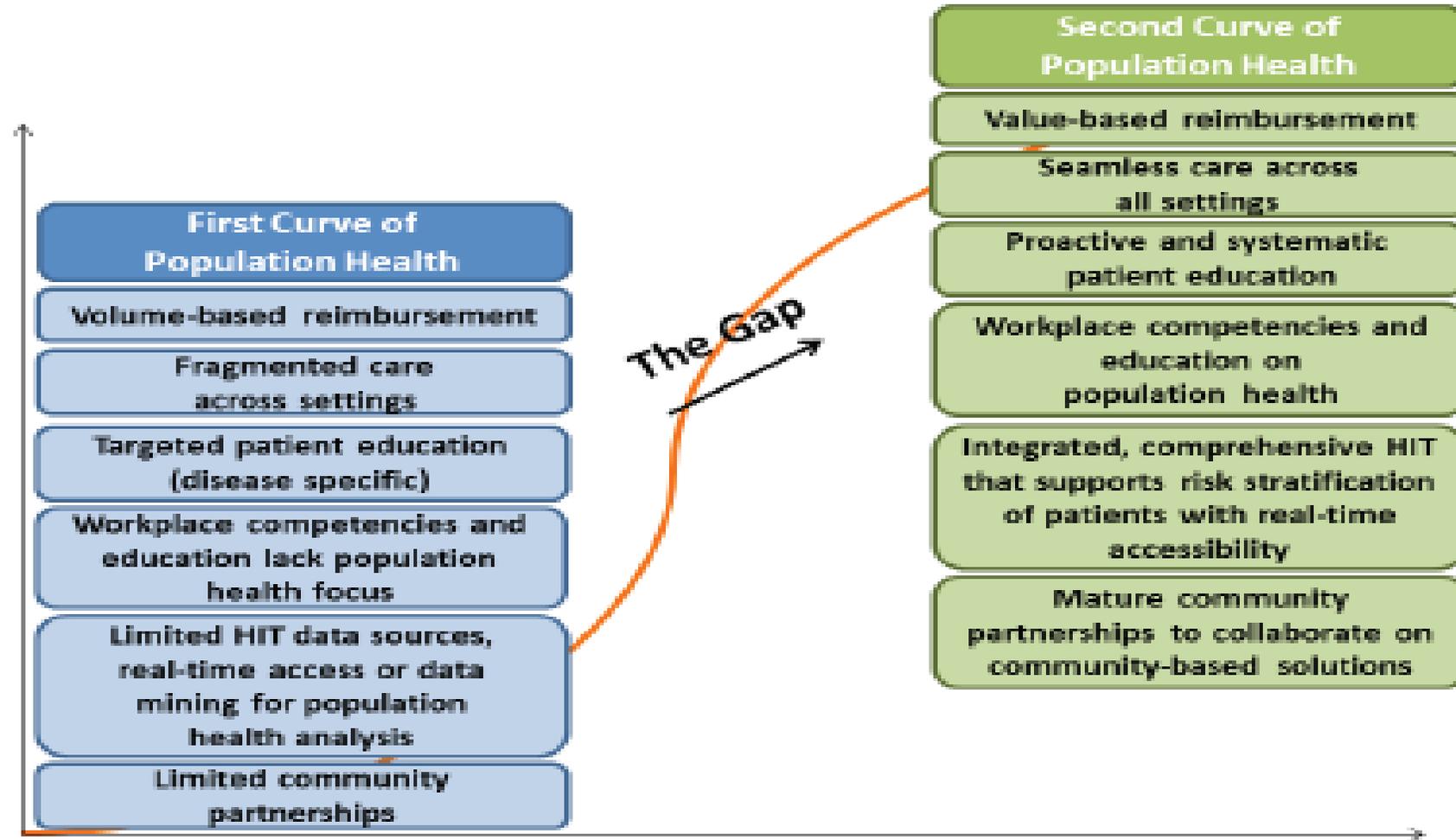
Why is your leadership so crucial?



# An integrated system of *Population Health Partnerships*



# First to Second Curve for Population Health



# Second Curve of Population Health

## ***Mature community partnerships to collaborate on community-based solutions:***

- Engage communities by exchanging resources, sharing knowledge and developing relationships to manage challenges and leverage advantages
- Extensive, diverse partnerships between hospitals and local organizations to address specific needs
- Partnerships with community and public health departments to address gaps and limitations in care delivery and address community needs
- Balanced leadership leveraging resources of community partners and including community representatives in leadership
- Hospital-led initiatives address community issues such as environmental hazards, poverty, unemployment, housing, etc.
- Community partners collaborate to develop relevant health metrics to measure progress and community needs

# Measuring Transformation

Choosing the appropriate metrics to measure transformation to the second the curve of population health involves identifying metrics that are:

- Simple, robust, credible, impartial, actionable and reflective of community values
- Valid and reliable, easily understood, and accepted by those using them and being measured by them
- Useful over time and for specific geographic, membership or demographically defined populations
- Verifiable, independently from the entity being measured
- Responsive to factors that may influence population health during the time that inducement is offered
- Sensitive to the level and distribution of disease in a population

# Measuring Transformation

## Sample Population Health Metrics

Metric Area	Description
Summary measures	<ul style="list-style-type: none"> <li>• Health-adjusted life expectancy at birth (years)</li> <li>• Quality-adjusted life expectancy</li> <li>• Years of healthy life</li> <li>• Disability-adjusted life years</li> <li>• Quality-adjusted years</li> </ul>
Inequality measures	<ul style="list-style-type: none"> <li>• Geographic variation in age-adjusted mortality rate (AAMR) among counties in a state (standard deviation of county AAMR/state AAMR)</li> <li>• Mortality rate stratified by sex, ethnicity, income, education level, social class or wealth</li> <li>• Life expectancy stratified by sex, ethnicity, income, education level, social class or wealth</li> </ul>
Health status	<ul style="list-style-type: none"> <li>• Percentage of adults who self-report fair or poor health</li> <li>• Percentage of children reported by their parents to be in fair or poor health</li> <li>• Percentage of children aged 3–11 years exposed to secondhand smoke</li> </ul>
Psychological state	<ul style="list-style-type: none"> <li>• Percentage of adults with serious psychological distress (score <math>\geq 13</math> on the K6 scale)</li> <li>• Percentage of adults who report joint pain during the past 30 days (adults self-report)</li> <li>• Percentage of adults who are satisfied with their lives</li> </ul>
Ability to function	<ul style="list-style-type: none"> <li>• Percentage of adults who report a disability (for example, limitations of vision or hearing, cognitive impairment, lack of mobility)</li> <li>• Mean number of days in the past 30 days with limited activity due to poor mental or physical health (adults self-report)</li> </ul>
Access to health care	<ul style="list-style-type: none"> <li>• Percentage of population that is insured</li> <li>• Percentage of the population that has a designated primary care physician</li> </ul>
Clinical preventive services	<ul style="list-style-type: none"> <li>• Adults who receive a cancer screening based on the most recent guidelines</li> <li>• Adults with hypertension whose blood pressure is under control</li> <li>• Adult diabetic population with controlled hemoglobin A1c values</li> <li>• Children aged 19–35 months who receive the recommended vaccines</li> </ul>
Cost of care	<ul style="list-style-type: none"> <li>• Percentage of unnecessary ER visits</li> <li>• Percentage decrease in ER costs</li> <li>• Percentage decrease in cost of care per patient, per year</li> </ul>

Source: Adapted from R. Gibson Parrish, 2010 and Healthy People 2020, 2013

# Case Example: Mercy and Memorial Hospitals

- **Background:** Mercy and Memorial Hospitals Background: Mercy Hospital Downtown, Mercy Hospital Southwest and Memorial Hospital, the three Dignity Health hospitals in Bakersfield, California, are the largest health care providers in the southern San Joaquin Valley and serve a diverse population of urban and rural residents. The hospitals' missions are to provide high-quality, compassionate health care to their patients and advocate on behalf of the poor. Created in 1991, the Department of Special Needs and Community Outreach was formed to take hospital resources beyond the walls of the three hospitals and help create a healthier community.

**Intervention:** Mercy and Memorial Hospitals have greatly expanded their population health initiatives over the last 10 years. They coordinate more than 45 outreach programs and collaborate with several hundred different partners in the community. A central component of the population health effort has been addressing access to care, preventive care, job training, chronic disease management, nutrition services and youth interventions. The programs are expanding with increased hospital support, grant funding and donations. **Mercy and Memorial Hospitals continue to coordinate their population health programs through three outreach centers located in the most vulnerable areas of Bakersfield.** These centers have become the hub of resources for the underserved. Residents have come to trust the employees, who provide a variety of health- and non-health-related services, including:

- Art for Healing • Empowerment (chronic disease self management) • Breakfast Club • Health education seminars and classes • Breast health program • Health screenings • Car seat program • Healthy Kids in Healthy Homes • Community fitness classes • Homemaker Care job training • Community Health Initiative • In-home health education • Dinner Bell program • Operation Back to School • Emergency food baskets • Referrals for basic needs

**Results:** Of the patients who enter the empowerment seminars for chronic disease and diabetes self-management, 93 percent avoided admissions to the hospital or emergency department for six months following their participation. In the Homemaker Care job training program, 66 percent of participants have gained employment within six months. In 2013, the Community Health Initiative of Kern County enrolled 9,519 children in health insurance programs. The Art for Healing program has become a popular destination for community caseworkers to bring clients suffering from mental illness.

## **Lessons Learned:**

- Collaboration with other providers and partners enables Mercy and Memorial Hospitals to create a network of community members to enroll residents into health insurance programs.
- By offering evidence-based chronic disease management programs, Mercy and Memorial Hospitals are effective in avoiding hospital admissions and readmissions.
- Many program participants become volunteers, leaders and in some cases employees.

# Case Example: St Joseph Hoag Health

- **Background:** St. Joseph Hoag Health addressed childhood obesity through its Healthy for Life (HFL) program. HFL is a county-wide effort designed to support schools that serve low income neighborhoods to enhance their physical education and wellness activities and policies. The purpose of the program is to reduce the rate of childhood obesity in low income youth in Orange County by assisting schools to support student efforts to establish lifelong healthy lifestyle habits. HFL led to reductions in Body Mass Index (BMI) among preschool through high school students, as well as improvements in specific dietary intakes (e.g., reductions in whole milk and junk food consumption among preschoolers), and decreases in “screen time” (e.g., sedentary television, computer and phone use). BMI decreased significantly for students at or above 85<sup>th</sup> percentile.
- **Intervention:** In an attempt to make the HFL program more economically sustainable, St. Joseph Hoag Health transitioned the HFL program to its partner, the Orange County Department of Education. Thirty grade 3-6 classroom teachers participated in a pilot serving 1,000 students in 15 low income schools across eight school districts. The goal was to increase healthy student behaviors and improve BMI outcomes by creating a healthier classroom environment through regular use of free online fitness and nutrition resources, no prep dvd-based physical activity tools, low-prep healthy eating materials and fitness curriculum. This approach aimed to improve teacher and student knowledge and skills, increase use of physical activity breaks and nutrition education learning opportunities in school, resulting in reduced student BMI.
- **Results:** Data showed a statistically significant reduction in student BMI and BMI percentiles.

	Pre-test	Post-test
BMI	19.99	19.72
BMI Percentile	71.54	63.85

Parent surveys indicated screen time decreased while physical activity after school increased.

- **Lessons Learned:** Collaboration with key partners contributed to the success of the program.
  - Project development, management and support services from Orange County Department of Education
  - Evaluation by Cal State Fullerton Dept. of Health Science
  - Funding from St. Joseph Health Community Partnership Fund and Kaiser Permanente

# Case Example: Quest Diagnostics

- **Background:** Quest Diagnostics has a stated strategy to utilize its depth and breadth to provide holistic solutions to clinical problems, enabling physicians and systems to practice the highest quality care. Specifically, Quest aims to:
  - 1. create holistic care pathways to facilitate diagnostic workups for PCPs and specialists and
  - 2. utilize its large clinical database to enable population health.
- Quest Health Trends database is the largest Clinical diagnostics data repository in the U.S. with over 150 million patient encounters per year, ~ 600 million tests, 2.8 billion results from 2005-present. The data represent broad coverage of demographics, lab results, diagnosis, geography, caregiver, involving over 50% of docs in US.
- **Intervention: Health Trends database** – Based on our database, Quest has made great strides in enabling epidemiology research and population health initiatives

Quest has an ongoing collaboration with CDC to provide quarterly data to enable HCV detection efforts in the US. These data have been critically important in the CDC's HCV initiative and are being presented at the AASLD meeting this November

Quest has developed and implemented the Clinical IQ toolkit enables use of data to empower population health management. This tool uses Quest national data and provider data to identify, target and monitor closure in gaps in care

Quest has published several high impact articles based on the Health Trends data to examine the use of anti-coagulation across the US, Rotavirus infection rates, LDL cholesterol trends and other key public health issues.

Most recent analysis of the Health Trends database provides insight into the implementation of the ACA and shows significant differences in diabetes detection rates in states who did vs. did not expand Medicaid in 2014. This data will be released in November and published in peer review thereafter.

**Holistic solutions:** Quest has developed and introduced comprehensive care pathways, including lab ordering and interpretation decision support for guideline supported care. These care pathways aim to enable PCP and specialists to practice efficient and high quality care.

Care pathways have been developed and released in 2013 and 2014 in HCV detection and care, Diabetes risk and care and Dementia.

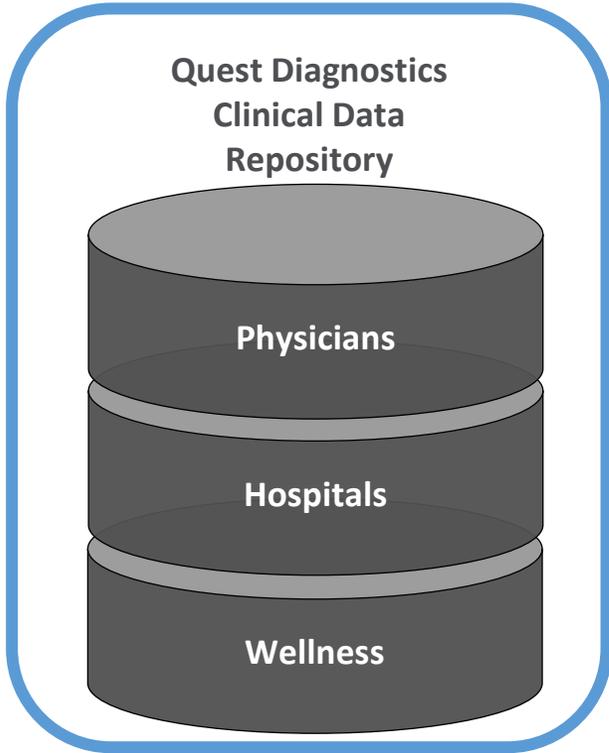
For the Dementia care pathway, Quest and the UCSF Dementia and Aging Center have embarked on a collaboration to implement the solution in the PCP community and demonstrate lowered time to diagnosis, identification of treatable causes and reduction in overall health care spend.

- **Results:** Through the deployment of care pathways, Quest has seen and increased compliance with guidelines among its customers in the Diabetes detection, Cardiovascular risk assessment and HCV detection and care areas. Through use of population diagnostic data we have been able to demonstrate effectiveness and remaining geographical gaps in CDC programs for HCV detection.
- **Lessons Learned:** Implementation of structured, guidelines based, care pathways with decision support enable physicians to comply with guidelines and close gaps in care. Diagnostic data can serve as a valuable tool in enabling population health programs at a national or provider level.

Our Quest Diagnostics Health Trends diagnostics database has unmatched scale which we use to generate powerful diagnostic insights



Holistic solutions,  
insights and closure  
in gaps in care



### Largest Clinical Repository in the U.S.

150 million patient encounters per year, ~ 600 million tests, 2.8 billion results

Over 1.5 billion patient encounters from 2005 – present

Demographics, lab results, diagnosis, geography, caregiver, 50% of docs in US

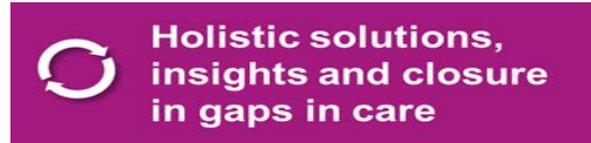
Generates very high impact scientific publications and contributions to the field with leading academic thought leaders

Clinical IQ™ toolkit enables use of data to empower population health management

- Test orders and results for expansive range of medical conditions:

- ✓ general health & wellness
- ✓ chronic conditions
- ✓ cancer
- ✓ infectious diseases
- ✓ neurology
- ✓ women's health
- ✓ pediatric health
- ✓ toxicology and prescription drug
- ✓ many rare medical conditions

# Our Clinical IQ™ solutions empower population health management



### Population Health Assessment

- ✓ **Gaps in Care**  
Are my patients getting the right medical services?
- ✓ **Population Diagnostics**  
What are my population health goals?

### Identify Risk

- ✓ **Lab-informed Disease Registries**  
Have I properly identified medical conditions of my patients?
- ✓ **Predictive Models**  
Have I accurately identified future clinical and financial risk?

### Clinical Performance of Providers

- ✓ **Provider Scorecards**  
How do my providers compare relative to internal and national benchmarks?
- ✓ **Performance Tracking**  
How do I reduce unnecessary / inappropriate variability in the delivery of healthcare services?

### Target Gaps in Care

Report Date	Physician	Patient	Last Testing Date	Next Testing Date	Test	Complete?
1/12/20	D: P1	P1	11/22/19	5/12/20	HbA1c	Yes
			12/22/19	6/22/20	Lipid	Yes
			11/22/19	11/22/20	Microalbumin	Yes
			11/22/19	11/22/20	eGFR	Yes
1/12/20	D: P2	P2	12/22/19	7/22/20	Lipid	Yes
			12/22/19	12/22/20	Microalbumin	No
			12/22/19	7/22/20	eGFR	Yes
1/12/20	D: P3	P3	1/12/20	7/22/20	HbA1c	Yes
			1/12/20	7/22/20	Lipid	Yes
			12/22/19	7/22/20	Microalbumin	No
			1/12/20	7/22/20	eGFR	Yes

- ✓ **Clinical Targeting**  
Which patients require clinical follow-up?
- ✓ **Patient Engagement**  
How can I impact patient behaviors to improve quality metrics and overall patient experience?

### Track Outcomes

- ✓ **Clinical Effectiveness**  
Are my population health strategies impacting utilization (e.g., hospitalizations) and clinical outcomes (morbidity and mortality markers)?
- ✓ **Financial outcomes**  
Are my programs impacting healthcare spend and maximizing shared savings?



Vision:

*Healthy People in Healthy Communities*

Mission:

*Promote Physical and Mental Health and Prevent Disease, Injury, and Disability*

# Generative Questions

- From your perspective, what are the barriers to enabling Population Health Management fully within your County?
- What role do you play, as County Health Officer to drive collaborative partnerships between Private and Public Healthcare organizations to fully enable Population Health Management?