

# **POPULATION HEALTH MANAGEMENT, CLINICAL INTEGRATION AND SYSTEMNESS**

## **Essential Health Care Functionalities for the Future**

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**California Area Indian Health Service Annual Medical Conference**

**Sacramento, CA**

**May 21, 2013**

# **Presentation Objectives**

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- **Provide a brief overview of the Institute for Population Health Improvement**
- **Discuss some key principles of population health management and clinical integration within the emerging concept of health care “systemness”**

# Presentation Premise

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To thrive in the emerging new value-based health care economy, health care systems must become high performing organizations that deliver a seamless continuum of coordinated, patient-centered clinical services that are population health mindful.



# The future is not what it used to be!



# WHAT IS THE INSTITUTE FOR POPULATION HEALTH IMPROVEMENT?

A photograph of a large, modern, multi-story hospital building with a prominent central tower and glass facade, set against a clear blue sky. The building is surrounded by a green lawn and some palm trees.

**UC DAVIS**  
HEALTH SYSTEM

***Population health*** refers to the net health outcomes achieved in a defined group of individuals as a result of healthcare, public health interventions and the many cultural, socio-economic and environmental factors that influence health.

***Population health management*** refers to the array of individual, organizational and societal interventions that are taken to integrate healthcare, public health and the cultural, socio-economic and environmental determinants of health for the purpose of improving the health outcomes of a defined group of individuals.

# Institute for Population Health Improvement

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- Established as an independent operating unit in the UCDHS in mid-2011; has since developed a diverse portfolio of funded activities >\$71M and >100 FTE and consultants
- New value-based health care payment models require that population health management be a core competency for health care systems
- Serves as a resource for:
  - ✓ Health care reform
  - ✓ Clinical quality improvement
  - ✓ Building health leadership capacity
  - ✓ Developing clinical intelligence
  - ✓ Health policy
- To date, work has primarily focused on assisting government health-related agencies and philanthropies design, implement, administer and/or evaluate programs
- Promotes understanding of the multiple determinants of health and appreciation of health being a function of the totality of one's circumstances



# Selected IPHI Activities

- **Provide technical assistance and thought leadership in quality improvement to the state Department of Health Care Services for Medi-Cal (California's \$60B/yr Medicaid program)**
  - ✓ **Medi-Cal Quality Improvement Program**
  - ✓ **Evaluate the Delivery System Reform Incentive Payments (DSRIP) Program**
  - ✓ **Design the CA-specific Evaluation of the California Medicare-Medicaid Dual Eligible Demonstration Program**
- **Manage operations of the California Cancer Registry**
- **Manage the California Health eQuality (ChEQ) Program - California's Health Information Exchange Development Program**
- **Provide technical assistance and support for multiple CDPH statewide chronic disease prevention and surveillance programs**
- **Conducting a statewide assessment of surgical adverse events**
- **Conducting population health research projects**
  - ✓ **Approaches to prevention of prescription opioid use (with CHPR)**
  - ✓ **Use of the Oncotype Dx Assay in Medi-Cal beneficiaries with breast cancer**

# Selected IPHI Activities

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- Investigating the feasibility of developing Community Paramedicine in California
- Assist CDPH achieve accreditation
- Develop a basic QI training program for all CDPH employees
- Partnering with California Health & Human Services Agency on a CMMI-funded Payment Reform Model for the California
  - ✓ \$2.3M 6-month planning grant received in Mar 2013
  - ✓ Anticipate submitting a \$60M 3-year implementation proposal before Dec 2013
- IPHI asked to join the hACT for the new \$1B HHS/CMS Health FFRDC managed by MITRE
- Establishing a Center for Veterans and Military Health



**To thrive in the emerging new value-based health care economy, health care systems must become *high performing organizations* that deliver a seamless continuum of coordinated, patient-centered clinical services that are population health mindful.**

# Characteristics of a High-Performing Health System\*

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- Ensures healthy and productive lives
- Care is
  - ✓ Effective
  - ✓ Safe
  - ✓ Patient-centered
  - ✓ Timely
  - ✓ Efficient
  - ✓ Equitable
  - ✓ Coordinated
- Universal participation
- Has the capacity to continuously improve and innovate

\*derived from various reports from the Institute of Medicine and Commonwealth Fund

# Characteristics of a High-Performing Hospital\*

- **Qualitative studies**
  - ✓ **Culture**
  - ✓ **Leadership**
  - ✓ **Structure**
  - ✓ **Strategy**
  - ✓ **Information management**
  - ✓ **Good communication pathways**
  - ✓ **Skills training**
  - ✓ **Physician engagement**
- **Quantitative studies**
  - ✓ **EHRs-CPOE**
  - ✓ **Maybe work-force design, financial incentives, nursing leadership, hospital volume**

\*Cochrane Review. *International Journal for Quality in Health Care* 2012; 24:483-494

# High-Performing Health System

## Organized System of Care

- Continuum of care provided for populations
- Integrated or has partnerships
- Physicians as principal leaders of medical care
- Shared responsibility for non-clinical activities
- Accountable for care transitions

## Efficient Provision of Services

- Manage per capita cost of care
- Improve patient care experience
- Improve health of populations

## Quality Measurement & Improvement Activities

- Preventive care & chronic disease management
- Patient outreach programs
- Continuous learning & benchmarking
- Research to validate clinical processes & outcomes
- External & transparent internal reporting
- Patient experience surveys

## Care Coordination

- Team-based approach with team members working at the top of their field
- Single plan of care across settings & providers
- Shared decision making

## Compensation Practices

- Incentivize improved health & outcomes of populations
- Affiliate with patient experience or quality metrics

## Use of IT & Evidence-based Medicine

- Meaningfully use IT, scientific evidence, & comparative analytics
- Aid in clinical decision making
- Improve patient safety
- Aid in the prescribing of Rx

## Accountability

- Shared financial & regulatory responsibility & accountability for efficient provision of services



American Medical Group Association | One Prince Street, Alexandria, VA 22314 | 703-838-0033 | [www.amga.org](http://www.amga.org)

**HIGH PERFORMANCE IS DIRECTLY RELATED TO  
THE DEGREE TO WHICH AN ORGANIZATION  
ACHIEVES “SYSTEMNESS”.**

**POPULATION HEALTH  
MANAGEMENT AND CLINICAL  
INTEGRATION ARE KEY ELEMENTS  
OR ATTRIBUTES OF HEALTH CARE  
SYSTEMNESS**



# WHAT IS SYSTEMNESS?



# Systems and Systemness

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- **Systemness refers to how well the components of an organization, or system, collectively perform in achieving a common purpose**
- **Healthcare ‘systems’ currently are very heterogeneous and mostly do not demonstrate tangible synergies from systematizing – i.e., healthcare organizations generally demonstrate poor systemness**
- **Increasing attention is now being directed at determining what systemness means in healthcare and how it can be achieved**

# The Evolving Concept of “Systemness”



**CREATING “SYSTEMNESS”  
WITHIN HEALTHCARE DELIVERY:  
Can Success be Proven and Shared?**  
ECRI Institute’s 19th Annual Conference  
on the Use of Evidence in Policy and Practice

Washington, D.C.  
November 28 - 29, 2012  
A free public service

**ECRI**Institute  
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ECRI Institute

## Creating “Systemness” within Healthcare Delivery: Can Success be Proven and Shared?

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**In Washington, DC, at the National Transportation Safety Board (NTSB) Conference Center**

CRITICAL ISSUES IN HIGHER EDUCATION CONFERENCE

## HARNESSING SYSTEMNESS DELIVERING PERFORMANCE

Charting a New Path for  
Higher Education

*New York City • November 8-9, 2012*

# “Systemness” Defined

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***Systemness*** refers to the degree to which a collection of interconnected discrete parts behave as a coherent whole in ways that are distinct from the component parts and that predictably and consistently produce results that are superior to the sum of the parts.



# WHAT DO WE KNOW ABOUT HEALTHCARE SYSTEMNESS?



# Observations about Systemness

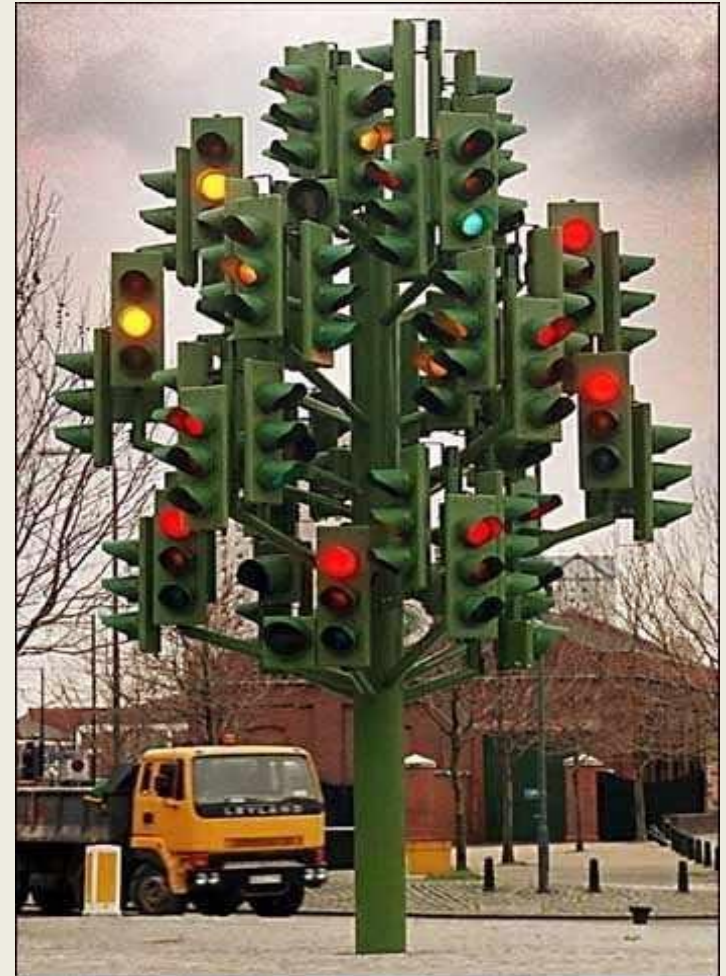
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**Systemness results from intentional design and execution of a ‘systematizing’ strategy that has clear strategic objectives.**



# Observations about Systemness

**Achieving healthcare systemness must be grounded on an understanding of how complex adaptive systems operate.**



# Characteristics of Complex Adaptive Systems

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- **Nonlinear and dynamic; do not inherently reach fixed equilibrium points**
- **Composed of independent agents whose needs and desires are not homogeneous; their goals and behaviors may conflict**
- **Agents are intelligent and learn so system behavior changes over time**
- **There is no single point of control; no one is truly “in charge”**



# Achieving Change in Complex Adaptive Systems

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- **Change cannot be specified and controlled the way it can be in simpler, more linear systems such as manufacturing**
- **Achieving desired change requires making selective changes in a few critical change levers**
- **Change strategies and tactics should be overlapping and mutually reinforcing**
- **Unintended consequences are unavoidable; these should be anticipated and vigilance designed into the system**

# The 5 Key Healthcare Change Levers

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- **Payment/finances**
- **Performance measurement and public reporting**
- **Patient engagement (consumerism)**
- **Health information technology**
- **Regulation/regulatory relief**

# Observations about Systemness

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**The evidentiary base about how to achieve healthcare systemness is very immature; however, enough is known to conclude that there is no single blueprint or ideal template for achieving it. Instead, there are a number of defining functionalities or operating characteristics of systemness that can be achieved in more than one way.**

# Defining Functionalities of Healthcare Systemness

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- 1. It is driven by a compelling mission and a shared, values-based vision.**
- 2. Diverse clinical, social support and administrative services are coordinated and integrated by *intentional design* using strategies and tactics tailored to local circumstances.**
- 3. Operational strategies and plans consistently include frontline practitioners and service recipients in their development and implementation.**
- 4. Information and data flow freely between and among care settings and caregivers and is available whenever and wherever needed.**
- 5. Service needs are anticipated and planned for - and especially for those having the greatest needs.**

# Defining Functionalities of Healthcare Systemness

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- 6.** Services are readily accessible across time and space when the recipient determines they are needed.
- 7.** Non-beneficial services and unnecessary variation in service delivery are minimized, but legitimate uniqueness is recognized.
- 8.** Health promotion, disease deterrence and population health mindfulness are integral to all services.
- 9.** Requires strong and respected leadership.
- 10.** May be integrated vertically and/or virtually (IT, data sharing and management agreements, contracts are the glue when virtual).
- 11.** An enabling infrastructure is necessary but not sufficient.

# Healthcare Systemness Infrastructure

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- 1. Knowledge management and transfer and communication tools (eg, EHR, decision support, registries, HIE, open access scheduling, tele-health, social media, etc.)**
- 2. Performance management system (eg, performance measurement and benchmarking methods, standardized performance metrics, reporting and data analysis tools, feedback mechanisms, accountability and rewards methods)**
- 3. Care/disease management tools (eg, clinical guidelines and care protocols) and competencies, care review and adherence mechanisms**
- 4. Systems learning methods and continuous improvement policies and practices**
- 5. Care teams and team processes**

# Healthcare Systemness Infrastructure

6. Agile human capital management, including an education and training system to develop and nurture new competencies
7. Shared decision making and other patient/family engagement mechanisms
8. A strategic communications plan and tools
9. A broadly participatory and structured method to balance patient and provider freedom of choice with efforts to coordinate care and manage costs



# Defining Functionalities of Healthcare Systemness

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- 12.** The enabling infrastructure must be embedded in a culture of collaboration and quality improvement.
- 13.** Finances are aligned with desired outcomes using various methods. Removing financial disincentives to coordinate care may be more important than providing positive financial incentives.
- 14.** Strategic communication utilizing both conventional and unconventional methods widely employed.
- 15.** The role of governance and management are addressed and clearly defined in policies and procedures.
- 16.** Care delivery assets are structured to support the mission but are flexible so that they can be quickly modified to adapt to changing circumstances.



# Observations about Systemness

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**More than anything else, systemness is about culture, and culture is more about sociology than technology.**

Published on [FiercePracticeManagement](http://www.fiercepracticemanagement.com) (<http://www.fiercepracticemanagement.com>)

## **Culture change, management expertise essential to doc-hospital alignment**

May 14, 2013 | By Debra Beaulieu

Although the number of hospital-employed physicians has increased dramatically in recent years--and is expected to keep rising--these relationships are rife with pitfalls.

"A new generation of physicians are looking for employment as their vehicle of how they are going to practice quality care," Luke Peterson, principal of Minneapolis-based consultancy Health System Advisors, noted at the Becker's Hospital Review Annual Meeting in Chicago on May 10. "However, for some hospitals the result of this employment has been big operational losses," he added. "We need to figure out how to create more stability and capture more of the population if we are going to go about this common standard."

# Healthcare Culture is the Biggest Barrier to Clinical Integration

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- Health care evolved as a ‘cottage industry’ of competing independent practitioners taking care of acute illness and injury
- Advances in biomedical sciences leading to progressively greater specialization and narrowing of focus
- Physician training has preferentially selected individualists and ‘independent thinkers’
- Increased separation of clinical and administrative activities; disdain for rules and procedures
- Separation of clinical medicine and public health; separation of management and clinical medicine
- Focus only on individual patients
- Practitioners idolized and rewarded for ‘rescue care’; insulated from and unaware of costs
- Infatuation with technology

# Changing Healthcare Culture Requires New Ways of Thinking and New Competencies

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- **Systems thinking**
- **Collaboration and teamwork concepts**
- **Quality management and process improvement science**
- **Information management**
  - ✓ Incident and anomaly analysis
  - ✓ Social network analysis
- **Complexity theory**
- **Population health management**
- **Conceptualizing hospitals as cost centers instead of revenue centers**
- **Viewing admissions as largely predictable and preventable (in chronic condition) and readmissions as system failures**

# Los Angeles Times

## To stay fiscally healthy, state's hospitals want fewer patients



By Anna Gorman

March 4, 2012, 5:15 p.m.

To survive the unprecedented challenges coming with federal healthcare reform, California hospitals are upending their bedrock financial model: They are trying to keep some patients out of their beds.

Hospital executives must adapt rapidly to a new way of doing business that will link finances to maintaining patients' health and impose penalties for less efficient and lower-quality care.

# Conclusion

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**21<sup>st</sup> Century healthcare will be increasingly delivered by high performing health care systems that are financed by 'global payment' methods and that are intentionally designed to demonstrate systemness by providing continuous healing relationships through patient-aligned caregiver teams enabled with "smart" technologies to facilitate and support ready access across time and geography, collaboration, evidence-based care and systems learning.**

# QUESTIONS ?

