

## **Little Hoover Commission Testimony Questions**

**June 26, 2014**

### **1. How informatics can be used to improve public health outcomes in California.**

Public health informatics has been defined as the systematic application of information and computer science and technology to public health practice, research, and learning. One could think of the informatics role as the link between the business process and the information technology in which data becomes usable information. Applying informatics practices to public health will enable the development and use of interoperable information systems for public health functions such as biosurveillance, outbreak management, electronic laboratory reporting and prevention efforts.

### **2. Current and upcoming PHIP initiatives to effectively deliver usable data, including the Health Information Exchange Gateway and Open Data Portal.**

The California Department of Public Health (CDPH) built the Health Information Exchange Gateway to support eligible providers and hospitals who wish to meet the meaningful use standards and receive incentive payments from the Centers for Medicare and Medicaid Services (CMS). Once built, however, CDPH envisions a larger role for the gateway in which other kinds of clinical data can be electronically shared and used to support the essential functions of public health. Please see this link for our HIE Gateway landing page: <http://hie.cdph.ca.gov/>.

When launched, the CHHS Open Data Portal project will put tools for transparency, accountability, and innovation directly into the hands of Californians and others through a centralized, user-friendly interface. The Open Data Portal will provide the user with a single point of entry to access CHHS departments' publishable data. This increased visibility will provide derivative value as the public is able to analyze and utilize publicly available (publishable) government data to better understand what is happening in government on all levels – federal, state, and local. The portal is envisioned to offer access to standardized data that can be easily retrieved, downloaded, sorted, searched, analyzed, redistributed and re-used by individuals, business, researchers, journalists, developers and government to process, trend and innovate a single data table or combination of data tables. CDPH will be the first CHHS Department to publicly launch its data in August 2014.

### **3. Challenges of and lessons learned from developing and implementing PHIP initiatives**

- Coordination among multiple government stakeholders can be a challenge, but is important and feasible.
- Developing a clear definition/role for informatics is critical to:
  - Include informaticists in project planning and implementation to ensure best practices in information management and data standards
  - Improve recruitment methods for informatics trained personnel (must be outside of the information technology classification pool)
- Securing funding for projects and infrastructure related to informatics and information technology needs can be challenging:
  - Technology evolves very quickly
  - Funding mechanisms and government contracting take a long time

### **4. If there have been any attempts to combine the Department of Public Health's data with data from other state agencies to create a more comprehensive and transparent visualization of public health needs in California**

Although state agencies have linked their data in the past, the most transparent and comprehensive effort is currently underway with the open data movement. California state agencies are working together to ensure that open data efforts are coordinated in the important areas of data standardization and metadata standards (data about the data). The California Health and Human Services (CHHS) Agency is leading the open data work in this area with the California Department of Public Health being the first department to launch its portal.

### **5. The relationship between informatics and geographic information systems (GIS) and how GIS informs the Department of Public Health's decision making**

Ideally, the informatics expertise can be valuable in informing the best uses of GIS in public health. GIS can be an invaluable tool for public health in many ways, including:

- Identifying clusters of disease
- Determining the best locations for public health interventions (screenings, vaccination programs, educational programs)
- Reviewing public access to public health services

- Environmental exposure assessment and reporting
- Biosurveillance

In addition, the communication of information via a map can be invaluable in public health messaging.

## **6. Your work in geomedicine and the potential applications of geomedicine to public health needs in California.**

Geomedicine is the field in medicine in which the body of knowledge about how environmental conditions influence health can be leveraged to improve personal health. Often in clinical medicine, there is a focus on one's genetics and behaviors. Yet...

***Personal health = genes + behaviors + environment***

Geomedicine accounts for the environmental component of this equation. In this context, the environment may be interpreted broadly and includes, but is not limited to: toxic exposures, access to health care and health-related resources, and the built environment (which includes both assets and challenges). The first link below provides a 2 minute YouTube video that I created to describe geomedicine and its benefits. The second link has 3 items of interest: (1) a TedMed talk by Bill Davenhall about geomedicine (9 minutes); (2) an e-book about geomedicine; and (3) an interactive tool allowing one to input their place history and learn about potential increased risk for cardio-pulmonary disease.

<http://www.youtube.com/watch?v=fdorZQkTCsI>

<http://www.esri.com/industries/health/geomedicine>

The relationship of geomedicine to public health is primarily in the body of knowledge that public health practitioners bring to the field of exposure medicine and the availability of resulting data to be consumed by geomedicine applications.