Dialogue4Health

Making Data Work for the Public’s Health: The Current Total

Elizabeth Baca, MD, MPA
Senior Health Advisor
Governor’s Office of Planning and Research

July 23, 2015
WHAT IS INNOVATION?

Listen to the words of Steve Jobs, Richard Branson, and Seth Godin and you’ll discover what separates true innovators from everyone else.

By David Brier

It all comes down to dots.

In his famous commencement speech, Steve Jobs said:

You can’t connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect
We can not solve our problems with the same level of thinking that created them

Albert Einstein
What does “health” really mean?
Data and Decision Making

Every day, JCCI is driven by the bold idea that together, we can build a better community.

Quality of Life in Jacksonville - Then & Now
January 20, 2014

2013 Quality of Life Progress Report
for Jacksonville and Northeast Florida
Data and Decision Making

Started to see more dashboards at the community level, starting to think about population and public health
Do you currently use a public facing tracking system in your city or county?

1. Yes
2. No
3. Don’t know
Data and Decision Making

Continued to progress in level of sophistication
Data and Decision Making

Data more actionable in the public realm, integrating into daily decisions at the individual to the policy level.

Food Data in Yelp Application

- **Today 5:30 pm - 11:00 pm**
  - **Closed now**
- **Full menu**
- **Price range** $31-60
- **Health score** 98 out of 100
- **Vegetarians** go nuts for this spot. See other places they like.
Why use data in this process?

- Walkable communities
- Safe places
- Access to healthy food
- Parks for recreation

Public Outreach and Community Vision in the process

Also requested data to inform and track outcomes
Healthy Community Themes

Ideas for Data and Analysis
- Prevalence child/adult obesity
- Prevalence diabetes
- Prevalence heart disease
- Land use mix
- Park access
- Commute patterns

Potential Policy Options
- Increase proximity to parks and recreation
- Build connected trail ways to jobs/amenities
- Pursue urban greening programs

Active Living & Recreation
Ideas for Data and Analysis

• Motor vehicle crashes with pedestrians and bicycles
• Serious psychological stress in the last year ~
• People feel like they can trust neighbors
• Neighbors willing to help each other

Potential Policy Options

• Separate pedestrian, bicycle, auto lanes
• Incorporate CPTED
• Prioritize joint-use agreements with schools and other facilities
“The high-injury corridors represent 5.2% of San Francisco’s street miles, and include 55% of all severe and fatal injuries and 51% of total pedestrian injuries reported to the State Highway Patrol between 2005 and 2009.”
Data Accessibility

Having reliable data available is key.
Vision of What is Possible

Florence-Firestone, CA
Central Avenue- Urban Advantage
Vision of What is Possible

Florence-Firestone, CA
Central Avenue - Urban Advantage
Vision of What is Possible

Florence-Firestone, CA
Central Avenue- Urban Advantage
Vision of What is Possible

Florence-Firestone, CA
Central Avenue- Urban Advantage
Vision of What is Possible

Florence-Firestone, CA
Central Avenue- Urban Advantage
Data can be a unifying force

We can look at areas where there are priorities for overlap
Data can help with Collective Impact

Sectors, policy/regulation, funding align for implementation
As We Think About What Is Next

- Exciting time, requires cross-sector partnership
- Data can be a common language
- Innovation and a culture shift to support using data
- Small steps matter!
Thank you!
Health Word Definition: "Health Word Definition" by Stuart Miles [http://www.freedigitalphotos.net](http://www.freedigitalphotos.net)

Conceptual image Social Determinants of Health: [http://heapol.oxfordjournals.org/content/23/5/318/F1.expansion](http://heapol.oxfordjournals.org/content/23/5/318/F1.expansion)


SF Pedestrian Data: [http://www.arcgis.com/home/item.html?id=7cb523571fb14e8b9d54b9435d10ba3b](http://www.arcgis.com/home/item.html?id=7cb523571fb14e8b9d54b9435d10ba3b)


RWJ County Rankings: [http://www.countyhealthrankings.org/app/california/2015/overview](http://www.countyhealthrankings.org/app/california/2015/overview)

Yelp.com food rating

CHHS Open Data Portal: [https://chhs.data.ca.gov/browse?q=asthma&sortBy=relevance&utf8](https://chhs.data.ca.gov/browse?q=asthma&sortBy=relevance&utf8)

Other images taken by Elizabeth Baca
Additional Background Slides
Thinking about all the data layers

Google Maps: GIS layers
Organized by Geographical Positioning

Information Commons
Organized Around Individual Patients

- Exposome
- Signs and Symptoms
- Genome
- Epigenome
- Microbiome
- Other Types of Patient Data
- Individual Patients
“In 2012 such data [health care] worldwide amounted to approximately 500 petabytes ... or the equivalent of the contents of 10 billion four-drawer file cabinets”

Health Affairs July 2014

1 petabyte = 10 \(^{15}\) bytes of digital information
The difference a system can make
Public Health in General Plans

Healthy Community Themes

Active Living & Recreation

Food Systems

Social Cohesion & Safety

Health & Economic Opportunity

Our Climate & Resiliency

Healthy Housing

Environmental Health & Exposures

Health & Human Services
### California General Plan Guidelines

#### Statutory Requirements

<table>
<thead>
<tr>
<th>Climate Change</th>
<th>Health + Economics + Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulation</td>
<td>Open Space</td>
</tr>
<tr>
<td>Land Use</td>
<td>Noise</td>
</tr>
<tr>
<td></td>
<td>Safety</td>
</tr>
<tr>
<td></td>
<td>Housing</td>
</tr>
<tr>
<td></td>
<td>Conservation</td>
</tr>
</tbody>
</table>

#### New optional chapters

- Healthy Community
- Social Equity, Environmental Justice, and Community Resilience Chapter
- Climate Change
- Economic Development

Each county and city must adopt a comprehensive, long-term general plan for the physical development of the county or city.

- Different time lines, only Housing updated on a regular basis

Can incorporate into next local update.
Determinants of Health and Wellbeing

- General socioeconomic, cultural and environmental conditions
  - Work environment
  - Living and working conditions
  - Unemployment
- Social and community networks
  - Water & Sanitation
  - Health care services
  - Housing
- Individual lifestyle factors
  - Education
  - Agriculture and food production
- Individual
Determinants of Health and Wellbeing