# Supporting communities as learning health systems: a report to the HHS Data Council on NCVHS activities and plans

Bruce Cohen, Ph.D.
Co-chair Population Subcommittee, NCVHS



Jan 8, 2014

#### Outline

- NCVHS: shaping the health data vision for the 21<sup>st</sup> century
  - Convergence: HHS data liberation and community learning systems for public health
  - Using data at the local level
  - Community driven change
  - Health data stewardship
- The Federal role in providing and supporting community driven change
- Aligning NCVHS and Data Council activities



# The National Committee on Vital and Health Statistics

- The statutory public advisory body to the Secretary of Health and Human Services in the areas of health data, statistics and health information policy; established in 1949
- Serves as a forum for interaction with interested private and public sector groups on key health data issues
- 18 members appointed for four year terms; drawn from fields including medicine, law, public health, economics, privacy, security, informatics, health plans, consumers
- Through hearings and open deliberation, aims to develop practical, timely, thoughtful recommendations to the Secretary of HHS

# Shaping a Health Statistics Vision for the 21<sup>st</sup> Century (2002)

#### **Place and Time**

#### Natural environment

Air quality
Water quality
Climate and weather
Topography and soil
Environmental contaminants
Animals and plants

#### Cultural context Norms and values

Religion Racism and sexism Discrimination Competition/cooperation

#### Political context

Public policies and Laws Social Economic Health Environment Political culture Differential political enfranchisement or participation

#### Context

#### Health services

Access and Use

Quality

Structure

Numbers of personnel
Types of personnel
Organization
Facilities
Types of services
Accessibility
Processess
Professional behaviors
Utilization
Treatment modalities
Cost and financing

#### Economic resources Employment

Control over work Income Income inequality Economic change Education Child care Early childhood experience

and education

**Built environment** 

Housing

School

Access

Workplace

Transportation

Communication

#### Community attributes

#### Biological characteristics

Community age distribtuion Community gender distribtuion Genetic make-up

#### Social attributes

Cohesion Influence Networks Support Social change

#### The population's health

	Level	Distribution
Disease		
Functional status		
Well-being		

#### Population-based health programs

Water Supply
Waste Disposal
Air Pollution Control
Public Health Programs
Children
Adults

#### Collective lifestyles and health practices

Diet
Wellness behavior
Physical activity
Sexual practices
Smoking
Substance abuse
Violent behavior
Access to health
information



## Convergence

- The Federal government wants to liberate its data
- Communities are becoming more sophisticated data users
- NCVHS is integrating its work on population health, security, privacy, standards, and quality



#### Impetus for Focus on Community Health Data

<u>Community</u>: an interdependent group of people who share a set of characteristics and are joined over time by a sense that what happens to one member affects many or all of the others

Upsurge in community health Initiatives

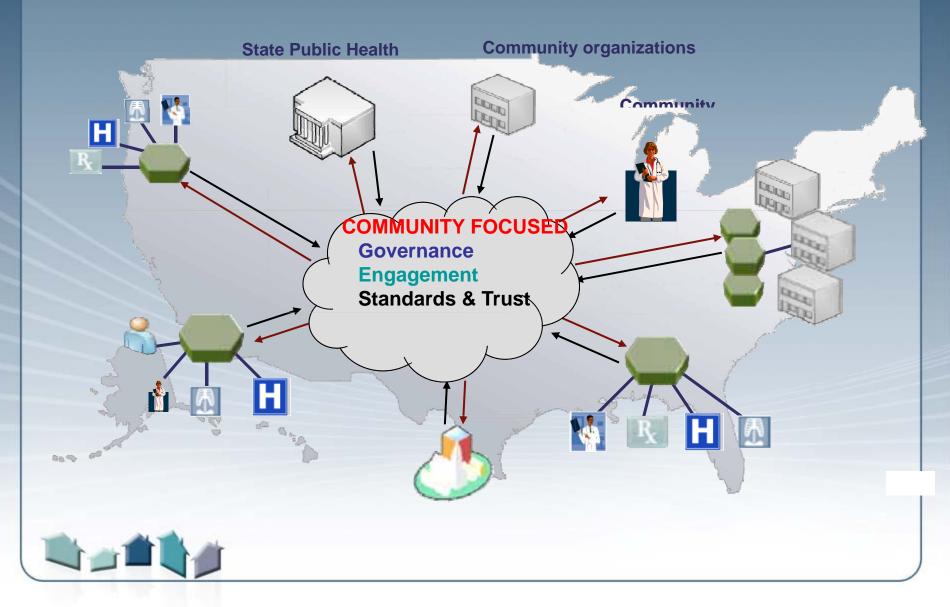


Learning
Health System
project

How communities can become learning systems for health and what resources exist and are needed to help them?



### A Learning Health System



Ongoing NCVHS work:
using local data
community driven change
data stewardship



# Using local data



### Health is a Community Affair

"Getting data into the hands of communities and ensuring they have tools and capacities to use them could move the nation toward realizing the public benefits of the informatics revolution."

The Community as a Learning System for Health, NCVHS, December 2011, p. 7



### 14 Leading edge Learning Communities



- 1. Boone County, MO Public Health
- 2. Bronx, NY Care transitions
- **3. Denver, CO** cardiovascular health, childhood obesity
- 4. Grand Junction, CO population health
- 5. Indiana and HIE population health
- 6. King county, WA data democratization
- 7. Mahoning Valley, OH children's health insurance coverage
- 8. New York City- BMI screening for children
- 9. Olmsted County, MN childhood asthma
- **10. Sonoma County, CA** health information for citizens
- **11. Columbia, SC** data to improve childcare
- **12. South Los Angeles, CA** land use policies and health disparities
- 13. State of Arkansas childhood obesity
- Utah consumer education about health data use

# Feedback from Community Groups: online tool

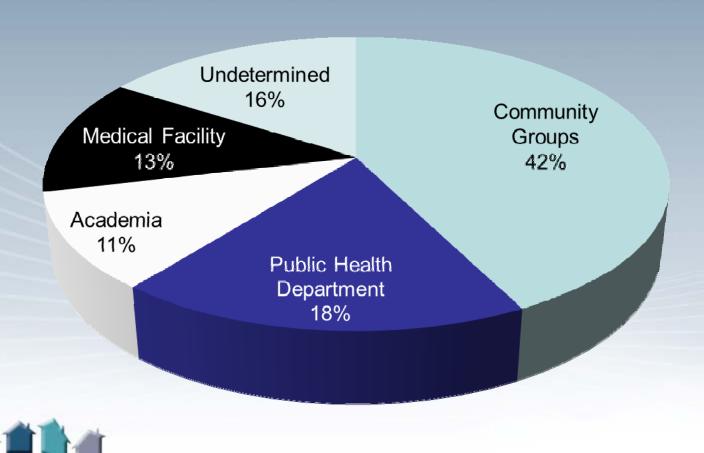
- Collecting, Protecting, and Using Health Data in Communities: A Feedback Tool
- Strategic planning leverage knowledge to expand thinking about potential options

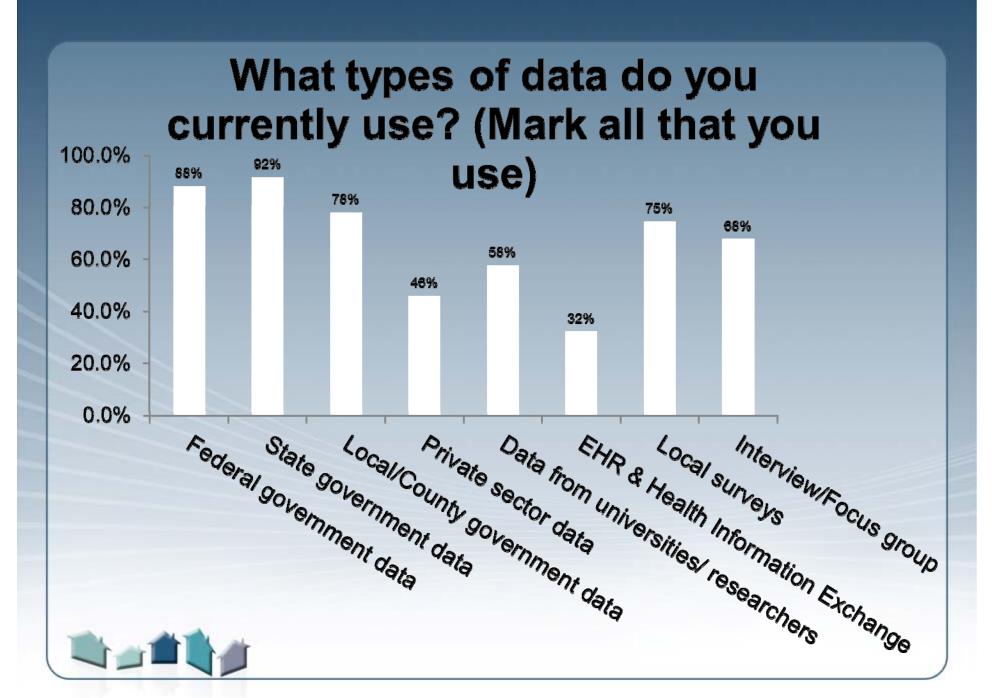


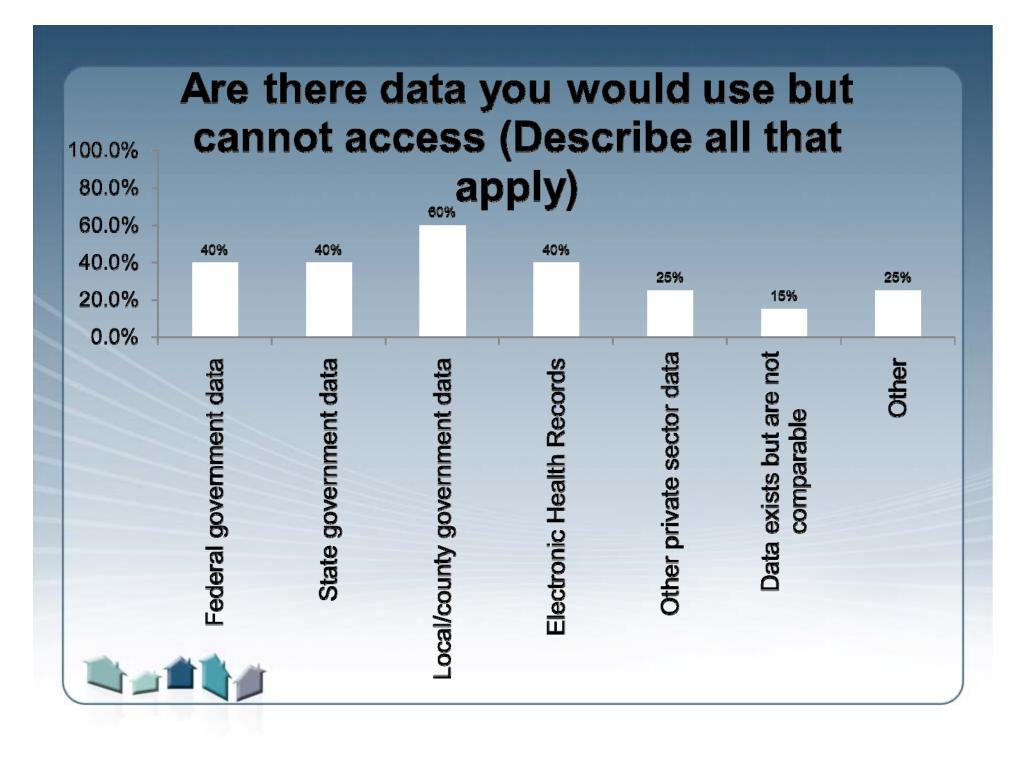
We can't solve problems by using the same kind of thinking that we used when we created them. – Albert Einstein

### 95 Organizations Responded









#### Themes and learnings

- 1. Much secondary data exist online: how to determine what to use and how to use them are the challenges.
- 2. Technical assistance is not universally available
- 3. Data start conversations; people make decisions: empowerment, dialogue, and engagement are key
- 4. NCVHS through leveraging Federal involvement can promote important partnerships and provide resources and support to promote the use of data for community driven change



#### Themes and learnings: factors for success

- 1. A galvanizing health concern.
- 2. A comprehensive understanding of health and community health.
- 3. Collaborative culture; social capital.
- Trust and community engagement.
- 5. Access to data on local health and its determinants, plus analytic capacities.

- 6. Data display and dissemination capacities.
- 7. Functioning coalitions, community engagement, agreement on priorities.
- 8. Organizational and technical support.
- 9. Political and financial support.
- 10. Processes and systems to translate information and priorities into action, evaluate results, and modify as needed.



# NCVHJ

Published, November 2011
Joint Project of the
Population Health and
Privacy, Confidentiality and
Security Subcommittees

The Community as a Learning System: Using Local Data To Improve Local Health

> A Report of the National Committee on Vital Health Statistics







#### **Current activities**

- Making recommendations to the Secretary to enhance usability of data by linking three key data constituencies: technically savvy but clinically naïve, clinically savvy but technically naïve; and community
- Proposing content and transactional standards for community health data: harmonizing health indicators
- Evaluating the 'repurposing' and expanded use of data (surveys, surveillance, clinical/EHR, local)



### Community driven change



### Community Roundtable April 2013

- 1. Advance the understanding of access to and use of data by communities to improve population health;
- 2. Refine our Stewardship Framework for the Use of Community Health data to support the needs of various types of community initiatives;
- 3. Better understand the role of government in providing data, tools, and resources to promote community driven change; and
- 4. Understand current state and possible gaps in data content and variable standardization for community data collection and use.

#### Roundtable Presenters

#### Local Initiatives

- Barbara Zappia, Greater Rochester Health Foundation, Neighborhood Health Status
   Improvement Initiative
- Lacey Hart, Southeast Minnesota Beacon Community
- Ninez Ponce, UCLA Center for Health Policy Research, California Health Interview Survey

#### Privacy and Public Health Law Experts

- Eve Powell-Griner, NCHS Confidentiality Officer
- Sharona Hoffman, Professor of Law and Bioethics, Case Western Reserve University
- Denise Chrysler, Network for Public Health Law

#### National-scale Organizations and Activities

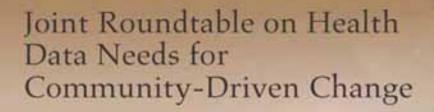
- Andrew Bazemore, Robert Graham Center for Policy Studies in Primary Care
- Bridget Catlin, County Health Rankings and Roadmaps
- Carladenise Edwards, Senior eHealth Advisor, ZeroDivide
- Donald Malec, NCHS Office of Research and Methodology small area estimation research
- Chris Fulcher, Community Commons
- Denise Love, National Association of Health Data Organizations



### Themes and Learnings

- 1. Co-production and co-ownership of data
- 2. Assessing the continuum of community readiness
- 3. Leveraging a key event to drive longer term change
- 4. Assistance using the data
- 5. Collaboration as key to success
- 6. 'Authentic' communities
- 7. Importance of qualitative data
- 8. Using the law to solve public health problems
- Untapped potential of aligning clinical and public health data
- 10. Bi-directionality and reciprocity





A Summary Report of the National Committee on Vital Health Statistics







#### **Current Activities**

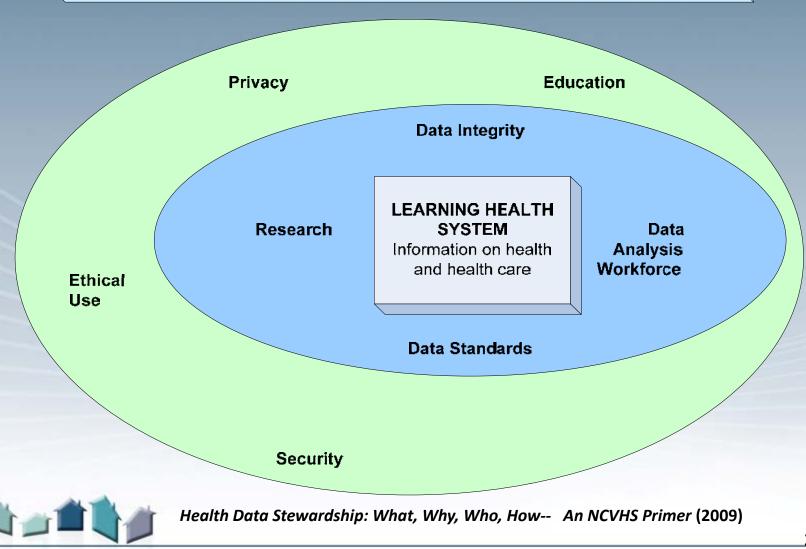
- Assess community readiness to make Federal data dissemination more valuable and technical support more useful for decision making
- Explore the continuum of clinical through population health data to provide consistent messaging and compatible data streams
- Investigate new data sources and dissemination modalities (social media, m-health, sub-county data, etc.) to supplement Federal traditional data sources and technical assistance



# Data stewardship



#### **HEALTH DATA STEWARDSHIP**



NATIONAL COMMITTEE ON VITAL AND HEALTH (FAILTHES

Privacy Report

# Recommendations on Privacy and Confidentiality, 2006-2008







# Stewardship Letter: Framework December 2012

- 1. Openness, transparency and choice
- 2. Purpose specification
- 3. Community engagement and participation
- 4. Data integrity and security
- 5. Accountability
- 6. Protecting deidentified data
- 7. Attending to the risks of enhanced data sets
- 8. Stigma and discrimination



### Privacy, Confidentiality, and Security Subcommittee Recommendations to the Secretary:

- 1. Facilitate development and promulgation of models for stewardship of community health data.
- 2. Support the development of dynamic guidance resources that compile best practices that experts, communities and other data users are learning about stewardship.
- 3. Compile case studies of results that communities achieve through their uses of data so that other communities might learn and be inspired.
- 4. Promote the creation of training materials for researchers who collect and use community health data.



#### **Current Activities**

- Developing and promulgating models of stewardship and best practices for protecting data for community users
- Preparing case studies
- Integrating data stewardship and privacy concerns into community learning systems



### Convergence framework



# Framework for community-focused learning health system



Access + analytics + skills to make data usable and useful.



Stewardship + privacy protection + engagement + governance = Trust



Support, facilitate shared learning, and create economies of scale



### Reinvigorating the Federal role



# Modernizing the Federal public health data infrastructure

- 1. Serve as intermediary to connect communities and data
- Redefine public health to meet broader community definitions
- 3. Reorient Federal workforce to reach communities and provide direct assistance
- 4. Leverage data collection mandates: IRS requirements for community health needs assessments, HIE's, ACA
- 5. Promote models of stewardship and best privacy practices
- 6. Support public health departments to take advantage of Meaningful Use criteria



# Modernizing the Federal public health data infrastructure

- 7. Standardize community health, health status, environmental and resource use indicators
- 8. Train and provide technical assistance and easy to use tools for data management, display and analysis, local data collection (including surveys and mapping) perhaps through existing HIT initiatives such as regional extension centers
- Promote Federal and state web-based data query systems
- 10. Longer funding periods, and transitional support for institutionalization of promising new policies and program



# Aligning NCVHS and Data Council activities



#### 1. Data liberation

Access and release Protection/stewardship Definitions/standards

2. Analytic Support/tools

Mapping

SAE's,

Statistical software

WDQS, etc.)

- 3. Workforce/human support
- 4. Funding
- 5. Facilitation: connecting communities to both Federal and non-Federal resources







"Someday, all this will be infrastructure."

The Community as a Learning System Report:

http://www.ncvhs.hhs.gov/1 11213chip.pdf

Next Step for Community
Data Use

http://www.ncvhs.hhs.gov/ 120417ag.htm

Health Data Needs for Community Driven Change

http://www.ncvhs.hhs.gov/ 130430ag.htm

**NCVHS** 

http://www.ncvhs.hhs.gov/



### **Additional Slides**



# Identifying priorities and building partnerships and collaboration

- Involving citizens and community groups; generating new partnerships
- The role of local data

"Consensus about local priorities emerges when quantitative data are combined with community members' insights and preferences."



The Community as a Learning System for Health, NCVHS, December 2011, p. 12

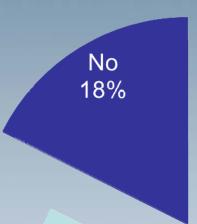
### **Building Trust**

- Educating community members and leaders about data use and benefits
- Involving community members in decisions about data use and more
- Trust-building among organizations and agencies that are data sources
- Governance fosters a sense of ownership and control

"...further efforts and leadership are needed to define a privacy and security framework to guide the innovative uses of local data emerging in communities across the country."



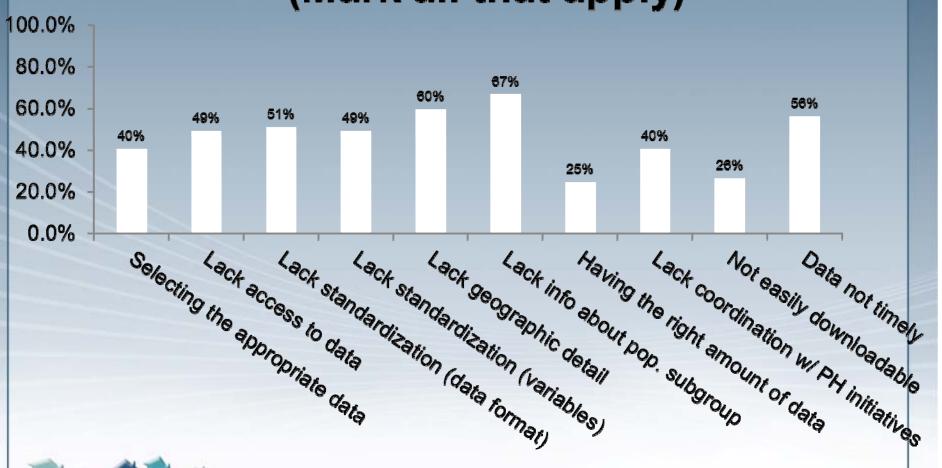
### Do you collect your own data?

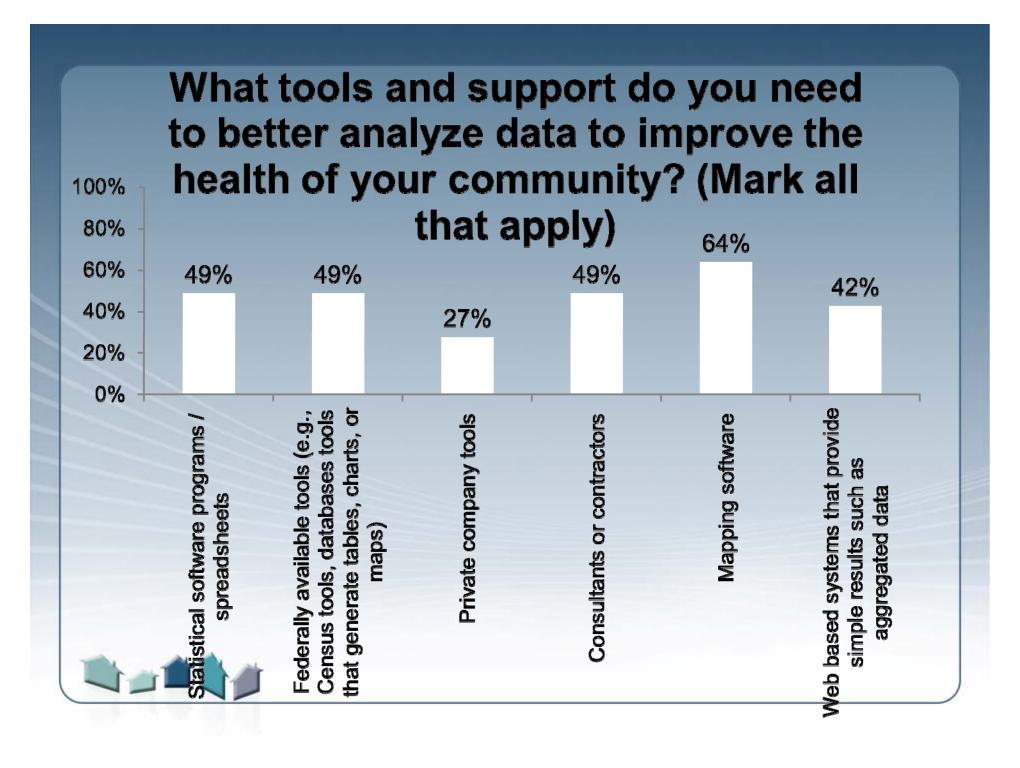


Yes 82%



# What are the limitations or challenges of the data that you use? (Mark all that apply)





# The following picture of communities emerges:

- Local Leaders create opportunities for collaboration and coalition-building
- Community members and organizations are engaged
- Partnerships are established with public health, health care and related sectors, such as schools, churches, housing
- The partners draw on multiple data sources, perhaps conducting their own local research



# The following picture of communities emerges:



- They assure privacy and build trust through a web of interrelated practices and protections
- They use the data to analyze major health issues, agree on priorities, enlist additional partners and develop policies and programs
- They create communication and data visualization tools to inform and educate stakeholders and influence decision-makers
- They monitor progress and evaluate results