



**LOCAL HEALTH PERSPECTIVE:
UNIFYING PUBLIC HEALTH
AROUND A HEALTH-BASED
MODEL**

PHDSC Annual Meeting

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LOCAL AND STATE HEALTH DEPARTMENTS & TRANSFORMING THE HEALTH SYSTEM

NACCHO Policy Statement (08-01) July 2011

- Committed building a 21st century health system
- Highest priorities:
 - **Prevention**
 - Access to health care for every person
 - Eliminate inequities in health status
 - Protect people and communities from emerging health threats.
- **Based upon promoting good health, rather than mitigating sickness**
- **Standardized, integrated** health information system
- Will require different commitments and investments
- Paradigm shift is realistic but will take time to achieve

ASTHO Position Statement (August 2008)

- 21st Century Health System prioritizes
 - **Prevention**
 - Supports healthy environments & lifestyles
 - Preventive & primary health care for everyone
 - Protects people and communities from existing & emerging health threats
- **Oriented to health not sickness**
- Comprehensive, fosters health promotion and disease prevention
- **Standardized, integrated,** public health information system
- Demands new and different commitments and investments



Place and Time

Context

Community attributes

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

Health services
 Structure
 Numbers of personnel
 Types of personnel
 Organization
 Facilities
 Types of services
 Accessibility
 Processes
 Professional behaviors
 Utilization
 Treatment modalities
 Cost and financing
 Access and Use
 Quality

Economic resources
 Employment
 Control over work
 Income
 Income inequality
 Economic change
 Education
 Child care
 Early childhood
 experience
 and education

Built environment
 Housing
 Workplace
 School
 Transportation
 Communication
 Access

Biological characteristics
 Community age distribution
 Community gender distribution
 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

KEY CHALLENGES / ISSUES

- Public Health and Population Health are much more than health care
- Current emphasis and funding are on health care
- Social determinants and environment impact a community's health much more than health care
- **This makes public health political**
- Local public health is the point at which public health works directly with citizens (whether done by state or local agencies).
- Supporting the direct delivery of services is not the same as public health reporting



WHY IS IT IMPORTANT TO KNOW “WHAT THE BUSINESS” IS?

- **Information systems that support work at the point of service increase the likelihood**
 - Making a successful business case to obtain funding
 - Sustainability over time
 - Keeping information current
- This is one of the reasons that EMRs are at the heart of current health IT initiatives
- However important or “central” information may be to a second party user, if it is not collected in an efficient way as services are rendered, it impacts timeliness, consistency and accuracy



LOCAL HEALTH DEPARTMENT ACTIVITIES

Activity	% all LHD	% Small	% Low Medium	%High Medium	% Large
Immunization provision (adult/child)	92%	88%-94%	95%-97%	95%-96%	94%
Communicable/ Infectious Disease Surveillance	92%	87%-93%	94%	98%	97%
Environmental Health Surveillance	77%	68-84%	82%	84%	86%
Syndromic Surveillance	45%	34-44%	43%	62%	80%
Maternal/Child Health Surveillance	62%	55%-60%	68%	72%	72%
Population-based nutrition	71%	62%-67%	79%	82%	89%
Population-based tobacco	69%	61%-71%	75%	76%	84%
Food Service Establishment Inspection	78%	68%-84%	86%	86%	79%
Food Safety Education	76%	67%-82%	80%	84%	75%
Vector Control	52%	43%-58%	57%	61%	61%
Land Use Planning	21%	17%-24%	26%	23%	22%
Regulation of pools	70%	59%-75%	78%	80%	77%
Screening for Disease (Tuberculosis (H) to Cardiovascular (L))	33%-85%	30%-87%	35%-88%	36%-93%	38%-91%

From NACCHO 2010 National Profile of Local Health Departments (Chapter 7)

LOCAL HEALTH DEPARTMENT HEALTH CARE RELATED ACTIVITIES

Activity	% all LHD	% Small	% Low Medium	%High Medium	% Large
Immunization provision (adult/child)	92%	88%-94%	95%-97%	95%-96%	94%
Oral Health	27%	18%-22%	30%	40%	59%
Home Health Care	25%	23-32%	25%	15%	10%
Comprehensive Primary Care	13%	9%-10%	19%	17%	22%
Behavioral/ Mental Health Services	10%	6%-8%	13%	14%	28%
Substance Abuse Services	8%	4%-8%	13%	11%	21%
WIC	64%	58%-63%	66%	74%	78%
MCH Home Visits	61%	55%-61%	66%	68%	76%
Family Planning	55%	50%-55%	58%	60%	70%
Prenatal (H)/ Obstetrical Care (L)	10%-30%	7%-31%	11%-31%	16%-38%	19%-36%
Screening for Disease (Tuberculosis (H) to Cardiovascular (L))	33%-85%	30%-87%	35%-88%	36%-93%	38%-91%

From NACCHO 2010 National Profile of Local Health Departments (Chapter 7)



STATE HEALTH DEPARTMENTS HEALTH CARE RELATED ACTIVITIES

Key facts about State

- In 13 states and the District of Columbia (28%), local health services are provided by the state public health agency (centralized or no local health departments).
- In 19 states (37%), local health services are provided by independent local health departments (decentralized states).
- The remaining 18 states (35%) function with some combination of the above arrangements (hybrid states).

Some of the key activities state public health agencies perform

- Statewide prevention programs (tobacco quit lines, newborn screening programs, and disease surveillance)
- Assuring a basic level of community public health services across the state
- Providing the services of professionals with specialized skills
- Collecting and analyzing statewide vital statistics, health indicators, and morbidity data
- Providing statewide investigations of disease outbreaks, environmental hazards such as chemical spills and hurricanes, and other public health emergencies.
- Conducting statewide health planning, improvement, and evaluation.
- Licensing and regulating health care, food service, and other facilities.



90% OF STATE HEALTH AGENCIES PROVIDE

- Childhood vaccine order management & inventory distribution.
- Maintenance of childhood immunization registry
- Laboratory testing for likely bioterrorism agents
- Data collection and analysis.
- Vital records, as well as data on morbidity and reportable diseases data.
- Epidemiology and surveillance activities on injuries, chronic diseases, and communicable diseases.
- Perinatal events or risk factors.
- Tobacco control & prevention.
- Food safety education.
- Bioterrorism event response.
- Screening and prevention for HIV/AIDS.
- Laboratory testing for food-borne illness.
- Newborn screening.
- Maintenance of cancer registry.
- Services for children with special health care needs.
- Data collection and analysis for behavioral risk factors.
- Cancer epidemiology and surveillance.
- Environmental health epidemiology.
- Injury control and prevention.
- Obesity prevention.
- Sexually transmitted disease counseling and partner notification.
- Access to health care for minority populations.

WHERE DOES THIS TAKE US?

- Important tool for Local Health Departments
- Using Business Process Analysis to Integrate Siloed Programs
- Enhancing Biosurveillance with Business Process Analysis
- A Framework for Taking Business Process Analysis to develop system interoperability requirements



CURRENT EFFORTS THAT SUPPORT THE INITIATIVE

- NACCHO Business Process Analysis In Public Health dialogue
- Public Health Informatics Institute
 - Common Ground
 - PHII Initiative to Describe all the Business Processes in Local Public Health
- PHDSC
 - Business Case for Public Health Role in HIT Standard Development
 - Framework for PH Interoperability Standards
- Continuum is critical—combination bridges the gap from local public health to the very, very technical
- Related and needed efforts with different audiences and complementary goals and outcomes



NACCHO BUSINESS PROCESS MEETING (NOVEMBER 2010)

Business Area	Domain --examples	Example of Business Process
Data analysis, collection management, interpretation & reporting	Surveillance	Case reporting
Response & Preparedness	Hazardous Release response	Case investigation
Population Health & prevention programs	Tobacco	Public education and awareness campaign
Health Services to Individuals	Maternal child health	Case management
Environmental Enforcement /Regulation and Risk Reduction	Permits Enforcement	Licensing Legal actions



PHDSC INTEROPERABILITY -- STANDARDS

Information System Functions	Examples of Related IHE Profiles and Standards
Collect Data	RFD, XDS, LAB TF (XD*Lab, Lab message), QRPH content (EHDI, PRPH-CA, MCH, DSC), PCC Content (LDS, XDS-MS, XPHR, IC), RPE, RDA, XD* with HL7 CDA for PH Reporting Reporting Requirements (Pending HL7 work) Report Criteria Guideline Manager Practice Manager Data Source Workflow (XDW)
Manage Data (upload, maintain, delete)	Control Access (XUA, ATNA)
Analyze Data	(Statistical Algorithms), Syndromic Surveillance Algorithms (DSUB, MPQ), Retrieve Medical Knowledge QRPH-29
Integrate Data	IT Infrastructure Profiles (PIX, PDQ, XDS, XDR, On-Demand Documents, XDW)
Report Data	PDF, Maps, Send Distribution QRPH-30



Public Health Business Areas	Public Health Business Processes Individual/Population	Information Systems Functions	Data Content
Population	Case/Outbreak Identification	Collect Data	Guidelines
Resources	Case/Outbreak Investigation	Manage Data	Case/Outbreak Reports
Environment	Case/Outbreak Management	Integrate Data	Lab Reports
Protection	Case/Outbreak Management Evaluation	Analyze Data	Care Plans
Wellness	Mitigation	Report Data	Alert & Notification
Direct Care Operations			Quality Reports
Research			Educational Materials

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