

Framework for a Healthier Greater New Orleans

Greater New Orleans Health Planning Group
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EXECUTIVE SUMMARY

Before Hurricane Katrina, Louisiana's health statistics were among the worst in the nation, in spite of the fact that health care expenditures were at the national average. The severe damage to the infrastructure for health care and public health services in the greater New Orleans area caused by Hurricane Katrina now requires that we rebuild all elements of the health system. The need for widespread recovery provides an opportunity to redesign the health infrastructure in ways that lead to improved health for the region's residents.

Shortly after the storm, a group of over 100 people from local, state, and federal health agencies, private providers, nonprofit organizations, and community groups gathered to discuss how the various elements of the health infrastructure could be redesigned and rebuilt. In addition, the group sought recommendations from unaffiliated community members. Finally, expertise from national organizations was sought to provide additional guidance.

From these sources, a planning framework was developed that identifies priority areas in which fundamental changes in the design of the health system could lead to better outcomes. Within each of those areas, the framework describes guiding principles and performance standards that health-related organizations should follow in rebuilding. It also suggests critical actions and required resources that can be taken in this initial recovery phase to lay the foundation for a more effective health system in the future. This framework should serve as a guide for organizations developing more detailed plans to rebuild health-related structures and requesting financial assistance in this rebuilding.

The framework covers priority issues across the entire spectrum of public health and clinical medicine, including building "healthy neighborhoods", environmental health, essential public health services, primary care, hospital and specialty care, information systems, and the health workforce. Because of time constraints, it does not cover the important issue of long-term care. Several cross-cutting principles emerged:

Planning and Implementation Principles

- All actions should be based on the ultimate goal of improving health outcomes.
- Opportunities for creating national models for improving health outcomes should be explored to the fullest.
- Decisions should be based on ongoing demographic analyses to reflect rapid shifts occurring in the greater New Orleans area.
- Community members should participate in all elements of decision-making.

Key findings in specific areas of health are as follows:

Healthy neighborhood design

- Neighborhoods should be rebuilt in ways that promote healthy living, which should include sidewalks and bike lanes, parks or playgrounds, access to healthy food, and conditions that promote safety, among other features. Neighborhoods should also be rebuilt in ways that strengthen formal and informal social networks and social institutions.

Environmental health

- Indoor environments of homes, schools and workplaces in the greater New Orleans area should be safe.

- Returning residents should not be exposed to hazardous compounds in soils, sediments or other sources from flooding associated with Hurricane Katrina.
- Core environmental health functions should be restored to insure safe drinking water; food safety; air quality; sewage, waste water and solid waste/debris management; minimal exposure to hazardous materials; and vector control.

Other core public health functions

- The New Orleans City Health Department, the Region 1 Health Office and the Office of Public Health should assure that all of the 10 essential core public health services are adequately conducted.
- Public health agencies in the greater New Orleans area should have a comprehensive package of surveillance systems that adds syndromic, risk factor and mental health/substance abuse surveillance, and environmental tracking to existing surveillance systems.
- Health promotion should use both modern media and community outreach. Messages should be consistent, evidence-based, and should address the leading underlying causes of morbidity and mortality.

Health effects monitoring and research

- Special studies should be done to measure expected health effects, identify unexpected health effects, and address residents' concerns about health risks related to the disaster.

Primary medical care

- Primary care in New Orleans should be neighborhood-based, convenient, affordable, inclusive of all life stages, and comprehensive. Services should be available to all and should not be distinguished based on age, disease, or socioeconomic status. These services should include preventive health services, disease management, family planning, mental health services, and access to medications, among others.
- A separate workgroup that includes local, state, and federal officials should develop plans for long-term financing of primary care.

Hospital and specialty care

- All persons in the greater New Orleans region should have access to quality hospital and specialty care regardless of their income or health insurance coverage. The Medical Center of Louisiana at New Orleans' (MCL-NO) responsibilities for care of low-income and uninsured persons and its health services/training capacities may not have to remain the domain of a public/state facility, but oversight mechanisms should be established to ensure that low income and uninsured persons have access to quality care.
- Planners should request that the greater New Orleans region become a model demonstration project that would assure equal access to care for the uninsured over the longer term.

Health information technology

- Integrated information systems for health records and patient tracking should link patients continuously across all primary, specialty, and hospital care settings, and should conform to the strategic goals of the National Health Information Network.

Health workforce

- State-of-the-art facilities for education of health care professionals training should remain available regardless of the way that care for low-income and uninsured residents is ultimately provided. In light of regional hospital and clinic closures, Graduate Medical Education

institutions should examine alternative/interim options such as training in private hospitals and non-traditional settings.

- The new medical education environment should place significant emphasis on training primary care physicians, mental health providers, as well as physician extenders who will serve as the health workforce in the region.

BACKGROUND

Hurricane Katrina caused severe damage to the infrastructure for health care and public health services in the greater New Orleans area. In the immediate aftermath, organizations of all types rushed to respond to the acute humanitarian crises and to rebuild the infrastructure for returning residents. Amid this emergency response, however, questions were raised about which components of the health sector should be rebuilt as they were previously, which components should be rebuilt differently, and which components should perhaps not be rebuilt at all.

Before the storm, Louisiana's health statistics were among the worst in the nation. Louisiana has the country's second-highest adult mortality rate and the second-highest infant mortality rate, in spite of the fact that its health care expenditures are at the national average¹. The low ranking in health statistics cannot be blamed on the failure of any single component of the public health or health care system, but rather to the structure of the entire system and the ways the different components interact. It is very likely that if all of the components of the health system are rebuilt as they were before the storm, the same disappointing health outcomes will result.

For this reason, as public health and health care decision-makers considered the options for rebuilding and requests for financial support from the federal government, they recognized a need to develop their plans within a common framework for the optimal design of system overall. The framework described in this document is meant to:

- 1) identify priority areas in which fundamental changes in the design of the health system could lead to better outcomes,
- 2) describe the principles that health-related organizations should follow in rebuilding within these priority areas,
- 3) identify performance standards for key components of the health system so that each component can be relied upon by other components, and
- 4) describe critical actions that should be undertaken and resources that are needed in the near term to lay the foundation for a health system that will meet those principles and performance standards.

This framework should serve as a guide for organizations developing more detailed plans to rebuild health-related structures and requesting financial assistance in this rebuilding. It also should serve as a description of the new health structures envisioned by the health sector, so that planning across other sectors of the metropolitan area can be coordinated. The framework addresses the Greater New Orleans area, which was defined for planning purposes to be the hurricane-affected areas of Orleans, Jefferson, St. Bernard, St. Tammany, and Plaquemines Parishes.

This framework is not an emergency recovery plan, but rather a guide to the long-term rebuilding of health structures, however, because many decisions that have important long-term implications must be made soon, the framework was developed quickly. Because of the short period of time in which it was developed, this framework is not a detailed plan, nor does it include all issues that deserve consideration. (In particular, because of time constraints it does not cover the important issue of long-term care.) The goal of the people participating in developing the framework was to take the opportunity of the disaster to consider the most important major issues in ways that ultimately improve the health of local residents. The final measure of success of the framework will be whether their health status improves.

¹ U.S. Department of Health and Human Services, *Health, United States 2004*, tables 23, 28 and 142.

DEVELOPMENT OF PLANNING FRAMEWORK

This plan was developed by a large number of people including greater New Orleans residents and public health and health care professionals. Numerous organizations were represented, including:

- New Orleans Health Department
- Louisiana Department of Health and Hospitals (DHH) and its subunits
- U.S. Department Health and Human Services (DHHS) agencies and other federal agencies
- Private for-profit and non-profit hospitals
- Community clinics
- Louisiana State University Health Care Services Division and Medical Center of Louisiana at New Orleans
- Academic medical centers
- Schools of public health
- Community based-organizations and coalitions of residents of New Orleans

A more complete description of participants is in the Appendix.

The planning process began with a meeting of over 100 people in Baton Rouge on October 6, 2005. The group was chaired by Dr. Fred Cerise (Secretary, Louisiana DHH), Dr. Kevin Stephens (Director, New Orleans Health Department), Admiral Craig Vanderwagen (Commander, Secretary's Emergency Response Team for Louisiana, DHHS), and Ms. Leslie Norwalk (Center for Medicare and Medicaid Services, representing DHHS Secretary Leavitt) to consider fundamental questions that could help improve the health of residents over the long term. The group was then divided into five smaller workgroups to develop recommendations for:

- 1) Health promotion and "healthy cities" environments,
- 2) Environmental health,
- 3) Other core public health functions,
- 4) Primary care, and
- 5) Hospital and specialty care.

The groups selected priority issues and began to draft principles and performance standards around these issues. Each group met at least one additional time in New Orleans or Baton Rouge between October 7th and October 13th to complete their recommendations, which gave opportunities for persons who missed the initial meeting to participate in person or over a conference call line. Two additional groups were formed during this time to deal with the specialized and cross-cutting issues of information technology and financing of primary health care. One final group was formed strictly to address integration of recommendations across the other work groups. These work groups developed written reports, which are included in the appendix².

Expertise from around the U.S. was obtained by e-mailing the draft workgroup reports to specific experts and soliciting their suggestions. In addition, experts at the RAND Corporation were asked to provide policy briefs on specific questions that arose around the following specific issues: the uninsured, the public hospital in New Orleans, the level of state involvement in municipal hospitals, healthcare structure safety, the healthcare workforce, health information technology, and neighborhood effects on health. Leading members of the National Association of County and City Health Officials also were engaged for

² The workgroup on financing of primary health care has not completed its work at the time this framework was completed.

their input and advice, including a face to face meeting in Houston on October 14 with local public health officers and federal representatives supporting the framework development.

The meetings of the work groups took place in rapid succession at a time when many local leaders and most local residents were displaced. Within these limits, broader input into the planning process was solicited by: 1) posting all drafts of work group reports on a website and providing a mechanism for web-based or e-mail comments, 2) sending questions regarding residents' desires for a rebuilt health system through an e-mail chain of community leaders and residents, 3) broadcasting a request for resident comments on WWL radio on October 20, and 4) setting up a toll free number for telephone comments. Comments were collected from these various sources and summarized; they have been integrated into the larger framework in the relevant sections.

The individual work group reports were synthesized into a draft framework report. The draft framework report was reviewed in detail by Drs. Cerise, Stephens, and Vanderwagen, and then presented to the entire planning group at a second plenary meeting on October 26, 2005. Then comments in these meetings, as well as ideas from residents experts revised above were used to make final revisions and produce this final framework document.

USE OF FRAMEWORK

This framework will become valuable in improving health only to the extent that it guides organizations and individuals in developing more detailed plans and making decisions regarding how to rebuild the health sector for greater New Orleans. To encourage the widest possible use of the framework, the planning group will submit it to government health-related agencies at the local, state, and federal level, distribute it to other health-related organizations in the region, present it to broader planning bodies (such as the Mayor's Bring Back New Orleans Commission and the Governor's Louisiana Recovery Authority) and make it available to the public by posting it on a website and announcing its availability to news organizations. The planning group itself, which is large and has diverse expertise, will also make itself available to these organizations, commissions and individuals to provide information and assistance in developing more detailed plans and in implementing plans based on this framework.

HEALTH PLANNING FRAMEWORK

I. Guiding Principles for Planning and Implementation

During the process of gathering input for the framework, a number of overarching principles were identified by participants:

1. All actions should be based on the ultimate goal of improving health outcomes

The issues discussed by the workgroups and questions addressed by community residents are all largely based in the process of delivering health care or public health services. The end result, however, should not be measured in terms of services delivered or other process measures, but in the improved health status of the residents of the greater New Orleans area. The connection between the issues and processes in the framework and health outcomes should be explicit.

2. Opportunities for creating national models for improving health outcomes should be explored to the fullest

All participants in the process were acutely aware that the effect of decisions made over the next weeks and months will be watched closely by the entire nation. The opportunity to serve as a model for establishing a comprehensive, integrated health infrastructure that results in improved health outcomes was seen by participants as an important consideration and caution.

3. Decisions should be based on ongoing demographic analyses to reflect rapid shifts occurring in the greater New Orleans area

The strategic planning process was made more challenging by the inevitable uncertainties created by the population shifts following the storms. All participants recognize that decisions will need to be made based on continuous re-evaluation of the demographic patterns that will continue to evolve as the New Orleans area is repopulated. For this reason, many of the recommendations for critical action steps remain somewhat vague to allow for this uncertainty.

4. Community members should participate in all elements of decision-making

All participants remain committed to developing ongoing processes that fully incorporate community residents into all elements of decision-making.

II. Healthy Neighborhood Design

Importance to Health

The “built environment” influences health in profound ways. About half of deaths can be traced to a small number of health-related behaviors such as smoking, physical activity, diet, alcohol consumption, driving, and use of firearms; these behaviors in turn are shaped by neighborhood features such as playgrounds, sidewalks, other facilities for physical activity, and the products sold in local retail stores (e.g. fruits and vegetables versus tobacco and alcohol). Socioeconomic segregation leads to concentrated poverty, which is often accompanied by interpersonal violence. Enough is now known about these effects that neighborhoods can be designed to be health-promoting.

Resident comments

When asked “What makes a neighborhood a healthy place to live?” residents responded with comments about safety, cleanliness, convenience, and social support:

- “A clean, non-violent neighborhood where children can play together. A place where you can sleep good at night and don’t have to worry about gun shots. Everybody helping everybody.”
- “Safety, good schools, parks (natural and sports), local mom & pop shops, efficient mass transit, teen centers.”
- “A clean environment, friendly neighbors, better police protection/patrolling areas, schools should be safe, neighborhoods should be drug free.”
- “Friendly neighbors, good schools, nearby grocery stores, clean streets.”
- “People working together as people and not by choice of color or race. Keeping their neighborhood clean of debris, trash, and broken down vehicles.”

Guiding Principles

- All neighborhoods and communities should be rebuilt in ways that promote healthy living, which should include:
 - Sidewalks, bike lanes, and other infrastructure for walking and bicycling
 - Land use mix and “traffic calming” to reduce dependence on driving and promote walking
 - Parks or playgrounds for physical activity
 - Community centers or other common areas for meetings, which could also include healthcare and other services
 - Socioeconomic integration
 - Conditions available and acceptable across the entire life span, including “aging in place”
 - Cues to healthy living and absence of cues promoting unhealthy living (such as alcohol, tobacco, and fast food billboards and outlets)
 - Fewer outlets selling alcohol and tobacco, with greater restrictions on sales (time of day, location, etc.)
 - Access to healthy food (e.g., high quality affordable produce in stores, space for a farmers’ market)
 - Lighting, visibility, and other conditions that deter crime and promote safety
 - Access to good public transportation
 - Police patrols to enhance safety
 - Sustainable mechanisms to remove debris and maintain cleanliness
- Zoning laws/rules/requirements that support healthy neighborhood environments should be enforced and not overruled by political processes

Performance Standards

- Healthy neighborhood design performance standards³
- Housing costs parallel to distribution of incomes
- Improvement in community satisfaction with neighborhood environments

Critical Action Steps

- Integrate health experts and health considerations into planning and rebuilding processes
- Establish appropriate zoning laws or revise existing laws to support healthy neighborhood design
- Tie funding for repair/development to requirements or incentives for “healthy neighborhood” development

³ Research will be needed to collect and review pre-existing standards.

- Establish structures or processes for participation of displaced and returned residents in planning neighborhood redesign

Required Resources⁴

- Funding for health experts and local staff to assure integration of health issues into neighborhood planning
- Funding to facilitate involvement of displaced and returning residents into planning

III. Housing and Indoor Environments

Importance to Health

The hurricane caused severe damage to tens of thousands of buildings, many of which will be occupied in the future. There is the possibility that the indoor environments of these buildings pose health risks to future occupants. Even without storm damage, known indoor air hazards such as lead, asbestos, and environmental tobacco smoke remain important causes of poor health that can be addressed through known effective public health strategies.

Guiding Principles

- Indoor environments of homes, schools and workplaces in the greater New Orleans area should be safe

Performance Standards

- Housing codes that incorporate existing or newly developed indoor air standards related to mold, lead and other potential hazards
- Housing inspectors have the knowledge and inspection criteria to evaluate environmental health risks (e.g., adequacy of water and sewage services, presence of lead or mold hazards)
- Inspections of school indoor environments account for the susceptibility of children to environmental exposures
- Public indoor spaces are free of environmental tobacco smoke

Critical Action Steps

- Assess the extent to which housing codes and inspection criteria in other states address mold, lead and other indoor hazards and evaluate the applicability of such codes/criteria for use in New Orleans
- Include mold contamination in the assessment of housing in flooded areas
- Assess lead hazards in housing being rehabilitated after flooding
- Introduce legislation or ordinance to ban smoking in indoor public spaces

Required Resources

- Expertise in environmental health policy to develop, implement and evaluate codes addressing housing, restaurants, schools, workplaces, and other buildings accessible to the general public
- Staff to inspect and assess the habitability and health risks of Katrina-damaged housing, schools, and other public buildings

⁴ Funding for healthy neighborhood rebuilding will require substantial funding that does not flow through health agencies; the required resources listed here are those to influence how rebuilding funds are used.

IV. Core Environmental Health

Beyond the damage to buildings, Hurricane Katrina caused massive disruption of the environment in the greater New Orleans area, including profound changes to surface water, drinking water, sewage, solid waste, and outdoor air, as well as the potential for exposure of individuals to hazardous materials. This disruption has the potential to cause a variety of health problems in residents. A strong core environmental health system is needed to prevent health problems from this changed environment. This environmental health infrastructure must have the capacity to identify and mitigate environmental health risks, communicate information on remaining risks to the public and various organizations, and conduct long-term monitoring of the effects on human health.

IV.A. Core Environmental Health Functions

Guiding Principles

- Core environmental health functions should be restored to insure safe drinking water; food safety; air quality; sewage, waste water and solid waste/debris management; minimal exposure to hazardous materials; and vector control
- Returning residents should not be exposed to hazardous compounds in water, soils/sediments or other sources from flooding associated with Hurricane Katrina
- Locations with historical hazardous materials should be identified and mitigated
- Mechanisms should be developed to insure that parties with interests in future use and economic development of land can access and account for environmental monitoring data

Resident Comments

Most comments from residents concerning the environment referred to general cleanliness of neighborhoods (see section II), but there was some concern about toxins:

- *“Determine what toxins are on or in our land and homes and the remedy to cure it.”*
- *“Communities/neighborhoods need monitoring for environmental health problems, especially now after Katrina.”*

Performance Standards

- Core environmental functions are conducted according to established national performance standards so that:
 - Tap water meets all EPA and state standards and is safe to drink
 - Restaurants are inspected and operate under all requirements of the sanitary code
 - Commercial and retail food vendors operate under sanitary code regulations
 - Fish and shellfish safety is monitored and consumption advisories issued if needed
 - Air quality meets all EPA and Louisiana Department of Environmental Quality standards
 - Waste water and sewage is treated before being released into Lake Pontchartrain
 - Solid waste and storm debris is removed from the streets and disposed of properly
 - Garbage collection is restored and removed to approved landfills
 - Hazardous waste sites and other locations with hazardous chemicals are identified and mitigated
 - Environmental monitoring of sediments/soils is conducted and data assessed to identify areas with highly elevated contaminants from Katrina flooding
 - A vector control program is implemented and sustained to monitor for all vectors, including mosquitoes, flies, termites, and rodents
- Remediation plans are developed for areas found to have localized contamination

- Historical hazardous waste sites, commercial entities (gas stations and underground storage tanks, dry cleaners, auto repair shops, etc) and brownfield sites that may have hazardous compounds are identified, assessed and mapped
- A tracking system is available to locate and monitor hazardous materials locations to guide future land uses

Critical Action Steps

- Conduct assessment of environmental health services
 - Identify agency with primary current legal responsibility for each environmental health service
 - Identify functions not being carried out post-Katrina
 - Assess functions that could be handled locally and those best handled at other governmental or organizational levels
 - Formalize organizational partnerships to insure that all environmental health functions are conducted
- Identify, map and develop a remediation plan for hazardous waste sites
 - Obtain EPA, and Louisiana Department of Environmental Quality and other monitoring data and assessments of sediments and soils in the flooded areas
 - Identify and map localized areas according to type of contaminant or hazard
 - Develop a remediation plan for each area
 - Communicate the information to developers, policy makers and the public

Required Resources

- Sanitarian workforce capable of implementing and enforcing environmental health inspections
- Environmental health workforce with skills in other areas environmental health, engineering, and ecological investigations
- Technological infrastructure to support core environmental health functions (such as computers, GIS, and laboratory capacity)
- Funding for additional core environmental health functions identified by assessment of environmental health capacity
- State- and City-wide capacity to complement EPA/Louisiana Department of Environmental Quality efforts in obtaining environmental sampling data
- Environmental tracking system and expansion of the current public health and GIS capacity to assess risks of historical hazardous waste sites and Katrina-related neighborhood hazards

IV.B. Risk Communication

Guiding Principles

- Residents should be informed of environmental problems in their homes, neighborhoods, and communities, as well as how to mitigate and protect themselves from environmental problems
- All agencies and organizations responsible for environmental health functions should be aware of environmental health risks

Performance Standards

- Residents, city agencies, contractors, and other organizations receive specific, accurate, and useful information on mold, lead, asbestos and other indoor hazards, hazardous wastes, and other environmental risks, as well as instructions for mitigating these risks
- Risk communication strategies are incorporated into all programs relating to the environment and coordinated among the programs and agencies

Critical Action Steps

- Develop risk communication strategies (messages, delivery modes, etc.) to inform the public and key agencies and organizations on environmental hazards and remediation methods
- Identify best communication methods to facilitate coordination around environmental risks among agencies and organizations

Required Resources

- Environmental risk communication organizational unit(s) capable of developing, delivering and evaluating just-in-time and just-in-case messages through multiple media channels

V. Social Environment Factors

Importance to Health

Numerous studies have demonstrated a powerful beneficial effect on health of social support, social networks, and social organizations

Resident Comments

Residents' descriptions of healthy neighborhoods heavily emphasized social support, usually expressed as "neighbors helping each other" (see section II).

Guiding Principles

- All neighborhoods should be rebuilt in ways that strengthen formal and informal social networks and social institutions, such as churches, schools, and community-based and voluntary organizations
- Neighborhoods should be rebuilt in ways that capitalize on their historical strengths and improve on their weaknesses

Performance Standards⁵

- Documentation of the re-establishment of social institutions that existed before the storms and/or new institutions after the storm (e.g., churches are open, neighborhood associations meet)
- Improvement of social support in self-reported "before and after" comparisons among residents

Critical Action Steps

- Establish neighborhood health committees (including representatives of key community organizations) to take on health-related projects and guide local decision-making
- Collect and collate historical information about neighborhoods to ensure historical strengths are retained
- Whenever possible, create jobs related to the critical actions listed by this work group for displaced citizens to help with healthy rebuilding

Required Resources

- Funding for public health staff positions in community organizing for health promotion
- Funding to collect and collate historical information about neighborhoods
- Funding for health-related projects initiated by health committees

⁵ Established performance standards do not currently exist for this issue.

VI. Other Core Public Health Functions

Importance to Health

The goal of public health is to prevent disease and promote health in populations. Achieving this goal requires ongoing collection of data on the health of populations and a core infrastructure to implement policies and programs. The field of public health has traditionally operated major programs to prevent communicable diseases such as tuberculosis and sexually-transmitted diseases, and these responsibilities continue. In addition, in recent decades public health has increasingly focused on preventing the major causes of mortality in the modern era, which are chronic diseases and injuries. Preventing these health problems requires (among other actions) delivering effective health-promotion messages around important health-related behaviors such as smoking, physical activity, diet, and alcohol consumption.

VI.A. Public Health Infrastructure

Guiding Principles

- The New Orleans Health Department, the Region 1 Health office and the Office of Public Health should assure that all of the 10 essential core public health services are fully and adequately conducted with no gaps and minimal overlap. These services are:
 - Monitor health status and understand health issues facing the community
 - Protect people from health problems and health hazards
 - Give people information they need to make healthy choices
 - Engage the community to identify and solve health problems
 - Develop public health policies and plans
 - Enforce public health laws and regulations
 - Help people receive health services
 - Maintain a competent public health workforce
 - Evaluate and improve programs and interventions
 - Contribute to the evidence base of public health
- The New Orleans Health Department, the Region 1 Health office, and the Office of Public Health should assure that high quality clinical services are available for all members of the population
- The Office of Public Health should continue to provide expertise and financial support to Region 1 and City public health activities
- In assuring that the 10 essential public health services are conducted, governmental public health entities should work with other organizations (e.g. universities, nonprofit organizations) to take advantage of the strengths and resources of the other organizations in promoting the public's health

Performance Standards

- The New Orleans Health Department, the Region 1 Health office, and the Office of Public Health and their non-governmental partner organizations should ascribe to the National Public Health Performance Standards in the conduct of their duties
- Healthy LA 2010 and Healthy People 2010 goals and objectives should be used to measure progress toward health objectives as the ultimate marker of successful health departments
- All prevention programs should be evaluated on an ongoing basis
- Evidence-based resources such as the Guide to Community Preventive Services should be used to inform intervention selection decisions

Critical Action Steps

- Conduct a review/inventory of New Orleans Health Department, Region 1 Health office, the Office of Public Health and their non-governmental partner organizations' activities to identify

gaps in the provision of the 10 essential services (*National Public Health Performance Standards Local Public Health System Performance Assessment Instrument*)

- Develop memoranda of understanding/agreement between the New Orleans Health Department, the Region 1 Health office and the Office of Public Health (central office) to describe roles and responsibilities to assure that no gaps in the provision of the 10 essential services are occurring
- Implement recommendations or activities to address findings of the core public health review/inventory
- High ranking Office of Public Health, New Orleans Health Department and Region 1 Health Office should participate in ongoing discussions of financing of health care at the state and federal level to assure that quality clinical care is accessible to residents regardless of income or insurance coverage
- Revise CDC guidelines on use of funds allocated for bioterrorism to allow for use for disaster preparedness and other core public health functions

Required Resources

- Funding for increased public health staff to address essential services not currently addressed
- *Note: additional infrastructure may be needed in regions 9 and 2 for core public health services as demographics change in these areas due to the sudden growth of the population*

VI.B. Surveillance

Guiding Principles

- Public health agencies in the greater New Orleans area should have a comprehensive package of surveillance systems that adds syndromic, risk factor and mental health/substance abuse surveillance, and environmental tracking to existing surveillance systems
- For any surveillance system, public health agencies should
 - use multiple integrated sources of data (including electronic medical records, laboratory data, population based surveys, etc.)
 - commit to rapid analysis and use of data
- Surveillance systems should be able to capture/track/identify the leading health indicators documented in Healthy People 2010 and Healthy Louisiana 2010
- Long-term environmental monitoring and human health surveillance systems should provide data to assess the impact of the environment on health
 - Tracking/ surveillance systems should be developed that should compile and track environmental monitoring data from all media in combination with human health surveillance data
 - These environmental and human health impact data should be used to develop evidence-based interventions and health promotion strategies and best practices

Performance Standards

- CDC Surveillance Guidelines
- CDC Syndromic Surveillance case definitions
- Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance Guidelines
- Benchmarks selected from Healthy People 2010/Healthy Louisiana 2010; HP2010 measurement guidelines

Critical Action Steps

- Surveillance staff should participate in development of electronic health records to insure that the system developed can serve as a data source for public health surveillance

- Continue current data collection and identify existing surveys that can be modified to obtain better data on the city and region
- Identify and implement proper mental health screening tools
- Repeat surveys conducted in the past in Orleans Parish and Region 1 to evaluate the effect of the hurricane on demographics, behaviors, and health-related events
- Develop and enhance existing public, private and academic partnerships surveillance and analysis of data
- Evaluate existing laws and regulations for any needed changes in sanitary laws to enable full spectrum surveillance, particularly syndromic surveillance
- Identify all sources of environmental and human health outcome data and establish partnerships to obtain and share the data
- Develop the technical infrastructure needed for environmental tracking/ surveillance systems
- Adapt the national environmental and health outcome databases according to a standard format, such as the Environmental Public Health Tracking database format and data standards

Required Resources

- Computers, information technology support, possibly software upgrades and related resources.
- An epidemiology unit at the city and increased staffing at the regional level
- Syndromic surveillance in particular may require information technology, statistical, and additional epidemiology expertise
- Staff, information technology and support for GIS mapping and spatial analysis regarding environmental hazards

VI.C. STD, HIV and Tuberculosis Control

Guiding Principles

- Treatment of HIV and tuberculosis (TB) is highly specialized and should be considered Specialty Care
 - Special clinics for the relatively small number of patients with these diseases should be maintained or established with clear lines of referral from the integrated primary care system
 - For TB treatment, Directly-Observed Therapy programs should be maintained and enhanced
- Basic STD diagnosis and treatment should be integrated into primary care systems that protect confidentiality and prevent stigmatization
 - STD care and treatment should continue to be free and without barriers to access
 - With integration of STD treatment into primary care, the Gonococcal Isolate Surveillance Program should be continued by incorporation into clinics likely to see the largest volume and variety of STD patients
 - STD screening and treatment should be available in schools
- Comprehensive communicable disease control programs should include:
 - Oversight systems to assure the delivery of high quality clinical services for HIV, STD and TB
 - Comprehensive, multi-modal surveillance (see guiding principles for surveillance systems above) linked to the primary and specialty clinical care systems for these conditions as well as to facilities serving high risk populations
 - Screening and treatment of high-risk populations such as jails, homeless shelters and others
 - Contact tracing

- Provider and patient education
- Community-based health promotion messages
- Condom distribution programs and other risk-reduction programs

Performance Standards

- HIV, STD and TB treatment guidelines
- HIV, STD and TB surveillance guidelines
- HIV, STD and TB community intervention guidelines
- CDC guidelines for STD clinic management
- US Preventive Services Taskforce clinical guidelines for screening of STD's, HIV, and TB

Critical Action Steps

- Reestablish HIV and TB specialty clinics in New Orleans
- The STD program at Office of Public Health should develop an oversight mechanism to ensure access to care and quality management of patients with STDs seen in primary care clinics

Required Resources

- Funding to re-establish HIV and TB clinics
- Funding for staff to oversee STD care in primary care clinics
- Funding for STD screening and treatment in various sites
- Funding for staff to support contact tracing (for syphilis and HIV)

VI.D. Health Promotion Messages

Resident comments

Some residents reported an interest in community health education:

“Walkers and Talkers (health promoters) are needed to provide plain talk to community members about health issues.”

Guiding Principles

- Health promotion messages should address the leading underlying causes of morbidity and mortality
- Health promotion messages should be consistent, evidence-based, and delivered with enough reach and frequency to have a population-level impact
- Messages should use multiple media and should be culturally-relevant and literacy-appropriate
- Health promotion messages should be delivered through both the mass media and community outreach

Performance Standards

- Data from ongoing monitoring and evaluation is used to continuously refine messages

Critical Action Steps

- Create health promotion units in public health agencies and/or partner organizations
- Health promotion should begin now for displaced residents
- Work with Department of Education for evidence-based coordinated school health programs, including the creation of healthy school environments

Required Resources

- Funding for health promotion unit(s), production, and message placement
- *See also sections IVB, V, and XI.*

VII. Health Effects Monitoring and Research

Importance to Health

Not all of the health effects of Hurricane Katrina can be anticipated at this point. Health effects can occur over the short term or over years. Identifying unexpected health effects is important to developing interventions to prevent them in the future, both in New Orleans and other places where similar disasters might occur.

Guiding Principles

- Special studies should be done to measure expected health effects, identify unexpected health effects, and address residents' concerns about health risks related to the disaster
- Special health monitoring studies should:
 - Include issues known or suspected to have long-term health implications (e.g., indoor air quality and exposure to molds, exposures to sediments/soils, hazardous wastes, impact on persons with asthma or other chronic conditions)
 - Include mental health issues (e.g., depression, PTSD, substance abuse)
 - Be flexible to capture unexpected issues
 - Allow for monitoring of issues important to residents
 - Utilize biomarkers with established clinical relevance
 - Pay specific attention to vulnerable populations (e.g., pregnant women, children, individuals with compromised immune systems) and adhere to specific human subjects regulations for these special populations
- New Orleans residents should be included in the National Children Study, the NHANES and other national studies that assess health comprehensively

Performance Standards

- Special studies to monitor known/suspected health risks should be proposed, funded, and implemented within six months
- Special studies should adhere to established human subjects procedures and guidelines

Critical Action Steps

- Research and assess appropriate biomarkers for intermediate and long-term monitoring
- Develop a research agenda for long-term health effects of the disaster, particularly by building on knowledge from previous disasters
- Include in research agenda projects to advance the understanding of environmental health effects, including research that integrates molecular and population science, systems biology research to identify innovative markers of exposure, susceptibility and effect associated with hazardous substances present in the environment in the aftermath of Hurricane Katrina.
- Facilitate participation of New Orleans residents in national exposure and health studies

Required Resources

- Task force to develop research agenda
- Funding for research as outlined in the research agenda

VIII. Primary Care

Many health problems can be prevented by clinical preventive services, such as immunizations, screening and treatment for hypertension, and screening for cervical and colon cancer. Long-term costly complications of other common health problems like asthma and diabetes can be minimized by appropriate management in primary care clinics. These services can be provided at low cost in primary care clinics by a range of providers (e.g. physicians, nurse-practitioners, physician assistants, nurses operating under standing orders). In order for these primary care services to be used optimally, they must be accessible and acceptable to all, but especially to low-income and uninsured persons. Before the hurricane, these primary care services were not widely available to low-income and uninsured persons in New Orleans because of a shortage of clinics and insufficient reimbursement for services.

Resident Comments

Resident comments strongly favor neighborhood-based clinics:

- *“Each district in New Orleans should have a health care center.”*
- *“Built in the people’s neighborhoods, responsive to the neighborhoods’ needs, and organized by the neighborhood citizenry...”*
- *“Need community-based health centers that are neighborhood-appropriate and provide preventive care as well as acute care.”*
- *“Community members should be able to look to their local neighborhood center as the better alternative to going to the Emergency Department.”*

Resident mentioned some services specifically:

- *“Neighborhoods need greater access to reproductive health care, STD care, family planning.”*
- *“Need to enhance access to immunizations.”*
- *“More community-based mental health programs should be established.”*
- *“Prevention should be the first thing the legislature funds.”*

VIII.A. Accessibility, Acceptability, and Scope of Services

Guiding Principles

- Primary care in the new greater New Orleans should be neighborhood-based, convenient, affordable, culturally-competent, evidence-based, inclusive of all life stages, holistic, comprehensive, high quality, family-centered, and accountable to people being served
- A patient should be able to obtain an appointment on the same day care is determined to be necessary by the patient
- Services should be available to all and should not be distinguished based on age, disease, or income. Services for families should be located in the same building
- Primary care settings should provide a broad array of services: primary/secondary/tertiary preventive health services, health education, immunizations, screenings, STD diagnosis and treatment, comprehensive disease management (focusing on diabetes, cardiovascular disease, asthma, and depression), family planning, pharmacy/medication therapy, behavioral health and mental health services; community-based research and community-led health education; dentistry; optometry; prenatal care; geriatric care; lab services; services for those with developmental disabilities; and nutritional support services
- Enabling support services, such as case-management, transportation, and translation, should be made available in the primary care setting to ensure access for an underserved population
- The system should have extraordinary information management capacity, including but not limited to outcomes measurement in real-time, patient tracking, electronic health record, and capacity to provide this information to partner organizations. The information systems should be integrated with community-wide health information technology (*see section XII*)

Performance Standards

- Days to next 3rd appointment⁶ (the standard to be met should be one day)
- 60% of appointments should be reserved for same day appointments
- Services should be available to all persons regardless of ability to pay
- For a limited number of preventive services with high public health importance (immunizations, STD screening, blood pressure screening and monitoring, cholesterol screening) there should be absolutely no barriers to access: no fees and services provided on a walk-in basis to all
- Population per clinician meeting acceptable standards
- Patient satisfaction to be higher than 90% (according to a validated tool)
- To establish scope of services, adopt HRSA Bureau of Primary Health Care primary care services (see HRSA program expectations for health centers) which are based on recommendations from the US Preventive Services Task Force
- Participation in Institute for Healthcare Improvement’s “Health Disparities Collaborative” regarding prevention, cardiovascular disease, diabetes, asthma, and depression
- Electronic health record follows HL7 standards; interfaces with information systems for hospitals, specialty providers, and pharmacies; and is used for continuous quality improvement

Critical Action Steps

- Determine the optimal number of primary care providers needed based on an analysis of the need/demand for services. (*Note: will change over time as population returns to the greater New Orleans area*)
- Identify the population to be served by age, gender, race/ethnicity, and income level as re-population occurs
- Adopt a community-participatory process for establishing what is acceptable in terms of accessibility (cultural, linguistic, geographical)
- Identify contacts and opportunities to collaborate with planning groups in other sectors such as public transportation, etc., that affect accessibility of comprehensive community-based primary care
- Develop specifications for primary care clinic performance and mechanism to provide financial and other assistance to organizations adhering to these performance standards
- Develop mechanisms for governmental oversight of primary care accessibility, scope of services, and quality of care
 - Evaluate Louisiana Maternal Child Health Grant from HRSA as example of standards for outcome measurement and oversight
- Establish and deploy health information technology in clinics (*see section XII*).
- Establish (require) information system for measurement of accessibility across the network (e.g. scheduling/ registration with minimum standards for interoperability)
- Create a subgroup of the primary care work group, with Louisiana Department of Health and Hospitals leadership, to examine and make recommendations for different models for paying for services: involve Agency for Healthcare Research and Quality, Center for Medicare and Medicaid Services, Health Resources and Services Administration, private sector finance experts, private community members, Kaiser, other representatives, including legal experts who understand complexities of the laws/regulations related to funding. (*in progress –see section VIII.B*)

⁶ Days to next 3rd appointment is more accurate than the next appointment, because of cancellations and random variation as established by the Institute for Healthcare Improvement.

- Determine status of physical facilities available to accommodate primary care settings and see how these can be integrated with other available private/public/nonprofit care settings organizationally
- Identify models for incorporating private physicians into networks of community-based primary care
- Utilize National Health Service Corps and Nursing Loan Repayment Program; designate where possible critical health professional shortage areas to recruit more providers

Required Resources

- Funding for clinic construction and equipment
- Funding for initial staffing of clinics until long-term financing established
- Funding to develop specifications for primary care clinics
- Funding for governmental oversight to assure access and quality of care
- Funding for information systems for primary care clinics necessary for quality assurance/quality improvement (*see section XII*)

VIII.B. Financing

Before the hurricane there was inadequate funding for primary care clinics. The funding that has existed for primary care has come in several streams that are difficult to coordinate. To address this problem, the Primary Care Work Group formed a Primary Care Financing Sub-workgroup. DHH Secretary Fred Cerise designated Dr. Roxane Townsend, Louisiana Medicaid Medical Director as the DHH representative. The charge of the group is to:

- 1) Establish guiding principles around primary/ neighborhood-level healthcare financing for greater New Orleans;*
- 2) Review challenges prior to the storm resulting from multiple/ inadequate funding streams for neighborhood-level primary care;*
- 3) Revisit efforts for reform directly prior to the storm (e.g. 1115 waiver, Medical Center of Louisiana at New Orleans (MCLNO) plans for clinics using “disproportionate share” Medicaid funds and local match, etc.), and re-establish those that processes that have merit in the current environment;*
- 4) Catalog and evaluate other existing mechanisms (other waivers, State Children’s Health Insurance Programs (SCHIP), Federally-Qualified Health Centers (FQHC), etc.), and review successful efforts elsewhere for maximizing financing and information exchange among primary care providers; and*
- 5) Recommend and implement jointly-agreed upon solutions (short- mid- and long-terms) for sustainable financing of primary care.*

At the time of this writing, this work is in progress.

IX. Hospital and Specialty Care

Importance to health

While primary care is necessary for early disease detection and treatment, primary care services cannot be effectively accomplished without the availability and accessibility of high-quality specialty services (e.g. diagnostic testing, expert consultations) and inpatient services for persons with suspected or recognized health problems that cannot be treated in primary care settings. Management of these health problems is most effective if the systems are seamlessly integrated and each level of the system does what it does best.

Resident Comments

When asked what bothered them about the health and public health system before the store, residents complained about lack of access and lack of respectful service. The services at Charity Hospital received both complaints and praise:

- *“Lack of services for the poor, difficulty obtaining understandable information.”*
- *“3rd world conditions at Charity Hospital – the teaching hospitals profited in terms of great learning opportunities for medical students and that’s great, but there’s no reason that the patients had to be exposed to long waits and unpleasant environments.”*
- *“Less than humane way of dealing with patients. People were treated with little respect and even less if they were receiving government-assisted insurance....Nurses/doctors were not friendly and treated patients as though they were a burden.”*
- *“There aren’t enough facilities to provide care to people who can’t afford it. More money needs to be provided for public clinics and hospitals. Charity hospital isn’t or wasn’t cutting it for people who couldn’t afford it.”*
- *“People will tell you ‘take me to Charity Hospital’; though you may have to wait, when you get in, they will treat you right.”*
- *“Neighborhoods and communities trust Charity, so it should continue in some capacity, perhaps in partnerships with private organizations in communities.”*
- *“Faculty at LSU/Tulane need to change; the white doctors are seen as conservative and sometimes racist; there is a need for more multicultural doctors.”*
- *“The Black community does not trust a racist white physician community. They see Charity is an institution that the Black community trusts.”*

IX.A. Accessibility and Quality

Guiding Principles

- All persons in the greater New Orleans region should have access to quality hospital and specialty care regardless of their income or health insurance coverage
- The Medical Center of Louisiana at New Orleans’ (MCL-NO) responsibilities for care of low-income and uninsured persons and its health services/training capacities may not have to remain the domain of a public/state facility
- Regardless of whether public hospitals provide care for low-income and uninsured persons, governmental oversight mechanisms should be established to ensure that persons of all incomes, insured or uninsured, have access to quality care
- The system for accessing primary, secondary, and tertiary care should be designed so that it is easily navigable by persons with little formal education
- The system for providing care for low-income and uninsured persons should be established based on a sustainable business model, and mutually beneficial to patient and provider

- The new reimbursement model should reflect the idea that the dollar follows the patient to all relevant providers and settings
- The new institutional culture in the greater New Orleans region of timely open reporting by hospitals of measures of performance and structural quality should continue and should be expanded
- Level I trauma care capacity and training should be available in one form or another in the region

Performance Standards

- Standards for access may be derived from known standards provided through the Institute for Health Care Improvement, Institute of Medicine, and others
- Measures, systems, and performance standards for accessibility in the region should be consistent with the same measures determined at the Federal level (e.g. what CMS sanctions)
- Quality measures should be consistent across settings (single tier system for quality and access)
- Standards for appropriate utilization of Emergency Departments and other clinical settings should be identified that relate access, utilization, and quality
- Non-emergency visits to hospital emergency departments should be eliminated
- Standards on open reporting of hospital capacities should be identified or developed

Critical Action Steps

- Determine if the greater New Orleans region can become a model demonstration project of the Department of Health and Human Services/Center for Medicare & Medicaid Services and the Louisiana Department of Health and Hospitals that would assure equal access to care for the uninsured over the longer term
- Identify the local, national, and international resources/experts/models that will be necessary to inform the principles described above
- Establish governmental oversight mechanism to ensure that residents, particularly those of low income and those uninsured, have access to quality health care in non-public facilities
- Review Scope of Practice standards for physician extenders to assess the possible advantages of broadening practice standards in increasing access to care
- *Note: If legislation is passed, CMS will work to institute five months of guaranteed funding (uncompensated care fund) for otherwise uninsured payments as a bridge toward longer term health care financing solutions*

Required Resources

- Funding and staff to review policies and recommend policy changes to insure access
- Funding and staff to provide oversight of access to care and quality of care

IX.B. Hospital Technical Capacities

Importance to health

The capacities of areas hospitals should be coordinated to provide for the evolving population needs and to prevent duplication, and should be designed to withstand future hurricanes.

Guiding Principles

- We should plan infrastructure which will protect critical equipment and services in the face of disasters, and provide for assurances like pumping systems in facilities
- We should look beyond our immediate region in assessing technical capacities and resources which could be used by our still-shifting population

Performance Standards

- All facilities meet enhanced building code requirements to protect critical hospital infrastructure and equipment

Critical Action Steps

- Assess current capacities of the existent facilities, those coming online, and determine strategies for sharing capacities and information regarding capacities among the institutions
- Develop plan to track over time the information about the available facilities/providers in the region and determine models for allocation of technical, financial, and human resources

Required Resources

- Staff to review and assure that hospitals meet enhanced standards

X. Integration of Primary Care with Hospital and Specialty Care

Importance to Health

Primary care cannot be effective and will not be acceptable to residents unless it is fully integrated with hospital and specialty care so that specialized services can be provided when necessary

Resident Comments

Residents commented on the need for community health centers to have ready access to hospital and specialty care:

- *“Neighborhood clinics should have access to technology that is available in the big hospitals – just make a phone call to schedule MRI, mammogram, etc. and arrangements could be made.”*

Guiding Principles

- Primary care should be the central locus of care in a seamlessly integrated network of care that includes inpatient care, specialty care, and diagnostic services
- The provision of health care services should be level appropriate, i.e., primary care providers should provide primary and preventive care, specialists should provide specialty care, emergency departments should provide emergency care
- An individual provider’s access to hospital privileges should require that the provider offer sustained follow-up care to any inpatient care
- Integrated information systems for medical records and patient tracking should link patients continuously across all primary, specialty, and hospital care settings (*see Section XII*)
- Equivalent access and willingness to participate in reimbursement for specialty care such as “Long-term acute care” (LTAC), psychiatric care, and other specialty care services should be implemented across payers in the state of Louisiana

Performance Standards

- Standards to measure availability and accessibility of specialty care should be identified or developed. Planners may review Jack Wennberg’s work regarding standards for resource allocation, quality, and population demographics
- Standards regarding timely exchange of patient information among care settings must be determined and implemented (*see Section XII*)

Critical Action Steps

- Establish mechanisms for referral, information exchange, financing, and service coordination based on other successful models in other cities
- Determine if the greater New Orleans region can operate as a demonstration project area for a new Medicare/Medicaid payment structure that supports the appropriate balance of primary care, inpatient care, and specialty care (*see Section IX.A*)
- *See also section XII below regarding information technology*

Resources Needed

- *To be determined*

XI. Integration of Primary Care with Social Services and Outreach

Importance to Health

Health problems are often the “final common pathway” of social problems or psychological problems, so preventing health problems often requires addressing them. Persons at the greatest need frequently have multiple linked problems, and often these persons are the least likely to seek care. Providing integrated social services and outreach are necessary to prevent further health problems in these persons.

Guiding Principles

- Primary care and public health delivery should be designed to co-locate medical, social, and psychological care, while still preventing the re-creation of a two-tiered system
- Co-located and integrated medical, social and psychological care systems should:
 - include a full range of individual, family and community level services (e.g., case-management, outreach to individual patients and to entire neighborhoods, health promotion messages)
 - be integrated and holistic, capable of dealing with all of an individual’s health issues, rather than disease specific
 - focus on critical, life-saving issues
 - interface with and refer to existing community organizations for delivery of services
 - be linked to electronic health records that facilitate integration and consultation
 - be at no cost to clients or reasonably priced
- Community outreach to persons and populations at high risk should be integrated and holistic rather than disease-specific

Performance Standards

- Research and identify existing standards for social services integrated into primary care settings (e.g., VA or Administration on Aging)
- Identify or develop standards for integrated outreach activities

Critical Action Steps

- Establish robust and scalable information and referral system to ensure access to enabling social and other human services
- Review existing Louisiana plans for funding and delivery of psychological services
- Review existing models of performance standards for integrated services and develop appropriate standards for the greater New Orleans region
- Develop a long-term financial sustainability plan for outreach and social services
- Create a cadre of highly trained public health outreach workers and case managers

Required Resources

- Funding for outreach staff
- Funding for social services

XII. Health Information Technology and Electronic Health Record

Importance to Health

Better decisions can be made about health if people have access to better information. This principle applies to health care providers regarding the health of their patients, to public health staff regarding the health of the entire population, and to residents regarding their personal health. Information technology is now readily available to provide all of these persons with the information they need, but this technology has not been used comprehensively because of a lack of local standards for health information systems, agreements regarding sharing of information, or established mechanisms for sharing information.

Guiding Principles

- Greater New Orleans should have an integrated health information network that meets the goals of the U.S. Department of Health and Human Service’s Framework for Strategic Action on Health Information Technology. The health information network should:
 - Inform clinical practice with the use of Electronic Health Records (EHR)
 - Interconnect clinicians so they can exchange health information
 - Personalize care with consumer-based health records and better information for consumers
 - Improve population health through advanced biosurveillance methods and streamlined collection of data for quality measurement and research
- The technology used should adopt the principles in the Summary of Nationwide Health Information Network (NHIN) Request for Information Responses, as endorsed by the National Coordinator for Health Information Technology⁷. They include:
 - A NHIN should be a decentralized architecture built using the Internet, linked by uniform communications and a software framework of open standards and policies
 - A NHIN should reflect the interests of all stakeholders and be a joint public/private effort
 - A governance entity composed of public and private stakeholders should oversee the determination of standards and policies
 - A NHIN should be patient-centric with sufficient safeguards to protect the privacy of personal health information
 - Incentives will be needed to accelerate the deployment and adoption of a NHIN
 - Existing technologies, federal leadership, prototype regional exchange efforts, and certification of electronic health records will be the critical enablers of a NHIN
- Health information technology should be designed to facilitate meeting the six Institute of Medicine (IOM) goals of healthcare quality (it should be safe, effective, patient-centered, timely, efficient and equitable)
- While information should be “patient-centric”, information sharing should also facilitate improvement of population health, data should be “rolled up” centrally with appropriate safeguards to individual confidentiality
- Information should be accessible through multiple modalities (internet, phone, “smart cards”, etc.)

⁷ Described at www.os.dhhs.gov/news/press/2005pres/20050603.html and available in full <http://www.os.dhhs.gov/healthit/rfisummaryreport.pdf>.

- Regional efforts at health information technology should take advantage of existing health information data systems and successes, including, for example:
 - Partnership for Access to Healthcare (PATH)
 - LSU Healthcare Network electronic medical record
 - Ochsner Electronic Health Record
 - VISTA (VA medical record)
 - LINK immunization registry system
 - AHRQ regional health information network demonstration projects
 - Existing billing information systems using ICD-9 codes (e.g., ESSENCE in National Capital Area)
- Health information technology should support surveillance, tracking demographics for health planning, monitoring quality of care on a local and regional basis, facilitation of access to care by web-based appointments and information provision, and trending supply and demand such as tracking bed capacities in local hospitals

Performance Standards

- Standards in the Nationwide Health Information Network (NHIN) Request for Information Responses report

Critical Action Steps

- Formally engage National Coordinator for Health Information Technology and AHRQ for advice on developing regional health information technology
- Create a regional health information collaborative to develop agreements among providers, public health organizations, and regulatory agencies for data access and sharing
- Create a smaller group, to include local “empowered” information officers, to meet on technical details and other issues for expanding data sharing locally
- Identify a “minimal data set”, hopefully from national examples, to incorporate into a greater New Orleans health information network
- Review the potential need for waivers so that antitrust/kickback laws do not prevent private hospitals from offering incentives to physicians to use a specific electronic health record

Required Resources

- Funding for health information technology collaborative
- Funding for health information technology demonstration project

XIII. Health Workforce

Importance to health

Protecting health, preventing disease, and treating disease effectively requires a high-quality workforce. Without such a quality workforce, none of the other recommendations in this framework will be implemented optimally.

Guiding Principles

- State-of-the-art facilities for education of health care professionals training should remain available regardless of the way that care for low-income and uninsured residents is ultimately provided
- There should be a collaborative commitment by regional graduate medical education (GME) institutions to re-establish high quality primary care, mental health, pediatric, surgical, specialist and sub-specialist training in the New Orleans region

- The new medical education environment should place significant emphasis on training primary care physicians, mental health providers, as well as physician extenders who will serve as the health workforce in the region
- Training of providers at all levels should include training in primary care clinics
- Regional public health agencies and partner organizations should be staffed with persons trained in comprehensive, up-to-date approaches to public health
- The increased environmental health risks will require additional staff and more highly-trained staff for environmental health

Performance Standards

- Education of physicians, allied health professionals, and public health workers should meet established national standards
- The regional GME institutions should meet national educational standards but in addition should pursue novel initiatives to achieve excellence in GME
- Staff in public health agencies should have formal training in public health

Critical Action Steps

- In light of regional hospital and clinic closures, GME institutions should examine options for alternative/interim options for training such as private hospitals and non-traditional settings
- Local GME institutions should continue to build on recent plans for rural health and primary care training tracks
- The American Medical Association, Center for Medicare and Medicaid Services, medical education bodies, legislative bodies and others should work to formulate more innovative reimbursement and incentives (e.g. loan repayment) packages to develop medical students' interests in primary care careers in the affected region
- Review legislative or regulatory options as to how GME/residency slots are allocated; changes may need to occur based on what facilities are available, who is providing care for the indigent (Medicare funding for GME), and who owns residency slots
- Re-establish educational systems for nurses and allied health professionals
- Pursue national licensure or state-to-state systems of reciprocity for physicians, nurses and other health professionals to allow for emergency contingencies and to ease relocation of residents
- Reform civil service systems to increase flexibility in hiring, pay, promotion, and termination so that a stronger public health workforce can be attracted and retained
- Identify training needs and conduct competency-based training to strengthen the public health workforce
- Create partnerships among governmental agencies, business and industry, and academia to develop internships and training programs to build workforce capacity

Resources needed:

- Funding for workforce development in public health agencies
- *Additional resources may be needed as more detailed plans are developed*

APPENDIX

1. Summary of Key Elements from the Framework
 - a. Guiding Principles
 - b. Critical Action Steps/Resources Required
2. Participant analysis
3. Workgroup reports – currently available at www.StayHealthyLA.org
 - a. Health Promotion/Healthy Cities
 - b. Environmental Health
 - c. Core Public Health
 - d. Primary Care
 - i. Primary Care Financing Subgroup
 - e. Hospital and Specialty Care
 - i. Health Information Technology/Electronic Health Record Subgroup
 - f. Integration workgroup notes
4. Resident comments and recommendations
5. RAND policy briefs
 - a. Expanding Coverage to the Uninsured of Louisiana
 - b. Planning the Safety of Healthcare Structures
 - c. The Level of State Involvement in the Municipal Healthcare System
 - d. Health Information Technology
 - e. The Public Hospital System in Louisiana
 - f. Recruitment and Retention of a High Quality Healthcare Workforce in Louisiana
 - g. Neighborhood Effects and the Role of Communities in Restructuring
6. New Orleans Health Officer – Public Health Officials Collegial Exchange
7. Process evaluation report