Background and Rationale

The 1980s found public health in America overwhelmed and unfocused. Medicaid, which became law in 1965 impacted public health operations in critical ways over the following score of years. Public health departments were impacted by the shifting of primary care clients to managed care organizations, with a significant decrease in clinical clientele. By the mid 1980s public health departments requested and were granted reimbursement for their clinical services by Medicaid. There were health departments in the United States in which Medicaid reimbursement accounted for approximately 25 percent of annual revenues. The 1980s experienced the growth of managed care for Medicaid eligible populations caused an erosion of clientele from public health agencies – and the loss of revenues. During this same timeframe, the rapidly expanding AIDS epidemic caused a refocusing of public health resources to be refocused to AIDS and then HIV prevention and risk reduction. These and other acute demands led to a loss in focus on the population base from which public health was built.

The IOM Report: The Future of Public Health

Public Health in America grew from a sanitation focus in the mid 1880s, establishing statutes that mandated clean water, proper sanitation and healthy food, which led to the elimination of approximately 80% of diseases known during that period. By the early 1900s, public health led the challenge for mass immunization and the delivery of primary preventive health care. All of these factors, as well as additional factors not mentioned above, led the Institute of Medicine, in 1987, to convene an expert committee to examine public health in the United States. The highly critical report, “The Future of Public Health,” published in 1988, outlined the dilemma facing all of public health in the nation, and recommended that public health return to its population base, with the community as the unit of focus. The report laid out three primary core functions for public health: Assessment – Policy Development – Assurance. “Assessment” was the regular collection and analysis of data regarding community health status, the identification of community resources, the identification and targeting of community problems and needs and the identification of opportunities to engage communities. “Policy Development” was the ability to respond to community needs by applying scientific knowledge, political acumen and leadership ability to develop sound public health policy and
The Public Health System Response

In response to the IOM challenge, public health began to mobilize and develop the “flesh” around the skeleton presented by “The Future of Public Health.” In 1992 bridges were built between the practice and academic communities, creating the Council on Linkages Between Academia and Public Health Practice, and the Faculty-Agency Forum. Public health capacity issues were addressed through the creation of the Assessment Protocol for Excellence in Public Health. In addition, a broad coalition was created, the National Public Health Leadership Institute. Public health organizations, during the period 1992-1995 created such documents as “Core Public Health Functions” (NACCHO), “Blueprint for a Healthy Community: A Guide for Local Health Departments (NACCHO & CDC), and “The Public Health Workforce: An Agenda for the 21st Century” (Public Health Functions Project of the USPHS). These documents began laying out the steps, often rudimentary, to create an effective public health operation for the future, with a competency-based workforce. Finally, the Public Health Functions Steering Committee composed of the broadest array of practice, academic, specialty and professional organizations, developed a common vision and mission for public health in the nation, a statement of purpose and expanded the three core functions into ten essential services. The vision - Healthy People in Healthy Communities, and the mission - To promote physical and mental health and to prevent disease, injury, and disability enunciated the population and community focus for the “new” public health. “Assessment” was presented as the monitoring of health status to identify community health problems, the diagnosis and investigation of health problems and health hazards in the community and the evaluation of the effectiveness, accessibility, and quality of personal and population-based health services. “Assurance” was explained as the informing, educating and empowering of people about health issues, enforcing laws and regulations that protect health and ensure safety, linking people to needed personal health services and assuring the provision of health care when otherwise unavailable, and assure a competent public health and personal health care workforce. “Policy Development” required the mobilization of community partnerships to identify and solve health problems, and developing policies and plans that supported individual and community health efforts. The last essential service stated that public health should pursue research for new insights and innovative solutions to health problems and was viewed as cutting across that other essential services.
Healthy People 2010: Objectives for the Nation

The essential service *assure a competent public health and personal health care workforce* was critical for the success of the entire venture to recreate public health in the nation. A public health worker would require an array of “new” competencies to have the knowledge, skills and behaviors to create the desired changes, to maintain them and to respond to future challenges. Assuring a competent workforce within a competent health department was considered so critically important, that the planners of the 2010 health objectives for the nation developed a series of Public Health Infrastructure goals and objectives. “Healthy People 2010: Objectives for the Nation,” stated:

“All public health services depend on the presence of basic infrastructure. Every categorical public health program – childhood immunizations, infectious disease monitoring, cancer and asthma prevention, drinking water quality, injury prevention and many others – requires health professionals who are competent in cross-cutting and technical skills, public health agencies with the capacity to assess and respond to community health needs, and up-to-date information systems.”

“In public health, a strong infrastructure provides the capacity to prepare for and respond to both acute and chronic threats to the Nation’s health, whether they are bioterrorism attacks, emerging infections, disparities in health status, or increases in chronic disease and injury rates. Such an infrastructure serves as the foundation for planning, delivering and evaluating public health. The public health infrastructure comprises data and information systems, the workforce, and public health organizations.”

“Healthy People 2010” presented 17 new public health infrastructure objectives with the goal: *Ensure that Federal, Tribal, State and local health agencies have the infrastructure to provide essential public health services effectively.* Twelve of the seventeen infrastructure objectives were developmental, requiring the delineation of target goals, baseline data and the method for setting the target. The objectives include:

**Data and Information Systems (#=7)**
- Public health employee access to the internet
- Public access to information and surveillance adata
- Use of geocoding in health data systems
- Data for all population groups
- Data for Leading Health Indicators, Health Status Indicators, And Priority Data Needs at Tribal, State, and local levels
- National tracking of Healthy People 2010 objectives
- Timely release of data on objectives
Workforce (#=3)
- Competencies for public health workers
- Training in essential public health services
- Continuing education and training by public health agencies

Public Health Organizations (#=5)
- Performance standards for essential public health services
- Health improvement plans
- Access to public health laboratory services
- Model statutes related to public health services

Resources (#=1)
- Data on public health expenditures

Prevention Research (#=1)

For the first time, the public health workforce was to be defined by a set of competencies, and public health agencies were to meet national performance standards for essential public health services. In addition, public health agencies were being asked to conduct or collaborate on population-based prevention research.

The first workforce objective is aimed at increasing the proportion of agencies that incorporate specific competencies in the essential public health services into their personnel systems. The objective clearly states the broad range of core competencies needed by the public health worker of the future:

“In addition to a basic knowledge of public health, all public health workers should have specific competencies in their areas of specialty, interest, and responsibility. Competent leaders, policy developers, planners, epidemiologists, funders, evaluators, laboratory staff, and others are necessary for strong public health infrastructure. The workforce needs to know how to use information technology effectively for networking, communication, and access to information. A skilled workforce must be culturally and linguistically competent to understand the needs of and deliver services to select populations and to have sensitivity to diverse populations. Finally, technical competency in such areas as biostatistics, environmental and occupational health, the social and behavioral aspects of health and disease, and the practice of prevention in clinical medicine should be developed in the workforce.”

And, in reference to the licensing and certification of public health professionals, the same objective states:

“National licensing and certification programs that measure competency already exist for nurses, physicians, dieticians, health educators, laboratory technicians, sanitarians, environmental health specialists, and many allied health professionals. Coordination with these national programs will be important to ensure that new certification efforts cover essential public health service concerns...”
In the fall of 1999, the U.S. Department of Health and Human Services presented the *Healthy People 2010: Objectives for the Nation* to the public within the mantle of building partnerships with communities around health.

**CDC/HRSA Public Health Workforce Taskforce**

The CDC/ATSDR, as the leader in preventive health for the nation, has had a long and proud tradition of training for the public health workforce. Many of the offerings are categorical and focus on highly technical skills for a specific public health program or task. Courses are now offered on the internet in “distance learning” formats. In the year 1999, CDC/ATSDR trained 664,000 people with an expenditure of approximately 55 million dollars. HRSA, as the leader in primary clinical preventive care for the nation, has maintained a regional network of Public Health Regional Training Centers, offering region–relevant courses. The leaders of both agencies, were well aware of many of the dramatic changes and mandates related to workforce competencies, the certification and credentialing of public health professionals and the focus on essential public health services with the move toward developing performance standards for public health agencies. The public health workforce has been estimated at approximately 500,000, the vast majority without formal public health training. A Taskforce was created at the CDC/ATSDR, with HRSA participation, for public health workforce development. The vision was *an integrated life long learning system for development of the public health workforce*, with the goal being *a competent workforce able to deliver the essential public health services*.

The Taskforce was composed of internal members representing every Center, Institute and Office of CDC/ATSDR, senior level HRSA participants, academicians, and public health practitioners. The Taskforce worked for almost four months and produced a “Strategic Plan for Public Health Workforce Development” which was presented to the Director of CDC in the fall of 1999. The goal of the strategic plan is “a workforce competent to deliver the essential services.” The critical components of the strategies are as follows:

**Strategy 1: Monitor Current Workforce Composition and Project Future Needs** – The taskforce recommends a systematic, ongoing monitoring of the composition of the public health workforce using newly developed standard operational classification nomenclature and a standard set of work site descriptions. In addition to monitoring composition, a process should be developed to forcast
future needs and recommend changes in workforce composition in relation to trends in public health practice.

Strategy 2: Identify Competencies and Develop Related Content/Curriculum – Using the concept of basic and cross-cutting competencies for public health practice, the taskforce recommends the development of a basic public health practice curriculum for use by all public health workers and basic to advanced training in cross cutting (core) competency areas for certain categories of the public health workforce. The proposed basic curriculum reinforces the essential public health services as the current description of what public health does and identifies the basic and cross-cutting (core) competencies that underlie all areas of public health practice regardless of setting or role.

Strategy 3: Design and Integrated Learning System - In light of the current fragmentation and bewildering areas of learning opportunities, the task force recommends a nationwide learning system with a unifying structural design. When viewed from the perspective of the learner/customer, the structural system should have three elements: 1) an online “shopping guide” and registration system; 2) delivery of training, continuing education and/or other workforce development programs; and 3) feedback on and documentation of individual competency.

Strategy 4: Provide Incentives to Assure Competency – The taskforce has determined that participation in learning experiences must be stimulated by a synergistic set of incentives and competency certification. These incentive and certification mechanisms must function at the national, state and local levels in relationship to existing personnel systems, if they are to have the desired effect of stimulating participation in learning programs. This holds true, not only for public agencies, but also for private and non profit organizations. These incentives, in the view of the task force, should be linked to financial compensation and/or career development. Competency certification should exist to assure minimum levels of competency in certain areas of public health practice and be tied to eligibility requirements for certain jobs. The organizational accountability for demonstrating a comprehensive approach to workforce development can be made explicit through the development and dissemination of performance standards for local and state public health systems.

Strategy 5: Evaluate Impact – The task force recommends that the commitment to evaluation be explicit and demonstrated at every level in the learning system: individual, program/curricula or
The effectiveness of individual learning should be evaluated consistently using uniform methodology. The impact of specific programs/curricula or organized networks dedicated to training or continuing education should be evaluated for effectiveness and impact. In addition, comprehensive evaluation at the system level should be performed periodically to assess broad [policy and coordination issues.

**Strategy 6: Assure Financial Support** – Without stable funding, which assures the availability of financial resources needed to develop, coordinate, support, and evaluate learning programs, the vision for a unified system will not be realized.

The taskforce, after presenting the six strategies, made one specific recommendation: “…that within CDC/ATSDR, a single organizational locus be specified as responsible for coordination of workforce development activities…”

The Taskforce report was presented to the CDC/ATSDR Director in November, 1999 and was accepted and acted upon immediately. The Office for Workforce Development has been created in the Public Health Practice Program Office (PHPPO) of the Office of the CDC Director, under the stewardship of Maureen Lichtveld, MD, who also has the title of the Associate Director for Workforce Development at PHPPO. The Office has prepared and presented a “Public Health Workforce Preparedness Initiative – Public Health Learning Exchange: Preparing the global public health front lines.” The initiative plans to develop:

- Ten “Centers for Public Health Preparedness” – training centers linking schools of public health with State and local health agencies;
- A global development and delivery system using state-of-the-art technologies – with a “one stop” online access system, and a global distance learning system linking public health partners;
- A system for certification and credentialing in public health competencies – with a consensus framework on priority competencies, and reflect emerging trends in public health practice; and
- A program for applied research and evaluation – which will measure the effectiveness of curricula and technologies, determine the impact of workforce training on practice and health outcomes, and translate the research findings into improved competency development strategies.

Concomitant with the production of the initiative, The Office for Workforce Development planned and initiated an expert external workshop for workforce development, focusing on three critical areas – competencies & curriculum,
certification/credentialing and applied public health practice research, with the charge to assist CDC/ATSDR and HRSA create the framework from which will be developed the implementation plan for a system directed “toward a life long learning system for public health practitioners.”