



1100 17TH STREET, NW, 2ND FLOOR
WASHINGTON, DC 20036
(202) 783-5550
(202) 783-1583 FAX
WWW.NACCHO.ORG

NATIONAL
ASSOCIATION OF
COUNTY & CITY
HEALTH OFFICIALS

Statement of

Seth L. Foldy, MD

on behalf of the

National Association of County and City Health Officials

Before the

Subcommittee on Technology, Information Policy, Intergovernmental Relations and the
Census

House Committee on Government Reform

Hearing on "Health Informatics: What is the prescription for success in
intergovernmental information sharing and emergency response?"

July 14, 2004

Thank you, Chairman Putnam, distinguished Subcommittee members, and my colleagues in the room today for your interest in intergovernmental information sharing and emergency public health. I particularly thank you for seeking the perspective of the nation's 3000 local public health departments represented by the National Association of County and City Health Officials, on whose behalf I testify today.

For the past four years I chaired NACCHO's Information Technology Committee. In May I ended a six year term as Commissioner of Health of the City of Milwaukee. I have had the opportunity to represent the perspective of local public health regarding the nation's health information infrastructure at the Centers for Disease Control and Prevention, the eHealth Initiative, the Connecting for Health project of the Markle Foundation, the Rand Institute Summit on Information Technology Infrastructure for Bioterrorism and other planning groups. Previously, I practiced and taught family medicine.

You have sought testimony on a complicated tangle of issues that actually boil down to one critical question: How can both health care providers, and public health and safety officials get the information they need when, and where, they must make a decision? The health care provider makes decisions regarding an individual patient or family; the public health official about an entire community. In the setting of a communicable disease, a covert bioterrorism attack, or an environmental emergency, poorly informed decisions by either party result in missed opportunities to prevent injury or illness, sometimes on a massive scale.

For instance, if a doctor or laboratory fails to inform public health officials of a notable finding, no action to protect the community will occur. If public health officials do not alert clinicians about local cases of Sudden Acute Respiratory Syndrome (SARS), anthrax, or whooping cough, cases will go unrecognized and transmission throughout the community will continue. If the cycle of communications fails at the local level, state and federal officials aren't notified, and the nation remains at risk.

Improving the timeliness, completeness and accuracy of information exchange in both directions is a critical goal for improving the nation's preparedness for bioterrorism, for natural disease outbreaks, and for other emergencies. One good example such of effective information exchange is automated electronic reporting of laboratory results to local health authorities.

Milwaukee is particularly sensitive to the importance of receiving timely information and acting upon it promptly. In 1993 a little-known waterborne parasite (*Cryptosporidium parvum*) caused over 400,000 illnesses and about 100 deaths. The traditional systems of disease surveillance based on legally-mandated reporting of confirmed diagnoses failed to provide notice to health officials until much of the damage had already been done. Had public health authorities known earlier about changes in water quality measurements, surging absenteeism at workplaces and schools, and the rush for stool

examinations and for over-the-counter anti-diarrhea medications, preventive response could have begun sooner. Similarly, Midwestern public health agencies were slow to learn of rising illness from heat deaths during the severe 1995 heat wave until morgues were full. No information: no action. No action: no protection.

Our capacities were improved by 2003. In March, 2003, within three days of CDC's nationwide request for SARS surveillance, we sent SARS screening forms to local physicians and 11 emergency rooms voluntarily began transmitting daily counts of SARS-related symptoms to our health department. Then in June, a single telephone call initiated an investigation that helped alert CDC to the Western Hemisphere's first outbreak of monkeypox. Rapid, but complex management of over 30 human cases, 90 human contacts and hundreds of animal contacts in Southeastern Wisconsin helped prevent the virus from becoming permanently established in North American animal hosts. A magnificent effort by local, state and federal public health and agricultural professionals was nonetheless hampered by the inability to share information between our various databases, requiring a constant stream of telephone calls, faxes and emails in a nearly futile effort to keep everyone on the same page.

These examples are given to drive home two points. The first point, I believe, echoes all who will testify today: we must do everything possible to speed the transition of health-related records from paper to secure electronic files, employing interoperable data and transmission standards so information can automatically and rapidly reach those authorized to see it (including public health officials). Toward this end NACCHO endorses the President's 10-year technology plan to a) promote health information standards; b) fund demonstration projects; c) provide incentives and remove barriers to the adoption of electronic health records and the exchange of health information; and d) create high-level medical informatics leadership in the Department of Health and Human Services with authority to drive strategic development of a national health information infrastructure (NHII) across multiple departments (including Defense, Homeland Security, Environmental Protection Agency, and Veteran's Affairs).

The second point is that the nation's local public health departments must be active participants in this new health information infrastructure. They are effectively the eyes, ears, hands and feet of the nation's public health system. The nation's public health preparedness will suffer if local public health agencies are left on the wrong side of the digital divide.

Local health departments perform the vast majority of data management or data-dependent tasks related to communicable disease control and environmental health. These include: interviewing cases and contacts; vaccinating; imposing isolation, quarantine, and environmental orders; certifying deaths; permitting and licensing health- and environmentally-related activities; and, sometimes, sending bills. For this reason, they actually have the greatest need to manage information electronically. Repeatedly re-transcribing the information they gather (whether on paper or into internet applications) is the way most such work is performed today. This results in wasted effort and data quality loss precisely where labor and precision are most needed in an emergency.

Today some local health departments serve as creative laboratories for the health information infrastructure. Examples include Kansas City's public-private partnership for electronic laboratory reporting¹; New York City's testing of sophisticated algorithms for rapidly detecting disease outbreaks², and use of an emergency medicine internet network for early SARS detection in Milwaukee, Akron, Denver and Fort Worth³. Local departments are also making heavy use of Geographic Information Systems (GIS), to help track, understand and manage health events. While most local health departments cannot build such projects from scratch, it is notable how quickly they adopt new sources of information once they are practically available. If NHII can build a practical socket, local health departments will build (and share) appliances to plug into it.

For this reason the true test of a nation's health information infrastructure is not whether health information reaches the Centers for Disease Control and Prevention (CDC). The real test is whether information rapidly reaches local public health officials in a way that it can be readily integrated into the day-to-day work of local public health protection. Federal policy decisions can play a crucial role in this outcome.

For example, a 1999 NACCHO survey disclosed that fewer than half of all public health officers had continuous high speed access to the Internet. A Congressional requirement that states utilize a substantial proportion of federal Health Alert Network spending at the local level to assure connectivity has radically changed this picture. Now a high proportion of local health departments can send and receive email and other information efficiently, reliably and continuously.

Unfortunately, FY 2005 Administration appropriations requests (and related DHHS reprogramming of FY 2004 bioterrorism preparedness funds) appear to move in the opposite direction. Funds to state and many local health departments are reduced, in part to fund the national BioSense initiative undertaken by the Centers for Disease Control and Prevention (CDC). BioSense, which aims to comb through large national collections of electronic data in order to provide early warning of outbreaks is a worthy, if highly experimental, project for the nation. However, it is essential to remember that it will be local health departments that, when alerted to abnormal disease trends, will do the legwork to validate such suspicions and actually manage the outbreaks. Reduced funding for state and local agencies defeats the overall vision. We urge Congress and the Administration to support instead the larger CDC vision of a Public Health Information

¹ Hoffman MA, Wilkinson TH, Bush A, Myers W, Griffin RG, Hoff GL, Archer R. Multijurisdictional approach to biosurveillance, Kansas City. *Emerging Infectious Diseases* 2003; 9(10):1281-6.

² Das D, Weiss D, Mostashari F, Treadwell T, McQuiston J, Hutwagner L, Karpati A, Bornschlegel K, Seaman M, Turcios R, Terebuh P, Curtis R, Heffernan R, Balter S. Enhanced drop-in syndromic surveillance in New York City following September 11, 2001. *J Urban Health* 2003; 80(2 Suppl 1):i76-88.

³ Foldy S, Barthell EN, Silva JC, Biedrzycki P, Howe DS, Erme M, Keaton B, Hamilton CL, Brewer LK, Miller G, Bernstein R, Eby E, Pemble K, Fenton C. SARS Surveillance Project: Internet-enabled multi-region syndromic surveillance for rapidly emerging disease. *MMWR Suppl* – [in press]

Network (PHIN), an enterprise model of information management across local, state and federal systems, not just a single component. Both nationwide projects and local capacity need support, not one at the expense of the other.

I do not wish to imply that local government should play no role in funding its own participation in the national health information infrastructure. Such a system must be built by many stakeholders working and investing together. But there is a highly understandable reluctance to make major local investments at this time (even using federal grant dollars). Our history with new information technology is littered with two types of problems. The first occurs when software projects are promised at low cost, but they arrive late, deliver less than promised, and are not supported with appropriate training, technical support, and updated versions on a timely basis. The second problem occurs when local information system initiatives are rendered obsolete by new, seemingly arbitrary, state or federal requirements for new and different types or forms of information from local partners. Local health departments are no different than private enterprises; they have limited resources and require predictability and consistency before they can afford to undertake major investments.

I encourage the Subcommittee, the Congress and the Administration to take consistent steps to ensure that local public health departments are equipped to play an active role in the evolving national health information infrastructure. Here is our “prescription for success”:

1.) Establish a measurable yardstick for the capability of public health and health care providers to electronically send and receive a high-value set of standardized electronic health messages. These would be messages that can be interpreted independently of proprietary software or hardware and that can transmit such information as patient name, provider name, address, reportable disease laboratory results, vaccination, or antibiotic prescriptions. Then monitor yearly the proportion of local health departments, hospitals, laboratories, pharmacies and physicians that have attained this capability. Poor progress in this proportion will sound the alarm that our NHII initiatives are failing to engage the producers and end-users of health information. When such standardized health messages are defined to the extent they can be used interoperably by different information systems, *and* when they can be sent and received by a meaningful proportion of players in the health system, we will rapidly see development of applications that put this information to use.

2.) Establish the following standard for federally-funded health information management projects: Regardless of where or how information is stored, local public health officers need 24-hour, 7-day-a-week access to the information they need to manage problems in their jurisdictions.

3.) Require that the governance of federally-funded health information infrastructure investments at both state and federal levels include meaningful representation of local public health departments. This is necessary to ensure that the work processes and business requirements of local health departments are considered in the design of

applications and networks, and that true local costs for hardware, software, training, technical support and life-cycle management are addressed in planning. Very modest funding for skilled staff to represent local needs in such forums can minimize the likelihood of much greater spending on projects that fail to work.

4.) Ensure that local public health partners are included in federally-funded regional health information exchange projects and authorities. NACCHO endorses the concept that practical innovation and lessons will emerge most rapidly in local or regional health information exchanges.

5.) Learn from the Health Alert Network program. Requiring that federal funds ultimately reach local health departments for targeted goals can spur rapid development.

6.) Improve the chances of success by supporting practical training in information system leadership and management for local public health executives and their counterparts in other local public safety agencies.

7.) Finally, support officials like Dr. David Brailer and CDC's Dr. Claire Broome as they try to ensure adherence to generic standards for public investment in information systems. Public funds should no longer be spent to lock information into proprietary boxes.

Thank you for your interest and leadership in this critically important area. I will be pleased to answer any questions you may have.