

## Health Information Technology Opportunities for Local Health Departments



### Background

The Health Information Technology for Economic and Clinical Health (HITECH) Act, a section of the American Recovery and Reinvestment Act of 2009 (ARRA), has helped to renew focus on health information technology (HIT) and health information exchange. These initiatives have the potential to greatly increase the appropriate flow of health

data between many health-related entities, including local health departments. While the HITECH Act emphasizes expanding the use of electronic health records (EHRs) by health care providers, it also has significant implications for local public health practitioners.

The capacity to use information is fundamental to all public health activities, including those that take place in local health departments. Historically, diverse programs in local health departments have been required to build different public health information systems that cannot communicate with each other. HITECH Act initiatives alone will not solve the problem of incompatible federal program requirements, but they present a good opportunity to improve how local health departments collect, use, and exchange information.

If designed correctly, local health department practitioners and people living in their jurisdictions would have appropriate and rapid access to relevant, up-to-date information that would aid planning and evaluation of efforts to improve health through both clinical and public health practice. The exchange of information from electronic health records would help to improve coordination among the broad range of public health and health care practitioners. Service to people interacting with those practitioners would be more coordinated, better informed, and of higher quality.

While clinical technologies are certainly a vital part of national efforts to streamline and connect health information systems, local health departments would benefit from simultaneous investments in electronic tools that could help detect infectious diseases as early as possible,

#### POLICY PERSPECTIVE

Since the passage of the Health Information Technology for Economic and Clinical Health (HITECH) Act, as part of the American Recovery and Reinvestment Act of 2009 (ARRA), billions of dollars have begun to flow from the federal government to health care providers and hospitals to facilitate the adoption and use of electronic health records (EHRs) and health information exchanges (HIEs).

Unfortunately, a similar commitment has not been made to ensure that the nation's 2,800 local health departments are also connected to this system of health information technology. Local health departments need to be connected to health care providers through HIEs to monitor health trends, administer preventive health services, respond to disasters, engage in clinical care, and identify health hazards. Through effective use of EHRs and participation in HIEs between clinical providers and public health professionals, trends in disease or exposure to toxic substances can be discovered sooner. Preventive services can be targeted to the appropriate neighborhoods and health improved for the whole population.

coordinate care between public and private providers, and assess the impact of community-wide disease prevention initiatives.

The H1N1 influenza pandemic was a real-life exercise that highlighted some of the existing gaps in the flow of public health information: timely and accurate reporting about developments in a community (knowing which population groups were contracting influenza); workforce and skills assessment for planning and mounting

### INNOVATIVE USE OF PUBLIC HEALTH INFORMATION TECHNOLOGY (HIT)

The ability of local health departments to use HIT effectively is exemplified by two recent winners of the 2009 Health Information Management Systems Society Davies Award, which recognizes public health achievement through health information management. Both winners demonstrate the innovative and pioneering work being undertaken by local health departments in the field of public health informatics.

The Boston Public Health Commission (BPHC) won the accolade for its Boston Syndromic Surveillance System, which collates data from a number of sources in the city and provides a picture of Boston's communicable disease activity, such as tracking hospitalizations for influenza during last summer's H1N1 outbreak. Having access to this type of data allows BPHC staff to take prompt action to reduce the spread of particular outbreaks that may be spreading in a community.

Denver Public Health, a safety-net health care provider, received its award for using a clinical information system to improve quality of care. The system allows patients to receive test results electronically—which means they come faster and arrive in formats that are convenient, such as on the Web and via text messaging. Having an electronic repository of test results also helps Denver Public Health staff flag disease outbreaks and notify the state health department that a response may be needed.

a response (identifying what would work best for that community); information sharing to effectively communicate with the public (dos and don'ts, when and where to go for vaccination); and systems to track the response (vaccination rates and efficacy).

## Key Findings

The National Association of County and City Health Officials (NACCHO) surveyed and interviewed members to get more information about HIT needs in local health departments. The Centers for Disease Control and Prevention (CDC) supported NACCHO's effort to produce the *2010 NACCHO Informatics Needs Assessment*, the most complete source of data about health information technology and informatics<sup>1</sup> in local health departments today. The survey results indicate a need for major changes in the way local health departments access and use these tools.

### Overall Survey Conclusions and Recommendations

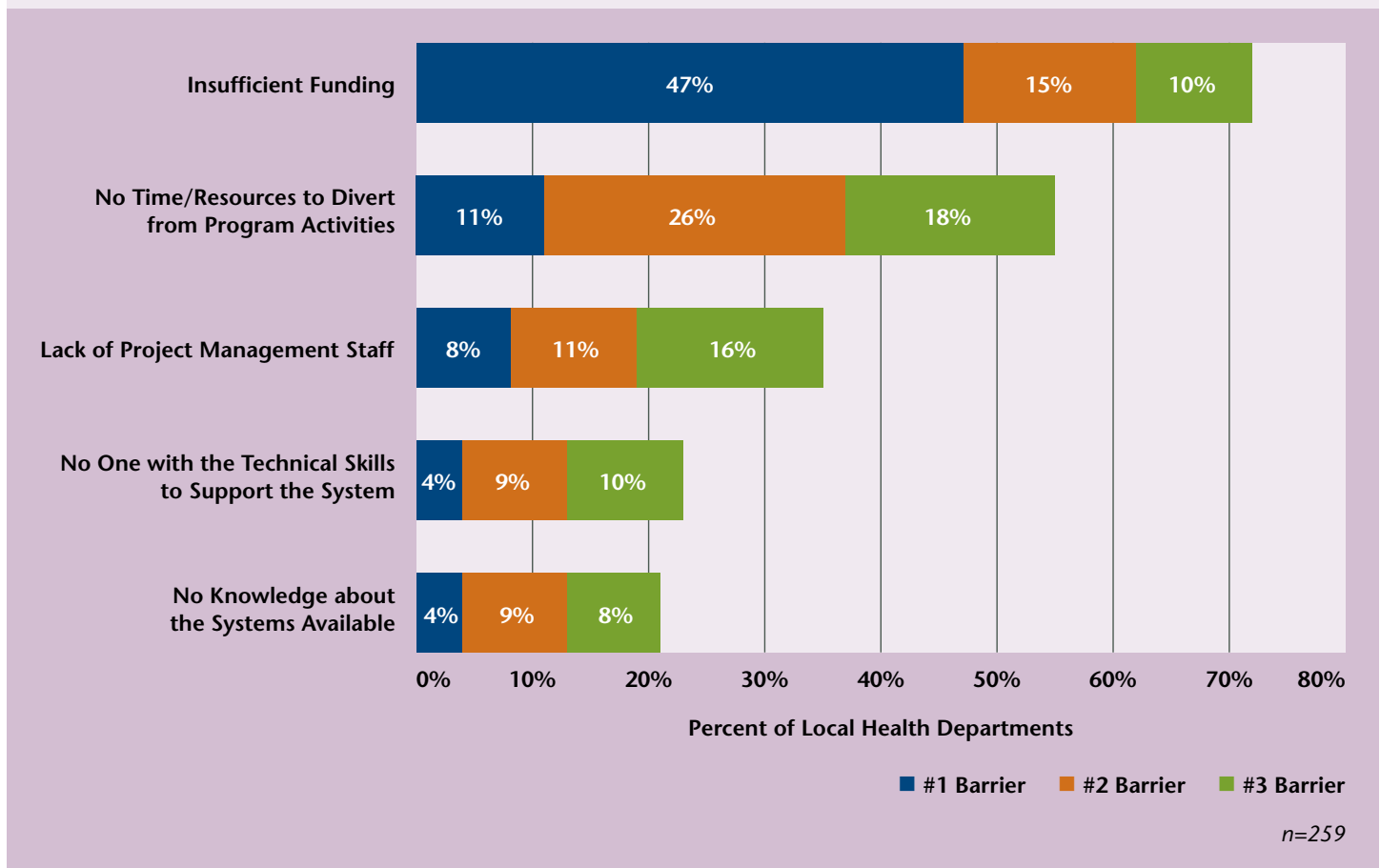
- Some local health departments, particularly those serving large populations, are well advanced in their informatics use. However, nationwide, awareness of public health informatics among local health department leadership and governing bodies is low—most local health departments have areas in which significant improvements should be made. ***Local health departments need resources and support to improve their use of informatics.***
- Serious health consequences can result if local health departments lack the tools they need to practice public health in a modern way. In one focus group conducted as part of the NACCHO needs assessment, a participant said that when vaccination rates (broken down by jurisdiction) were sent to local health departments around his state, those with lower vaccination rates quickly took steps to improve. ***Local health departments need electronic access to up-to-date data in order to improve population health.***

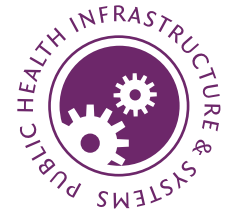
<sup>1</sup> Public health informatics is defined as the systematic application of information and computer science and technology to public health practice, research, and learning. (A. Friede, H.L. Blum, and M. McDonald, "Public Health Informatics: How Information Age Technology Can Strengthen Public Health," *Annual Review of Public Health* 16 (1995): 239–252.)

- Information systems and practices are incompatible nationwide. Unfortunately this is not a challenge that can be solved at the individual local health department level. It is incumbent on state and federal agencies to lead on the issue of interoperability. *At this critical time in the development of public health informatics, state health departments and federal agencies, including the CDC and the Office of the National Coordinator for Health Information Technology, must work with local health departments to build common systems that support essential public health services.*

- Local health departments are adopting Web 2.0 technologies to reach out to different population groups. This demonstrates that, when given the opportunity, local health departments are eager to engage with public health informatics. A focus group participant from Kansas shared an example of how her health department is using social media to target teens: After a survey revealed that teens are most likely to have sex between the hours of 3 and 5 p.m., when parents aren't home, the health department's youth clinic nurse began an information campaign on safe sex via Twitter and Facebook during the afternoon hours. This tactic resulted in a significantly lowered teen pregnancy rate in the county.

Percentage of Local Health Departments That Selected Each of the Top Five Barriers to Information System Development





## [ POLICY HIGHLIGHT ]

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- Local public health practice is disadvantaged by national policy. The current national policy emphasizes clinical health information technology and only superficially acknowledges the enormous potential of informatics and information systems for local health department practice. ***National and state decision-makers should provide HIT-focused funding to local health departments in order to fully realize HIT's potential benefits.***

### Policy Opportunities

Congress has demonstrated its commitment to getting the clinical care system “wired” through funding provided in the HITECH Act. However, federal and congressional leaders have not made a corresponding effort to bring the public health system, including local health departments, online

in a similar way. A nationwide system of HIT that does not include the public health system will severely limit the ability of public health professionals to connect with the clinical health care system to most effectively and efficiently improve the public's health. Congress and the administration should ensure that funding for health informatics includes local health departments, which would help local public health practitioners keep pace with their colleagues in the clinical care setting. Regulations and standards that govern the exchange of health information should consider the ability of clinical care providers to exchange data with local and state health departments. Policymakers should pay attention to these issues as the HIT system is developed so that they may use improved access to data to protect and improve the public's health in communities across the nation.

# NACCHO

National Association of County & City Health Officials

The National Connection for Local Public Health



Public Health

Prevent. Promote. Protect.

The mission of the National Association of County and City Health Officials (NACCHO) is to be a leader, partner, catalyst, and voice for local health departments in order to ensure the conditions that promote health and equity, combat disease, and improve the quality and length of all lives.

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