

Testimony By:

***Guthrie Birkhead, M.D., M.P.H.
Deputy Commissioner
New York State Department of Health***

Presented to:

***HIT Policy Committee
Meaningful Use Workgroup***

***Panel 1: Achieving population health through
meaningful use: How do governmental public
health agencies view the process to date?***

***Thursday, July 29, 2010
Washington, D.C.***

My name is Guthrie Birkhead and I am the Deputy Commissioner for Public Health at the New York State Department of Health (NYS DOH). Thank you for the opportunity to speak this morning on the opportunities and challenges presented to State health departments and other public health agencies in aiding providers in achieving meaningful use of Electronic Health Records (EHR) for public health purposes. The perspective I bring to you today is that of the public health practitioner in a State Health Department where we have the statutory authority and responsibility to collect key health information on individuals to guide immediate public health program responses, for example to follow up on a reportable communicable disease case, and also to aggregate individual health data to better gauge the health of the population to guide and evaluate public health programs and policies. We also have a role to communicate critical public health information, for example diagnosis and treatment of diseases of public health interest, to practitioners, local public health departments and the public.

At the New York State health department for over a decade we have recognized the importance of gathering electronic data in the three areas of interest today: clinical laboratory results of public health interest, childhood immunizations, and emergency department syndromic data. We have invested a tremendous amount of effort and funding to develop these systems. We now have in place universal electronic systems that achieve data collection in all three areas with a degree of timeliness and accuracy that generally meets our current programmatic needs. For example, New York's Electronic Clinical Laboratory Reporting System (ECLRS) annually collects hundreds of thousands of clinical laboratory results on reportable communicable diseases to trigger follow-up

field investigations to determine the source of infection and prevent further spread. In the recent H1N1 pandemic, New York's syndromic surveillance system collected on a daily basis the number of emergency department visits for influenza-like illness from almost all EDs in the state, providing vital situational awareness of where the pandemic was in the state and which communities were being impacted. And New York's Immunization Information System (NYSIIS) is utilized by over 85% of pediatric providers in New York (outside New York City) to record all childhood immunizations. We have invested a lot in assuring the quality of the data we are receiving in these systems and understanding their timeliness. These systems are in use everyday across the state driving, guiding and informing our public health programs. I would point out that these systems are achieving meaningful use of the data today, for the most part without any direct link to patient electronic health records.

That said, we recognize the tremendous opportunity that tapping into patient electronic health records (EHRs) could bring for public health reporting and population data aggregation purposes. For example, in the reportable communicable disease programs, access to EHR data could provide additional clinical information like symptoms and date of illness onset that is normally only collected through intensive field work by public health staff. In syndromic surveillance, the ability to pull final diagnosis and other detailed clinical information like laboratory test results from the emergency department EHR could greatly improve the granularity and specificity of the data, which are now crude and non-specific. In the immunization registry area, we know that it is a barrier for providers to use the system which is separate from their office information

systems and EHRs if they have them. The ability to move data on immunizations from provider EHRs to the state registry and back again with added value features like a vaccine scheduler using the state recommended algorithm, would greatly improve the utility of the system to pediatric providers. However, with all of these potential expanded uses of EHR data for public health purposes, we would need to assure at least the same quality and timeliness of the data that we now enjoy.

Current Experience in New York with Data Exchange with EHRs

In New York we are taking initial steps to foster data exchange with EHRs. We are making a nearly \$1 billion public and private investment in the Statewide Health Information Network for New York, or SHIN-NY, including fostering the development of regional health information organizations. To align with that effort, New York is now testing the Universal Public Health Node (UPHN), a system designed to leverage local health information exchanges across the state for public health functions. While the UPHN is not yet operational, we have begun to collect immunization data into NYSIIS by batch uploads from EMRs. We currently have certified 56 billing and EHR software vendors representing over 650 practices administering 10 million of the 17 million immunizations reported in the state outside New York City last year to report data to NYSIIS by batch upload. Additional practices served by these vendors are not yet online because they have older versions of the software or do not wish to pay the vendor for this service. In addition, we are exchanging immunization data with 8 large managed care plans to enable them to calculate immunization quality measures on their insured children. These systems are not yet bidirectional or real time, but we are working to

achieve those goals so that providers can benefit from scheduler, practice assessment and other functions built into NYSIIS.

Actions Toward a More Integrated Approach to Data and Information Sharing

As part of the efforts to develop a Statewide Health Information Network, New York has undertaken several activities with the goal of better integrating multiple data sets containing public health data.

The most advanced of these is the Child Health Information Integration or CHI². Using the NYSIIS, the immunization information system platform, we will soon make available to providers all laboratory tests for childhood lead poisoning and the results of newborn hearing screening. In the future, we are exploring adding to the CHI² system newborn metabolic screening results and data on Medicaid service utilization among other data available. By ensuring that partners, including providers and RHIOS, are assured access to a unified data base of child health information available to the state health department, we hope to reduce duplication of effort, provide data sharing capability, and permit data from the emerging EHR systems and RHIOs to be transmitted and received, with the ultimate goal of improving child health. This is the ultimate meaningful use.

Barriers to Meaningful Use of Public Health Data:

I would like to highlight three specific barriers as we move ahead to more fully utilize health information exchange with EHRs for public health purposes to achieve meaningful use of health data.

First, public health needs to broaden its thinking on new uses of data which will be available as a result of health information exchange with EHRs. Progress towards achieving public health goals such as reducing obesity, diabetes and cardiovascular disease might be better measured through collecting clinical information from EHRs such as height, weight, diabetic control and blood pressure. At this time, public health chronic disease programs are not equipped to receive or analyze this type of clinical information and have no experience in using such data to inform and evaluate public health programs. New ways of thinking, new analytic techniques to manage this potentially vast amount of information, and additional resources will be needed to achieve these capabilities.

A second challenge is the lack of funding to support upgrading public health data systems to keep pace with the advances in technology. While we are spending billions in New York to develop EHRs, the statewide health information network, and the public health node on that network, the resources to upgrade public health to integrate with these systems are lacking. In addition, current public health data system funding is “siloes” with each discrete program area funded separately for system development and upgrades. Since these categorical funds often come from the federal government, changes in federal funding rules to allow more cross program flexibility will be important. An example is the recent announcement of HL 7 2.5.1. Just in the area of laboratory reporting alone, we have multiple data systems including communicable disease, HIV, childhood lead, and cancer reporting that will need to be upgraded to handle HL 7 2.5.1 messaging. The ability to collaborate across programs in this upgrade process will greatly speed the process. These systems will greatly benefit from the new world of interoperable systems,

but we need to flexibility in our funding streams to “think outside the silo” and to support data exchange development leveraging the efforts of other public health programs.

Finally, it is important to note that existing public health reporting systems will need to be maintained until there are proven reliable replacement systems available. We will need to be assured of the quality, validity and timeliness of new data sources before we can fully transition public health programs to them. As a result, for a period of time simultaneous maintenance of multiple existing systems along with integration of multiple new data streams will be necessary until all data providers are successfully reporting through the new data infrastructure. Until the transition is complete, public health reporting for healthcare providers will be both complex and costly.

Recommendations for the Future:

As I have discussed, New York has a significant investment in multiple electronic health information systems. The emergence and adoption of EMR systems and the ability to access those data through health information exchange will open the door to a wide range of data, much of which is currently unavailable to public health agencies, and has the potential for making a significant impact on the meaningful use of these data for public health purposes.

I offer the following recommendations to the committee for you to consider in supporting the involvement of public health in meaningful use of EHR data exchange:

1. Continue to actively engage public health agencies and professionals to assure that HIT goals can be achieved, can be sustained, and are useful for public health program purposes.

2. Develop and promote national standards for health information exchange that have been widely vetted in the PH community. Data standards need to take into account public health data needs, which require both individual level data as well community-level (aggregate), and need to assure that the data are valid, accurate and timely. Resources will be needed to assure the validation of these new data sources and collection methods.
3. Help assure that federal funding for categorical public health programs are flexible enough allow cross-program collaboration initiatives such as New York is undertaking in its CHI² initiative.

As I think about the technology and workforce changes facing public health, the words of Dr. David Blumenthal, published in the July 13 NEJM article resonate with me: “The speed of ascent must be calibrated to reflect both the capacities of providers who face a multitude of real world problems and the maturity of the technology itself”. Public health’s capacities are currently limited. We need to be at the table and actively engaged and resourced to ensure that we do not merely receive EHR data but that the information exchange and resulting data are useful and can improve public health practice. Until this is achieved, improvements in population health resulting from meaningful use of health data for public health practice will be limited.

Thank you again for the opportunity to speak today.