NCVHS
National Committee on Vital and Health Statistics

June 16, 2014

Honorable Sylvia Mathews Burwell
Secretary, Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Re: Electronic Standards for Public Health Information Exchange

Dear Madam Secretary,

It is a great privilege to welcome you as the new Secretary of the Department. We are submitting to you your first letter of recommendations from the National Committee on Vital and Health Statistics.

The National Committee on Vital and Health Statistics (NCVHS) was established by Congress in 1949 to serve as the public advisory body to the Secretary of the Department of Health and Human Services (HHS) on national health information policy and standards. The Committee serves as a forum for the collaboration of interested parties to accelerate the evolution of public and private health information systems toward more uniform, shared data standards, operating within a framework to protect privacy and security.

The purpose of this letter is to provide observations and recommendations from the NCVHS regarding the current state of health informatics standards used by public health and population health programs. We strongly believe that the nation's public health system is at a critical juncture. We have an unprecedented opportunity to invest in advancing our public health information infrastructure to ensure it is capable of interacting effectively and efficiently with the rapidly evolving electronic health record systems and health information exchanges of the future.

An overview of our recommendations follows. Detailed descriptions for each recommendation with correlating observations are provided further in the body of this letter.

- HHS should pursue the development and implementation of a new National Public Health Information Infrastructure Strategic Initiative to advance and bring to par public health information systems with rapidly evolving clinical information systems for better alignment and linkage.

- HHS should establish a Public Health Information Infrastructure Dedicated Fund that will serve as a sustainable funding source to enhance the information infrastructure needed to support all public health functions.

- HHS should work with the public health community to establish a National Public Health Informatics Standards Collaboration initiative to accelerate the adoption and implementation of standards in public health programs.

- HHS should leverage policy programs and initiatives, including the Affordable Care Act and the EHR Meaningful Use Incentives program to align incentives for public health reporting; stimulate vendor engagement in adopting and using public health data standards; and ensure public health data requirements are incorporated into clinical systems.

- HHS, in partnership with national public health collaboration organizations, public health informatics organizations, and public health professional associations should develop a new National Strategy for Public Health Informatics Capacity Building to increase the number of skilled workers in the public health workforce.

Background

NCVHS is continuing its efforts to advance the convergence of electronic standards within and across the health care industry that meet multiple purposes and needs, including a wide variety of public health reporting and data exchange requirements.

In November of 2013, NCVHS convened a hearing to gather industry input on the state of health informatics standards used by public health and population health programs.[1] Representatives from public health data standards

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[1] By "*informatics standards*" we mean standards that define the message and document content and format, vocabulary and terminology, transport, and security used in the electronic exchange of information between public health and data suppliers (i.e., providers, health plans, others). By "*public health*" we mean the entire ecosystem or organized measures, infrastructure and resources to prevent disease, promote health and prolong life among the population as a whole. The term is primarily applied to the entire spectrum of public health agencies and programs (federal, state and local). By "*population health*" we mean the health outcomes of a group of individuals, including the distribution of such outcomes within the group. The term is primarily applied to the goal that private sector organizations share with public health.to achieve desired health outcomes.

organizations, public health agencies, standards developers and information system vendors provided an overview of the utilization of health informatics standards across public health functions and included details on the current status of development, adoption and implementation of public health electronic messaging and code set standards. Additionally, testifiers identified and discussed barriers and challenges, as well as incentives and drivers for adopting and using public health informatics standards from various perspectives.

During the hearing, testifiers noted that public health, as an integral component of health and health care, benefits significantly from the adoption and use of informatics standards. From a regulatory perspective, testifiers explained that there are already basic policies and regulations on standardization in place that cover parts of public health.

Public health informatics standards are developed, adopted and implemented in response to jurisdictional funding streams driven by specific programmatic business needs and drivers. These forces perpetuate the silo and uncoordinated effect in public health systems development and limit the ability to achieve general support for nationwide collaboration and coordination across public health programs in concert with standards development organizations. Standards adoption by autonomous jurisdictions depends on their ability and willingness to fund a transition to new or enhanced systems, their technical capacity to adopt the new system, and their understanding of the business purpose driving the use of standards. Also, minimal public health practitioner involvement and engagement in standards development activities represents one of the biggest implementation challenges. This limits their ability to specify and advocate a strong value proposition for widespread adoption and effective use of standards that are essential for data exchange to bring tangible benefits to them and their community partners. It is important to acknowledge here the role that philanthropy has played, and will continue to play in supporting communities point the way forward.

Important work has been done over the past 15 years to advance the development, testing, adoption and implementation of public health informatics standards. National informatics standards already exist and are well recognized, adopted and used in selected areas in public health such as immunizations, laboratory reporting, and vital registration at the state level. Acceleration in the development and use of public health informatics standards has occurred in the past four years with the rapid adoption of electronic health records (EHR) under the Meaningful Use program, and new requirements and increased expectations from health care providers to exchange health information electronically with public health agencies using nationally adopted standards.

However, much work around public health information systems capabilities and standards adoption and implementation still remains. A number of opportunity areas were identified during the hearing, where national informatics standards do not exist yet, or are under development, such as public health case reports (i.e., reportable conditions, adverse events), registry reporting, and environmental health.

Following are the key overarching themes of the hearing:

- The nationwide public health information infrastructure needs significant attention and sustained investment to keep it at par with the development and adoption of advanced electronic systems and standards in the rest of the health care industry.

- Replicating infrastructure and data analytic capabilities across all components of public health will require significant investments, and consideration should be given to identify and optimize common capabilities, pursue shared services and resources, and better leverage limited funding.

- Widespread adoption and implementation of standards throughout the complex, national public health information infrastructure is influenced by financial, political, and specifically, jurisdictional decision-making. There is a need to establish the appropriate incentives for the adoption and implementation of public health standards.

- The maturity and adoptability of standards and ability of public health agencies and communities to implement standards must be considered, before requiring their use.

- Public health currently has very limited participation in standards development organizations due to limited availability of dedicated and trained resources. Additional resources are needed to support public health programs' engagement in standards development activities and to promote adoption.

- There is a need for increased support, focus and engagement on public health informatics standards development, implementation and adoption at the Federal, state and local levels.

In this letter, the Committee will focus on these themes and make recommendations to advance much needed improvements in the nation's public health information infrastructure and to enhance the adoption and implementation of public health informatics standards. The overall goal is to improve electronic health information exchanges that support data collection and reporting to local, state and Federal public health programs, and the use of these data at local levels.

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Observations and Recommendations

One of the most significant themes highlighted by testifiers was the absence of an overall strategy shared by the federal, state and local public health communities aimed at supporting and funding the advancement of the nation's public health information infrastructure.

Recommendation 1: HHS should pursue the development and implementation of a new national Public Health Information Infrastructure Strategic Initiative to advance and bring to par public health information systems with rapidly evolving clinical information systems for better alignment and linkage, including strong support for the advancement of public health information policy, technology, informatics standards, workforce development and availability of other relevant resources.

Recommendation 2: HHS should establish a Public Health Information Infrastructure Dedicated Fund to be jointly governed by CDC, and an organization representing the states and local public health practice communities. This fund would serve as a dedicated, sustainable funding source to enhance the information infrastructure needed to support all public health functions. The Public Health Information Infrastructure Dedicated Fund would:

- *Fund specific new and improved information infrastructure capabilities for state and local public health agencies.*

- *Support the public health informatics, public health services and systems research communities in assessing current levels of standards adoption and identify where the barriers and gaps exists;*

- *Conduct analysis of public health program areas within which a clear value proposition for a standard may exist, but has not yet been acted upon by the community;*

- *Engage standards experts and make them available to public health programs to support establishing standards based on defined business needs;*

- *Provide cost-effective training both in informatics and in standards development to the public health practice community; and*

- *Support the collaborative development of an overall roadmap that lays out a path for how public health can transition*

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> *towards a modular, reusable, sharable services-based and standards-based design of information systems.*
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> o *Recommendation 2.1: HHS should also leverage this Public Health Information Infrastructure Dedicated Fund to provide sustained funding for:*
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>   • *Continuous quality improvement to support public health information systems;*
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>   • *Promoting, developing and sustaining public health information management skills, thus increasing work force capacity; and*
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>   • *Standards development and adoption with a broad engagement strategy and collaboration that includes state and local public health.*

To date, much of the focus on public health information exchanges has been on a unidirectional approach with public health as the receiver. There are increasing expectations and demands for establishing bi-directional communications among public health, providers and others. More actionable, real-time electronic information from public health will help providers deliver better care to individuals at the point of care. Standards and technology serve as the vehicle to realize this enhanced data flow and achieve public health interoperability with clinical information systems. All stakeholders need to continue emphasizing, refining and building the business case for public health data standards to improve communication between public health programs and their host of associated data partners.

> *Recommendation 3: HHS should work with the public health community, represented by national public health and professional associations, to establish a National Public Health Informatics Standards Collaboration initiative to accelerate the adoption and implementation of standards in public health programs. At the State and local levels, the initiative needs to be part of a broader prioritization with public health serving in a leadership role. The role and responsibilities of this entity will be to:*
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> o *Work towards the harmonization and appropriate linkages of demographics in public health databases*
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> o *Establish pilot programs that clearly document and demonstrate the importance of bi-directional information exchanges between public health and clinical care*
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> o *Support a core group of public health professionals to actively participate in standards development*

- o ***Expand the efforts to bring public health, population health, community health and clinical care closer***
- o ***Create opportunities for advancing population health management tools and resources***
- o ***Make the case for a standards based approach for public health case reporting***

Incentives are needed to foster collaboration between the public and private sectors. The human factor is one of the main barriers to public health data standardization due to the limited number of trained resources in the public health workforce with the technical expertise needed to support public health standards initiatives and standards development work. Much of the work is accomplished through reliance on admirable volunteer efforts; however, this is not a sustainable model. Adoption of public health data standards is dependent on the ability to engage resources with the technical capacity and business purpose drivers. There are also competing priorities for the limited skilled workforce members. An omni-directional data partnership among public health and its health care and other community partners is a business relationship that will require new financial commitment, one needed to support and modernize the information infrastructure of public health.

Recommendation 4: HHS should leverage several different policy programs and initiatives, including the Affordable Care Act and the EHR Meaningful Use Incentives program to:

- o ***Align incentives for key components of public health reporting to foster collaboration between the public and private sector; to stimulate vendor engagement in adopting and using public health data standards; and to ensure public health data requirements are incorporated into clinical systems***
- o ***Develop a new component of the value proposition for the Public Health Agenda that includes identification of use cases and the benefits and significance of adopting and using public health informatics standards.***

Recommendation 5: HHS, in partnership with national public health collaboration organizations, public health informatics organizations, and public health professional associations should develop a new National Strategy for Public Health Informatics Capacity Building to increase the number of skilled workers in the public health workforce needed to address the new and emerging advances in health information technology, electronic standards and information infrastructure.

An important theme of the hearing was the role of privacy and security standards in the exchange of health information in public health. Testifiers noted that while there are a number of privacy and security standards in health care that apply to public health, there is also a need for more systematic policies or laws requiring a more comprehensive level of protection for all public health data. To this end, the NCVHS plans to convene industry experts to participate in subsequent hearings to provide feedback on privacy and population health concerns that are essential to public health reporting.

Concluding Comments

The rapid evolution of data exchange demands urgent attention to the current fragmented delivery of public health services. NCVHS recognizes the challenges facing the public health community and acknowledges the key role that standards should play in assisting public health in being effective as an information enterprise. However, a broader engagement strategy, clearly articulated and compelling business needs, and adequate resources are required to achieve real value in our federated public health system.

On behalf of the NCVHS members and staff, welcome to your new position at HHS. We all look forward to working with you to achieve the Department's strategic goals, objectives, and initiatives to improve the nation's health.

Sincerely,
/s/

Larry A. Green, M.D. Chairperson,
National Committee on Vital and Health Statistics

Cc: HHS Data Council Co-Chairs