Applying Innovation to the Work of Government: A Case Study of the Office of the National Coordinator for Health IT

Farzad Mostashari, MD, ScM, Office of the National Coordinator for Health IT*

June 2012

For decades, using electronic health records (EHRs) and exchanging health information has been viewed as essential for modernizing health care and improving patient care. The 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act provided financial incentives for health care professionals and hospitals to adopt and “meaningfully use” certified EHRs. It also allocated $2 billion to build the infrastructure needed to deploy interoperable and secure EHRs nationwide.

In just 3 years, the Office of the National Coordinator for Health Information Technology (ONC) (a small agency within the Department of Health and Human Services) has enabled nationwide progress in EHR adoption by changing the way government works.

The results are dramatic. Adoption of EHRs between 2009 and 2011 doubled among primary care providers from 20 to 40 percent. It increased among hospitals from 16 to 35 percent. By the end of 2012, I believe most of the health care in the United States will be delivered by providers using EHRs. The industry has gained depth and breadth, with expanded functionalities going beyond documentation and billing, to include quality measurement, population health management, care coordination between providers, and numerous tools to help engage patients in their own health management.

There are now more than 1,800 certified EHRs. Compared to 2010, venture capital funding more than doubled both in terms of deals and dollars invested, and the health IT sector is a bright spot in the economy with over 50,000 new IT jobs filled in the past two years.

These results have been accomplished through an entrepreneurial and innovative approach for limited but effective government action, developed and implemented in conjunction with the White House Chief Technology Officers’ “Open Innovator’s Toolkit.”

Transparent and Open Governance in the Public Interest

A clear policy framework for the certification and “meaningful use” of EHRs and a competitive market-based program for EHR testing and certification serve as the foundation of our nationwide health IT initiatives. Policies governing EHR certification and meaningful use had to be developed quickly while incorporating the perspectives of consumer groups, privacy advocates, technical experts, primary care and specialty providers, hospitals, health

*Contributor to the Learning Health System Commentary Series of the IOM Roundtable on Value & Science-Driven Health Care.
plans, and technology firms. Open and inclusive processes provided an assurance of fairness and regulatory predictability. ONC effectively coordinates two of the hardest-working federal advisory committees in government; they and their 20+ workgroups have held open meetings on average every other day for the past 3 years. We sought comments early and often through hearings and requests for comments. We expanded public opportunity to participate beyond the normal confines of a FACA hearing by soliciting comments through blogs. The committees’ recommendations shaped the structure, direction, and details of our regulations.

Impatient Convening

For years, technical disagreements and proprietary industry approaches prevented the emergence of widely implemented consensus-based standards for system interfaces and technical protocols for sending health information over the Internet securely. The time and effort needed to negotiate each data interchange led to high costs, low information flow, and poorly coordinated patient care. But top-down promulgation of standards carries significant risk. The ONC’s approach is to establish the conditions for accelerated consensus from years to months through clear objectives (e.g., consensus protocols for sending health information securely over the Internet within 90 days); criteria for success (simple enough for “the little guy”); policy guideposts (no patient identifiers revealed in transit); the process (rough consensus and running code); and an open online “wiki.” Over 1,000 private-sector experts have volunteered their labor to these collaborative efforts.

Applying Innovative Approaches to Funding and Accountability

Finally, we have expanded our funding repertoire beyond standard government contracts and grants. To establish a network of 62 local non-profit “extension centers” that give hands-on assistance to 40 percent of U.S. primary care providers, we used cooperative agreements that combined the flexibility of grants with the accountability of deliverables-based contracts. Grant recipients used a cloud-based commercial platform for documenting and managing customer relations, and the ONC pulled data rather than requiring retrospective performance reporting of milestones. In the past year, we have also used the 2010 America Competes Act authority to issue 10 challenges, including one to extend the capabilities of an open-source tool for quality measurement.

We also publish our performance metrics on a dynamic dashboard and use healthdata.gov, for example, to post a data file of providers and hospitals achieving meaningful use, as well as the certified products used to do so. The resulting analysis focuses vendors on helping providers achieve success, rather than just making an initial sale.

The ONC has effectively partnered with external stakeholders to achieve rapid progress on nationwide health IT adoption and interoperability using these tools. Tools such as those described above can be used by government agencies at all levels to solve problems that neither government nor the private sector could solve on its own.

Farzad Mostashari is the National Coordinator in the Office of the National Coordinator for Health IT.
In this commentary, Farzad Mostashari describes the accomplishments to date by the Office of the National Coordinator for Health IT to increase electronic health record (EHR) usage nationwide. His discussion touches on several issues and lessons central to the delivery of care that is effective, efficient, and continuously improving, including:

- The central role of the digital infrastructure as the engine for progress.
- The importance of the policy framework and stakeholder leadership in implementing system-wide innovations.
- Regular and continuous public feedback on program work.
- The roles of well-defined objectives, clear approaches to action, policy guideposts, a transparent process, and a forum for public input.

Information on the IOM’s Learning Health System work may be found at [www.iom.edu/learninghealthsystem](http://www.iom.edu/learninghealthsystem).