STATE E-HEALTH ACTIVITIES IN 2007: FINDINGS FROM A STATE SURVEY

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ABSTRACT: Virtually all states now are actively engaged in e-health strategies to facilitate the use of information technology to make the health care system more effective while providing greater value and higher quality. States see e-health initiatives as high-priority; however, they and their private sector partners face significant challenges that accompany such initiatives, including the issues of cost and time required for implementation and for realizing a return on investment. Nevertheless, as reflected in the wide range of e-health activities across the states, a consensus has emerged that these policies and initiatives are significant and well worth the effort. This report is based on a 2007 survey of states and the District of Columbia conducted by the National Governors Association (NGA) in partnership with Health Management Associates (HMA) and with support from The Commonwealth Fund. The purpose of the survey was to identify current e-health initiatives, priorities, and challenges within state governments.

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EXECUTIVE SUMMARY

"E-health" is a term used to describe any health care practice supported by electronic processes and communication, including health information technology (HIT) and electronic health information exchanges (HIEs). Across the nation, states have taken on the challenge of promoting e-health policies and initiatives, encouraging a wide variety of public and private sector efforts. States are motivated by their interest in improving performance, assuring quality, and obtaining greater value in their roles as health care purchasers, providers, and regulators, and as protectors of public health and catalysts for private-sector action.

Broad agreement exists that health information technology (HIT) can significantly improve health care delivery and quality and reduce its costs. Indeed, HIT has the potential to transform health care delivery and produce great improvements in efficiency and effectiveness for all the programs in which states have a role and an interest. However, states are faced with real constraints on what they can do, owing to limits on state funds and the many competing demands for those resources. As a result, important goals, including those that might lead to a "nationwide health information network," remain on the horizon, with states pursuing a variety of strategies and approaches toward their attainment.

To better understand the e-health landscape within state governments, the National Governors Association (NGA) partnered with Health Management Associates (HMA) to survey states, the District of Columbia, and the U.S. Territories. The project was also supported with funding from The Commonwealth Fund. The survey was designed to capture state HIT and electronic health information exchange (HIE) activities, challenges that states face in pursuit of these activities, emerging best practices and benefits, current directions, and future goals. Forty-one states and the District of Columbia responded to the survey (42 responses in total), providing a rich set of data and an important baseline of state e-health initiatives, activity, and progress. Key findings are outlined below.

All states now place a high priority on e-health activities. No state indicated that e-health activities were *not* significant, and almost 70 percent of states (29 of 42 responding) described e-health activities as *very significant*. States listed a wide range of initiatives as their most significant, including electronic HIE activities, adoption of HIT components, quality and transparency initiatives, registries, and efforts to resolve privacy and security issues.

According to the survey, state governors' two highest e-health priorities over the next two years were the development of electronic HIEs and of policies fostering local or state-level electronic HIEs, to assure interconnectivity among health care providers. When asked to identify the two state e-health activities they considered most significant, over three-quarters of responding states (32 of the 42) identified electronic HIE activities. Among such activities, 11 states reported forming a statewide committee, commission or board to study electronic HIE issues; 17 states reported other electronic HIE planning and monitoring activities; and seven states described either developing or implementing electronic HIEs. Also, four states (Florida, Georgia, Minnesota, and Washington) described as their significant activity providing grants, loans, or pro bono technical support to spur both HIT and electronic HIE development.

State HIT initiatives span a broad range of activities. Many states identified various HIT components (Table ES-1) as their most significant e-health activities. These activities not only help states operate more efficiently, but also help states improve health care quality. They also provide states with opportunities to participate in e-health partnerships with private payers.

Table ES-1. HIT Activities That States Identified as Significant

HIT Component	States Indicating Activity as Significant
Telehealth	HI, NE, NM, OR, WV
E-Prescribing	AR, IL, MA, NH, PA, RI, KY
Medicaid Management Information System (MMIS) Replacement	ND
Electronic Medical Records (EMRs)	FL, HI, NM, OR, RI
Electronic Health Records (EHRs)	AR, DC, KS, MN, MO
Patient Health Records (PHRs)	OR
Decision-Support Tools, Chronic Disease Management, and Case Management	ME, MO, IN, VT
Web-Based Tools	AL, MA, UT

E-health applications are enabling states to implement quality and transparency initiatives. Five states identified significant e-health activities that focused on quality and transparency, including efforts to collect and distribute data on health outcomes, costs, utilization, and pricing and thereby increase accountability in public and private health care delivery systems.

Privacy and security remain key concerns of states and a clear focus for state action. Most states participating in the survey (31 of the 42) reported having state privacy laws and other protections in place and two-thirds (28 states) reported establishing

policies and procedures to address data privacy and security breaches. Five states listed actions related to privacy and security as their most significant e-health activities.

The greatest barrier to release of health information within an electronic HIE lies in differing consent requirements, especially for services related to substance abuse, mental health, and HIV/AIDS; the second-greatest barrier identified was federal privacy requirements. In particular, most states (24 of 38 responding states) indicated that federal laws related to substance abuse services create a barrier when implementing an electronic HIE. Thirteen states reported that state and federal confidentiality and consent laws create obstacles for e-health activities and nine states reported HIPAA preemption standards as a barrier. Other barriers included the technological challenges of securing data and authentication.

States demonstrate interest in knowing and improving the availability of medical data to health care providers and Medicaid enrollees. One barrier for beneficiaries is lack of access to computers. One-third of states (13 of the 42 responding) had recently assessed the extent to which the Medicaid population has access to computers and the Internet. A similar number of states indicated they had initiated education efforts about e-health specifically intended to inform consumers from culturally and linguistically diverse communities. Two-thirds of states had assessed provider connectivity.

Barriers to implementing EMRs included initial and ongoing costs associated with the implementation process, lack of quantifiable return on investment (ROI), and difficulty finding an EMR application that is interoperable.

States have formed public-private consortiums to develop standardized measures of utilization and performance. Eighteen states reported working with private payers to develop statewide measures of utilization and performance.

States have adopted HIT activities across a wide variety of programs. States reported a range of e-health activities across five state-administered health care programs: Medicaid, employee health benefit plans, state-operated mental health hospitals, state prison systems, and public health. The greatest number of state e-health activities were in the area of public health, with the second-highest number within Medicaid. States reported registries as the most prevalent e-health activity. The next most frequently cited initiative was telehealth, followed by decision-support tools.

Public health has extensive experience operating registries, which will be foundational to other e-health activities. In many states, public health agencies for decades have operated electronic registries related to immunization, surveillance, disease, newborn screening, and early and periodic screening, diagnosis and treatment (EPSDT). In fact, all but one of the 42 responding states reported operating one or more of these registries. States indicated that their experience operating these registries will be foundational as they develop other HIT and electronic HIE activities. As one state official commented, a registry "is much like an RHIO with a narrow focus of information and a broad user base."

Almost all states reported e-health initiatives in Medicaid. Of the 42 responding states, a total of 37 reported e-health initiatives in Medicaid. Over half reported implementing Web-based Medicaid Management Information Systems (MMIS), telehealth, and decision-support tools. Web-based provider enrollment and certification and immunization registries were reported in about one-third of the responding states.

Obtaining funding for both implementation and long-term operations is the most significant barrier to the widespread adoption of interoperable HIT and a nationwide network of electronic HIEs. Over half of responding states identified lack of funding as the greatest barrier. Thirteen states also referred to "sustainability" or difficulty in establishing a "business case" as a barrier, e.g., building a business model in which revenues or savings from the use of HIT would be sufficient to offset its additional cost.

In addition to financial issues, other impediments observed in state survey responses included:

- **Stakeholder Engagement.** Almost half of responding states (20 of the 42) mentioned the challenge of obtaining the trust, buy-in, and participation of health care providers and of other stakeholders that are vital to success.
- **Lack of Standards.** Twelve states reported lack of defined nationwide standards for interoperability and coordination with federal standards development.
- **Privacy and Security Concerns.** As mentioned above, privacy and security are key concerns in state e-health initiatives. Two states also reported difficulty in coordinating with the privacy laws of neighboring states.
- **Terminology.** There was wide but not yet complete agreement regarding the interpretation and usage of common e-health terms. States also recommended that public health be included in the definitions for HIT and electronic HIE.
- **Legal Constraints for E-Prescribing.** Several states noted federal legal barriers related to e-prescribing and Schedule II prescription drugs.

States indicated that the most important "lesson learned" was the need for collaboration and stakeholder engagement. For the e-health activities that each state identified as most significant, states provided the most important lessons learned that would benefit another state undertaking the same activity. By far the most commonly cited "lesson learned" was the need to collaborate with, work with and obtain the buy-in of the full range of stakeholders. One official recommended that other states make "sure that everyone is buying in to what you want to accomplish and what the next steps will be" and "collaborate with stakeholders from the start to develop a level of trust and confidence in the information exchange."

Other lessons learned reported by states included:

- **Planning.** Ten states addressed the need for sufficient time and careful planning. One commented, "Proceed slowly gaining trust and fully exploring policy issues related to privacy and security, access, authorization, and authentication." Another, however, cautioned, "You don't need all the answers today to move forward; plan broadly, implement incrementally."
- **Clear and Effective Communication.** Eight states stressed the need for clear and effective lines of communication and the importance of educational activities.
- **Resources and Funding.** Other states emphasized the need for dedicated resources and start-up funding; the need for leadership from both government and the private sector; and the importance of strong project management.
- **Versatile Electronic HIE Model.** One state noted that an important lesson learned was to use an electronic HIE model that did not lock out prospective participants because of its dependence on a particular vendor or service.

CONCLUSION

Virtually all states now are actively engaged in the promotion and implementation of e-health strategies intended to use information technology to provide better effectiveness, efficiency, value, safety, and quality in the health care system. Reflecting a belief that information technology can assist state and private efforts to slow the growth in health care costs and help them get greater value for their health care dollars, every state has placed significant priority on e-health. The challenges are significant, including the issues of cost and the time required for implementation and for realizing a return on investment. Nevertheless, a broad consensus has emerged, as reflected in the wide range of e-health activities across the states, that the promotion of e-health policies and initiatives is a significant undertaking that will be well worth the effort.

This report provides a benchmark of state e-health activities, showing what states have achieved and where they are going during state fiscal year 2008. States and their stakeholders can learn from their colleagues across state lines, and can leapfrog beyond what has been attained elsewhere. One state official noted, "It is powerful to learn that the majority of states share similar perspectives and plans for the future . . . . This report will open up lines of communication between state HIE efforts."

States desiring more information on this report may contact any of the authors.
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