

A Vision of Health Care from and Framework for the State Alliance for e-Health

Background

The American health care system is a study in contradictions. On the one hand, it offers some of the most advanced and effective care in the world. It supports some of the best trained providers and often utilizes some of the most cutting-edge technologies. It treats patients in some of the most advanced clinical settings available. If asked, most Americans would characterize their health care as the best in the world.

On the other hand, such observations do not tell the whole story or reflect the actual state of affairs. In fact, the quality and efficiency of America's health care is quite low by international standards while the amount of money we spend for these services is quite high—bordering on the exorbitant. Health care spending today consumes 16 percent of the United States Gross Domestic Product (GDP)—a far greater share than in any other industrialized nation. Our costs translate to \$5,635 per person per year—53 percent more than the per capita health spending of any other country, and 140 percent more than the mean per capita spending for all industrialized nations. If current trends continue, the United States will spend 21 percent of its GDP on health care by the year 2020.¹

What do we get for such expenditures? We do not enjoy higher levels of health care quality than our lower spending counterparts in other industrialized nations. American life expectancy is exceeded in 21 other countries. Infant mortality in the United States is the fifth highest of any industrialized country. More cancer cases per 100,000 people are reported in America than in half of industrialized nations. In addition, the United States has the highest obesity rate in the industrialized world.²

The quality of our clinical care also must be improved. A recent study by the Commonwealth Fund compared patient experience in five nations: Australia, Canada, New Zealand, the United Kingdom, and the United States. While the United States received high marks for effectiveness—basing health care decisions on the best scientific knowledge available—it ranked last in quality overall. According to the survey results, Americans are more likely to receive the wrong medication than patients in any of the other five countries, are more likely to visit an emergency room for a condition that could have been treated in a doctor's office, and are least likely to consider their care to be patient-centered.

New evidence of both patient safety and health care quality raise even more serious concerns about the quality of the health care that Americans receive.

- More than 57,000 patients die because they did not receive appropriate health care and between 44,000 and 68,000 die as the result of a preventable medical error each year, which is more than the number of people killed in motor vehicle accidents.³
- Patients receive only 55 percent of care recommended for their respective health conditions.⁴

- Less than half of the recommended care management processes for four of the most prevalent chronic diseases are used routinely by physician organizations.⁵
- As many as 18,000 people die annually from heart attacks because they were not prescribed a drug that could have prevented the attack—even though they were clinically eligible to receive the prescription.⁶
- Two in five diabetics do not receive an annual eye examination to check for signs of conditions that lead to blindness, and almost half do not receive a foot exam to check for nerve damage—both of which can be treated to prevent or slow degeneration.⁷

Why does the United States spend so much of its money on health care and yet still produce such mediocre rankings? The reasons are many, but in general they can be attributed to three broad factors.

First, by failing to effectively use information technology, the U.S. health care industry has created a system that encourages inefficiency. The U.S. health care system remains a bastion of paper-based recordkeeping, billing, and information exchange. As a result, administrative costs account for 31 percent of total health care spending in the United States, a level almost double Canada's rate⁸. Part of this inefficiency can be blamed on our fragmented system, in which multiple insurance and health care providers, regulatory systems, and health care networks all use different forms and standards. But a more important reason is the fact that the U.S. health care system is dramatically behind in deploying computer technology to standardize information, store data, and share records in a secure fashion.

The result of this inefficiency is not just an increased administrative burden, but a loss of efficiency in patient care. Without electronic record-keeping, doctors in different locations or organizations cannot easily examine a patient's medical records or coordinate treatment with other providers. Their knowledge often is limited to their own examination and the information supplied by the patient. Likewise, patients cannot easily monitor their own health status or treatment progress. As a result, the efficacy of care is reduced, errors are more likely, and over- or under-use of services are frequent.

Second, the U.S. health care market does not emphasize quality or reward effectiveness. The current system does not reward providers for quality of care, encourage the reporting and elimination of errors, or promote cooperation among providers to enhance services. A major problem is the way we pay for care. Most doctors today are compensated based on the complexity and volume of the clinical services they provide, not the quality of care.

In a quality-based system, clinicians would be compensated for achieving better outcomes for their patients, using best practices (including disease management and treatment protocols), and keeping people well by helping them avoid obesity and diabetes. Clinicians also would not be penalized for reporting errors that aid clinical improvements.

Perhaps the greatest barrier to achieving a quality-based system is the limited integration and use of health information technology (health IT) systems, such as electronic health records (EHR) and electronic prescribing (eRx) systems, into health

care practice. Limited use of health IT systems is a significant contributing factor to the slow development of a nationwide network for electronic health information exchange.

Before we can begin to pay for services that improve the quality of care, reduce medical errors, eliminate unnecessary and redundant tests, and utilize built-in safety checks, we must first build a health care system that allows physicians appropriate access to their patients' complete medical record anywhere and anytime care is provided. Our current paper-based medical records system does not permit such access or exchange. Instead, multiple providers serving the same patient rarely have access to the patient's complete and current medical information. As a result, each provider will treat with limited information, often leading to prescription overuse, duplicative tests and procedures, and harmful medical errors that cause unnecessary hospitalizations and death.

Third, the health care system in this country makes it difficult for the consumer to make informed decisions on the cost and quality of the services they receive.

Little incentive or opportunity exists in today's health care system for the consumer to compare the prices or quality of the clinical services they receive or to implement lifestyle changes to reduce future service demands. The financial motivation for most consumers is to find the least costly insurance plan, not to find the most cost-effective treatment. The consumer is not motivated to minimize costs and is unable to judge the quality of care.

Even if cost control was a motivation of consumers, the absence of data on prices for medical services and quality of care thwarts anyone from making an informed choice about the value of health care services. This lack of transparency further fragments a system in which health care services are delivered to one party (the patient) but billed to another (the insurer).

To improve the cost-effectiveness of health care, consumers must be empowered to make cost-effective choices. This requires building an information backbone so people have the knowledge and the tools to help themselves better manage their health status. It also requires giving consumers the financial incentive to manage the cost and quality of their care.

Americans need a health care system that is efficient, effective, safe, accessible, transparent, and affordable for all Americans. The health care system should support physicians and other health care providers in providing high-quality care. It should enable timely clinical research and the development and adoption of medical advancements. It should embrace accountability and ensure that medical errors are reduced and prevented. The American health care system should not widen the health disparities gap, but instead, narrow it. Finally, it should facilitate better integration of medical care and public health and focus on improving both individual and population health.

Why Creation of a Nationwide Health Information Network is Important

Full deployment of health IT systems, including the development of networks for electronic health information exchange, is the essential foundation for almost all meaningful health care system improvements. Without a robust health IT infrastructure,

improvements in disease management, consumer empowerment, medical error reduction, and health care quality reporting are nearly impossible.

A number of demonstrations already are underway in the United States testing the use of health IT systems for the purposes of enabling electronic health information exchange and eventually connecting these systems into a nationwide health information network (NHIN). In 2004, for instance, the U.S. Department of Health and Human Services (HHS) awarded \$139 million in grants and contracts to promote the use of health IT. Over 100 grants were given to communities, hospitals, providers and health care systems to help them develop and use information technology. Larger contracts were given to five states (Colorado, Indiana, Rhode Island, Tennessee and Utah) to help them develop statewide networks that are secure, ensure privacy of health information, and allow sharing of records among providers.

In 2005, HHS awarded funds to four groups of health care and health IT organizations to develop architecture prototypes for developing a NHIN. The prototypes will enable electronic exchange of health data between health care markets across the following states:

- Kentucky (eastern), Tennessee (eastern), and West Virginia
- Indiana (Indianapolis), Massachusetts, and California (Mendocino)
- New York and North Carolina (Research Triangle and Rockingham County)
- California (Santa Cruz) and Ohio (Cincinnati and Cleveland)⁹

In addition to these federally-supported demonstrations, several private health care networks have made enabling electronic health information exchange a core element of their business model. They have invested heavily in health IT systems and network capabilities and achieved beneficial results.

Nevertheless, for the vast majority of Americans, the handling of medical records seems virtually untouched by the information technology wave that has transformed nearly every other aspect of society. Only a small fraction of clinicians have adopted and integrated health IT systems into their practice work flow. Most medical records remain paper-based, resulting in the perpetuation of fragmented care and uncoordinated management of individual and population health.

A number of barriers contribute to the slow adoption of health IT systems and development of a nationwide network for electronic health information exchange, including:

- the lack of standards that allow for connectivity between disparate health IT systems;
- absence of policies pertaining to the privacy and protection of patients' health information;
- unknown liabilities that may exist in a more connected health care system; and
- misaligned financial incentives between those who invest in the purchase and implementation of health IT systems and networks versus those who stand to gain from their use.

These and other issues will need to be addressed to allow the development of an interoperable system. The *Framework for Strategic Action* developed in 2004 by the Office of the National Coordinator for Health Information Technology (ONC) frames a path forward, from the federal perspective, for achieving a NHIN. Similarly, many states have formed commissions and developed roadmaps for health IT implementation within their borders. There also are public/private collaborative efforts to form health information exchange (HIE) structures that are at various stages of development. Some of these initiatives are locally based, while others are state-wide or regional. While these activities are forging a pathway towards nationwide health information network, it is imperative to create synergies and ensure coordinated action to prevent the siloing of these efforts.

Mission and Goals of the State Alliance for e-Health

The State Alliance for e-Health is a consensus-based, executive-level body of state elected and appointed officials formed to address the unique role states can play to facilitate the adoption of interoperable electronic health information exchange. The work of the Alliance will be guided by the following principles:

- The underlying goal for achieving a nationwide health information network is to enhance the efficiency and effectiveness of the delivery of health care.
- Interoperable electronic exchange will occur in a manner that protects consumers' health information.
- HIE networks will provide for the portability of and ready access to health information by consumers and providers.
- HIE networks will allow for timely exchange of health information to improve population health.

The State Alliance for e-Health offers an unprecedented opportunity to create synergies between national and state-level health information exchange efforts. The State Alliance for e-Health intends to work in a fashion that is complementary to federal efforts, is supportive of ongoing collaborations between public and private sectors, and contributes to greater coordination among and within states.

Scope of Work for the State Alliance for e-Health

The Scope of Work outlined in this section constitutes early development of the State Alliance's activities and work products and is intended to serve as a foundation for setting priorities for State Alliance work and each of the supporting taskforces for 2007.

It is the intent of the State Alliance to operate in an environment of shared learning, where every member of the State Alliance (including taskforce members) represents an appreciated and important point of view. The State Alliance for e-Health will identify opportunities and advance recommendations to states for supporting and facilitating the development of a nationwide health information network. Taskforces to the State Alliance will advance recommendations to the Alliance for discussion and consideration.

The following key areas may be emphasized in the initial efforts by the State Alliance and one or all of its taskforces:

- **Privacy and Security**

The State Alliance may examine inconsistencies in state privacy policies, practices, and laws that hinder the electronic exchange of health information. For example, the State Alliance may explore different ways that states have implemented the consent process for acquiring sensitive types of data or different policies on the secondary uses of data. The State Alliance may identify solutions for addressing these inconsistencies, including but not limited to, developing model legislation and standard privacy policies as well as advancing practices that appropriately facilitate the free flow of health information among health care entities within or across state lines.

The State Alliance also may address security challenges to protecting health information. These issues may include addressing policies that create operational difficulties in ensuring appropriate access to patient information by external organizations—of which there are currently no standard processes in place—such as conducting authentication, authorization, access control and auditing protocols.

- **Licensure of Clinicians in Health Information Exchange**

The State Alliance may identify solutions for enabling clinicians to engage in telehealth or consultations across state lines given the varying state licensure laws. These solutions may take the form of state compacts or standard policies for allowing clinicians to conduct remote patient monitoring and interstate consultations.

- **Liability in Health Information Exchange**

The State Alliance may explore practices that have the potential to increase real or perceived liability as HIE networks develop and become increasingly connected. The State Alliance may address issues such as provider liability in having immediate access to health information; liability associated with the release of protected health information and re-disclosure of information; and health care entity and network liabilities. These discussions may require include a need for the State Alliance to develop a common understanding of what constitutes a medical record.

- **Integration of Public Programs in Health Information Exchange**

The State Alliance may examine opportunities for states to enhance existing public programs through cooperative HIE activities with the private sector. For instance, the State Alliance may examine the value proposition for public programs, such as Medicaid, to participate in existing and new HIE efforts. The State Alliance may also address how to better integrate public health into HIE efforts to enhance disease surveillance and state preparedness efforts. In addition, quality measurement as enabled by HIE can play a role in population-based quality assessments. States ultimately have a constitutional responsibility to protect the public's health. As such, the State Alliance may examine how

states, as providers of information, can play appropriate roles in HIE for publicly covered populations.

- **States Roles in Health Information Exchange**

States as purchasers of health care, funders of community-based initiatives, regulators of health care settings, and protectors of consumers have variable roles in HIE. The State Alliance may explore priorities for state action (e.g., funding and regulation) in HIE activities.

In addition to these key areas, other programmatic and technical issues that fall within or outside these broad, overarching categories may be addressed over time by the State Alliance and its taskforces.

The State Alliance for e-Health will consider the key areas outlined above and establish a plan of action for its work in 2007. The State Alliance will also provide a charge for each of the supporting taskforces that will help further its work plan. The National Governors Association Center for Best Practices NGAC will provide support and serve as a resource to the State Alliance as it sets its priorities and engages in its work throughout the year.

Endnotes

¹ Gerard Anderson et al, "Health Spending in the United States and the Rest of the Industrialized World." *Health Affairs* (Washington, DC 2005).

² Institute of Medicine, *Crossing the Quality Chasm: A Health System for the Twenty-first Century* (Washington, DC: National Academies Press, 2001).

³ The National Committee on Quality Assurance, 2003

⁴ Elizabeth McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *The New England Journal of Medicine*, 348, no. 26 (June 26, 2003): 2635-2645.

⁵ Alliance of Community Health Plans, "What is Health Care Quality?"

⁶ Institute of Medicine, *Fostering Rapid Advances in Health Care* (Washington, DC: National Academy Press, 2003).

⁷ Ibid

⁸ Steffie Woolhandler et al, "Costs of Health Care Administration in the United States and Canada", *The New England Journal of Medicine*, 349, no. 8 (August 21, 2003): 2461-2464.

⁹ U.S. Department of Health and Human Services, HHS Awards Contracts to Develop Nationwide Health Information Network, Press Release, November 10, 2005, available at <http://www.hhs.gov/news/press/2005pres/20051110.html> (accessed on January 17, 2007).

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