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Creative Incentives for the Nationwide Adoption of Interoperable Health Information Technology

White Paper



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Center for Health Transformation
Better Health, Lower Cost

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Dear Reader:

Medical errors are the fifth leading cause of death in America. The Institute of Medicine (IOM) estimated that between 44,000 and 98,000 people die every year in hospitals due to preventable medical errors. This death rate would be the equivalent of one Washington-to-New York airplane shuttle crashing every day. In contrast to the federal response and media coverage that accompanies a single commercial jet crash or the threat of an outbreak of contaminated beef, the government, media, and consumer advocates are comparatively silent when it comes to medical errors. Nevertheless, government leaders can take effective action to protect consumers from medical errors by utilizing their regulatory and legislative authority, as well as leveraging their healthcare purchasing power, to transform the nation's health system into a 21st Century Intelligent Health and Healthcare System.

The foundation of a 21st Century Intelligent Health and Healthcare System will be reliable patient safety solutions. In this 21st Century health system healthcare professionals and patients will utilize an information delivery system that provides the most current information about an individual's health status. In addition, this information will be cross checked against smart information based quality control systems that should eliminate certain types of common errors altogether or prevent other types of errors before they occur. Widespread adoption of interoperable health information technology is a cornerstone of creating a 21st Century Intelligent Health system.

It is time to move beyond HIT studies and pilots into a rapid implementation phase and the government is a decisive player. This paper is designed to help policymakers take significant action this year to advance a 21st Century Intelligent Health system that will save lives and save money.

Sincerely,

Newt Gingrich
Founder, The Center for Health Transformation

BACKGROUND

The United States Department of Health and Human Services (HHS) has embraced a significant objective – to develop a nationwide health information technology infrastructure to improve patient safety. Such an infrastructure would encompass a set of standards and secure networks that would allow a clinician or health delivery facility to gather and disseminate relevant information by computer network – such as test results, x-rays and medical history as well as clinical guidelines, drug labeling and current research findings – to best treat an individual patient. As a result, the healthcare industry and its various stakeholders are experiencing a transformation with the adoption of health information technology (HIT)¹ solutions. The ever-accelerating advances in technology are producing a qualitative change in the nature of healthcare delivery. For example, according to Evanston Northwestern Healthcare in Illinois, an electronics medical records system has reduced medical errors and the time needed to obtain test results, and is expected to improve financial performance through savings from higher reimbursements and collection of co-payments². This shift promises dramatic increases in patient care and health outcomes, as well as financial benefits to providers. Despite initial evidence of profitability and improvements in safety and efficiency, adoption rates of HIT solutions are slow.

The Federal government, including the Congress, the Executive Office and agencies such as HHS, Department of Veteran Affairs (VA), Department of Defense (DoD), is aggressively working to accelerate the adoption of various HIT components. HHS is currently faced with many decisions regarding the necessary measures for implementation of an interoperable HIT infrastructure, as well as the allocation of funds for HIT programmatic initiatives. President Bush's Executive Order, issued on April 27, 2004, announced the goal of every American having an electronic medical record (EMR) within ten years³.

As a first step toward achieving this goal, HHS was tasked with establishing the position of National Health Information Technology Coordinator to provide leadership of the development and nationwide implementation of an interoperable HIT infrastructure to improve the quality and efficiency of healthcare. HHS appointed Dr. David Brailer as the first ever National HIT Coordinator. Dr. Brailer has encouraged private sector involvement in this public initiative; he recognizes that successful ramp-up of a national HIT infrastructure will require coordinated effort involving appropriate incentives and enablers between the public and private sector to ensure interoperability, utilization and improved healthcare quality and delivery. On May 6, 2004, HHS Secretary Tommy Thompson hosted a HIT Summit and announced the appointment of Dr. David Brailer.

Additionally, the Executive Order mandates a report from HHS within 90 days on options to provide incentives in HHS, VA, and DoD programs and the Federal Employees Health Benefits Program that will promote the adoption of interoperable HIT. Therefore, the impending HHS

¹ *Health Information Technology includes electronic medical records, individual health records, computerized prescriptions order entry, bar-coding of pharmaceuticals, electronic decision support systems, e-prescribing, etc.*

² *"Evanston Northwestern Healthcare Rolls Out Electronic Patient Record System, Setting National Standard for Improving Quality of Care". Evanston Northwestern Healthcare Press Release. May 17, 2004.*

³ *Remarks by President Bush at the American Association of Community Colleges meeting in Minnesota on April 26, 2004*

report is the first step in the government's HIT Initiative to catalog the various types of incentives provided by the government that may effectively promote the adoption of interoperable health information technologies.

The lack of readily available, comprehensive, individual-centered health information negatively affects healthcare accessibility and delivery at every level. According to the report from the Institute of Medicine, *Crossing the Quality Chasm*⁴: "If we want safer, higher quality care, we will need to have redesigned systems of care, including the use of information technology to support clinical and administrative processes." The report makes an urgent call for fundamental change to close the quality gap, recommends a redesign of the American healthcare system, and provides overarching principles for specific direction for policymakers, healthcare leaders, clinicians, regulators, purchasers, and others.

The healthcare system in the United States is highly fragmented and compartmentalized which is worsened due to the common practice of storing information in paper-based formats. Each healthcare stakeholder – clinicians, hospitals, pharmaceutical companies, insurers and researchers – collects and maintains critical information in paper files. In an age when vital data can be transferred digitally only a small portion of healthcare data is accessed and transferred electronically. Information that is needed to support patients and clinical decision-making is often unavailable at the point of care; therefore, not allowing routine quality measurement and inhibiting efficiency of health information exchange. The absence of standardized HIT solutions contributes to clinicians unknowingly repeating tests, or advising ineffective or dangerous treatments. Additionally, researchers and public health officials do not have access to aggregate data to track diseases, assess treatment effectiveness and safety, or track data that may be critical in identifying a bioterrorism attack.

Evidence indicates that the secure exchange of medical information will significantly advance our healthcare system – improving healthcare quality and patient safety by reducing medical errors, reducing wasteful and dangerous inefficiencies in the delivery of healthcare, improving administrative efficiencies by reducing paperwork and improving communication, and increasing access to affordable healthcare. The optimal HIT system would:⁵

- Foster quality improvement, the reduction of medical errors, and accelerate the practice of evidence-based medical care;
- Deliver the relevant personal data, clinical guidelines, and administrative information to a medical provider and consumer in order to increase the likelihood of an appropriate medical decision at the time and place of care;
- Decrease overall healthcare costs by improving efficiency, decreasing costly medical errors, coordinating care in a way that makes it easier to detect disease before expensive acute episodes result;

⁴ *The Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century (2001). The Institute of Medicine serves as adviser to the nation to improve health. As an independent, scientific adviser, the Institute of Medicine strives to provide advice that is unbiased, based on evidence, and grounded in science. The mission of the Institute of Medicine embraces the health of people everywhere.*

⁵ <http://www.healthtransformation.net/Projects/HIT.asp>

- Advance consumerism by enabling more transparent information on healthcare costs quality, and outcomes;
- Connect all caregiver settings including home care, physician offices, long-term living facilities, and pharmacy,
- Guarantee the security and protection of patients' individual health information.

OVERVIEW

This white paper outlines the HIT economic landscape for a provider organization and offers suggestions on what steps policymakers and government leaders can take to provide incentives for nationwide adoption of HIT. This paper also summarizes the findings from key stakeholders on the effectiveness of incentives in promoting the adoption of dependable interoperable HIT systems that offer patients prompt high quality treatment for the twenty-first century.

ECONOMIC LANDSCAPE

The implementation of HIT can result in a positive financial return on investment to the healthcare community. IDC, a global market intelligence and advisory firm, projects that HIT spending in the United States will increase from \$15.1 billion in 2002 to \$17.3 billion in 2007 among healthcare providers. The Center for Information Technology Leadership (CITL) indicates the United States healthcare system could save \$44 billion annually in reduced medication, radiology, laboratory, and hospitalization expenditures from nationwide adoption of Computerized Patient Order Entry (CPOE), one component of HIT. CITL studies also suggest that more than 2 million adverse drug events and 190,000 hospitalizations each year could be prevented with the use of HIT.

Similar to users of CPOE, users of EMR perceive that such technologies have had an impact on practice costs. Although in many practices physicians and staff are unaware of actual expenses and cost savings associated with the EMR, those that retired paper-based systems believe they have realized cost savings.⁶

According to a study published in the American Journal of Medicine, the net benefit per provider using EMR over a five-year period would be approximately \$86,000. When the implementation timeframe was increased to ten years, the net economic benefit increased to \$330,900 per provider.⁷ Pursuant to this study, the associated EMR costs include the cost of software and hardware, training, implementation, and ongoing maintenance and support as well as all costs associated with transitioning from a paper based system. The financial benefits include savings in chart pulls and transcription, as well as utilization savings and savings from diminished billing errors. The study indicates the majority of savings, following implementation of EMR, result from

⁶ Wager A. et. al. "Impact of an Electronic Medical Record System on Community-Based Primary Care Practices". *J Am Board Fam Pract* 13(5):333-348, 2000. © 2000 American Board of Family Practice.

⁷ Blackford M., et.al. "A Cost-Benefit Analysis of Electronic Medical Records in Primary Care." *The American Journal of Medicine*. Volume 114. April 1, 2003.

drug expenditures, decreased radiology utilization, decreased billing errors and improved charge capture.

If a provider adopts an EMR system for the reduction of paper chart pulls and transcription costs, the net cost will be \$18,200 per provider and if electronic prescribing were added there would be a net benefit of \$44,600 per provider. The economic impact on a provider organization varies depending on the level of implementation, the EMR components adopted and the implementation time frame. If adopted and implemented within the guidelines of this study, the implementation of EMR can result in a positive financial return on investment to the healthcare provider.

APPROACH FOR IDENTIFYING INCENTIVES

The use of financial and qualitative incentives will facilitate the promotion of HIT investment, adoption and implementation for healthcare providers. The objective of identifying and categorizing incentives for HIT adoption is to encourage community participation toward viable solutions.

HIT incentives research conducted included:

- Comprehensive research and literature review surrounding the market segments within the healthcare industry to understand how each are reacting to barriers and benefits of HIT adoption
- Feedback from stakeholder groups attending the June 15, 2004 Forum: Creative Incentives for HIT
- Discussions with high-level industry and government decision makers.

The aggregate of these findings reflect stakeholder perspectives on which incentives, both financial and non-financial, should be considered in developing a modern and dependable interoperable HIT infrastructure.

Findings

To encourage buy-in and community participation in nationwide HIT adoption, it's critical to understand stakeholders' perspectives related to barriers and benefits of implementation. Key stakeholder groups participated in a June 15, 2004 Forum to evaluate options. During the Forum, Former Speaker Newt Gingrich, Founder of the Center for Health Transformation (CHT) spoke about transforming the United State healthcare system and the HIT Imperatives. Dr. Anthony Nowlan, until recently, an Executive Director of the National Health Service Information Authority in the UK, provided information related to the lessons learned in implementing a National Health IT Infrastructure. As identified earlier, Dr. David Brailer, National Health Information Technology Coordinator for HHS noted that a successful ramp-up of a national HIT infrastructure would require a well-coordinated effort involving appropriate incentives and enablers between the public

and private sector to ensure interoperability, utilization and improved healthcare quality and delivery.

As a starting point for discussion, industry incentives for adoption of EMR were consolidated for the key stakeholders to review during the Forum. Table 1 summarizes the high-level perspectives from each key stakeholder group.

Table 1. Stakeholder Groups

Stakeholder Group	Perspective
Payers	Payers are using HIT to become more efficient and responsive to the market by analyzing data collected through EHR. They have been leaders in experimenting with changing the “face-to-face” based delivery system to reflect that many simple diagnoses and follow-up visits can be addressed through HIT rather than office visits.
Hospitals Clinicians	Providers are facing increasing financial pressure, as costs remain high. Providers would like to improve healthcare delivery and quality through use of HIT. Provider adoption would increase if they could be assured that the system is interoperable, can easily adapt to changing technology, and has appropriate training and support.
IT Solutions	Vendors will be active in creating markets to promote their products. These players have provided capital and assistance to ramp-up HIT adoption.
Pharmaceutical Manufacturers	Pharmaceutical manufacturers have disease-management programs to build communities of consumers centered on particular drugs. Pharmaceutical manufacturers are integrating technology into the clinical workflow, in some cases, introducing new technology for free into doctors' practices.
Employers	Employers want to comparison shop for health plans and want their beneficiaries to be able to comparison shop on quality and price for health services; employers have also been active players in providing incentives for HIT adoption.
Long Term Living Facility	Long-term care providers recognize that HIT adoption would help streamline the annual survey process, promote quality of care and reduce the cost of the program.
Consumers	Consumers welcome HIT solutions if their personal privacy can be assured and protected.

After the key stakeholders reviewed the industry incentives, stakeholder breakout groups were organized and each group proposed incentives and enablers that would promote adoption of HIT, and support interoperability, and improved healthcare quality and delivery. Industry expert facilitators were provided for each of the stakeholder breakout groups to maximize the outcome. Each breakout group summarized their key findings in a presentation, which the facilitator shared with the larger group.

During the breakout group sessions, key stakeholders reviewed a list of implementation enablers that could facilitate incentive implementation. Table 2 displays a list of enablers that may be necessary to put in place incentives for adoption of interoperable health information technology:

Table 2. Implementation Enablers of Health Information Technology (HIT)

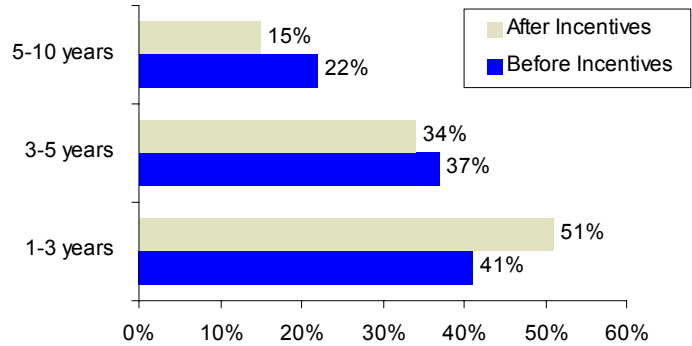
IMPLEMENTATION ENABLER	EXAMPLE
Legislation	<ul style="list-style-type: none"> • Repeal / Amend existing legislation • Enact new legislation
Regulations	<ul style="list-style-type: none"> • Translation of laws implementing standards promulgated by the appropriate Federal department
Federal Funding	<ul style="list-style-type: none"> • Appropriations providing necessary start-up assistance and capital • Government sponsored grant initiatives
Private Sector Business Practices	<ul style="list-style-type: none"> • Modification of existing business practices; leverage skills, expertise and opportunities to improve its strategic position with HIT
Private Funding	<ul style="list-style-type: none"> • Philanthropic funds put forth by private sector
Compliance / Audit	<ul style="list-style-type: none"> • Requirements to ensure compliance with new standards
Patient Participation	<ul style="list-style-type: none"> • Increased patient involvement in their own clinical research and choices in healthcare providers

During the Forum, the key stakeholders were surveyed to gain additional insight on their point of view.

**Questions: What is a reasonable time frame to expect ramp-up of national EHR adoption?
If your HIT incentives are executed, what is a reasonable time frame to expect
ramp-up of national EHR adoption?**

Figure 1. Ramp-Up Time for EHR Adoption

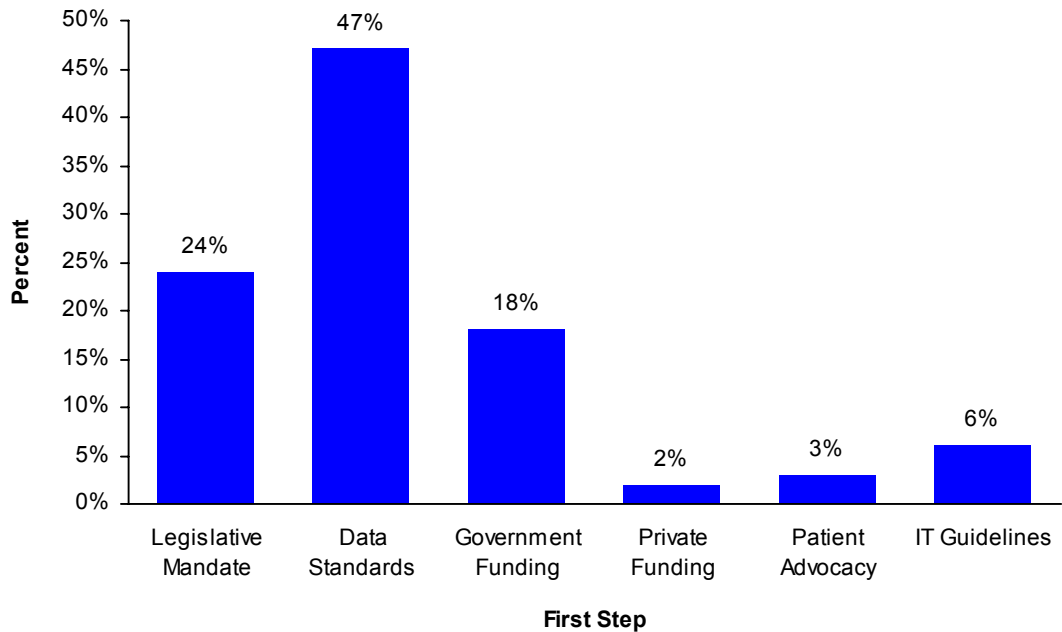
51% of respondents (51%) reported that after their HIT incentives were in place, they would expect the ramp-up time for EHR adoption would be 1 – 3 years. Even without their HIT incentives in place, 41% of respondents reported that it would take 1 – 3 years to adopt EHR.



Q: What is the first step in creating an interoperable healthcare information technology system?

The 47% of respondents reported that creating data standards is the most necessary first step in creating an interoperable healthcare information technology system.

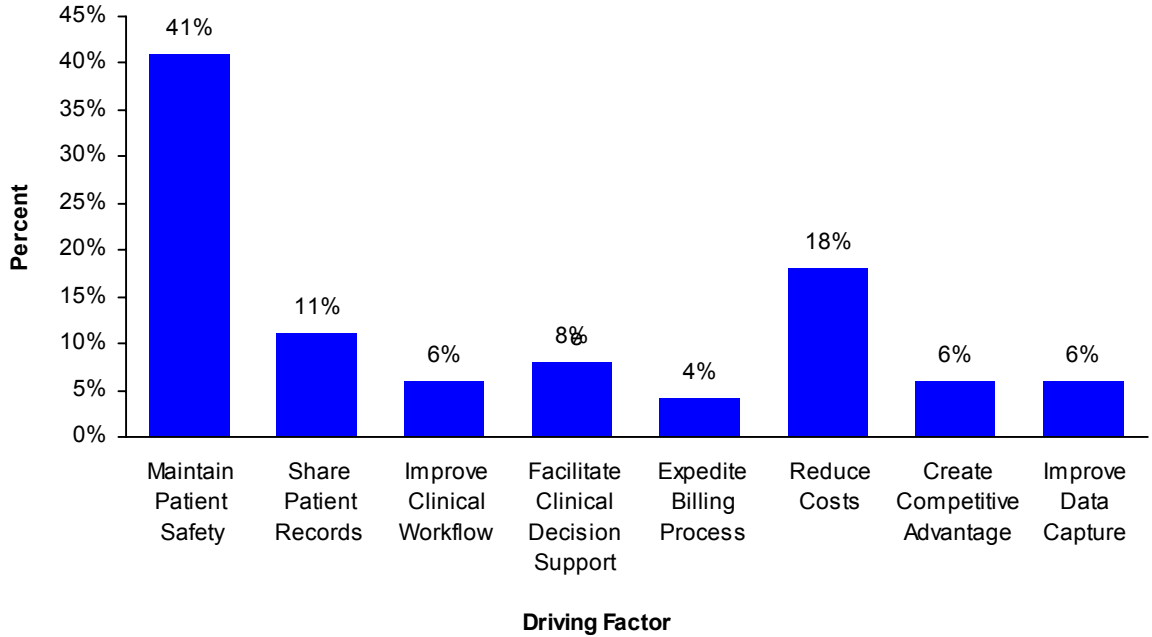
Figure 2. First Step in Creating HIT



Q: What factor is driving the need for EHR Systems within your organization?

The 41% of respondents reported the maintaining patient safety is the top factor driving the need for EHR Systems within their organization.

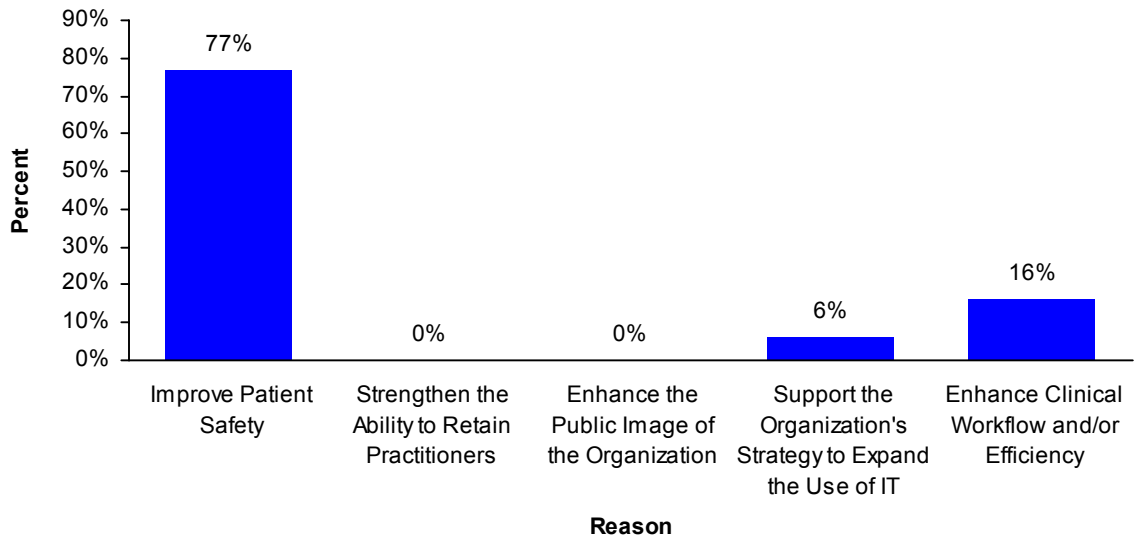
Figure 3. Factors Driving EHR Systems Need



Q: What is the most critical reason for adopting EHRs within your organization?

77% of respondents reported that improving patient safety is the most critical reason for adopting EHRs within their respective organizations.

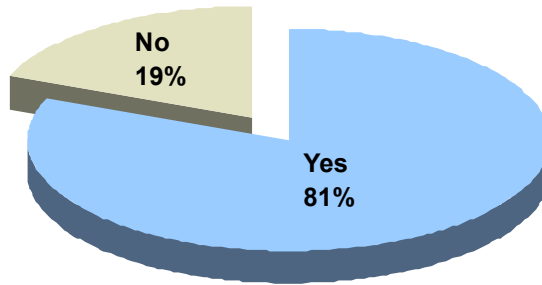
Figure 4. Reasons for Adopting EHR



Q: Would you personally choose a healthcare provider with EHR, or other forms of HIT, over one without an existing system?

81% of respondents reported that they would personally choose a healthcare provider with EHR rather than one without EHR.

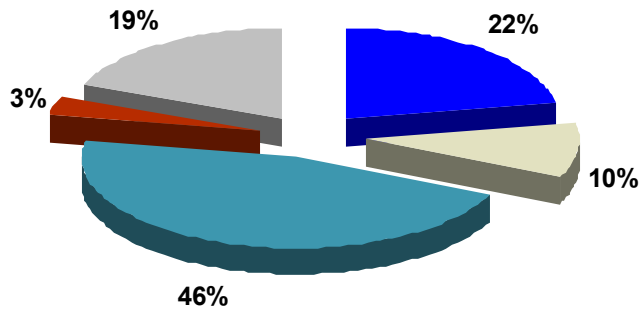
Figure 5. Percent Who Choose Providers with EHR



Q: If you were the President and had no budgetary constraints, how would you leverage HIT to start saving lives?

46% of respondents reported that providing seed money to regional projects, deserving proposals to generate nation-wide solutions would leverage HIT to start saving lives.

Figure 6. Leverage HIT



- Build a thorough business case demonstrating value generated around quality improvements, direct cost savings, cost avoidance (e.g. medical malpractice), etc.
- Provide seed money to regional successful projects, deserving proposals, et al to generate nation-wide solutions.
- Select common health data standards and standard health record formats – make a Federal mandate.
- Announce that electronic signatures will be accepted and treated as legally equivalent to written signatures.
- Fund a national campaign to educate the public and generate a national demand for HIT implementation, especially with regard to electronic health records and e-prescribing.

Implications of the Survey

The findings suggest that stakeholders embrace the concept of HIT, and believe it will improve healthcare quality, reduce medical errors, and advance the delivery of appropriate, evidence-based medical care. However, despite the assertion of profitability and improvements in safety and efficiency, adoption rates of HIT are slow. Perhaps, the main deterrent to adopting a nationwide health infrastructure is the lack of foundational data standards.

According to the HHS' Consolidated Health Informatics (CHI) workgroup the time is right to establish universal clinical vocabulary and messaging standards to enable technology development and support exchange in a secure environment. CHI is a government-wide health IT governance council consisting of multiple departments and agencies with health-related missions, including HHS, VA, DOD, Social Security Agency, General Services Administration, and National Institute of Standards and Technology. CHI has developed a portfolio of existing clinical vocabularies and messaging standards enabling Federal agencies to build interoperable federal health data systems. In spring 2003, HHS, DoD and the VA announced the first set of uniform standards for the electronic exchange of clinical health information to be adopted across the Federal government.

CHI will continue to play a pivotal role in the adoption of universal data standards. Leaders in the healthcare industry have communicated how important the Federal government's leadership role is in the adoption of standards. Federal agencies will continue to work through CHI to exchange their ideas and experiences pertinent to standards portfolio as it is assembled. At the same time, private sector consortiums seeking standards solutions are beginning to partner and share their information with CHI. (the President's E-Gov Initiative)

After the Forum, the breakout summary presentations were reviewed along with the detailed notes from each session, and the priority incentives were identified.

Incentive: Reduce Surveying Frequency

Background	Current government oversight in nursing homes is centered on an annual survey. The process is labor intensive and costly for both the facility and government. The long-term care industry has been advocating for a more outcomes focused survey process in lieu of the survey driven process with the government becoming a true stakeholder in assuring quality. Proactive reduction of the survey burden would be strongly considered.
Description	The government increases the time between surveys of nursing homes and ICFs/MRs ⁸ for facilities that have no quality of care deficiencies and use electronic health records.
Which stakeholder group benefits from the incentive?	Long-term care facilities and ICFs/MRs
Which stakeholder pays for the incentive?	A key characteristic of this incentive is that it will not cost the government additional funds to implement beyond the initial process modification costs.
Enablers specific to this incentive	<p>The regulation requiring annual surveys would have to be amended or HHS could issue a blanket waiver for every state. The survey process is regulated by the Federal government and implemented by the State government; therefore, some jurisdiction issues may require attention. Lastly, the government needs to differentiate more strongly between quality of care deficiencies and other deficiencies so the safety of citizens is always paramount.</p> <p>A process for random compliance checks needs to be developed and implemented to ensure that facilities actually have EHR and are utilizing them properly.</p>

⁸ ICFs/MR= Intermediate Care Facilities for persons with Mental Retardation

Incentive: Provide Financial or Non-Financial Bonuses

Background

The standard payment mechanism for healthcare is to pay a provider or hospital for a legitimate claim of service that is covered by the payer regardless of the clinical outcome. However, a new trend, called “pay-for-performance” seeks to alter the focus of the payment away from process and move it toward outcomes by paying providers a bonus for their patients whose health improves. Information technology facilitates treatment whereby enabling providers to assist their patients in becoming healthy. For example, electronic medical records help providers better coordinate care across the healthcare system or decision support systems can be imbedded to cue providers to apply a new best practice.

Description

Providers would receive bonuses for achieving specific outcomes such as those related to patient health, patient satisfaction, patient safety, provider satisfaction, provider turnover, provider retention, and provider vacancy rates. These bonuses could be financial or non-financial, i.e. input into policies and decision making; participation on committees; CEUs; desired work schedules. The primary aim of this model is to provide providers with financial support for achieving improved patient safety through HIT.

Which stakeholder group benefits from the incentive?

- Providers

Which stakeholder pays for the incentive?

- Centers for Medicare and Medicaid
- Private health plans
- Regional coalition of health plan, employer, and independent community group

Enablers specific to this incentive

Compliance audit should be instituted to ensure outcome-based bonuses to providers.

However, it would need to be determined if the current CMS regulations would allow this or if the regulations would have to be amended. Second, in order for private health plans to participate there would have to be a government mandate as well as strong public support.

Last, it would be essential to have government oversight to help explain what patient safety means in terms of cost reimbursement and how the tolerances and ranges for the outcomes would need to be defined.

Incentive: Provide Federal Loans and Grants

Background	<p>A common barrier to IT adoption is the high initial investment costs. The Hill-Burton Act (enacted in 1946) was the country's first major health facility construction program originally designed to modernize hospitals, which had become obsolete due to lack of capital investment, and ultimately encourages Federal and local investments in hospitals. Since 1946, more than \$4.6 billion in Hill-Burton grant funds and \$1.5 billion in loans have aided ~7,000 healthcare facilities.</p>
Description	<p>The Government establishes a Health Information Technology Fund that encourages physicians and hospitals to buy-in to HIT solutions and use a combination of Federal grants and loans with no interest or low interest. This incentive also reduces the cost burden on employers.</p>
Which stakeholder group benefits from the incentive?	<ul style="list-style-type: none">• Providers• Hospitals
Which stakeholder pays for the incentive?	Government
Enablers specific to this incentive	<p>Ensure Office of Management Budget (OMB) support. The loan or grant program should be included in the President's annual budget proposal.</p> <p>The government would have to determine which agency would manage the funding and accept the applications for funding. This would probably require some form of statutory or regulatory modification.</p>

Incentive: Reduce Consumer Out-of-Pocket Costs

Background

Individual out-of-pocket costs have risen 26% between 1995 and 2001.⁹ Any strategy to reduce these costs is getting the attention of consumers. For example, organizations have experienced success in modifying individuals' purchasing behavior by tying it to changes in co-pays, deductibles, and premiums. These incentives also increase employee/consumer/patient involvement and knowledge about their own health and healthcare.

Description

Employer and or Health Plan waives/reduces co-pays for employees/patients that receive care at hospitals meeting high quality standards through HIT improvements. The government could also adopt this model, lowering Medicare beneficiaries' co-insurance payments for those choosing care from physicians utilizing EMR.

Which stakeholder group benefits from the incentive?

- Patient
- Employee
- Medicare beneficiary

Which stakeholder pays for the incentive?

- Employer
- Insurer
- CMS

Enablers specific to this incentive

As the consumer of healthcare services, patient involvement is vital. Patients can play a more active role in their treatment process and help in reshaping the policies governing healthcare to improve the delivery, quality and cost associated with the healthcare system. CMS' participation in this model could be ensured through changes in regulations and legislation to reduce co-insurance for beneficiaries.

⁹ Bureau of Labor Statistics (<http://www.nchc.org>)

Incentive: Provide Training for HIT Users

Background	Providers and their staff are concerned about issue of HIT training and support. Once physician offices and hospitals procure HIT solutions, it will be critical that users are trained to ensure proper use and a high level of utilization.
Description	Providers and staff are provided with onsite IT training and classes to ensure workflow and productivity are not compromised, but improved, with HIT utilization.
Which stakeholder group benefits from the incentive?	<ul style="list-style-type: none">• Providers and Staff• Hospitals• Long-term living facilities
Which stakeholder pays for the incentive?	There are several possible payers for IT training, the first of which is the Federal government. The government has an interest in ensuring that HIT investments are used to full capacity and used properly to avert patient related errors. Vendors are also a likely source of IT support and training, as they will be providing the software and hardware.
Enablers specific to this incentive	Congress may need to pass legislation calling for a program designed to offer IT support to physicians and hospitals.

Incentive: Issue Nationwide Data Standards

Background	Many stakeholder groups cite the paucity of national data standards as a significant reason for slow or unsuccessful HIT adoption among providers. Providers are concerned that the IT solution they purchase may have limited functionality if it is unable to connect with other outside providers who use a system with different standards.
Description	The Federal government should adopt a complete set of data standards to promote an interoperable electronic healthcare system.
Which stakeholder group benefits from the incentive?	<ul style="list-style-type: none">• Hospitals• Providers• IT Solutions• Long term care facilities
Which stakeholder pays for the incentive?	Federal government
Enablers specific to this incentive	Sufficient financial resources are essential for this model to succeed and to ensure that current public/private collaborations, such as those occurring in Indianapolis and Santa Barbara, are successful. Prior to congressional action, HHS should gain consensus from these collaborations on which standards to mandate. Congress should pass legislation that will facilitate the adoption of standards to promote interoperability. The Federal government may also consider establishing an advisory commission of experts, similar to the Medicare Payment Advisory Commission (MedPAC), to allow for public feedback and submit reports to Congress on all issues related to HIT adoption. The formation of the HHS' Consolidated Health informatics (CHI) workgroup has made significant progress.

Incentive: Reduce Malpractice Suits

Background	Medical liability costs have been skyrocketing due to increased claim frequency and award severity in the past decade. It has been estimated that medical liability reform could save the healthcare system between \$60 billion and \$108 billion each year. ¹⁰
Description	Reduction in medical malpractice premiums would be based upon the provider's adoption of HIT. The reduction in provider's liability would likely improve patient outcomes by reducing the number of unnecessary procedures and improving access to therapies and could result in significant savings to the healthcare system.
Which stakeholder group benefits from the incentive?	Physicians
Which stakeholder pays for the incentive?	Insurance Company
Enablers specific to this incentive	Tort reform may be necessary to move forward with this model.

¹⁰ Department of Health and Human Services, *Special Update on Medical Liability Crisis*, 9/25/02

Incentive: Provide Tax Credits

Background	Alter State/Federal tax structures to encourage investment and adoption of HIT
Description	Providers and hospitals receive State/Federal tax breaks commensurate with their adoption of HIT. This model provides incentives for both rural and small entities to adopt HIT.
Which stakeholder group benefits from the incentive?	<ul style="list-style-type: none">• Physicians• Hospitals
Which stakeholder pays for the incentive?	Federal government/Treasury
Enablers specific to this incentive	Congress may consider amending the Internal Revenue Code of 1986 to provide additional tax incentives to encourage nationwide HIT adoption.

RECOMMENDATIONS

The adoption of Health IT is transforming the way providers, consumers, and payors interact; the role of government in regulating care; and the role of partnerships in the healthcare marketplace. While government regulations and mandates may exert pressure to adopt HIT, incentives provide critical motivation for the nationwide adoption of health information technologies. It is critical that incentives promote adequate implementation, sustained utilization and improved quality of care. The following initiatives should be considered for accelerating our nation's movement towards an interoperable health system that leverages the power of technology.

- HHS should forge partnerships with State and Local governments, regions and the private sector by establishing grants, loan funds and tax credits to support capital investments in HIT adoption. This effort is already underway at the Agency for Healthcare Research and Quality (AHRQ) with the Agency managing \$100 million in grants this fiscal year to support the implementation of HIT.
- HHS should guide the execution and implementation of interoperable health IT in its role as the Federal government's principal agent for protecting and preserving the health of all Americans. Since government HIT is not a federal mandate, the Administration should provide adequate fiscal support to HHS in order to ramp-up and increase the FY2006 HIT budget. For example, HHS has already launched the Consolidated Health Informatics (CHI) workgroup, promoting the adoption of interoperable standards for clinical data used within the Federal government. The Department of Defense has also made significant headway by launching the Composite Health Care System II, which stores data from over 100 clinical information systems in a central repository.
- HHS should incorporate IT components into all new safety and quality programs or pilot programs implemented by Centers for Medicare/Medicaid Services (CMS), Office of Personnel Management (OPM), Veteran's Administration, DoD, National Institutes of Health (NIH) and Centers for Disease Control (CDC) that involve direct patient care. For example, the Medicare Modernization Act (MMA), in addition to including HIT provisions, mandated the creation of new programs which CMS will implement over the next few years, including a "Welcome to Medicare" physical for beneficiaries who are eligible for Medicare in 2005. When implementing the new program, CMS should provide incentives to physicians to input the information into an electronic health record.
- HHS should continue to further their relationships with stakeholders. Stakeholder support government HIT standards is a vital catalyst in ensuring national HIT adoption. CHI is a good example of such an initiative.
- HHS should consider initiating a public health campaign to encourage patients to manager their own heathcare. In our current healthcare system, patients are an underutilized resource with the most at stake. Their involvement will lead to better medical outcomes, lower costs and higher patient satisfaction.
- HHS should develop regulations that permit the universal submission of electronic forms and electronic signatures.

- CMS should make small increases in Medicare and Medicaid provider and health plan payments to accelerate broad adoption of HIT solutions. Concurrently, providers and private health plans should work with other purchasers to ensure adequate buy-in and private-sector investment in HIT that helps everyone.
- CMS should conduct a demonstration project to determine the cost savings associated with EHR or EMR implementation. Such hard data would be useful for government entities such as the Office of Management and Budget, Congressional Budget Office, as well as the private sector.

Next Steps

In addition to these comprehensive and long term recommendations, there are immediate opportunities for progress and impact. HHS' external outreach has inspired action in the private sector. In order to implement an interoperable health IT system, HHS must continue to forge ahead with its internal and inter-agency efforts. To ensure continued progress and success, it is suggested that HHS follow these "Next Steps" for the future.

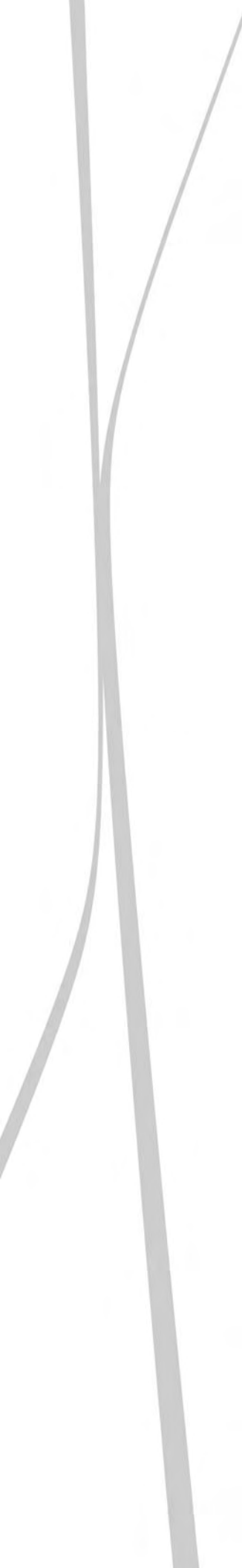
HHS must re-evaluate the FY2005 budget and begin aggressively planning the FY2006 budget. During the planning period, the Office of the National Health Information Technology Coordinator should work strategically with internal budget planning committees to efficiently shift resources and funds to compensate for all the changes within the government incurred by the implementation of health information technology. Without a government mandate, HHS should devise a budget that can absorb the costs of promoting the implementation of a new interoperable HIT system.

HHS should also identify any initiatives that would require statutory or regulatory change. To develop new policy that addresses these modifications, HHS should assign inter-agency task forces and/or multi-agency task forces to draft new policy before the 2006 fiscal year begins.

HHS should immediately identify and coordinate with the White House on any new initiatives, including incentives, reimbursements, tax credits and mandates, which would require legislative change.

As part of the budget process, HHS should coordinate with DoD and VA to issue internal guidance mandating the inclusion of HIT in the the FY2006 IT budget for every program providing patient care. HHS, DOD, and VA should also identify FY2005 budget neutral changes that would advance the use of HIT within the Federal government.

Having partnered with public and private stakeholders to draft recommendations for the implementation of interoperable HIT systems, HHS should meet with these stakeholders on a periodic basis to review the recommendations. As implementation proceeds, HHS should be responsible for reevaluating and redefining the function and role of the stakeholders. HHS should continue to prioritize the NHII and specifically the CHI to build confidence in stakeholders who are concerned first and foremost about data standards.



To the public demand for HIT and EHR, HHS should consider launching a public health campaign to inform and educate the public on how HIT can improve public health. This could be an expansive grassroots campaign supported by public service announcements (PSAs), public health information technology forums and web-based educational tools. This type of campaign would directly support Administration's goals about the function of EHR.