Leading Health Care and Information Technology Groups Endorse Common Framework for Health Information Exchange to Support Improvements in Health and Healthcare

Thirteen Groups Collaborate in Responding to Federal Government’s RFI on National Health Information Network

January 18, 2005 (New York, NY and Washington, DC) Thirteen major health and information technology organizations, in an unprecedented joint collaboration, today endorsed a “Common Framework” to support improved health information exchange in the United States while protecting patient privacy. The collaborating organizations have identified the vital design elements – of standards, policies, and methods—for creating a new information environment that would allow health care professionals, institutions, and individual Americans to exchange health information in order to improve patient care. These recommendations were developed in response to the Request for Information related to a “National Health Information Network” issued by the U.S. Office of the National Coordinator for Health Information Technology (ONCHIT) within the Department of Health and Human Services in November 2004.

The collaborative foresees a new health information environment that would allow appropriate users to find, request and retrieve patient records rapidly and accurately, subject to patient authorization. This decentralized approach takes advantage of the significant investment already made in information technology in U.S. health care, protects the privacy of patient information, and allows rapid progress toward providing Americans with more reliable, higher quality care. The recommended approach does not require centralized national databases, replacement of existing information networks, or a unique national health identifier.

The new health information environment should be based on:

- Open, consensus-driven and non-proprietary standards and common methods for their adoption
- Connectivity built on the Internet and other existing networks
- Uniform policies that protect privacy, assure security, and support existing trust relationships.

The collaborative also recommends the use of financial incentives for the adoption of standards-based information technology in health care, citing opportunities to leverage this environment to produce value for patients, consumers, professionals, researchers, the public health community and, indeed, all sectors of our health care system. Finally, the recommendations describe the roles and structure of both the national and regional elements of this environment.
The collaborators noted that the new information environment must:

- Facilitate effective connectivity for the delivery of high quality healthcare
- Provide timely access to information
- Empower patients to access and control their own information and contribute to the quality of care provided
- Support the application of “intelligent” tools to improve health and health care
- Facilitate the appropriate aggregation of data for public health, research, and quality assessment, and
- Enable improvements in the quality of clinical care.

The group, coordinated by Connecting for Health, represents America’s clinical leadership, academic institutions, health insurance plans, private industry, consumer and patient leaders, technology vendors, employers, and some of the foremost experts on health information management and information technology and includes:

- **The American Health Information Management Association (AHIMA):** the national association of health information management professionals. AHIMA's 50,000 members are dedicated to the effective management of personal health information needed to deliver quality healthcare to the public.

- **The American Medical Informatics Association (AMIA):** AMIA is dedicated to the development and application of medical informatics in support of patient care, teaching, research, and health care administration.

- **The American National Standards Institute, Healthcare Informatics Standards Board (ANSI HISB):** ANSI HISB provides an open, public forum for the voluntary coordination of healthcare informatics standards among all United States standard-developing organizations, professional societies, trade associations, private companies, federal agencies and others with more than 100 participants.

- **The Center for Information Technology Leadership (CITL):** CITL is a non-profit research group based at Partners HealthCare in Boston and supported by HIMSS that assesses the value of clinical information technologies to help provider organizations maximize the value of their IT investments, to help technology firms understand how to improve the value proposition of their healthcare products, and to inform national healthcare IT policy discussions.

- **The Connecting for Health Steering Group (CFH):** Connecting for Health…A Public Private Collaborative was conceived and is operated by the Markle Foundation and receives additional support from The Robert Wood Johnson Foundation. The Steering Group includes more than 60 diverse stakeholders from the public and private sector, committed to accelerating actions on a national basis to tackle the technical, financial and policy challenges of bringing healthcare into the information age.

- **The eHealth Initiative (eHI):** eHI is an independent, non-profit consortium of practicing clinicians, employers and healthcare purchasers, health plans, healthcare information technology vendors, hospitals and other healthcare providers, manufacturers, patient and consumer organizations, and public health agencies, whose mission is to improve the quality, safety and efficiency of healthcare through information and information technology.

- **The Healthcare Information and Management Systems Society (HIMSS):** HIMSS is the healthcare industry's membership organization exclusively focused on providing leadership for the optimal use of healthcare information technology and management systems for the betterment of human health.

- **Health Level Seven, Inc. (HL7):** HL7's comprehensive suite of ANSI accredited standards for the exchange of demographic and clinical information provides the syntax and semantics for interoperability in a large number of provider organizations in the United States and around the world.
• **HIMSS EHR Vendor Association (EHRVA):** EHRVA represents more than 25 Electronic Health Record (EHR) vendors with a mission to address national efforts relative to health information interoperability, standards, EHR certification, performance and quality measures, and other evolving government, industry and physician association initiatives and requests.

• **Integrating the Healthcare Enterprise (IHE), (American College of Cardiology, Healthcare Information and Management Systems Society, and Radiological Society of North America):** IHE drives standards adoption to address specific clinical needs, by creating a framework for passing vital health information seamlessly – from application to application, system to system and setting to setting – across the entire healthcare enterprise.

• **Internet2:** Internet2 is a consortium led by over 200 universities working in partnership with industry and government to develop and deploy advanced network applications and technologies, accelerating the creation of tomorrow’s Internet for a broad spectrum of organizations, including those in the health sciences.

• **The Liberty Alliance Project:** Liberty Alliance is a consortium of more than 150 organizations from across the globe, committed to developing open standards for federated network identity that support all current and emerging network devices.

• **The National Alliance for Health Information Technology:** The Alliance is a diverse partnership of influential leaders from all healthcare sectors working to achieve measurable improvements in patient safety, quality and efficiency through information technology.
Comments from Collaborating Organization Participants:

From AHIMA:
"This request for information from ONCHIT provides an outstanding opportunity to gather and organize the industry's collective intelligence and begin mapping out a course of action. Creating a national health information network is a complex yet critical challenge but one that we must not wait any longer to address. The health of patients and the systems that serve them are depending on it." - Linda Kloss, RHIA, CAE, executive vice president and CEO

From AMIA:
“Implementing information technology for the nation is an extraordinary challenge that must be addressed if we are to successfully solve the many problematic dimensions facing health care in America today. Through this recent collaborative effort, including the expert resources of AMIA, we have been able to suggest tested advice for David Brailer and his staff.” - Don E. Detmer, AMIA President and CEO

From ANSI/HISB:
“The collaboration among these industry groups demonstrates an unprecedented commitment to making the NHII a reality. It is my sincere hope that this will be the first of many collaborative efforts required for successful implementation of the NHII.” - Robert L. Owens, Chair; Health Informatics Standards Board

From CITL:
“The Collaborative Response to the ONCHIT RFI describes the critical technology requirements, and guiding principles -- a Common Framework -- to create a 21\textsuperscript{st} century National Health Information Network. Without consideration of such a Common Framework for the NHIN we are at risk of implementing IT solutions in healthcare that can obtain only half their potential value. Without information exchange and interoperability between systems, we may implement islands of automation across clinics and hospitals that cannot communicate with each other, and thus cannot fully support the transformation of US healthcare.” - Blackford Middleton, MD, MPH, MSc; Chairman of CITL Executive Committee

From Connecting for Health:
"The principles developed by the collaborative will put patients and their families at the very center of the health care system, supported and surrounded by an information environment that they can use – or allow others to use – to make decisions, monitor health, provide feedback, and support strategic analytic functions that produce measurable improvements in health.” - Carol Diamond, MD, Managing Director, Markle Foundation

From eHealth Initiative:
“In working on this response, we found that we hold far more in common than we ever imagined. This represents the first-ever set of detailed recommendations regarding the specific attributes and principles of an environment for health information sharing developed by such a large and diverse group of stakeholders. Our collaborative response should lay the foundation for the actual execution of a 21\textsuperscript{st} century healthcare system that will help us reduce medical errors, improve quality, and begin to tackle issues related to rising healthcare costs.” - Janet Marchibroda, Chief Executive of eHealth Initiative and Executive Director of the eHealth Initiative Foundation

From HL7:
“HL7 is pleased to be included in the diverse group of healthcare industry and policy leaders contributing to a consensus response to this important RFI. We firmly believe that the goal of a National Health Information Network will be facilitated by this unprecedented collaborative effort. We look forward to continued work with the collaborative in support of this important national initiative. Our focus will be on ensuring that the Common Framework incorporates the tenets of semantic interoperability as implemented in our Version 3 standards; including the inherent need to bind standard vocabularies to information exchange models defined by use cases.” - Mark J. Shafarman, Chair, HL7 Board of Directors
From HIMSS, HIMSS EHRVA, and IHE:
"Each of the 13 organizations brings a unique perspective and targeted expertise related to the development of an interoperable health information environment. This collaborative response further strengthens and substantiates the industry's effort - and ability - to work together for the nationwide adoption of a 'common framework' for the electronic exchange of health information." – H. Stephen Lieber, President/CEO of HIMSS

From Internet2:
"Ubiquitous and secure access to medical information and resources will lead to more timely, more accurate, and more cost-effective healthcare. By applying advanced information technology capabilities to the current healthcare architecture, we believe the entire industry - from patients to doctors to administrators - will greatly benefit." - Gary Bachula, vice president of external relations for Internet2

From Liberty Alliance:
"As the only open standards body focused exclusively on the transaction of identity information, Liberty Alliance is pleased to have played a role in this significant collaborative submission. We firmly believe the adoption of federated identity is key to a viable national health network that protects the privacy and security of all members. A National Health Information Network would expand the reach of our healthcare system and help contain escalating healthcare costs. These are undeniable social benefits, and Liberty's members are proud to be associated with this effort as experts in federated identity." - Donal O'Shea, Executive Director of the Liberty Alliance

From The National Alliance for Health Information Technology:
“Dr. Brailer is uniquely qualified to lead the government efforts and work with the private sector to develop information technology standards and infrastructure to enhance patient care and operating efficiencies. We applaud his commitment to seek responses from technology organizations, healthcare providers, industry associations and other stakeholders.” - Scott Wallace, president and chief executive officer of the Alliance

A full copy of the response and brief statements from each supporting organization can be found on the Connecting for Health Web site at www.connectingforhealth.org
The Thirteen Collaborating Organizations

About AHIMA
The American Health Information Management Association (AHIMA) is the national association of health information management (HIM) professionals. AHIMA's 50,000 members are dedicated to the effective management of personal health information needed to deliver quality healthcare to the public. Founded in 1928 to improve the quality of medical records, AHIMA is committed to advancing the HIM profession in an increasingly electronic and global environment through leadership in advocacy, education, certification, and lifelong learning. (www.ahima.org)

About AMIA
The American Medical Informatics Association (AMIA) is an organization of leaders shaping the future of health information technology in the United States and abroad. AMIA is dedicated to the development and application of medical informatics in support of patient care, teaching, research, and health care administration. AMIA's members represent all basic, applied, and clinical interests in health care information technology. (www.amia.org)

About ANSI/HISB
The American National Standards Institute’s Healthcare Informatics Standards Board (ANSI HISB) provides an open, public forum for the voluntary coordination of healthcare informatics standards among all United States standard developing organizations. Every major developer of healthcare informatics standards in the United States participates in ANSI HISB. The ANSI HISB has 27 voting members and more than 100 participants, including ANSI-accredited and other standards developing organizations, professional societies, trade associations, private companies, federal agencies and others. (www.ansi.org/standards_activities/standards_boards_panels/hisb/overview.aspx)

About CITL
The Center for Information Technology Leadership in Wellesley, MA is a not-for-profit research organization established in 2002. Using a rigorous, analytic approach, CITL assesses clinical information technologies and disseminates its findings to help provider organizations maximize the value of their IT investments, help technology firms understand how to improve the value proposition of their healthcare products, and inform national healthcare IT policy discussions. Chartered by Partners HealthCare, which was founded in 1994 by Massachusetts General Hospital and Brigham and Women’s Hospital, CITL is directed by an Executive Committee, supported by a strategic alliance with HIMSS, and assisted by teams of experts in healthcare delivery, business, and informatics. (www.citl.org)

About Connecting for Health
Connecting for Health, which was conceived and operated by the Markle Foundation and receives additional support from The Robert Wood Johnson Foundation, is committed to accelerating actions on a national basis to tackle the technical, financial and policy challenges of bringing healthcare into the information age. Connecting for Health has demonstrated that blending together the knowledge and experience of the public and private sectors can provide a formula for progress, not paralysis. Early in its inception, Connecting for Health convened a remarkable group of government, industry and healthcare leaders that led the national debate on electronic clinical data standards. The group also drove consensus on the adoption of an initial set of standards, developed case studies on privacy and security and helped define the electronic personal health record. In July 2004, Connecting for Health released a timely report that details specific actions the public and private sectors can take to accelerate the adoption of information technology in healthcare. Connecting for Health's Preliminary Roadmap for Achieving Electronic Connectivity in Healthcare calls for all stakeholders from across the healthcare industry to work together to build a health information infrastructure that would improve patient care, reduce medical error and lower costs while protecting patient privacy. (www.connectingforhealth.org)

About eHealth Initiative
eHealth Initiative and its Foundation are independent, non-profit affiliated organizations whose missions are the same: to drive improvement in the quality, safety and efficiency of healthcare through information
and information technology. Through eHealth Initiative’s consortium of practicing clinicians, employers and healthcare purchasers, health information organizations, health plans, healthcare information technology vendors, hospitals and other healthcare providers, manufacturers, patient and consumer organizations, and public health agencies and eHealth Initiative Foundation’s various programs and initiatives, both engage the multiple and diverse stakeholders in healthcare to achieve consensus on and then implement actionable strategies that tackle the technical, financial, organizational, legal and clinical challenges related to the adoption of health information technology and health information exchange to improve health and healthcare. (www.ehealthinitiative.org)

About HL7
Founded in 1987, Health Level Seven, Inc. is a not-for-profit, ANSI-accredited open, consensus-based standards development organization dedicated to providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services. HL7’s more than 2,000 members from approximately 500 public and private organizations, including 90 percent of the largest information systems vendors serving healthcare, bring the full spectrum of healthcare and IT domain knowledge to standards development. (www.HL7.org)

About HIMSS
HIMSS (Healthcare Information and Management Systems Society) is the healthcare industry's membership organization exclusively focused on providing leadership for the optimal use of healthcare information technology and management systems for the betterment of human health. Founded in 1961 with offices in Chicago, Washington D.C., and other locations across the country, HIMSS represents more than 14,000 individual members and some 220 member corporations that employ more than 1 million people. HIMSS frames and leads healthcare public policy and industry practices through its advocacy, educational and professional development initiatives to promote information and management systems' contributions to ensuring quality patient care. (www.himss.org)

About the HIMSS EHRs Vendor Association
The EHR Vendor Association is comprised of companies that develop and sell electronic health record systems and have voluntarily elected to form a trade association in order to accelerate EHR adoption. The primary mission of the association is to provide a forum for the EHR vendor community relative to standards development, the proposed EHR certification process, interoperability, performance and quality measures, and other EHR issues that may become the subject of increasing government oversight, as well as clinician association initiatives and requests. (www.himssehrva.org)

About Integrating the Healthcare Enterprise (IHE)
IHE is an initiative undertaken by medical specialists and other care providers, administrators, information technology professionals and industry to improve the way computer systems in healthcare share information. IHE has effectively promoted the coordinated use of established communications standards such as HL7, ISO, DICOM, W3C, and IETF to address specific clinical needs in support of optimal patient care. It has for the past six years established a proven standards adoption process that resulted in the detailed specification of a framework of 27 Integration Profiles, publicly available interoperability solutions to a number of healthcare information exchange problems. These detailed and exhaustive standards-based specifications have been adopted by more than 100 healthcare vendors world-wide, among which most of the leading large and small technology vendors that sustain the US healthcare IT system. They have voluntarily cooperated with the provider professional associations and submitted their implementations to the IHE Connectathon testing process. As a consequence of this cooperation, providers have experienced that systems developed in accordance with IHE communicate with one another more effectively, are easier to deploy, and enable care providers to use information more readily. (www.ihe.net)

About Internet2
Led by more than 200 U.S. universities working with industry and government, Internet2 develops and deploys advanced network applications and technologies for research and higher education, accelerating the creation of tomorrow’s Internet. Internet2 recreates the partnerships among academia, industry, and government that helped foster today’s Internet in its infancy. The primary goals of Internet2 are to create a
leading edge network capability for the national research and education community; to enable revolutionary Internet applications; and to ensure the rapid transfer of new network services and applications to the broader Internet community. In doing so, Internet2 supports innovations in networking that assist organizations, including those in the health sciences, to enhance their activities; expand their technological capabilities; refine their security and applications; and redefine the parameters of disease diagnosis, treatment, and management. (www.internet2.edu)

About the Liberty Alliance
Liberty Alliance is an alliance of more than 150 companies, non-profit and government organizations from around the globe. The consortium is committed to developing an open standard for federated network identity that supports all current and emerging network devices. Federated identity offers businesses, governments, employees and consumers a more convenient and secure way to control identity information in today's digital economy, and is a key component in driving the use of e-commerce, personalized data services, as well as Web-based services. Membership is open to all commercial and non-commercial organizations. The 2005 Board is comprised of the following sixteen companies: American Express, AOL, Ericsson, Fidelity Investments, France Telecom, General Motors, HP, IBM, Intel, Nokia, Novell, Oracle, RSA Security, Sun Microsystems, VeriSign, and Vodafone Group. (www.projectliberty.org)

About the Alliance
The National Alliance for Health Information Technology is a diverse partnership of leaders from all healthcare sectors working to advance the adoption and implementation of healthcare information technology to achieve measurable improvements in patient safety, quality of care and operating performance. The Alliance works with healthcare and government leaders to help shape the policy environment and accelerate the implementation of world-class, standards-based information technology aimed at creating the most effective, safe, unified, and inclusive health system possible. Since its founding in 2002, the Chicago-based Alliance has helped forge consensus and advance progress on such important initiatives as barcodes and electronic health records. (www.nahit.org)
## Contacts for each Collaborating Organization

<table>
<thead>
<tr>
<th>Collaborator</th>
<th>Contact Person</th>
<th>Phone/e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Health Information Management Association</td>
<td>Theresa Reynolds, Public Relations Manager</td>
<td>312-233-1159; <a href="mailto:theresa.reynolds@ahima.org">theresa.reynolds@ahima.org</a></td>
</tr>
<tr>
<td>American Medical Informatics Association</td>
<td>Mary Ellen Doran, AMIA Manager of Communications</td>
<td>301-657-1291; <a href="mailto:maryellen.amia@amia.org">maryellen.amia@amia.org</a></td>
</tr>
<tr>
<td>ANSI HISB</td>
<td>Sally Seltz</td>
<td>212-642-4918; <a href="mailto:SSeltz@ansi.org">SSeltz@ansi.org</a></td>
</tr>
<tr>
<td>Center for Information Technology Leadership</td>
<td>Jan Walker</td>
<td>781-416-9200; <a href="mailto:jwalker@citl.org">jwalker@citl.org</a></td>
</tr>
<tr>
<td>Connecting for Health Collaborative</td>
<td>Todd Glass</td>
<td>212-713-7622; <a href="mailto:tglass@markle.org">tglass@markle.org</a></td>
</tr>
<tr>
<td>eHealth Initiative</td>
<td>Louise Arnheim, Director of Communications, eHealth Initiative and Foundation</td>
<td>202.624.3274; <a href="mailto:Louise.arnheim@ehealthinitiative.org">Louise.arnheim@ehealthinitiative.org</a></td>
</tr>
<tr>
<td>Health Level Seven</td>
<td>Jonathan Himlin, Director of Communications</td>
<td>734-677-7777; <a href="mailto:jhimlin@hl7.org">jhimlin@hl7.org</a></td>
</tr>
<tr>
<td>Healthcare Information and Management Systems Society (HIMSS)</td>
<td>Joyce Lofstrom, Public Affairs Manager</td>
<td>312.915.9237; <a href="mailto:jlofstrom@himss.org">jlofstrom@himss.org</a></td>
</tr>
<tr>
<td>HIMSS EHR Vendor Association (EVA)</td>
<td>Julia Zarb</td>
<td>919.845.9100; <a href="mailto:jzarb@a4healthsystems.com">jzarb@a4healthsystems.com</a></td>
</tr>
<tr>
<td>Integrating the Healthcare Enterprise (IHE)</td>
<td>Joyce Sensmeier, Director of Professional Services, HIMSS</td>
<td>312.915.9281; <a href="mailto:JSensmeier@himss.org">JSensmeier@himss.org</a></td>
</tr>
<tr>
<td>Internet2</td>
<td>Lauren B. Kallens, Media Relations Manager</td>
<td>202.331.5345; <a href="mailto:lkcallens@internet2.edu">lkcallens@internet2.edu</a></td>
</tr>
<tr>
<td>Liberty Alliance</td>
<td>Russ DeVeau</td>
<td>718-263-1762; <a href="mailto:russ@devcommgroup.com">russ@devcommgroup.com</a></td>
</tr>
<tr>
<td>The National Alliance for Health Information Technology</td>
<td>Jane Horowitz</td>
<td>312-422-2184; <a href="mailto:jhorowitz@nahit.org">jhorowitz@nahit.org</a></td>
</tr>
</tbody>
</table>
Creating a National Health Information Environment:  
A Collaborative Approach

We believe that general adoption of a common framework can permit health information to be delivered when and where it’s needed in a private and secure manner and improve the quality of health care.

Thirteen major health care and information technology organizations have come together to recommend a consensus approach to the design of a national health information environment. Key elements of their approach are:

- Establishing an information environment that facilitates and structures connectivity – through encouraging adherence to precisely defined, uniform technical standards, common policies, and common methods, known as the “Common Framework”.
- Defining a Health Information Environment that allows diverse networks of users, grouped together through proximity, stakeholder trust and patient care needs, to exchange information efficiently.
- Connectivity built on the Internet and other existing networks.
- The “build” of the new information environment happens incrementally, through accretion of sub-networks – many of which already exist but need to have the ability to be linked together to provide maximum benefits to patient care.
- The environment is private, secure, and is built on the premise of patient control and authorization.
- Personal health information remains with health care providers, patients and other trusted partners – and is accessed and exchanged only when it is needed, with proper authorizations and security.
- Creating a national, public interest Standards and Policy Entity (SPE) that recommends the standards and policies that comprise the Common Framework and the ongoing requirements for interoperability.
- Leveraging existing open, non-proprietary standards to enable the exchange of health information.
- Accurate patient identification based on uniform and standardized methodologies but without a new, mandated, national, unique health identifier.
- Record Locator Services (RLS) are created and controlled regionally or within other sub-networks, to help authorized parties learn where authorized and pertinent information is housed – but never containing that information.
- A mechanism for validating compliance with the standards of the Common Framework is required for the early phases, but the network becomes self-validating over time.
- The information environment facilitates growth, innovation and competition in private industry.
- Continuing investments in health information technology come from multiple, public and private sources. Incentives for adopting interoperable electronic records systems are built into routine payment and operations at the regional and local level and are tied to use of the Common Framework.