HiMSS

Statement of
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Introduction

Chairman Quayle, Ranking Member Edwards, members of the Subcommittee, thank you for the opportunity to testify before the Subcommittee today. I am Willa Fields and I am a Professor in the School of Nursing at San Diego State University in San Diego, California. Additionally, I was honored to be selected the Chair of the Board of Directors of the Healthcare Information and Management Systems Society (HIMSS) as of July 1st this year and this is my first opportunity to testify before Congress.

I am honored to have this opportunity to provide you the perspective of HIMSS, as well as my own, on the status of health information technology adoption in this country, including some of the challenges we still face as a Nation and recommendations on selected issues requiring Congressional support in the coming few years.

I have worked in the fields of clinical nursing, education, research, performance improvement, management, and information systems for more than 40 years. At San Diego State University, I teach Informatics, Personnel Management, and Quality Improvement in the graduate nursing program. My areas of research interest include exploration of practices that improve patient safety in the provision of patient care. Some of my specific investigations have included the effects of computerized

physician order entry on medication safety events and nurses' work, and attitudes, knowledge/skills, practice, and barriers to evidence-based practice (EBP).

From 2000 to 2006 I was the Vice President of Patient Care Systems in the Information Systems Department at Sharp HealthCare in San Diego, where I had responsibility for the patient care computer systems, including implementation of new core clinical systems that included physician order entry. I have published widely in the professional literature. I received my Doctorate in Nursing Science from the University of San Diego and a Master's of Science in Nursing from San Diego State University.

HIMSS and its Mission

HIMSS is a cause-based, not-for-profit organization exclusively focused on providing global leadership for the optimal use of information technology (IT) and management systems for the betterment of healthcare. Founded 52 years ago, HIMSS and its related organizations are headquartered in Chicago with additional offices in the United States, Europe and Asia. HIMSS represents nearly 50,000 individual members, of which more than two thirds work in healthcare provider, governmental and not-for-profit organizations. HIMSS also includes over 570 corporate members and more than 225 not-for-profit partner organizations that share our mission of transforming healthcare through the effective use of information technology and management systems. HIMSS frames and leads healthcare practices and public policy through its content expertise, professional development, research initiatives, and media vehicles designed to promote information and management systems' contributions to improving the quality, safety, access, and cost-effectiveness of patient care.

HIMSS is the primary organizer of National Health IT Week (NHIT), which this year was September 10-14, 2012. National Health IT Week is a collaborative forum where public and private healthcare constituents work in partnership to educate industry and policy stakeholders on the value of health IT for the U.S. healthcare system. National Health IT Week raises national awareness that comprehensive healthcare

transformation is not possible without system-wide adoption of health information technology to improve the quality of healthcare delivery, increase patient safety, decrease medical errors, and strengthen the interaction between patients and healthcare providers. This year we were joined by almost 260 partnering, government, corporate, and non-profit organizations in organizing and acknowledging NHIT Week. We were very gratified and appreciative that the President issued a Presidential Message in support of National Health IT Week, and that the U.S. Senate and the National Conference of State Legislatures passed resolutions supporting National Health IT Week 2012.

HIMSS adheres to four imperatives for the best use of information technology and management systems. These principles direct all of HIMSS' worldwide effort and leadership for the optimal use of information technology and management systems for the betterment of healthcare. Information technology and management systems must work toward:

- Improved Quality;
- Improved Safety;
- Increased Cost-Effectiveness; and,
- Increased Access to Care.

**Status of Health Information Adoption in America**

Although as a Nation we still have a ways to go, electronic health records adoption has passed the tipping point in America.   The evidence suggests that as a result of the HITECH Act (Health Information Technology for Economic and Clinical Health Act – included in the American Recovery and Reinvestment Act of 2009) and the substantial investment the public and private sectors have made in health information technology, a groundswell has been achieved in the adoption of Health IT/EHRs. I believe the time is very near when providers coming out of their medical training will not want to work in an environment without a state-of-the-art electronic health records system, including provider order entry, clinical decision support tools, and

interoperable information exchange capabilities across the country. More importantly, the time is rapidly approaching when informed patients, fully engaged in their own care and with access to discriminating information on the quality of care achieved by available providers, will include the level of health information technology as a key discriminating factor when selecting a provider and hospital.

Status of EHR Adoption in America

The adoption rate of EHR systems has been increasing steadily. The percentage of physicians and hospitals that have adopted a basic EHR system, which includes some meaningful use requirements but not all, has increased from 11.5 percent in 2010 to 18 percent in 2011. Although comprehensive EHR adoption in hospitals has progressed more slowly, it is also trending upwards, increasing from 3.6 percent in 2010 to 8.7 percent in 2011:

**Changes in the Adoption of Basic and Comprehensive EHR Systems Among US Hospitals, 2008-11**
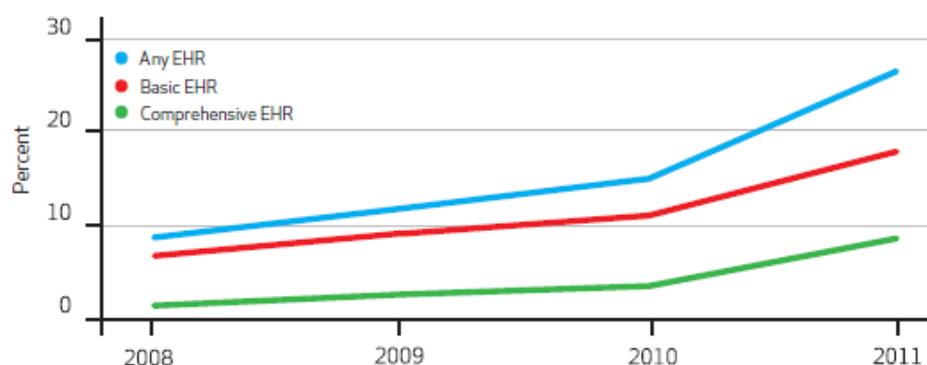
SOURCE Authors' calculations of data from the American Hospital Association annual survey information technology supplement. NOTE All analyses were statistically weighted for potential nonresponse bias.

Office-based physicians are also adopting electronic health records systems at increasing rates. In 2011, the Centers for Medicare and Medicaid Services (CMS)

released National Ambulatory Medical Care Survey data that reveals the percentage of physicians with basic EHR systems:

Percentage of Office-based Physicians with EMR/EHR Systems: United States 2001-2009 and Preliminary 2010-2011
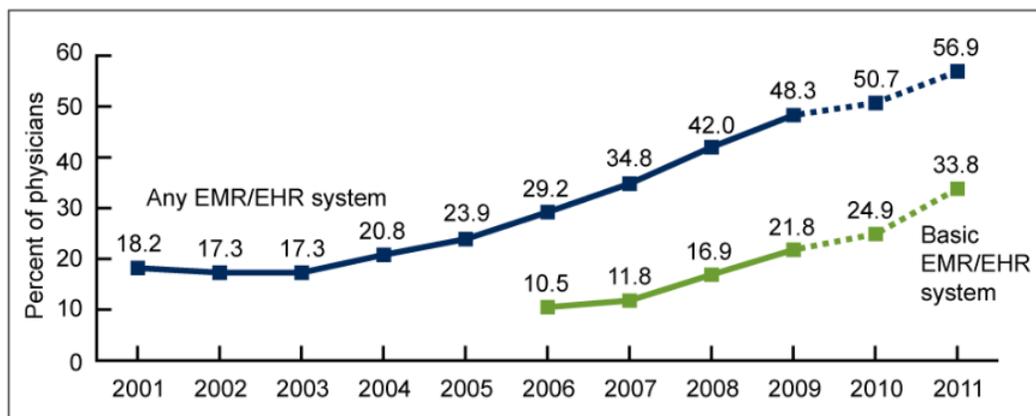
NOTES: EMR/EHR is electronic medical record/electronic health record. "Any EMR/EHR system" is a medical or health record system that is all or partially electronic (excluding systems solely for billing). Data for 2001–2007 are from the in-person National Ambulatory Medical Care Survey (NAMCS). Data for 2008–2009 are from combined files (in-person NAMCS and mail survey). Data for 2010–2011 are preliminary estimates (dashed lines) based on the mail survey only. Estimates through 2009 include additional physicians sampled from community health centers. Estimates of basic systems prior to 2006 could not be computed because some items were not collected in the survey. Data include nonfederal, office-based physicians and exclude radiologists, anesthesiologists, and pathologists.
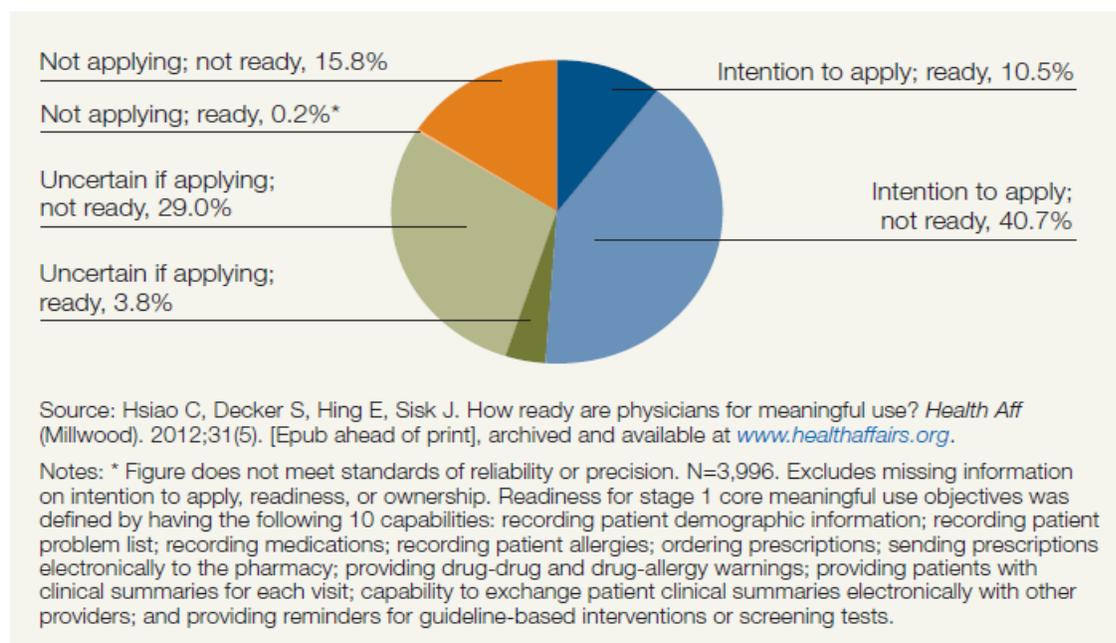SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Medicare and Medicaid EHR Incentive Programs Registration and Payments to Date

The Centers of Medicare and Medicaid Services (CMS) opened registration for the EHR Incentive Programs in January 2011 and began distributing Medicare incentive payments in May 2011. Since then, the number of participants has been climbing at an increasing rate. Through September 2012, more than 307,000 Eligible Professionals and Eligible Hospitals had registered in the Medicaid and Medicare incentive programs. Over 158,000 of these providers and hospitals have met meaningful use requirements and have already received payments, totaling nearly $4 billion from the Medicare EHR Incentive Program and $3.5 billion from the Medicaid EHR Incentive Program. These numbers already exceed expectations for 2012.

Providers Planning to Attest to Meaningful Use

The majority of physicians and hospitals are preparing to apply to the incentive programs. To achieve meaningful use, they must have electronic health records systems that meet Meaningful Use core objectives (ten for physicians, twelve for hospitals). While only 10.5 percent of physicians are ready to implement the core objectives, 40.7 percent plan to apply:

Physicians' Readiness For Ten Stage 1 Core Objectives, By Intention to Apply, 2011

Not applying; not ready, 15.8%

Not applying; ready, 0.2%*

Uncertain if applying; not ready, 29.0%

Uncertain if applying; ready, 3.8%

Intention to apply; ready, 10.5%

Intention to apply; not ready, 40.7%

Source: Hsiao C, Decker S, Hing E, Sisk J. How ready are physicians for meaningful use? *Health Aff* (Millwood). 2012;31(5). [Epub ahead of print], archived and available at *www.healthaffairs.org*.

Notes: * Figure does not meet standards of reliability or precision. N=3,996. Excludes missing information on intention to apply, readiness, or ownership. Readiness for stage 1 core meaningful use objectives was defined by having the following 10 capabilities: recording patient demographic information; recording patient problem list; recording medications; recording patient allergies; ordering prescriptions; sending prescriptions electronically to the pharmacy; providing drug-drug and drug-allergy warnings; providing patients with clinical summaries for each visit; capability to exchange patient clinical summaries electronically with other providers; and providing reminders for guideline-based interventions or screening tests.

Hospitals are also approaching widespread implementation of Meaningful Use criteria. Between 2010 and 2011, the percentage of hospitals ready to apply increased from 4.4 percent to 18.4 percent. While 18.4 percent have achieved all twelve core objectives, an additional 33.6 percent have implemented between nine and eleven objectives and are nearing Meaningful Use classification.

HIMSS' Own Electronic Medical Record Adoption Model (EMRAM) Scores

HIMSS Analytics conducts an annual study on available information systems data and assigns Electronic Medical Record Adoption Model (EMRAM) scores to hospitals according to their stage of EHR implementation. The scores employ seven stages, delineating more specific categories of system implementation than the basic and comprehensive divisions used elsewhere. Stage 0 is an all paper environment while Stage 7 is a paperless environment with interoperable information exchange capability. Since HIMSS Analytics introduced the EMRAM model in 2006, 1.8 percent of U.S. hospitals have achieved Stage 7 on the model.   Similar to other previously identified trend data the adoption of EHR systems, HIMSS EMRAM data also indicates clear upwards adoption trends, at increasing rates. The number of hospitals achieving a minimum of Stage 5 or higher on the EMRAM model has increased from 8.7 percent at the end of 2010 to 21.1 percent as of September 2012. This increase at Stage 5 and above represents a huge improvement in patient safety.

The stages, their descriptions, and quarterly percentages are listed in the table below:

US EMR Adoption Model℠

Stage	Cumulative Capabilities	2011 Q2	2012 Q3
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	1.1%	1.8%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	4.0%	7.3%
Stage 5	Closed loop medication administration	6.1%	12.0%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	12.3%	14.2%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	46.3%	41.3%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	13.7%	11.2%
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed	6.6%	4.8%
Stage 0	All Three Ancillaries Not Installed	10.0%	7.4%

Data from HIMSS Analytics™ Database ©2012   N = 5,310   N = 5,319

Interoperability Status

The impactfulness of electronic health record systems adoption is highly dependent upon health information exchange (HIE), since EHR data can most effectively be useful if it can be exchanged across healthcare delivery systems, EHR vendors, and health information exchanges. HITECH includes elements of information exchange in the Meaningful Use criteria and provides for state investment in health information exchange infrastructure (referred to as HIEs) through the State Health Information Exchange Cooperative Agreement Program. While in Stage 1 of Meaningful Use, however, the growth of HIE has been somewhat limited. Now that the Meaningful Use Stage 2 final rule has been published and new standards have been set, we fully expect to see providers and hospitals creating a significantly expanded capacity to share information. Widespread HIE will emerge from multiple business models rather than a single plan.

Electronic Health Records Certification Program

Another measure of the progress we are making is the ONC Certification Program for Electronic Health Record (EHR) technologies. The program is designed to ensure EHRs meet the adopted standards and certification criteria to help providers and hospitals achieve Meaningful Use (MU) objectives and measures established by the Centers for Medicare and Medicaid Services (CMS). Eligible professionals and eligible hospitals who seek to qualify for incentive payments under the Medicare and Medicaid EHR Incentive Programs are required to use certified EHR technology.

As of the end of June this year the Certified Health IT Product List (CHPL), the authoritative, comprehensive listing of Complete EHRs and EHR Modules that have been tested and certified under the Office of the National Coordinator included 2591 ambulatory and 859 certified inpatient EHRs and EHR Modules.

Return on Investment of Health IT

Perhaps in many years healthcare could have caught up with other industries in the adoption of information technology without the Meaningful Use Program including the EHR Incentive Program, but in the meantime quality of care and access to care would have continued to suffer and the Nation would have continued to pay much more for healthcare than necessary.

From both a cost of care and a quality of care perspective the nation cannot wait for a casual uncoordinated approach to this major national problem. A **RAND Corporation study** projected cost-savings of $80 billion a year from EHRs. http://content.healthaffairs.org/content/24/5/1103.full. A 2005 article by the same authors in Health Affairs estimated Net Potential Savings (Efficiency Benefits Over Adoption Costs) For Hospital And Physician Electronic Medical Record (EMR) Systems Adoption During A Fifteen-Year Adoption Period (2004–2018) at over $580 billion. http://content.healthaffairs.org/content/24/5/1103.full.

Additionally the RAND Study estimated that system-wide implementation of EHRs would eliminate 200,000 adverse drug events with Computerized Physician Order Entry, and avoid thousands of deaths by improving preventative care and chronic-disease management. Additionally, some improvements in quality and efficiency have been documented. In 2008, HIMSS presented documented examples of both soft and hard ROI in recommendations directed toward the Obama administration.

The Success of the Meaningful Use Program

The Meaningful Use Program, authorized by the HITECH provision of the American Recovery and Reinvestment Act of 2009 has been an undeniable success for the Nation. The data to support this conclusion comes from government sources and HIMSS' own analytics. HIMSS continues to be a very strong supporter of the Meaningful Use Program and the EHR incentives it provides to adopters of EHRs. The

staged approach to adoption of health information technology by providers and facilities tied to the demonstrated use of these capabilities in a "meaningful way" is producing real results.

Without the Meaningful Use Program we would not be nearly as far along this path to transforming healthcare as we are. Not only the substantial public and private investment in adopting electronic heath records, including the Incentive Program, but a carefully choreographed three-stage Meaningful Use Program of health information technology criteria, electronic health records certification, standards, and interoperability have resulted in a more rapid and orderly transition and faster adoption nationwide.   The Meaningful Use Program is the mechanism by which we are ensuring we are getting value for our national investment. The faster we keep this progress moving, the sooner we will realize real savings in healthcare costs, the sooner we impact the quality of healthcare, the sooner individual clinical care is improved, and the sooner we can realize the promises of real population health management.

Without the Meaningful Use Program we would not be surely and steadily moving toward system-wide interoperability and nationwide health information exchange capability.

On September 4, 2012, the Department of Health and Human Services released the Meaningful Use Stage 2 and the Standards & Certification Criteria Final Rules. HIMSS believes the Stage 2 regulations allow the healthcare community to continue the necessary steps to ensure that health information technology will support the transformation of healthcare delivery in the United States by placing greater emphasis on the next level of health information exchange and online patient access to their health records.

This Stage 2 final rule expands upon the Stage 1 criteria with a focus on encouraging the use of health IT for continuous quality improvement at the point of care and the

exchange of information in the most structured format possible. Included in this regulation are more demanding requirements for e-prescribing, incorporating structured laboratory results, and the expectation that providers will electronically transmit patient care summaries with each other and with the patient to support transitions-in-care. Patient engagement is an important focus of Stage 2, which includes measures that require patient activity.

Portions of this final rule, which are applicable beginning in payment year 2013, specify the Stage 2 criteria that eligible professionals (EPs), eligible hospitals (EHs), and critical access hospitals (CAHs) must meet in order to qualify for Medicare and/or Medicaid EHR incentive payments. Additionally, this regulation specifies the timeline for payment adjustments for EPs, EHs, and CAHs for failing to demonstrate meaningful use of certified technology. This final rule also revises the previous Stage 1 criteria, details new clinical quality measures and reporting mechanisms, and discusses volume calculation within the Medicaid program.

In our initial review of the Medicare and Medicaid Programs; Electronic Health Record Incentive Program--Stage 2 Final Rule from the Centers for Medicare and Medicaid, HIMSS identified several significant policy decisions, including:

- Setting the Meaningful Use Stage 2 start date as 2014, which will maximize the number of eligible professionals (EPs), eligible hospitals (EHs), and critical access hospitals (CAHs) prepared to meet Stage 2 requirements
- Allowing a 90-day reporting period in Year 1 of Stage 2, which is consistent with HIMSS' recommendations on the proposed rule
- Accepting 2013 as the attestation deadline for EPs, EHs, and CAHs to avoid a Medicare payment adjustment, and allowing for exceptions, including limited availability of information technology
- Finalizing Clinical Quality Measure submission specifications for EPs, EHs, and CAHs

The Office of the National Coordinator for Health Information Technology's (ONC) efforts in the [Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition](#) streamline the administrative process of certifying EHR products. We note that the Final Rule both adopts and concurs with a number of [HIMSS recommendations illustrative of the collaborative approach the Department of Health and Human Services continues to employ with provider and other stakeholders across the country](#). The HIMSS response to the proposed rule had requested several points of clarity and additional specification around certain criterion, and we commend the government's thorough review and inclusion of additional information to clarify many topics.

Stage 3 is planned for a final rulemaking in early 2014 with Stage 3 starting in 2016.

Health Information Technology Provisions of the Patient Protection and Affordable Care Act

In addition to its more controversial healthcare reform components, the Patient Protection and Affordable Care Act (ACA) also contained important health information technology related provisions. Each of the following provisions of the ACA is important to helping America realize the full benefits of the investment the public and private sectors have made in health information technology.

Accountable Care Organizations (ACOs) - The Medicare ACO Program or the Medicare Shared Savings Program (MSSP) authorized by the ACA encourages healthcare providers to manage and coordinate all care for patients through an ACO (Section 3022). ACOs will be required to promote evidence-based medicine, encourage patient involvement, report on quality and cost measures, and coordinate care across all settings, and can be eligible to receive payments for shared savings. The ACO program requirements will depend on the use of health IT, the integration of EHRs and electronic prescribing, deployment of health information capabilities, the use of

tele-health and other enabling technologies to engage patients and providers in a variety of healthcare settings. CMS published the Accountable Care Organization Final Rule on October 20, 2011.

Quality Reporting - Several ACA provisions require different agencies, including HHS, CMS and ONC, to develop mechanisms to collect data on quality, establish national standards for data collection and interoperability, and create strategies to utilize healthcare data to improve quality of care overall. EHRs and other reporting tools are essential for aggregating and analyzing data for quality improvements. The ACA also includes reporting requirements for group or individual health insurance issuers, and extends the Physician Quality Reporting Initiative (PQRI) program, which integrates PQRI's quality reporting measures with reporting requirements for meaningful use of EHRs, through 2014.

Quality Measures Development - The ACA directs the establishment of new quality measures where no quality measures exist, and to improve, update, and expand existing quality measures with the help of health IT. Preference in providing grants to aid in developing quality measures is authorized for providers that demonstrate meaningful use of Health IT. Programs such as the CMS "Innovation Center" and "National Pilot Program on Payment Bundling" require reporting of quality measures and will use health IT (such as home telehealth, patient registries, EHRs, health information exchange capabilities and other technology) to report these measures and improve quality of care.

Availability of De-Identified Medicare Data – The ACA authorizes HHS to release extracts of de-identified Medicare claims data for items and services under Medicare parts A, B and D to be made available to measure quality of provider and supplier performance.

Health IT Interoperability Standards and Protocols - The ACA requires the HHS Secretary and the Health IT Policy and Standards Committees to develop

interoperable and secure standards for the enrollment of individuals in federal and state health service programs. Their [recommendations](#), published September 17, 2010, include initial standards and protocols that encourage adoption of modern electronic systems and processes that allow a consumer to seamlessly obtain and maintain the full range of available health coverage and other human services benefits.

Administration Simplification - The ACA establishes a single set of operating rules regarding eligibility and claims status, electronic funds transfers, healthcare payment and remittance rules, health claims, enrollment in health plans, health plan premium payments, referral authorizations, and unique health plan identifiers, for the purpose of simplifying the administration of healthcare. It also amends the HIPAA provisions of the Social Security Act relating to Transaction Standards to provide for "operating rules" for the electronic exchange of information.

State Health Insurance Exchanges (HIX) and Consumer Access to Data - The ACA recognizes that health IT is crucial towards developing HIXs and supporting consumer access to information regarding health insurance. HIXs will provide individuals and small businesses with a "one-stop shop" to find and compare affordable, quality health insurance options. The law also creates a consumer-friendly website where consumers can compare health insurance coverage options and pick the plan that is best for them (Section 1311). The interoperable and secure standards include processes that allow a consumer to seamlessly obtain and maintain the full range of available health coverage and other human services benefits.

Fraud and Abuse – The ACA requires entities that offer health insurance options through the State Insurance Exchanges to include the use of technology and data to enable real-time investigation of potential fraud and abuse. The ACA also requires manufacturers of drugs, medical devices, biologics and medical supplies under federal programs to report payment data to be made publicly available online; expands the Office of the Inspector General's access and ability to use this data; and grants ACO

participants responsibility for detecting fraud related to the electronic exchange of information and data sharing. The ACA also requires CMS to expand its integrated data repository to include Medicaid and other federal agencies' data in order to help detect fraud, waste and abuse.

Health IT Workforce – To address the significant increase in demand for a trained Health IT workforce created by the HITECH Act and the Meaningful Use program, the ACA authorizes community-based interdisciplinary "health teams" to provide support services and implement Health IT; the "National Healthcare Workforce Committee" to address the demand for labor in the Health IT field; and the "Interagency Working Group on Health Quality" to address the supply of qualified health IT specialists. Other provisions set up primary care training and health IT enhancement programs, federal grants for training in Health IT, and require the HHS Secretary to conduct a project that updates nursing practices and facilities for the use of Health IT.

Challenges and Issues to be Addressed:

Interoperability

Since the passage of the HITECH Act, a new process for oversight of health IT interoperability and standards was implemented through the Office of the National Coordinator for Health IT (ONC). While forward progress is being made, especially in the Standards and Interoperability (S&I) Framework, we encourage coordination of efforts to ensure health IT standards and specifications that are recommended in subsequent stages of Meaningful Use include standards for transport, financial transactions, and basic security, which are essential for achieving interoperability.

HIMSS also urges CMS, ONC and NIST to ensure that all contractual engagements for standards and interoperability are coordinated, thereby complementing rather than duplicating each agency's efforts towards creating testing procedures, tools, services

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and reference implementations. These efforts should also embrace a transparent and open consensus process with the private sector.

We also recommend that HHS:

1. Promote the adoption of implementation guidance for all selected international standards;
2. Further adopt data transport, financial transactions, security and health information exchange standards as soon as possible;
3. Publish the process and schedule for harmonizing standards; and
4. Set up one repository (such as the National Library of Medicine) for licensure and access to all standards and implementation guides.

Necessity for a Consistent National Patient Data Matching Strategy

One of the largest unresolved issues in the safe and secure electronic exchange of health information is the need for a nationwide patient data matching strategy to ensure the accurate, timely, and efficient matching of patients with their healthcare data across different systems and settings of care.

In 1996, the Health Insurance Portability and Accountability Act (HIPAA) mandated *"a Unique Individual Identifier for healthcare purposes."* However, the 1999 Omnibus Appropriations Act (PL 105-277) stated:

> *"SEC. 516. None of the funds made available in this Act may be used to promulgate or adopt any final standard under section 1173(b) of the Social Security Act (42 U.S.C. 1320d-2(b)) providing for, or providing for the assignment of, a unique health identifier for an individual (except in an individual's capacity as an employer or a health care provider), until legislation is enacted specifically approving the standard."*)

This language has been carried forward in Labor HHS Appropriations bills ever since, including FY13.

Since 1999, three successive administrations have interpreted the Appropriations language to mean no study, no standards, and no criteria, i.e., not addressing the issue at all. Others believe that the language simply means no attempt to finalize a rule or solution until HHS reports to Congress on how any proposed solution will protect patient privacy and security.

With passage of the HITECH Act in 2009, Congress has placed a clear mandate on the nation's healthcare community for adoption of interoperable electronic health records (EHRs) including financial incentives for adopting EHRs and disincentives of reduced Medicare reimbursement rates for not doing so. Additionally, the Administration has made health information technology (IT) and the ability to exchange data an essential component of the nation's healthcare transformation strategy; Meaningful Use Stage 2 of the Medicare and Medicaid EHR Incentive Program emphasizes this focus on health information exchange (HIE). Furthermore, data is increasingly generated outside the traditional care environment, expanding the need for sound approaches to the matching of patient data.

However, the lack of clear Congressional intent as a result of the Labor HHS Appropriations bill provision poses a huge impediment to the optimal adoption of health information exchange, endangering patient safety while raising costs. As providers increasingly communicate using HIEs, the risk of mistakenly matching data with the wrong patient exponentially increases. Compromise in data integrity may occur as information is exchanged between different entities using different hardware and software.

Patient-data mismatches remain a significant and growing problem. According to industry estimates, between 8 and 14 percent of medical records include erroneous information tied to an incorrect patient identity. The result is increased costs,

estimated at hundreds of millions of dollars per year to correct information. These errors can result in serious risks to patient safety. Mismatches, which already occur at a significant rate within an individual institutions and systems will significantly increase when entities communicate among each other via HIE —a Meaningful Use Stage 2 requirement – that may be using different systems, different matching algorithms, and different data dictionaries.

Since Congress enacted the restriction in 1999, health information technology has made significant strides toward improving clinical care, enhancing patient outcomes, and controlling costs. Similar advances have been realized in the area of protecting the privacy and security of health information. Nationwide healthcare transformation is virtually impossible without meaningful, system-wide adoption of EHRs and HIE, including a technologically advanced nationwide patient data matching strategy.

HIMSS does not recommend a particular technology or solution but, rather, is encouraging Congress to direct a study of the issue and the approaches to a nationwide strategy to health information exchange and optimized patient-data matching across systems, while enhancing patient safety, privacy and security. A technologically advanced nationwide patient data matching strategy does not mean that every system has to use the same patient identity method but, rather, means creating national standards and solutions that can be used for exchanging information across systems.

An informed nationwide patient data matching strategy would enhance, not compromise, the privacy and security of patient health information. Such a nationwide patient data matching strategy does not mean a national identity number or card. Technological advances now allow for much more sophisticated solutions to patient identity and privacy controls, including patient consent, voluntary patient identifiers, metadata identification tagging, access credentialing, and sophisticated algorithms.

In the absence of a nationwide patient data matching strategy, the states, HIEs, large health plans, various consortiums, and individual electronic health record vendors have had to develop individual patient identity solutions that do not necessarily work well across systems. As our nation moves forward with greater urgency toward system-wide health information exchange, this essential core functionality to ensure the accurate match of a patient with his or her information remains conspicuously absent. The multitude of different solutions and the lack of a national coordinated approach pose major challenges for our health information infrastructure and result in millions of dollars of unnecessary costs. Patient safety, privacy, and security depend on getting this core element right, and soon.

Congress should include language in the Labor HHS Appropriations bill to clarify that it does not prohibit federal agency study and leadership developing an appropriate consistent nationwide patient data matching strategy. Rather, HHS has clear Congressional authority to exercise its appropriate leadership role. Consistent with the Labor HHS Appropriations bill language, Congress expects the HHS to commission an appropriate study of a nationwide patient data matching strategy and provide appropriate recommendations to Congress. Such study should include the prevalence and costs of patient-data mismatches nationwide, the costs of correcting these errors, the patient safety risks of NOT having a nationwide strategy, the benefits and implications of applying a nationwide strategy, the impact on privacy, security, and safety of a nationwide strategy, current and near-term available technologies, the costs/benefits and practicality of adopting a nationwide strategy, and best industry practices currently employed to ensure acceptably reliable patient data matching across systems while enhancing patient privacy, security, and safety, with report back to the committee not later than six months.

Harmonization of Federal and State Privacy Laws

The ability to exchange health information confidently and securely across healthcare systems is a fundamental requirement to transforming America's healthcare delivery

system, achieving improved quality clinical outcomes, and controlling costs. With passage of the Health Information Technology for Economic and Clinical Health Act (HITECH Act; included in the American Recovery and Reinvestment Act of 2009), Congress placed a clear priority on the adoption of interoperable electronic health records (EHRs), including financial incentives for adopting EHRs and disincentives of reduced Medicare reimbursement rates for not doing so. Additionally, acting upon Congress' clear guidance to make the financial incentive requirements increasingly stringent over time, the administration has made health information exchange (HIE) an essential component of the nation's healthcare transformation strategy. Meaningful Use Stage 2 of the Medicare and Medicaid EHR Incentive Program focuses on HIE.

Conflicting privacy and security laws are among the most serious potential barriers to HIE adoption. Legal barriers to HIE implementation are pronounced and pervasive, from the lack of laws in some states, too many conflicting laws, legal standards and regulations in other cases. There is a lack of national guidelines for the interpretation of these laws and some existing state and federal laws are not well-adapted to HIEs. Each state has its own privacy and security laws that often conflict with other state or federal laws, causing more confusion on which law(s) applies in a given situation.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA; Pub.L. 104-191, 110 Stat. 1936), as well as its amendments in the HITECH Act, sets a floor for national privacy laws regarding Personal Health Information (PHI). HIPAA generally permits the use and disclosure of information for treatment, payment and healthcare operations, without the patient's written consent. However, HIPAA is superseded by state privacy laws that are more stringent. States' privacy laws have varying levels of stringency, which makes the exchange of information between and among states challenging as the entities must know and comply with federal law, the laws of the receiving and sending states, and interpret how those laws interact.

Examples of conflicting federal and state privacy laws that serve as barriers to HIE:

Clinical Laboratory Improvement Amendments (CLIA) (a federal law for clinical research) restricts the providers with whom a laboratory may share health information, but states that a state law may also specify who is authorized to receive a clinical laboratory test result. Only seven states have licensing laws that allow direct access to laboratory test results by the patient. State laws have varying levels of stringency in regard to lab results:

a) New York State requires the provider's written consent to issue lab reports to patients except for a few standard tests results such as blood type and states that the results belong to the provider and not the patient.

b) In New Hampshire, PHI belongs to the patient, and the laboratory may release test results only to the ordering provider without the patient's consent.

c) Oregon permits the release of test results directly to the patient seven days after receiving the request from the patient; prior access to test results requires a written authorization from the ordering physician. After the waiting period, a patient may access the results without the provider's concurrence.

The lack of laws, legal standards, regulations, and guidance specific to the privacy and security concerns related to HIE is also a barrier to HIE adoption and implementation. Data stewardship, the responsibility, guided by principles and practices, to ensure the knowledgeable and appropriate use of data derived from individuals' personal health information[1], is inconsistent. For nationwide HIE to work, it is crucial to determine which jurisdiction is responsible for providing protections in the data exchange process or alternatively, develop rules for exchange based on a set of defined and accepted principles.

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[1] http://www.ncvhs.hhs.gov/090930lt.pdf

Differences in authentication requirements also greatly hinder PHI exchange. There is currently no specific legal requirement for any particular type of authentication information or processes for electronically "signing" EHRs. Additionally, all personal health information (PHI) created, received, maintained or transmitted by an organization is subject to the federal HIPAA Security Rule, which requires covered entities to ensure the confidentiality, integrity and availability of PHI, and identify and protect against threats to security or impermissible uses or disclosures. The HIPAA Security Rule is aimed at regulating individual healthcare organizations and is not specific to HIEs.

Finally, the lack of understanding about how all of these laws interact with each other, and to whom they apply and when, creates an enormous question regarding liability. Private and federal right of actions regarding patient privacy is extensive and can be harsh with respect to damages. A reconciliation of the differing laws and standards across a national scale being very difficult, developing rules for exchange based on a set of defined and accepted principles could lead to more innovation and implementation of HIEs and a decrease in potential liability.

HIMSS recommends that Congress support harmonization of federal and state privacy laws and regulations by: (1) when considering future legislation, be aware of the roadblocks to information exchange created by the current differing laws and regulations; (2) convene hearings on the challenges and possible solutions to mitigating the divergence of federal and state privacy and security laws and regulations; and (3) direct HHS to promulgate the ONC Privacy and Security Framework to protect personal health information while eliminating barriers to interstate exchange of health information.

Long term Sustainability of Public and Private Health Information Exchanges

Health Information Exchange (HIE) is a key building block towards realizing many industry initiatives including Meaningful Use, Care Coordination, Accountable Care Organizations and shifting from traditional fee for service to new emerging payment models. HIE can, and is often referred to as both a noun and a verb. The noun HIE (the organization providing governance oversight and/or operational management) and the verb HIE (the process of data exchange within an organization and across multiple organizations) are both critical for achieving the goals of the industry as well as supporting improved patient care quality.

HIE organizations include state-level health information exchanges, regional health information exchanges and the private sector exchanges such as those supported by hospitals and health systems. HIEs can support many state and federal initiatives including Medicaid, public health initiatives, bio-surveillance and state insurance exchanges.

Privacy and Security Laws and Regulations – lack of consistency across the federal and states.

The ability to exchange health information confidently and securely across healthcare systems is a fundamental requirement to transforming America's healthcare delivery system, achieving improved quality clinical outcomes, and controlling costs. Conflicting privacy and security laws are among the most serious potential barriers to achieving health information exchange.

Legal barriers to information exchange implementation are pronounced and pervasive. Each state has its own privacy and security laws, regulations and program requirements that often conflict with those in other state or federal laws, causing confusion on which law(s) applies in a given situation. There is a lack of guidance on the interpretation of these laws and some existing state and federal laws are not

well-adapted to health information exchange. The lack of understanding about how all of these laws interact with each other, and to whom they apply and when, creates an enormous question regarding liability. Private and federal right of actions regarding patient privacy is extensive and can be harsh with respect to damages.

The lack of guidelines on data stewardship, unclear liability standards, and differing privacy and security laws make the interstate exchange of health information increasingly complicated and greatly impedes health information exchange implementation.

Patient Access to PHI and Patient Engagement

HIMSS support's the Department of Health & Human Services' Office of the National Coordinator for Health Information Technology (ONC) efforts to empower individuals to be partners in their healthcare through health IT. HIMSS support the national campaign to educate and engage the public on the value and benefits of health information technology (health IT) in improving health and health care.

HIMSS has pledged to lead the effort to equip clinicians and other front-line personnel with the education, tools and resources needed to make smart decisions on when and how to e-engage consumers to improve the quality, cost-effectiveness, safety and access to healthcare. Through outreach to all facets of HIMSS stakeholders – from leaders to point of care professionals – HIMSS will provide opportunities to members and non-members for involvement in and education on the importance of, and processes for, e-engagement with consumers.

ICD-10 Adoption

HIMSS is a strong supporter of the most rapid nationwide adoption of the International Classification of Diseases or ICD-10 Implementation. We appreciate the recent release by the Secretary of Health and Human Services of the final rule adopting a unique

health plan identifier (HPID) in response to requirements in the Affordable Care Act to cut red tape in the healthcare system and to save up to $6 billion over ten years. The rule also makes final a one-year proposed delay – from Oct. 1, 2013, to Oct. 1, 2014– in the compliance date for use of the ICD-10 diagnosis and procedure codes.

ICD-10 represents one of the most comprehensive projects in healthcare today with far-reaching impacts throughout the healthcare delivery system.

- ICD-10 is the very basic foundation for other healthcare transformation efforts, including Meaningful Use.
- ICD-10-CM/PCS will have positive implications for patients. Better clinical intelligence data can describe multiple levels of severity, which should result in improved care algorithms to support accurate, more individualized patient care and lead to or promulgate improved outcomes.
- ICD-10-CM/PCS will provide more accurate payment structures for providers over time.
- ICD-10 has the potential to reduce costly requests for health information.
- Increased research capabilities, quality metrics and public health tracking and reporting made possible due to ICD-10 cannot be overemphasized.
- The ICD-9 numbering system cannot accommodate today's current medical technology used for patient procedures.
- Continued use of ICD-9, with its limited codes, will hinder progress towards clinical best practice and evidence-based medicine.

HIMSS' survey of providers suggests that most of the larger providers are taking the necessary steps to be ready for ICD-10. Based on research released at the 2012 HIMSS Annual Conference & Exhibition, nearly 90 percent of the 302 healthcare IT

executives responding to HIMSS' 23rd Annual Leadership Survey said they expect to complete the conversion to ICD-10 by the original deadline. In fact, two-thirds of respondents (67 percent) indicated that implementing ICD-10 continues to be their top focus for financial IT systems.

To assist providers in achieving ICD-10 readiness by the newly established October 1, 2014 deadline, HIMSS offers a comprehensive and credible portfolio of ICD-10 related tools, resources, education, and community for health providers. HIMSS and AHIMA have released the "ICD-10 Critical Pathway to Getting Started – 2012 and Beyond." This readiness tool is designed to help providers just starting on their ICD-10 conversion efforts.

Additionally, HIMSS and the Workgroup for Electronic Data Interchange (WEDI) are taking leadership in collaborating with healthcare stakeholders across the industry to implement an ICD-10 National Pilot Program with end-to-end testing and Regional Solutions Centers. This program will publish incremental outcomes data to assist providers in their implementation through the ICD-10 PlayBook as soon as information becomes available. HIMSS seeks the support and involvement of CMS in this program.

Mobile Technology

The emerging mobile technologies hold enormous promise for healthcare especially in the areas of patient engagement, remote patient monitoring, patient information and education, and home care to name a few. The use of mobile devices is bolstered by the fact that over 95.6 percent of all Americans live within the coverage of one of 69 mobile broadband networks. mHealth, short for mobile health technologies, includes devices such as tablets, smartphones, wearable sensors, and applications (apps). Mobile technologies also present a major opportunity to shift the cost curve of healthcare. However, a number of barriers prevent the adoption of mobile devices as a solution to emerging healthcare problems which include a complex regulatory

environment, limited incentives to adopt, provider reimbursement issues, and privacy and security concerns.

HIMSS recommends Congress should continue to foster an environment of interagency support; work quickly to remove barriers to advancing mHealth technologies; address broadband availability issues, and provide a regulatory framework that is responsive to the needs of patients, providers, and the emerging mHealth industry.

HIMSS Recommendations for Congress

In conclusion, in order to improve the quality of healthcare for all Americans while also controlling costs, HIMSS recommends that Congress should:

1. Continue its strong bipartisan support for the adoption and use of electronic health records and interoperability.

2. Continue to support and sustain the Meaningful Use and Electronic Health Records Programs.

3. Direct the administration to initiate an appropriate study of a nationwide patient data matching strategy with a report back to Congress.

4. Support harmonization of federal and state privacy laws and regulations to encourage the exchange of health information across health systems, payers, and vendor systems.

5. Continue to support programs and services to educate providers and provider organizations on how Health IT can and should be used to engage patients in their healthcare with personal health data in a secure manner.

6. Continue to support and sponsor pilot programs addressing the collection, analysis and management of clinical data for quality reporting purposes to assist providers and provider organizations make informed decisions for public health, patient care and business purposes.

7. Preclude any additional delay in the nationwide implementation of ICD-10, International Classification of Diseases beyond the current October 1, 2014 deadline.

Conclusions

EHR adoption and implementation has passed the tipping point in America. The evidence, including data from the Centers for Medicare and Medicaid Services , the Centers for Disease Control and Prevention, and HIMSS Analytics' analysis suggests that, as a result of the HITECH Act and the substantial investment the public and private sectors have made, a groundswell has been achieved in the adoption of health IT/EHRs. We believe the time is very near when informed patients with access to information on the quality of care delivered by available providers will consider the providers' impactful use of health IT as a key factor when selecting a caregiver and care setting.

Clearly, the Nation would not have made the significant progress toward EHR adoption and health information exchange (HIE) that is has without the Meaningful Use Program authorized by the HITECH Act of 2009.

The public dialogue, open consensus-building process, standards based approach, and phased implementation provided by the Meaningful Use process have been critical to bringing the country to the current level of accomplishment and rapidly increasing adoption rates that have been achieved.

There is more work to be done especially on the issues I have discussed including interoperability and health information exchange across systems, and privacy and security. HIMSS recommends that in order to improve the quality of your constituents' healthcare while also reducing costs, Congress should continue its strong bipartisan support for Health Information Technology.

I and my 50,000 HIMSS professional colleagues stand ready to work with Congress and the administration to make the transformation of healthcare in America a reality, through the implementation of health information technology. Thank you for the opportunity to speak with you today. I would be happy to answer your questions.