



ARRA and Meaningful Use: How Siemens Helps You to Get There

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“Siemens is committed to ensuring that any customer who intends to seek meaningful use incentive monies will be able to do so through their Siemens solutions.”

Janet Dillione, CEO, Siemens Health Services

Introduction

Siemens is committed to helping customers achieve “meaningful use” of healthcare information technology under the American Recovery and Reinvestment Act (ARRA). The proposed meaningful use definition recommends a phased-in approach to addressing ARRA requirements, introducing IT infrastructure improvements incrementally over time. To maximize customer benefit from the opportunity, we are gearing our efforts to help customers achieve meaningful use in the initial years of the program as well as to provide ongoing support in this exciting new era of healthcare IT.

Even before ARRA was signed into law, Siemens experts helped to shape relevant public policy, serving as a voice for our customers in defining key ARRA requirements. That participation gives Siemens insight in designing technologies that not only meet those requirements, but also help our customers achieve improvements beyond the scope of ARRA.

Siemens participates in key groups responsible for defining standards and policies related to ARRA. These include HIT Policy Committee – Meaningful Use Work Group, the HIT Standards Committee – Clinical Operations Workgroup, the CCHIT Commission, CCHIT committees, HITSP committees, and standards organizations such as HL7 and X12. Siemens experts contribute to these groups as board members, chairpersons, co-chairs, and general members.

As a result, Siemens is well positioned to provide our customers with solutions addressing the key strategic priorities related to ARRA requirements. Here are some of the ways Siemens can help.

Achieving Meaningful Use Using a Certified EHR

Here is what we know today: The definition of “meaningful use” (MU) is and will continue to be the key driver of the requirements for receiving ARRA funding. The HIT Policy Committee (HITPC) MU workgroup has prepared a matrix of healthcare goals and criteria that define meaningful use and how the requirements of a “meaningful user” will increase for later stimulus years. The matrix has been accepted by the larger HITPC and is available from the Office of the National Coordinator (ONC) website.

Certification

Siemens is the only healthcare technology provider to offer three CCHIT Certified® healthcare information solutions.

Soarian® Clinicals V2.0C5 and INVISON® Clinicals V27.0, both with Siemens Pharmacy and Med Administration Check™ V24.0, achieved full CCHIT Certified status and meet CCHIT inpatient electronic health record criteria for 2007.

MedSeries4® WebConnect Clinical Suite with Siemens Pharmacy and Med Administration Check, Version 28.10 and V24 respectively, is a CCHIT Certified Inpatient EHR (eMAR only) product for 2007.

These certifications are valid until the end of 2010.

However, as of July 2009, the definition of “certification” with respect to ARRA remains unclear. As that definition solidifies, Siemens will continue to be actively involved and will closely follow these issues in order to act as quickly as possible once we have information.

There will be a clear distinction between criteria required to achieve meaningful use (to be defined by governmental agencies) and third parties, such as CCHIT, that validate software. There is also an indication from the workgroup that there should be multiple validation agencies, not just CCHIT.

Currently, however, CCHIT remains the only known path to certification. In the short term, it seems clear that CCHIT will continue to perform certifications and execute the validation of criteria as presently defined by the ONC. CCHIT may perform this validation to fill gaps in our existing certification, or to fill gaps in 2008 or 2009 CCHIT certification criteria. The validation will almost certainly be done in conjunction with an option for a more explicit “EHR-M” (modular) certification that would only test those items defined by ONC.

For additional reference, please visit the following web-based resources:

CCHIT: <http://www.cchit.org/>

ONC: <http://healthit.hhs.gov/>

Meaningful Use Matrix: http://healthit.hhs.gov/portal/server.pt?open=18&objID=876940&parentname=CommunityPage&parentid=16&mode=2&in_hi_userid=11113&cached=true

Certification Workgroup Recommendations:

http://healthit.hhs.gov/portal/server.pt?open=18&objID=876937&parentname=CommunityPage&parentid=16&mode=2&in_hi_userid=11113&cached=true

The Siemens Commitment to Meaningful Use

What is our plan today? In light of the latest available information, we will proceed with our current development efforts that target functionality based on what was known as the “CCHIT 2009 Final Criteria.” This plan will change as needed to help customers meet the requirements of meaningful use and to maximize the value they derive from our technology. We are performing an analysis with the intention of adding the capabilities required to satisfy meaningful use definitions as they become clarified. We believe that the functionality we provide will exceed the requirements for certification and MU. Regardless of how certification for MU is ultimately defined, Siemens has already made the commitment to help our customers to qualify for the ARRA incentives.

Clinical Solutions

According to our 2009/2010 product release schedule, we expect to deliver the technology needed to meet what was originally defined as CCHIT 2009 Final Criteria in early 2010.

2010 releases for Soarian, INVISION, and MedSeries4® will contain software updates required by current meaningful use definitions.

The 2010 Soarian Clinicals release will contain functionality for medication reconciliation at admission and discharge. Medication reconciliation for transfer level of care was delivered in the C5 release.

New components will be used by Soarian, INVISION, and MedSeries4 to address key areas contained in the meaningful use definition, specifically interoperability and e-prescribing.

We will also deliver model report content, rules, and workflow starter model content to assist customers with achieving meaningful use measures.

Revenue Cycle Solutions

New criteria for verifying insurance eligibility electronically and submitting claims electronically emerged in the latest meaningful use definitions for 2011 issued on July 16, 2009.

- **Eligibility:** Siemens HDX eligibility customers are well positioned to report on the eligibility metric as it has been described in the meaningful use matrix. Siemens can also help customers maximize their use of this functionality to best meet the requirement. For customers seeking an eligibility solution to satisfy this metric, Siemens offers a full suite of EDI services, including eligibility verification, to help meet their needs.
- **Claims:** Siemens HDX Electronic Claims Service (ECS) customers and customers who have contracted with Siemens claims management vendor affiliates are well positioned to report on the claims metric. For those customers who do not have a total claims management solution, Siemens currently has an alliance with The SSI Group, Inc. Their ClickON® LinX interface will allow customers to keep their Siemens HIS and their claims management system in sync.

Meaningful Use Road Map and Solution Packaging

To meet the timelines detailed in the latest meaningful use definitions, Siemens has completed implementation road maps for our three CCHIT Certified Systems. This work enables us to develop individualized customer road maps. Siemens Global Services has developed the methodology to handle the scope of deployment, using internal Siemens resources and those of our implementation partners. We have a focused plan to help customers deploy CPOE, a key component of meaningful use, and satisfy ARRA requirements for rate of physician CPOE adoption.

Mindful that ARRA requirements will continue to evolve and the uniqueness of each customer's environment, Siemens will individually explore each customer's specific situation and map any outstanding requirements for meaningful use to standard solution offerings. To help plan the path to meaningful use, Siemens produced an IT Solution Road Map, which bridges the gaps and provides line of sight to meaningful use over a designated timeline.

The Siemens Assessment tool with customized executable road maps will accelerate this process.

Exchanging Health Information

Interoperability among healthcare information systems is a key requirement for transforming healthcare and occupies a place of central importance in meeting the requirements of ARRA.

Meeting ARRA healthcare outcomes policy priorities depends on common, shared access to patient information among providers, consumers, payers, and other key stakeholders in the healthcare industry. The national push for a connected, interoperable system that expedites the exchange of electronic health records between care facilities and consumers will help providers drive improvements in patient safety, the quality of care delivery, and financial performance across the care continuum.

The Siemens Commitment to Interoperability Standards

With the rapid evolution of technology and its impact that healthcare domains experience today, there is – just as in any other IT dominated fields – an urgent demand for further standardization in healthcare IT.

Siemens is already delivering interoperable healthcare information systems. We work through industry citizenship to help develop standards that will further enable interoperability across care entities with systems of all kinds.

Siemens is committed to providing technology that conforms to industry standards for data content, format, terminology, and communication, as required for meaningful use per HIT Standards Committee. These standards are key to enabling our solutions to share information with other systems, such as ambulatory solutions, those used by Health Information Exchanges/Regional Health Information Organizations and public health agencies, and solutions from other vendors.

Continuity of Care Document

A cornerstone of our interoperability strategy is the HL7 Clinical Document Architecture (CDA), starting with the Continuity of Care Document (CCD). The CCD is designed to contain essential patient information that can be shared among multiple providers, and healthcare organizations. Using HITSP/CCHIT approved standard interfaces, our use of the CCD will enable providers to create, view, and send CCD documents to and from a repository or provider.

The Siemens strategy is to provide an advanced form of the CCD, one that contains structured data elements using industry-standard terminologies for drugs, allergies, and more. This flexible infrastructure will allow us to meet additional interoperability requirements as they solidify.

Ambulatory Interoperability

Conformance to standards built into Siemens enterprise HIT systems facilitates interoperability with ambulatory systems to satisfy key requirements for exchange of patient information:

- Patient identity matching through HL7 ADT inbound and outbound interfaces for admission, discharge, and transfers
- Sharing of patient demographics, allergies, medications, and problems, achieved through the CCD
- User interface interoperability

In addition to standards-enabled interoperability with ambulatory systems that comply with standards, Siemens provides more extensive data sharing with systems provided by our ambulatory system partner NextGen. Using Siemens Global Session Manager (GSM), NextGen can be launched without requiring users to login. Users can also navigate between Soarian and NextGen to view patient encounter data in the corresponding system.

Health Information Exchanges (HIEs)

Exchange of CCD documents with an HIE is achieved through the support of HITSP Manage Sharing of Documents Transaction Package (IHE Cross Enterprise Document Sharing/xds.b technical framework). Through these defined IHE profiles, our clinical systems can integrate with any CCHIT HIE-certified system. RHIO/HIE systems are typically deployed with a component called a Patient Identity Cross Reference (PIX) manager (EMPI). Siemens supports the HL7 Patient Identifier Feed transactions of Patient Admission and Patient updates to the PIX manager.

Patients

To address the ARRA policy priority of engaging patients and families, Siemens strategy is to provide patients with an electronic copy or access to clinical information. This may be achieved through interoperability between a CCD and with a Personal Health Record (PHR). There may be additional means to share information with patients, such as exporting a patient summary delivered as a PDF or structured file via media, e.g., CD or USB drive, as defined by HIPAA and CCHIT standards.

Public Health Agencies

Addressing the ARRA priority of improving population and public health, Siemens interoperability strategy is to leverage our electronic document exchange infrastructure (beyond CCD) and include additional structured clinical information or messages.

Reporting Quality Measures

The Siemens product portfolio includes advanced, proven analytical and reporting tools needed to meet ARRA requirements for quality measures.

INVISION Clinicals customers will meet the quality reporting criteria through the DSS data warehousing solution using data from the INVISION Clinicals repositories. Soarian Clinicals users can leverage embedded analytics to provide analysis and reporting of key metrics. MedSeries4 customers will meet the quality reporting criteria using data from the MedSeries4 repository and patient management suite.

Siemens embedded analytics technology is tightly coupled with our Soarian workflow engine, enabling customers to apply the Siemens Healthcare Process Management (HPM) methodology to continuously improve processes in line with the rapid pace of change in healthcare. HPM provides tools for designing processes, synchronizing activities of care providers and departments, analyzing organizational performance, and adapting to change. Using HPM tools and techniques, customers have the ability to deploy workflows and measure the results through the monitoring and reporting tools.

Soarian Quality Measures provides the potential for quality reporting capability beyond what is needed to meet meaningful use requirements. Soarian Quality Measures facilitates the abstraction of clinical information for the calculation of the CMS Core Measures and The Joint Commission's National Patient Safety Goals by extracting both structured and unstructured data from database tables as well as EDM documents. Soarian Quality Measures complements Siemens Decision Support Solutions and embedded analytics, providing comprehensive reporting support for INVISION, MedSeries4, and Soarian.

Meeting Security and Privacy Requirements

Siemens products currently support Covered Entity requirements of HIPAA privacy and security, which will be a fundamental component of the ARRA certification requirements. ARRA introduces a few additional privacy and security requirements as well. Siemens is positioned to meet the challenges of the expanded personal health information (PHI) accounting of disclosures and restrictions on disclosure provisions. We are prepared to address all other privacy and security requirements as they become known, and we monitor all forthcoming final rules, regulations, published guidance, and compliance deadlines from HHS closely.

As final requirements for various privacy and security provisions related to Siemens healthcare IT solutions become known, Siemens will communicate additional updates to our customers. In the meantime, Siemens continues to work closely with industry groups such as HITSP, CCHIT, the HIT Policy and Standards Committees, and WEDI, as well as our contacts within HHS, to better understand expected Privacy and Security impacts, and advocate on behalf of our customers.

Hosting Your System

Siemens is one of the first healthcare technology providers to offer remote hosting of healthcare information solutions. For many organizations, remote hosting provides a simpler way of meeting ARRA requirements, in the following areas:

- **Capital Expense:** Our ISC averages 99.9% availability and processes more than 194 million transactions daily. Our ASP offerings provide a lower overall cost model and minimizes technology and capital expenditures.
- **Privacy and Security:** For more than 40 years, Siemens has provided state-of-the-art security by monitoring and maintaining HIS systems, using system management, application management, wide-area network (WAN) management, infrastructure/environmentals, and application and system support.
- **Recovery:** Siemens provides server backup, backup tape offsite storage, hardware maintenance, and disaster recovery. Our system management capability provides operating system support and maintenance, database management and support, server backup and reboot scheduling, and capacity planning. Our infrastructure/environmental teams provide power and network redundancy.
- **Time to Live:** Our application management team installs application streams of enhancements, and our change management team allows for the timely and expert implementation of our ASP product offerings.

Communications/Education

The complex array of factors shaping ARRA can change quickly. Staying informed and up-to-date can be challenging. Through active participation in organizations that influence requirements for ARRA funding, Siemens experts gain valuable insights that we share with customers on a regular basis.

Your portal to key Siemens ARRA information is the Siemens Executive Gateway www.siemens.com/executivegateway, which offers a library of resources and is updated constantly. You'll find links to our ongoing webcast series, communication from Siemens Health Services CEO Janet Dillione, customer case studies, and other useful information.

You can also follow us on Twitter at www.twitter.com/SiemensHospIT for the latest updates.

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Local Contact Information

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA
Phone: +1-888-826-9702
www.usa.siemens.com/healthcare

Global Business Unit

Siemens Medical Solutions USA, Inc.
Health Services
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA
Phone: +1-888-826-9702
www.usa.siemens.com/healthcare

Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Muenchen
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestrasse 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Legal Manufacturer

Siemens Medical Solutions USA, Inc.
Health Services
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA

www.siemens.com/healthcare