

## **Transatlantic eHealth/health IT Cooperation Roadmap**

### **Vision**

To support an innovative collaborative community of public- and private-sector entities, including suppliers of eHealth solutions, working toward the shared objective of developing, deploying, and using eHealth science and technology to empower individuals, support care, improve clinical outcomes, enhance patient safety and improve the health of populations.

### **Executive Summary**

Health related information and communication technology (most usually referenced as “eHealth” in Europe and “health IT” in the US) is an important and growing sector in the United States and the European Union. It is a rapidly developing and highly innovative area. It has considerable potential to promote individual and community health while fostering innovation and economic growth.

Both the United States and the European Union are currently working to encourage more effective use of ICT and ICT in general, in delivery of health services, including disease prevention and health promotion. The Transatlantic Economic Council has therefore decided to make a critical contribution to this development by promoting interoperability of health related information and communication technology (eHealth/health IT) products and services, gaining improved mobility and consistent proficiency recognition for a professional workforce, and by helping to prevent unnecessary regulatory divergences.

We have decided to implement specific cooperative action plans for the following high-priority areas:

- Advancing eHealth/health IT Interoperability – we will collaborate to accelerate progress towards the widespread deployment and routine use of internationally recognized standards that would support transnational interoperability of electronic health information and communication technology; and
- eHealth/health IT Workforce Development – we will work together to identify approaches to achieving our common goals for achieving a robust supply of highly proficient eHealth/health IT professionals and assuring health care, public health, and allied professional workforces have the eSkills needed to make optimum use of their available eHealth/health information technology. Equally, we will identify and address any competency and knowledge deficiencies among all staff in healthcare delivery, management, administration and support to ensure universal application of ICT solutions in health services.

The cooperative action plans anticipate robust participation by relevant experts and stakeholders, across the public, private and academic sectors. The public sector participants expect to confer with academic stakeholders, and to convene, catalyze and support creative collaborations among capable and willing private and academic sector participants, while offering guidance consistent with their policymaking responsibilities. All participants, and particularly the private-sector participants, in specific projects and initiatives under the action plans will identify solutions consistent with best practices in relevant fields (such as information science and workforce development).

Over time, we expect to update the priority action plans to reflect progress made and new opportunities identified in the course of their implementation. We also recognize that, as work progresses and circumstances evolve, we may later want to develop cooperative action plans for additional areas and

potentially involving additional participating public- and private-sector entities and/or different roles for entities also participating in the eHealth/health IT Interoperability and Workforce Development cooperative action plans.

## **Advancing eHealth/health IT Interoperability Action Plan**

### ***Challenge***

To promote individual and community health in a global environment, and enable a robust and innovative ecosystem of eHealth/health IT that supports the electronic exchange of human- and machine-readable health, clinical, medical and management information to advance the health of individuals and communities, we must maintain and enhance inter-governmental cooperation and also collaboration between governments and the private sector. The *Memorandum of Understanding between The United States Department of Health and Human Services and The European Commission on Cooperation Surrounding Health Related Information and Communication Technologies (MOU)* was signed in December, 2010, to demonstrate our shared dedication to cooperation addressing these challenges. Exploration of specific potential activities and approaches to implementing transatlantic interoperability, consistent with the principles and vision described in *HHS-EC MOU* require careful and inclusive analysis. This action plan articulates early, concrete steps toward the transatlantic interoperability and health IT workforce goals.

### ***Scope Statement***

This action plan focuses on activities to advance the goals for cooperation around health related information and communication technology, as commemorated by the HHS-EC MOU, and with a specific emphasis on two areas identified in the MOU as having immediate importance and potential:

1. international interoperability of Electronic Health Records information, to include semantic interoperability, syntactic interoperability, patient and healthcare provider mediated data exchange (including identification, privacy and security issues surrounding exchange of health data); and
2. cooperation around the shared challenges related to eHealth/health IT workforce and eHealth proficiencies.

### ***Action plan***

Public, academic and private-sector stakeholders from the EU and US are invited to participate in this potential collaboration. Virtual meetings and other online communications tools will be utilized to build a collaborative environment supporting participants' engagement. This Collaboration Roadmap is being accompanied by an immediate Call for Stakeholder Engagement. Stakeholders will be invited to engage in the identified work stream(s) of interest to them.

Goals/Objectives	Deliverables/Action	Milestones/Due Dates
<i>International interoperability of electronic health records information, to include semantic interoperability, syntactic interoperability, and patient mediated data exchange (including privacy and security issues surrounding exchange of health data)</i>	<b>1. EU and US Action Plan for International Interoperability</b>	
	Initial Cooperation Roadmap (including executive summary, scope statements for the work streams, action plan and deliverables). We expect the roadmap to be a living document with regular updates to reflect changing needs, capabilities and markets situations	February 28, 2013
	Announce the collaboration to known to be and/or potentially interested in developing specifications and or pilot demonstrations of international information exchange and invite them to participate	February 28, 2013
	Create online social collaboration tools for transparency and community engagement	March 25, 2013
	<b>2. Interoperable Electronic Health Records</b>	
	Create initial set of use cases, based on community and stakeholder input	May 31, 2013
	Compare existing US and EU vocabularies, terminologies and clinical models to identify areas of overlap and commonality	July 15, 2013
	Identify available resources and opportunities for aligning them (technology and standards to support ongoing collaboration with vocabularies, modeling, and interoperability)	August 2, 2013

Goals/Objectives	Deliverables/Action	Milestones/Due Dates
	Agree on specifications, standards and architecture for the pilot	September 2, 2013
	Compare the data/document structures used in the US and EU by comparing the consolidated CDA (C-CDA) and the exchange standards used in epSOS	December 20, 2013
	Define project teams, leaders and resources to pilot	December 20, 2013
	Based on candidate pilot sites, identify potential demonstration sites for early pilots	January 31, 2013
	Compare existing US and EU legal, policy and organizational frameworks regarding eIdentification of patients and healthcare providers, data privacy, security and exchange to identify potential barriers to piloting	March 28, 2014
	Define framework requirements for semantic infrastructure and services	May 30, 2014
	Analysis of initial draft of shared clinical models and their metadata alignment	September 26, 2014
	Finalize pilots	September 26, 2014
<i>Cooperation around the shared challenges related to eHealth/health IT workforce and eHealth proficiencies</i>	<b>1. EU and US Action Plan for Health IT Workforce</b>	
	Roadmap (including executive summary, scope statements for the work streams, action plan and deliverables). We expect the roadmap to be a living document with regular updates to reflect changing markets	February 28, 2013

Goals/Objectives	Deliverables/Action	Milestones/Due Dates
	Announce the collaboration to identified and interested stakeholders	February 28, 2013
	Create online social collaboration tool	March 25, 2013
	Organize an additional Stakeholder meeting (online)	April 12, 2013
	Appropriate arrangements for healthcare professionals and all staff in healthcare delivery, management, administration and support to access professional development services	May 31, 2013
	Identify champions	May 31, 2013
	<b>2. Skilled eHealth/health IT workforce and eHealth proficiencies</b>	
	Assessment of the scope, scale and characteristics of the healthcare workforce in the US and EU – current status and future trends in terms of eHealth capabilities	May 31, 2013
	Assessment of healthcare settings in the US and EU – current status and future trends	April 26, 2013
	Role based competencies, curricula for chosen scenarios in the US and EU: Perform analysis of competencies required by the diverse care workforce – (a) professionals in the field; (b) academic track for new professionals (pre-service) and those transitioning from other health disciplines and from mainstream ICT into the health sector (c) all staff in healthcare delivery, management, administration and support	July 12, 2013

Goals/Objectives	Deliverables/Action	Milestones/Due Dates
	<p>Identify or create curricula that addresses the competencies identified in the US and EU</p> <p>In the case of the EU consideration to be given to basing these curricula on the European e-Competence Framework, a component of the long term e-skills agenda (<i>e-skills for the 21<sup>st</sup> Century</i>) of the European Union supported by the European Commission and the Council of Ministers</p>	August 26, 2013
	<p>Definition and agreement of common standards of competence and professionalism that identify “fitness to practice” health informatics and accreditation of professionals</p> <p>Development of occupational codes for health IT professionals in the US and EU</p>	November 25, 2013
	Explore internship opportunities in the US and EU	January 27, 2014
	Explore new models of education/employer collaboration to facilitate continued development of programs to meet employment needs in the US and EU and ensure that all healthcare staff maintain competence levels through recognized program of certified continuous professional development	January 27, 2014

*Outcome indicators for interoperable Electronic Health Records and other relevant documentation that supports effective decision making:*

- Identify Project Champions
- Development of use cases/user stories
- Perform Vocabulary Analysis

- Perform Infrastructure Alignment
- Perform Patient Mediated Exchange Analysis
- Perform Healthcare provider Mediated Exchange analysis
- Perform Analysis of Clinical Models
- Perform policy analysis (eIdentification, health data privacy and security).
- Semantic and syntactic mapping of scenario related health data
- Pilots

*Outcome indicators for development of skilled eHealth/health IT workforce and eHealth proficiencies:*

- Identify Project Champions
- Completed analysis of competencies required by the diverse healthcare and eHealth/health IT workforce – (a) professionals in the field, (b) academic track for new professionals (pre-service) and those transitioning from other health disciplines and from mainstream ICT into the health sector and (c) all staff in healthcare delivery, management, administration and support
- Identify and create curricula that address the competencies identified in the US and EU
- Provide appropriate arrangements for healthcare professionals and all staff in healthcare delivery, management, administration and support to access professional development services
- Identify and develop procedures to recognize individuals whose competence is developed and maintained through non-academic, experiential and mentoring routes, and through short, non-academic courses addressing subsets of criteria that make up a particular competence
- Ensure recognition of Health Informatics as a distinct profession
- Explore new models of education/employer collaboration to facilitate continued development of programs to meet employment needs in the US and EU
- Pilots illustrating innovative ways to update current content with an open repository of case studies, scenarios and educational materials