EU*US eHealth Skills Collaboration Opportunity

Presenting the EU*US eHealth Work Project:

A Mid-Term Update for Our Stakeholder Community

Rachelle Blake

- Rachelle Blake, PA, MHA, is a global health subject matter expert and physician assistant
- EU*US eHealth Work Project Coordinator
- Original member of EU-US Workforce Development Workgroup
- Founded Omni Micro Systems/Omni Med Solutions (US) in 2007, in 2014 in Germany (GmbH)
- Co-creator of HITCOMP tool
- Member of Global Health Workforce Council (AHIMA), HIMSS TIGER Committee, IHE and
- Inaugural Recipient of HIMSS' Most Influential Women in Health IT Award

Background

- A Memorandum of Understanding (MoU) was signed in 2010 between the European Union and the United States

- This was done to address:

  - the burgeoning global demand for skilled healthcare workers, and

  - the need for development and deployment of eHealth skills, competencies and training programs

DIGITAL SINGLE MARKET
Digital Economy & Society

European Commission > DG CONNECT

DG CONNECT

Background

- This Memorandum of Understanding and Roadmap, beginning in 2010, and most recently updated in 2016, focused on activities to advance the goals for cooperation around health-related information and communication technology, with a specific emphasis on three areas:

  1. International interoperability among Health IT systems with patient summary records, including a focus on semantic and syntactic requirements for the purposes of clinical care across borders

  2. Cooperation and collaboration around shared challenges related to eHealth/Health IT Workforce Development; and

  3. Supporting Transatlantic eHealth/Health IT Innovation Ecosystems

Work Streams of the MoU

Initiatives continue in all areas - DG CONNECT and the US Department of Health and Human Services have continuing programs in all three streams:

- Interoperability:
  - The interoperability work support Standards and Profile Developing Organizations and eHealth/Health IT stakeholders so that they collaborate to enable a standardized international patient summary (IPS) to be in use by 2020
  - CEN is participating to this activity along with other SDO (HL7, IHTSDO, ISO…)
  - This activity is also the subject of an EU-US MoU Support action funded under Horizon 2020
- Ecosystems:
  - This new work-stream aims at encouraging innovation in the eHealth/Health IT industry.
  - One of its key elements will be to strive to identify key EU and U.S. stakeholders and enlist their support for greater collaboration between companies and ecosystems located in each jurisdiction
- Workforce:
  - The work continues primarily in the form of the EU*US eHealth Work Project and Digital Skills initiatives of the European Commission

It is the workforce works stream that connects and aligns all of the areas, as interoperability and ecosystems cannot happen without a digitally skilled workforce.

Workforce stream goals

- The goals of the EU-US Collaboration in Workforce Development were:

    - To **achieve a robust supply of health professionals** highly proficient in the use of HIT and digital skills

    - To **assure current and future workforces have the required technology skills** needed to be successful, and enhance experience and performance within the eHealth/Health IT Ecosystem

    - To **support an innovative collaborative community** of public- and private sector eHealth/Health IT entities, working toward the shared objective of developing, deploying, and using eHealth science and technology

    - To **define standards, develop competencies and produce useful tools** that support this work

Addressing the Goals

- As part of this goal, a workgroup, called the EU-US Workforce Development Workgroup (WDW), was convened in 2013 to begin addressing these goals

- WDW Members met every week for 20 months, in addition to extra meetings, conferences and presentations in Athens, Boston and Riga
  - The WDW included subject matter experts from 13 countries
  - The work began with reviewing, analyzing and synthesizing thousands of skills and competencies from 15 source organizations
  - The result was the mapping and cataloguing of over 1,200 competencies, from basic to expert levels, for over 200 job specific roles in acute care, in 33 areas of competency
  - This data was compiled into a resource developed and now used on a global basis, called the HITCOMP Tool and Repository

Where Workforce Development Part I Ended…

- The EU-US WDW Initiative ended in May 2015. Much work had been done, but several objectives of the original MOU were still outstanding, including:
  - Completing the mapping of competencies to other settings
  - Linking competencies to educational resources
  - Providing access to foundational eHealth training
  - Surveying patterns and trends, and analyzing gaps and disparities, especially throughout less densely populated areas of Europe and other areas globally
  - Developing new collaborative tools and resources to measure, inform and educate current and future eHealth workers
  - Engaging stakeholders throughout European states
  - Disseminating and exploiting the results of this important work to make an impact in eHealth by heightening skills and knowledge
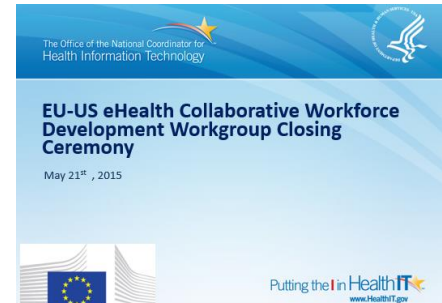
Workforce Development Part II - New Horizons

- The European Commission launched a new call to continue the work and meet these objectives in the fall of 2015 – essentially continuing the project as "Part II"

- A consortium formed as an offshoot to the EU-US Workforce Development Workgroup to answer this call, in the form of a Societal Challenge under the EU's Horizon 2020 research and innovation grant program

The EU*US eHealth project consortium: A Global Network of Partners

- The consortium partners who make up the EU*US eHealth Project, along with global stakeholders, are uniquely poised to meet the goals of the workforce stream
  - We are a network of partners from academia, clinical practice, healthcare associations, and industry
  - We have extensive background and experience in mapping, cataloguing and synthesizing health informatics competencies and education
  - Together, we are working toward the common goal of positively impacting the healthcare workforce with heightened skills, tools, and knowledge
- The consortium began with core WDW members from Germany/US, Israel and Finland

clinicians

EU*US eHealth Work Global Network

health associations

industry

academia
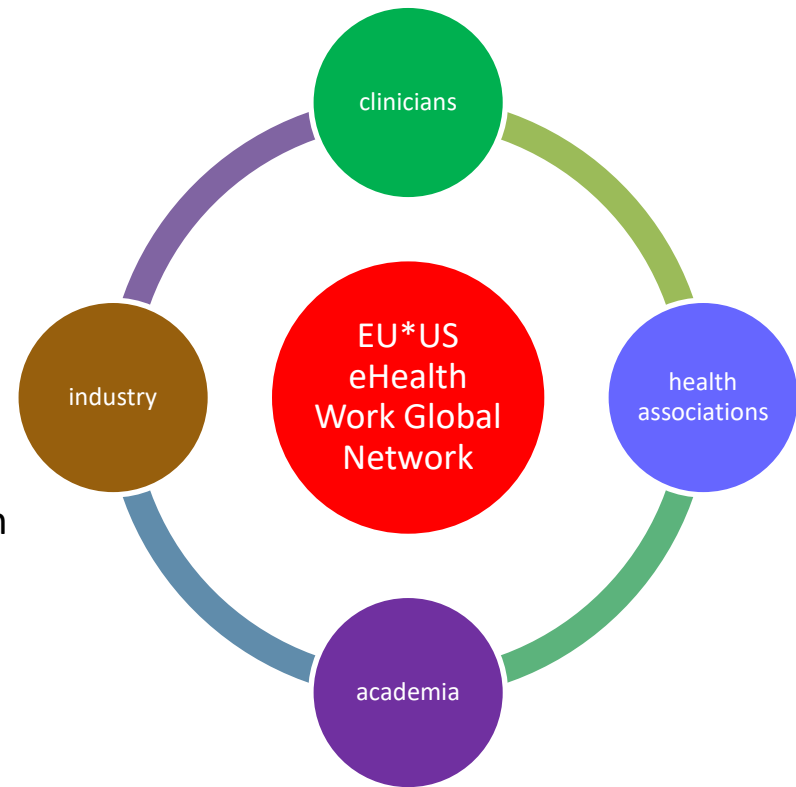
The EU*US eHealth Work Consortium

- The consortium began with core WDW members from Germany/US, Israel and Finland

- And grew to its current "network of networks", including:

  – Omni Micro Systems/Omni Med Solutions GmbH (OMS) (Project Coordinator) (Germany)

  – HIMSS (Health Information Management Systems Society) TIGER Initiative*

  – EHTEL (European Health Telematics Association) (Belgium)

  – University of Applied Sciences Osnabrück (FH OS) (Germany)*

  – Tampere University of Technology (TUT) (Finland)

  – Steinbeis 2i (S2i) (Germany)

HIMSS and University of Applied Sciences Osnabrück submit all deliverables in tandem, as the university's team lead is also chair of the International TIGER committee

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What is the Nature of the EU*US eHealth Work Project?

- The EU*US eHealth Work Project is a European Commission funded Horizon 2020 project, a Coordination and Support Action under the Societal Challenge Call of 2016-17

- We are doing this by undertaking research, synthesis, resource and tool development, and dissemination related to the eHealth/health information technology workforce in the following streams:

    - Measuring
    - Informing
    - Educating
    - Advancing
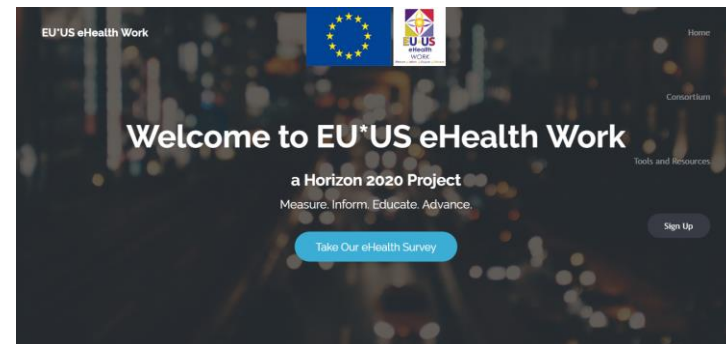
Work Streams

Aligned with the directives of the 2010 MoU, and as set out in the Horizon 2020 call, the EU*US eHealth Work Project is carrying out objectives in these four major areas of focus:

- *Measure*
  - *Performing surveys, analyzing the results through gap analyses, and compiling the findings through case studies*

- *Inform*
  - *Hosting a web portal, distributing newsletters, holding interactive stakeholder sessions and participating in eHealth conferences and events*

- *Educate*
  - *Building a set of foundational curricula for digital skills in eHealth, enhancing the HITCOMP Tool and Repository, and creating an interactive web platform*

- *Advance*
  - *Disseminating and exploiting the work generated under this project, utilizing our "network of networks" in a perpetually evolving process of information, resource and tool development*

Mapping Needs, Gaps and Trends of the eHealth Workforce

- The Goal of the EU*US eHealth Work Project is to identify, map and provide resources to support the needs, gaps and trends of the eHealth Workforce

- We are doing this through two mechanisms:
  - Significant Deliverables
    - eHealth Survey
    - Gap Analysis (in progress)
    - HITCOMP Restoration
  - Major Events
    - Project Dissemination Events
    - EU-US Collaboration Event at HIMSS17 in Orlando, Florida

Tools, resources and innovations for skills, education and competency assessment for eHealth

Survey of Current State of eHealth Needs

- **Timeframe**: Survey runs February through May 2017
- **Priority**: Flagship of our project
- **Goal**: Capture information to identify global health IT/eHealth workforce development needs, trends and gaps
- **Target**: Over 1,000 respondents

Survey addresses:

- Availability of eHealth courses
- Certification & Certificates
- Digital skills gaps
- eHealth promotion/importance
- Online tools / courses
- Gender disparities
- eHealth education funding
- eHealth reputation in politics

Survey for Recommendations on eHealth* Workforce Education, Training, Status, Competencies, Needs and Trends

Thank you for your willingness to participate in this survey and for sharing your expert opinion on global eHealth workforce development. Based on your responses, this survey should not take longer than 30 minutes.
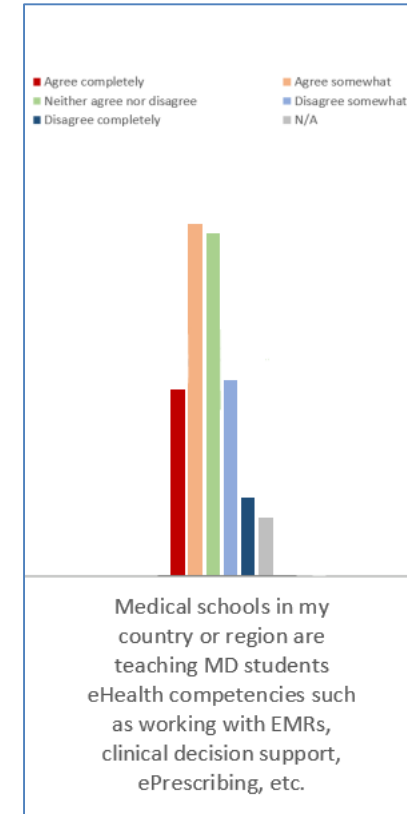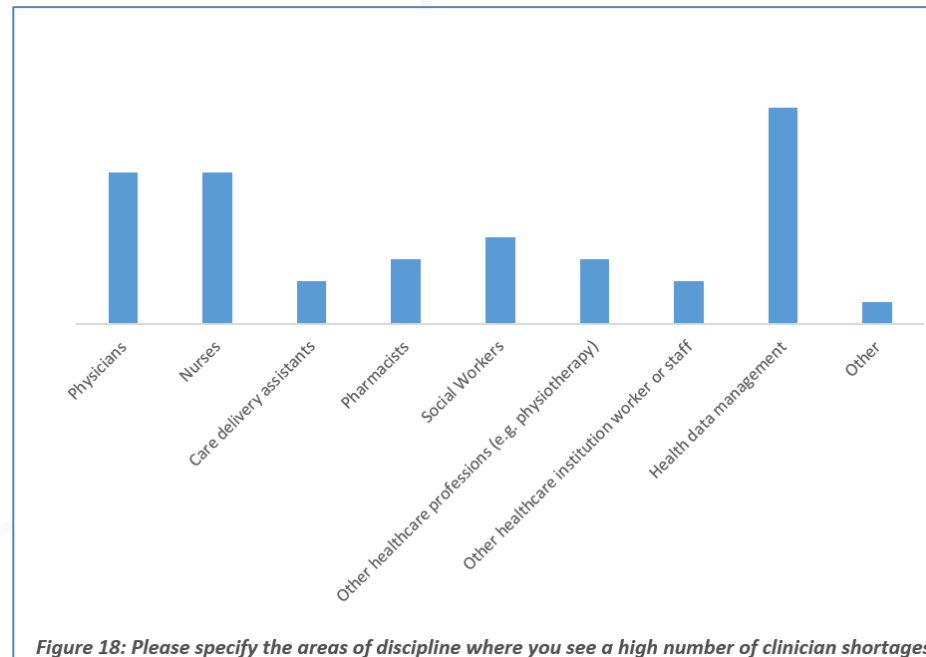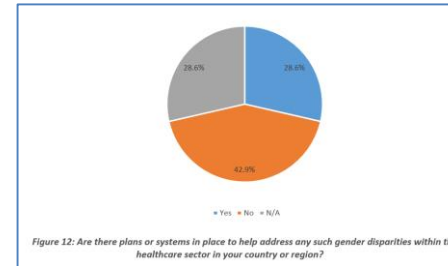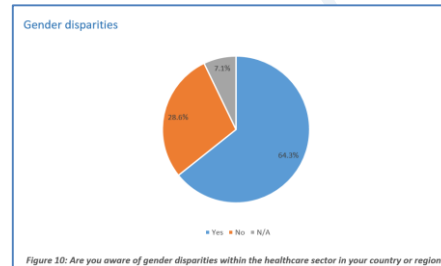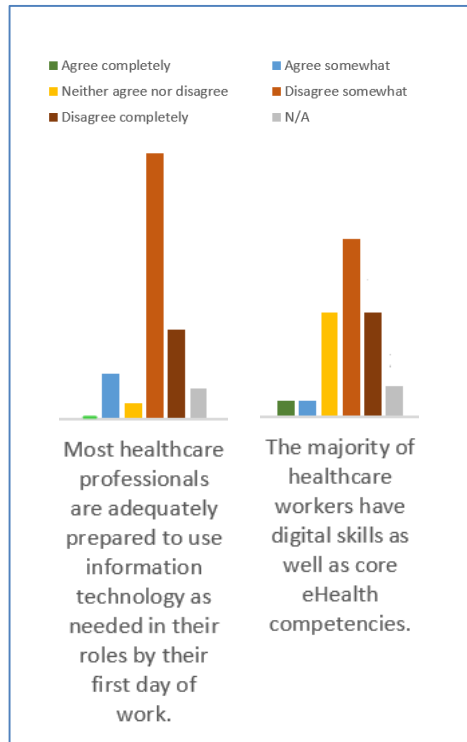
This questionnaire has the following overall topics:
- Demographics
- Politics and Government
- eHealth Training and Education

- Survey Results Report and Gap Analysis that leads to Case Studies

Most healthcare professionals are adequately prepared to use information technology as needed in their roles by their first day of work.

The majority of healthcare workers have digital skills as well as core eHealth competencies.

Figure 10: Are you aware of gender disparities within the healthcare sector in your country or region?

Figure 12: Are there plans or systems in place to help address any such gender disparities within the healthcare sector in your country or region?

Medical schools in my country or region are teaching MD students eHealth competencies such as working with EMRs, clinical decision support, ePrescribing, etc.

Figure 18: Please specify the areas of discipline where you see a high number of clinician shortages.

Tools, resources and innovations for skills, education and competency assessment for eHealth (cont'd)

- HITCOMP Restore
- What is the HITCOMP Tool? *Health Information Technology Competencies*
    - An interactive health information technology role, competencies and education research tool and repository
    - A global resource usable by employers, educators, managers, recruiters, agencies, students, current/future eHealth workers and more
    - An open Source tool, free to anyone with internet access, with a commitment to remain available to the public beyond the lifetime of the project
    - A resource containing over 1000 competencies mapped to 250 roles
        - Coming soon: All competencies and roles mapped to an entire foundational online curriculum along with additional instructor-led and online courses
    - You can find HITCOMP at www.hitcomp.org

Tools, resources and innovations for skills, education and competency assessment for eHealth (cont'd)

Tools, resources and innovations for skills, education and competency assessment for eHealth (cont'd)

Coming Summer/Fall/Winter 2017

- Foundational Curriculum
  - Core online eHealth courseware in 20 modules, providing baseline digital health skills
  - Can also be used as a "starter set" for academic institutions without an existing eHealth program
- HITCOMP 2.0 upgrade
  - Linkage to Foundational Curriculum
  - Mapping of competencies and roles to EU, US and global instructor-led courses and global education
- Case Studies
  - Presentation of relevant regional and country-specific cases where digital health skills and education has led to significant eHealth workforce development
  - Competency synthesis evaluation, harmonization and recommendations for greater uptake of interprofessional eHealth skills
- Interactive Educational Demonstrator Module
  - Social media module series demonstrating foundational curriculum in an interactive instructor-led presentation
- Interactive Website Platform
  - eHealth platform that provides a variety of eHealth resources, tools, and certification and educational content such as HIMSS' virtual learning environment (VLE) for all eHealth actors and stakeholders

Project Dissemination Events

- The project has participated in several key dissemination events to date, each offering opportunities to present information, network with eHealth workforce development stakeholders, and exploit the work of the project

- Events to date have included:

  - **MEDICA 2016, Düsseldorf DE: 14/15 November 2016**

  - **WoHIT (World of Health IT), Barcelona, ES: 21/22 November 2016**

  - **European Summit on Digital Innovation for Active & Healthy Ageing, Brussels, BE: 5/8 December 2016**

  - **European Health Telematics Association (EHTEL) Symposium, Brussels, BE: 15/16 March 2017**

  - **Royal College of Nursing Conference, Cardiff, Wales, UK: 22/23 March 2017**

  - **Informatics for Health 2017, Manchester, UK: 24/26 April 2017**

  - **eHealth Week, St. Julian's, Malta: 10/12 May 2017**

  - **Healthcare Workforce Summit Meeting, Berlin, Germany: 18/19 May 2017**

FIRST PROJECT STAKEHOLDER EVENT: EU-US Collaboration In Orlando at HIMSS17

- **The project has also sponsored one series of stakeholder participation events to date, with the second occurring now in Helsinki, Finland**

- **On the morning of Tuesday, February 21, the project held its first international event: the EU*US Collaboration Roundtable**

  - Held in Orlando, Florida, at the HIMSS17 Annual Conference, the event provided a unique opportunity for key US and European eHealth stakeholders to collaborate

  - Around 20 stakeholders participated in the event, including educators, government representatives, industry leaders, and other eHealth influencers

- **In the afternoon, the project held its second event: the EU*US Collaboration Networking Event**

  - Over 50 participants took part in the social and networking function, with project team members giving an overview of each facet of project

  - Emphasis was put on ensuring there is "an enduring legacy following project conclusion"

Second Stakeholder Event: Finland: Day One

- Our Second Stakeholder Event was kicked off on Tuesday, May 22, at the keynote session at Hotel Arthur, in downtown Helsinki

- The keynote address at the meeting of the Finnish Social and Health Informatics Association, entitled "Developing Health IT Workforce Skills and Empowering Women to Take on Greater Roles in Today's Health Informatics Landscape" was delivered by Rachelle Blake, CEO/President, Omni Micro Systems, Germany & EU*US eHealth Work Project Coordinator

- The event, delivered primarily in Finnish with the afternoon sessions in English, was attended by about 25 event participants

Upcoming Project Stakeholder Events

At project sponsored events, stakeholders will have an opportunity to

hear about the project, participate in action planning, and take part in

crafting a recommendations framework

- **September-November 2017: Stakeholder Engagement Event #2, hosted by University of Osnabrück, Germany**
    - Actively discuss survey results and recommendations
    - Review case studies
    - Action planning for final quarter of project
    - Discuss interim project results to date
- **January 2018: Final Conference in Brussels, Belgium, co-hosted by EHTEL and Omni Micro Systems/Omni Med Solutions**
    - Present lessons learned
    - Discuss final results of the project
    - Create a recommendations framework for further dissemination and exploitation post-project

How You Can Get Involved

- We need your help, now, during the project, and after its completion
  - You can participate as a stakeholder, active participant or interested party in helping to inform our work, make recommendations and have a voice in the future state of the eHealth workforce for the EU and US
  - All actors are welcome to participate in our project, including: healthcare providers, allied health staff, informaticists, ICT specialists, educators, managers, students, policy makers, and more
- Help us in our efforts to:
  - Inform and educate current and future eHealth workers
  - Participate as a stakeholders in our events
  - Help disseminate and use your networks to exploit the results of this important work to make an impact in eHealth
- Log on to our website: www.ehealthwork.org or www.ehealthwork.eu
- Take our survey here: http://ww2.unipark.de/uc/eu_us_ehealth_work_survey

Questions

KIITOS!

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