

# HIMSS<sup>®</sup>19

## CHAMPIONS OF HEALTH UNITE

Global Conference & Exhibition  
FEB 11-15, 2019 | ORLANDO

# EU/US Collaborations to Ensure a Capable eHealth Workforce

Session 292, February 14, 2019

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OF NURSING  
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# Conflict of Interest

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Has no real or apparent conflicts of interest to report.

# Agenda

- Describe the current EU/US healthIT/eHealth competency gap.
- Highlight the potential impacts on systems because of the gap.
- Explore two case studies for addressing the gap.
- Gather audience input on their awareness of a HealthIT/eHealth gap among current workforce.
- Solicit audience experiences with addressing that gap focusing on process and lessons learned.
- Generate audience suggestions for support, tools, and resources that can be used by facilities to address the gap.



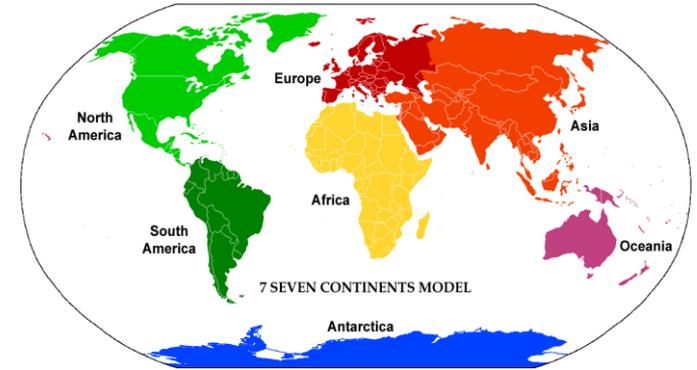
# Learning Objectives

- Describe the current evidence available describing the health IT/eHealth competency gap among healthcare professional students, faculty, and employees which is an international and inter professional issue as healthcare become more digitally connected
- Appraise the efficacy and applicability of the presented case studies to address the gaps in health IT/eHealth competency. These case studies include concrete outcomes, educational offerings, and knowledge development for healthcare professionals
- React and respond to guided questions presented by the speakers which will be used to gain additional information from audience experience with programs to address the Health IT/eHealth competency gap in healthcare professionals
- Construct a roadmap for addressing the health IT/eHealth competency gap in the workplace in the EU and US



# Room Assessment

- We would like to know about you.
  - Are you from the US?
  - Are you from the EU?
  - Asia, Middle East, Africa, Latin America?
  - Do you work for a healthcare facility? University? Clinic?



Images: [Alex Covarrubias](#) (tweaked by [Corticopious](#)); adapted from [Image:Continents vide couleurs.pn](#)

Nick Youngson - link to - <http://www.nyphotographic.com/>



# Background



- Information and communication technology development and implementations are making significant and lasting changes to the way we live, work, play, communicate, and interact.
- We need a well-prepared eHealth workforce.
- A competent workforce can optimize costly implementations, use the data and information, obtain the desired outcomes, and function in interprofessional teams.
- A competent workforce has the cognitive, motivational, moral and social skills that are needed to achieve goals through knowledge and actions. (Hubner, Egbert, Hackl, Lysser, Schulte, Thye & Ammenwerth, 2017).

# Evidence of Gap

- Nurses entering the workforce are not prepared and lack informatics competencies needed (Found, 2012).
- Competency deficits were found in a pretest of informaticists in a facility in the SE US (Pordeli, 2018).
- Brunner et al (2017) in a 3 phase study identified the need for education and curriculum reform to reinforce eHealth capability and reduce the gap between academia and application.
- The EU/US eHealth Work Project carried out a measure and mapping project.
  - In 2017, a Gap Analysis was conducted targeting 1000 respondents
  - 877 participants responded from the US and EU
  - Found pressing need for training particularly among nurses and physicians



# Significant Gap Findings

- Managers and workers do not have digital skills.
- Informal caregivers lack training.
- Educators competence must be improved.
- Courses and training are limited.
- Training materials and tools are not available.
- Job descriptions have not been adapted to include digital skills.
- Healthcare professionals are lacking in digital skills related to continuity of care.
- Users are not involved in phases of systems development life cycle.

EU/US eHealth Work Project. Blake, Blake, Shaw, Thye, Varri et al (2017).



# Addressing the Workforce Gap

Case Studies Review

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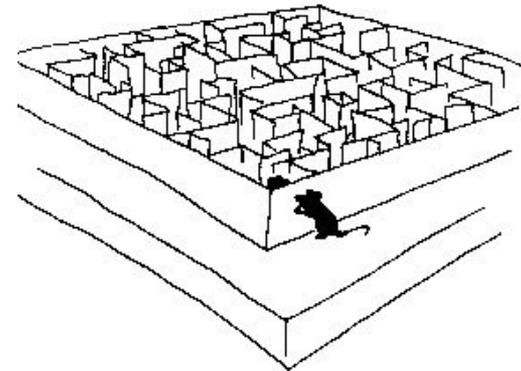


#HIMSS19

# Developing the next generation...

'An educated workforce  
learns how to exploit new  
technology, an ignorant one  
becomes its victim.'

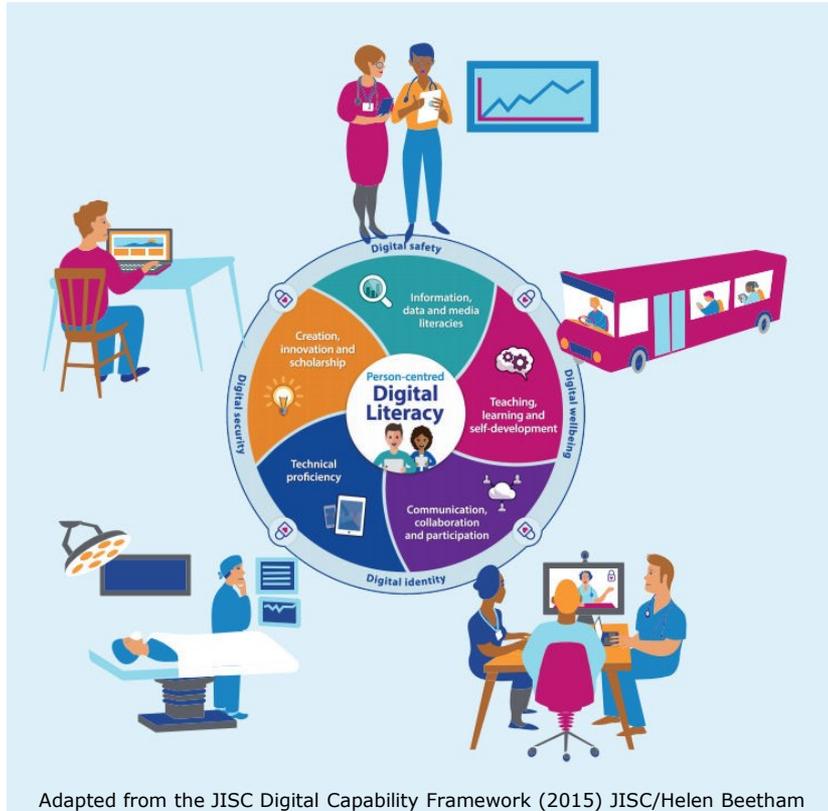
Stonier, T. (1981)



"Psst - want a map?"



# Developing the next generation...



**NHS**  
Health Education England

 Royal College  
of Nursing

**By 2020:**

**Every Nurse an eNurse**

**Sheffield  
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# Developing the next generation...



**Digitization** within society has brought about **Distribution** across time and communities, which in turn has caused **Disruption** to the 'normal' systems and structures and this has resulted in **Diversity** of actions...



# Partnering for Practical Informatics



Health system hurtles nonstop  
down the HIT Highway

**Skilled Drivers Needed:  
Informatics-fluent Healthcare Workforce**

# Partnering for Practical Informatics

- Unique academic-industry structure
- Organizational value proposition
  - Internal & external needs analysis
- Shared vision & operational engagement
- Concept to pilot to reality!

## Applied Health Informatics Certificate Program

# Partnering for Practical Informatics

## Student Outcomes

- Broadened perspective of health informatics (beyond the EHR!)
- Developed basic clinical-technical translation skills
- Acquired & applied practical skills & tools in daily work
- Inspired life-long informatics-related learning
- Reinforced the patient/healthcare consumer focus!



# Your Experiences...

Audience Input

# In your experience, what is the most significant impact of the front-line healthcare workforce members' gap in healthIT/eHealth competencies?

- Technical proficiency
- Information, data and media literacies
- Communication, collaboration and participation
- Creation, innovation and scholarship
- Teaching, learning and self-development



How have you measured baseline healthIT/eHealth competency of front-line clinicians?

Students of healthcare professions?

Faculty in healthcare professional programs?

Healthcare consumers/patients?

What methods of closing the healthIT/eHealth competency gaps have you found most effective for front-line clinicians?

Students of healthcare professions?

Faculty in healthcare professional programs?

Healthcare consumers/patients?

# What do you need?



[https://padlet.com/p\\_procter/bjgvnvvjwawm](https://padlet.com/p_procter/bjgvnvvjwawm)

# Resources

- Health Information Technology Competencies
  - <http://hitcomp.org>
- Nursing Knowledge Big Data Science Initiative Education Workgroup
  - <https://www.nursing.umn.edu/centers/center-nursing-informatics/news-events/2019-nursing-knowledge-big-data-science-conference>
- Office of the National Coordinator. Health IT Curriculum Resources
  - <https://www.healthit.gov/topic/health-it-resources/health-it-curriculum-resources-educators>
- TIGER Virtual Learning Environment (VLE)
  - <https://www.himss.org/professional-development/tiger-initiative/virtual-learning-environment>



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# Questions

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