Introduction to the Global Health IT Strategies Minitrack

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The global advancements in information and communication technologies has provided opportunities to address issues important to global health, such as coordinating responses to emerging diseases, and addressing health issues that have an international interest throughout diverse regions of the world. These technologies assist in disease surveillance and response, global health education, disease monitoring and tracking, applying traditional telemedicine applications, as well as other applications for all healthcare actors. These efforts are already impacting the rapid growth and further development of global healthcare solutions and approaches arising from the active collaboration among cross-disciplinary researchers, multi-national agencies and international clinical practitioners.

This mini-track will examine broader issues relating to Global Health IT strategies, including similarities and differences in how regions as diverse as North America, Africa, Asia and the Middle-East approach to health improvements, emerging trends for applying innovative health IT solutions to improve general population and community health care globally, new forms and modalities of care delivery aided with Health IT globally such as use of innovative low-cost, mobile and sensor-enabled and other emerging health technological applications. These solutions will provide a multinational perspective on the benefits of mobile health and other emerging information technologies and describes different examples and applications implemented.

This is fifth year that the Global Health IT Strategies minitrack has appeared at HICSS, and this year sees an increase in the papers submitted to this minitrack. In all, this minitrack will have seen the presentation of 18 papers, some of which have been accepted for publication in the International Journal of Healthcare Information Systems and Informatics (IJHISI).

This year sees three papers accepted in this minitrack. The first paper reports on an application of image recognition technology to identify insects that can potentially transmit disease, where the images are supplied via social media. The paper titled "Image Recognition of Disease-Carrying Insects" describes a prototype that includes modules for image collection, training of image classifiers, specimen recognition, and expert validation and analytics. The results of the recognition of specimens in images provided by citizen scientists can be used to generate visualizations of geographical regions of interest where the threat of a virus may be imminent, and uses state-of-the-art image classification algorithms and a combination of mobile and desktop applications to ensure that crucial information is shared appropriately and accordingly among its users.

The second paper in this minitrack reports on findings of a nation-wide adoption of an electronic medical record (EMR). The paper, titled "Critical Issues in Implementing and Adopting National e-Health Solutions", reports on Australia's adoption of MyHealth Record. The authors use Actor-Network Theory (ANT) as a lens to evaluate various e-health solutions and illustrate in the context of MyHealth Record, the chosen e-health solution for Australia. The results of this study reveal that the implementation of eHealth is a complex process and approaching it nationally, serves to make it significantly more challenging with enormous barriers.

The third paper, titled "A Longitudinal Study of Ambulatory EMR Adoption in the USA", examines the adoption of electronic medical records (EMR) by clinics in the USA between 2004 and 2014. This study identifies clinic-, patient- and visit-related variables from the survey, and uses them to predict EMR adoption intention and usage in each year. The explanatory power of different variables changed over time in different ways, revealing how policy, technology, and practice influence EMR adoption together. The findings yield implications for the strategies and best practices of health IT diffusion.

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