

INVITED SESSION SUMMARY

Title of Session:

Co-designing a sustainable amputation and prosthetics service delivery in low and middle income countries.

Name, Title and Affiliation of Chair:

Dr Cheryl Metcalf, Faculty of Health Sciences, University of Southampton, UK

Dr Alex Dickinson, Faculty of Engineering and the Environment, University of Southampton, UK.

Details of Session (including aim and scope):

The aim of this session is to describe a process of delivering a sustainable technology-enabled healthcare service for prosthetics throughout Cambodia by utilising innovative low-cost technology, such as CAD/CAM limb fitting and connectivity hubs. This project relies heavily on a network of clinicians, industrial developers/suppliers, charity services and multidisciplinary academic researchers as important project partners. This session will describe this process from the different perspectives of these key partners and the work undertaken to achieve this objective.

This process is embedded within an ethnographic agenda; identifying key socioeconomic and cultural factors that will promote or prevent technology adoption within the existing health service. These important issues will be derived from end-users of the existing health care system (patients and clinicians). This bottom-up approach to understanding the user problem will help define key development and implementation gateways that will be intrinsic to the successful sustainability of the project.

A comprehensive review of potential technology solutions for facilitating a conceptual 'travelling prosthetist' will be undertaken, thereby widening access to services from major cities to include provincial townships and villages, empowering end-users (patients and clinicians) with relevant data and information to inform decision-making. This session will highlight how important it is for academic researchers to engage fully with industry, clinicians and patients during development, and to integrate principles defined during the ethnographic work to take a user-led design approach to service delivery.

Running concurrently with this process from inception is a business modelling approach. The rationale for undertaking this modelling throughout the project lifecycle is two-fold: to capitalise and integrate the ethnographic data, and to iteratively hone a business development plan that is flexible and modular to be adapted, in part or whole, to other countries. This work will highlight factors associated with requirements of infrastructure, regional resources, funding and government and cultural requirements.

This session will describe a translational research programme making an important difference to the provision of international healthcare by widening access and provision to technology.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Dr Alex Dickinson, Bioengineering, Faculty of Engineering & the Environment, University of Southampton, UK

Professor Mike Santer, Founder/Business & Product Development Director, BluPoint Ltd and University of Canberra

Associate Professor Maggie Donovan-Hall, Faculty of Health Sciences, University of Southampton, UK

Representative from Exceed, formerly The Cambodia Trust.

Dr Cheryl Metcalf, Principal Enterprise Fellow, Faculty of Health Sciences, University of Southampton, UK

Website URL of Call for Papers (if any):

N/A

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