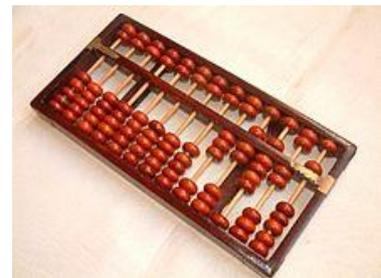




DIGITAL HEALTHCARE: Shaping the Future

The Centre of Postgraduate Medical Research and Education (CoPMRE) held another sell-out conference in October on the Bournemouth University (BU) Lansdowne Campus. The Centre is the primary conduit for local doctors and allied healthcare professionals, together with a national and international visiting faculty, to work at Bournemouth University in collaboration with other Faculties and centres on an impressive range of educational, research and enterprise activities.

With the topical theme of Digital Healthcare, the conference was opened by Professor Stephen Tee, Executive Dean for the Faculty of Health and Social Sciences, (FHSS), who welcomed us and set out where the University was and where it was heading. Of particular note was the University's rise of 20 places in the Sunday Times Good University Guide. He paved the way for the day's discussion announcing that we are in the middle of a digital revolution with an opportunity to improve healthcare delivery. The morning session, chaired by Dr Katherine Curtis, Associate Professor and Head of Department for Nursing and Clinical Sciences in FHSS, started with a journey through time and space of 2000 years of medicine and computing history. Delivered by the double act of Dr Andrew Main, computing guru at the Faculty of Management, BU and Dr Tim Battcock, CoPMRE Co-Director of Education, homage was paid to past and present gamechangers. Professor Tamas Hickish, CoPMRE Co-Director of Research then set the scene for a Hackathon. The audience were invited to identify healthcare problems to challenge his group of boffins from the Faculty of Science and Technology to creatively solve, in a space of a few hours, by means of digital technology.



The first keynote address was delivered by Cathy Francis, Director of Patients and Information for NHS England South. She set the national context and strategy for digital healthcare in an inspirational talk which mapped the foundation for the future. The role of social media in today's world was emphasized with over 70% of people now owning a smartphone and one in 20 Google searches health related. She quoted Simon Stevens, Chief Executive of NHS England "Now is quite obviously the time to confront – not duck – the big local choices needed to improve health and care across England over the next five years, and STPs (Sustainability and Transformation Plans) are a way of doing this. Their success will largely depend on the extent to which local leaders and communities

now come together to tackle deep-seated and long-standing challenges that require shared cross-organisational action.” The Five Year Forward View commits the NHS to closing the gap in the three areas of Health and Wellbeing, Care and Quality, Financial & Efficiency and the Clinical Commissioning Groups (CCGs) have been tasked with organising themselves in digital footprints to develop local digital roadmaps to address this. Cathy was excited about the virtual platform already being used to improve healthcare and encouraged everyone present to aim high as she believes digital technology has a big role to play in the future of the NHS.

During a networking coffee break, delegates visited stands promoting the Research & Development departments at our local hospitals, the BU Clinical Research Unit (BUCRU), and local digital innovation companies Nourish, Silicon South, Hivewire, Hip Buddy and MSK Note.

After coffee, Andy Hadley, Head of IT Development at NHS Dorset Clinical Commissioning Group, outlined the Dorset digital journey with an emphasis on Prevention at Scale by empowering people and supporting networked expertise. He outlined the Dorset Sustainability and Transformation Plan and what a digitally enabled Dorset would look like. This was followed by Nuno Almeida, CEO Nourish who comes from a world of innovation and entrepreneurship in healthcare, who shared his company’s mission to enable service transformation through digital. He demonstrated how product management and design can enhance the user experience, improve clinical pathways to the benefit of patients in a variety of settings.

Next, came an innovation showcase. Professor Jonathan Cole regaled us with the marvels of a new mobile phone device to detect neuropathy in patients undergoing cancer treatment, allowing oncologists to adjust timing and dosage of subsequent chemotherapy. This was a collaborative NHS and BU project between Professors Cole and Hickish and Drs Dubey and Vaughan. The team, who won the NHS Innovation Challenge Prize earlier in the year, hope to be able to roll out this innovation to allow patients to self-test for diabetic neuropathy. Next, Dr Sue Baron, Lecturer in Adult Nursing, BU introduced us to some videos where patients and carers told their personal story and experiences of using digital technology in the management of chronic disease <http://www.bournemouth.ac.uk/csnp>.

After an excellent lunch, Dr Tim Battcock took over as Chair and introduced two innovation stalwarts, Cathal Malone, MSK Note and Dilan Pathmajothy, Hivewire who stood in at short notice. Cathal presented two technology products: a musculoskeletal Practice Management System and a Patient Information Platform to improve the management of musculoskeletal healthcare. Dilan introduced us to the use of a WhatsApp style communication tool for junior doctors and healthcare workers. Very exciting developments indeed!



Our second keynote address was delivered by Professor Theodorus Arvanitis from the Institute of Digital Healthcare at University of Warwick looking at the importance and challenges of interoperability and the need to design systems that worked well together. He spoke about the power of healthcare information which needs to be readily available and easily interpretable by both humans and machines. It was demonstrated that a digitally-enabled healthcare provides the way forward for the benefit of individuals and society and that whilst interoperability is hugely challenging, it provides a great

opportunity to transform healthcare.

After tea it was time for the afternoon showcase innovation. Richard Dolan from NHS Dorset CCG focused on primordial prevention and introduced us to Generation Alpha, as coined by futurist Mark McCrindle, the generation born after 2005, with smartphones in hand and an expectation of interaction based on technology. We learnt that technology needs to be integrated into lives rather than used as a tool and he explained to us 'gamification' which is human focused design, in order to achieve better health outcomes. This was followed by Dr Biao Zeng, Senior Research Fellow at BU who provided us with an insight into alternative communication using blink and brainwave for post-stroke aphasia. A few ideas to add to our Christmas present list this year!

Generation Alpha



Finally, we saw the return of our group of technology boffins who had risen to the morning Hackathon challenge and wowed the audience with their technological solutions to the problems we had posed in the morning. Their innovative ideas ranged from using something like the Smart Eyeglass for patient specific information and patient/doctor interaction to using an electronic decision tree for triage to avoid patients having to give personal embarrassing information to doctor receptionists and for better signposting.

Thanks to all the speakers, chairs, my team for their support, Nicola Deedman from Marketing and Communications team, BU and to Daniel Stubbington, BU student and cinematographer. A two minute YouTube video can be viewed at https://www.youtube.com/watch?v=ybjF4-geH_c and full recorded presentations and PowerPoints can be viewed via our website www.bournemouth.ac.uk/copmre .



CoPMRE staff with Professor Arvanitis

See you at the Fourteenth Annual Symposium!

Audrey Dixon
CoPMRE Manager
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