

## Cambridge Wireless Healthcare SIG

### “Management of Chronic Long-Term Conditions – Technology Innovations in Patient Pathways”

26th September 2013

Jointly supported by:  **Cambridge Biomedical Campus**  
Innovation and Excellence in Health and Care



The Wireless Healthcare SIG is championed by Paul Winter of **TTP**, Rob Blake of **Philips Research UK**, Peter Ferguson of **Accenture** and Tim Phipps of **Cambridge Consultants**

Venue: Queens College, Fitzpatrick Hall, Silver Street, Cambridge, CB3 9ET

#### AGENDA

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- 13:30** Registration & Networking over coffee (*please note that lunch is not provided at this event*)
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- 14:00** Introduction to the Cambridge Wireless Healthcare SIG from **Paul Winter** of **TTP**
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- 14:10** Welcome from our partner, **Simon Yarwood** of **The IET**
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- 14:15** Chaired by SIG Champion, **Paul Winter** of **TTP**  
**‘Adoption of New Patient Pathways’**  
**Charles Lowe, President-elect, Telemedicine & eHealth Section, Royal Society of Medicine**  
Many clinicians and patients are hesitant about new patient pathways that use technology to improve outcomes and reduce costs. This presentation will explore the reasons for that resistance and suggest the best ways to overcome it.
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- 14:30** Q&A  
Sessions chaired by SIG Champion, **Rob Blake** of **Philips Research UK**
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- 14:40** **‘A Single Version of the Truth’**  
**Keith Swinburne, Programme Director of the eHealth Project, Papworth Hospital**  
An integrated electronic patient record is now generally accepted as an essential component in the delivery of effective multi-disciplinary healthcare but has proved elusive in the UK. Keith explains how Cambridge is tackling this issue with the eHospital programme.
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- 14:55** Q&A
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- 15:05** **‘Involving Patients in their Own Healthcare – What Lies Ahead?’**  
**Dr Afzal Chaudhry, Consultant Nephrologist & Clinical Lead for IT, CUH**  
Extensive evidence shows that successful, high quality patient care is enhanced by directly involving the patients themselves. Technological advances mean that this can now extend far beyond the traditional consultation. Dr Chaudhry explores the current situation and what lies ahead for both Cambridge and others healthcare providers.
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- 15:20** Q&A
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- 15:30** **Refreshment Break**  
Sessions chaired by SIG Champion, **Paul Ferguson** of **Accenture**
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- 16:00** **‘Conventional and Cloud-Based Monitoring of the Heart Beat’**  
**Dr Andrew Grace, Consultant Cardiologist, University of Cambridge**  
Disturbances of the cardiac rhythm are by their very nature episodic and seemingly stochastic. This talk will demonstrate how arrhythmias can be better managed through continuous monitoring using both implanted and non-implanted devices. Tailored risk stratification of arrhythmia risk and targeted therapy using cloud-based data exchange will also be covered.
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- 16:15** Q&A
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- 16:25** **‘The Challenges of Managing Patients Outside the Surgery: A GP's Story’**  
**Dr Rachel Morris, General Practice Unit, University of Cambridge School of Clinical Medicine**  
This talk will use a case history to illustrate the challenges and issues involved in managing patients in a setting where diagnosis is uncertain, information is elusive and communication relies on paper.
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- 16:40** Q&A
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Chaired by SIG Champion, **Rob Blake** of **Philips Research UK**

**16:50** **'Technology Care on the Cheap: How can Mainstream and Specialised Technology Solutions be Used to Support People?'**

**Steve Barnard, Strategic Director of Innovation, Hft**

This presentation will focus on how a person-centred approach can enhance the quality of life of people whilst making them less dependent on others. The live video case studies used during the presentation will focus on people with learning disabilities, however many of the solutions are transferable to other groups.

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**17:05** Q&A

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**17:15** **Open Forum** with all speakers chaired by **Paul Winter** of **TTP**

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**17:55** **Fill in Evaluation Forms / Event Closes**

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Delegates are invited to attend the Founders' Dinner pre-dinner drinks, taking place at Queens College, Old Kitchen, Cambridge and kindly sponsored by Cambridge Biomedical Campus.

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*With the permission of the speakers, presentations will be loaded to the Cambridge Wireless website on the day following the event*

## Profile of Organisers

### Cambridge Wireless

Cambridge Wireless is a leading industry forum and vibrant community with a rapidly expanding network of companies actively involved in the development and application of wireless technologies. In addition to high level networking dinners, educational events and business development activities, Cambridge Wireless runs an annual Future of Wireless International Conference along with the Discovering Start-Ups initiative to support emerging, innovative wireless companies. Over 15 Special Interest Groups focused on specific technologies and market sectors, also provide opportunities for members to meet, form partnerships to exploit new commercial opportunities, and share knowledge and information about the latest industry trends and hot topics. Cambridge Wireless has partnerships with other leading industry clusters and organisations around the world to extend its international reach and to keep members up to date with the latest global developments and business opportunities. For more information please visit: [www.cambridgewireless.co.uk](http://www.cambridgewireless.co.uk)

### Cambridge Biomedical Campus

The Cambridge Biomedical Campus is a world-class centre of excellence dedicated to biomedical research, patient care and education. Current occupiers include Cambridge University Hospitals NHS Foundation Trust, the Cancer Research UK Cambridge Research Institute, the Hutchison/MRC Research Centre, the Medical Research Council Laboratory of Molecular Biology and the University of Cambridge School of Clinical Medicine. Unlike traditional science parks, the Campus is not just a real estate solution for research-led organisations. It is a community of like-minded individuals, many of whom are world-leaders in their field, working in successful partnerships both with one another and with industry in order to bring new and improved treatments and care to patients. In the past, space constraints have meant that accommodation on the Campus was restricted to the current occupiers. This is no longer the case however and the Campus is currently undergoing a major expansion. The development team is now inviting companies that can contribute to achieving the goals of the vibrant research community to consider locating alongside them on the Campus. Laboratory and office accommodation will be provided in state-of-the-art shared occupancy buildings with bespoke "design and build" options also available. For more information please visit: [www.cambridge-biomedical.com](http://www.cambridge-biomedical.com)

### The IET

The IET is one of the world's leading professional societies for the engineering and technology community, with more than 150,000 members in 127 countries and offices in Europe, North America and Asia-Pacific. The IET provides a global network to facilitate the exchange of ideas and promote the positive role of science, engineering and technology in the world. For more information please visit: [www.theiet.org](http://www.theiet.org)

### EAHSN

The Eastern Academic Health Science Network (EAHSN) is one of 15 new Academic Health Science Networks, licensed in May 2013 to deliver the coalition Government's objectives set out in 'Innovation, Health and Wealth' and 'A Strategy for UK Life Sciences'. Serving a population of 4.8 million people in four established clinical and biomedical communities (Cambridgeshire and Peterborough, Norfolk and Suffolk, Bedfordshire and Hertfordshire, and Essex), the EAHSN has clear plans to develop and commercialise research and innovation, thereby driving economic benefit and improving health outcomes. The EAHSN will work with NHS, academic and industry partners to open doors to the NHS for SMEs as well as larger companies in med-tech, bioscience, informatics and the pharmaceutical industries. As part of this programme the EAHSN will be hosting eight Small Business Research Initiative (SBRI) competitions in 2013/2014, bridging the vital gap between research and innovation and high quality clinical care. For more information please visit: [www.eahsn.org.uk](http://www.eahsn.org.uk)

## Profile of SIG Champions

### **Paul Winter, TTP**

Paul Winter is a programme manager and RF engineer in the Communications and Wireless group at TTP. He has led numerous projects in commercial, industrial and healthcare sectors developing connected devices and precision instrumentation. Paul has a heritage in developing products integrating multiple wireless standards including GPS, GPRS, Wi-Fi, Bluetooth and proprietary ISM band radios, deployed within multi-sensor systems for in-home and on-body applications, often coupled to 'Cloud' based analysis and visualisation services. In healthcare Paul has applied aspects of wireless, antennas and electronics to a number of medical devices including inhalers, glucose testing and point of care diagnostic instruments. Paul has also led several incubation projects for TTP's Carbon Trust Incubator, covering a wide range of cutting edge technologies.

Paul joined TTP in 2006; prior to this he worked as a radio engineer for Global Communications developing high volume consumer in-home satellite and digital TV distribution equipment, as well as portable equipment for the 'on-location' broadcasting industry. Paul has a Masters degree in Electrical & Electronic Engineering from the University of Wales, Cardiff. He is a member of the Institute of Engineering and Technology, the Royal Academy of Engineering and is a Chartered Engineer. For more information please visit: [www.ttp.com](http://www.ttp.com)

### **Peter Ferguson, Accenture**

Peter is a Programme Manager in Accenture, Cambridge. Peter has lived in Cambridge for 15 years. He has a MSc and PhD in Medical electronics. Peter has held key Technical and management responsibility for development projects including the world's first Self-Adhesive Physiological monitor and the delivery of over 20 Global Smartphones. In his 2 years as an Accenture Mobility Health delivery lead, he has provided mobile technology consulting for the NHS, UK Health research and government hospitals in China (Shanghai). As a Champion of the Cambridge Wireless Healthcare SIG Peter's objective is to demonstrate and present Global Mobility Health Innovation. For more information please visit: [www.accenture.com](http://www.accenture.com)

### **Rob Blake, Philips Research UK**

Robert Blake is a Senior Scientist at Philips Research, Cambridge. Philips has recently established their UK Research presence in the town, showing a commitment to Research, the UK and Cambridge. At Philips, Robert has worked on mobile and wireless applications, focussing on usability and acceptability issues relating to the technology. Initially he worked on location and context aware applications, using mobile phones and Bluetooth to deliver services to users. Robert was involved in the early days of Near Field Communications (NFC) where he worked on applications for this new technology and built some of the first NFC-enabled mobile phone prototypes. A major focus of the work was building and promoting novel contactless applications, including using NFC to establish a Bluetooth connection. More recently he has been investigating the application of mobile and wireless technology for home healthcare and wellbeing. One of the projects he is working on is SAPHE (Smart and Aware Pervasive Health Environment), aiming to provide a next generation telecare system for improving the quality of people's lives. Robert holds a MEng in Software Engineering from Imperial College London and is fluent in German. In his spare time he enjoys photography and is a keen cyclist. For more information please visit: [www.research.philips.com](http://www.research.philips.com)

### **Tim Phipps, Cambridge Consultants**

For 50 years, Cambridge Consultants has led the way in innovative product development. We are the development partner of choice to many of the world's leading blue chips as well as the virtual development team for ambitious start-up companies. Tim is responsible for Wireless Business Development at Cambridge Consultants and has a long track record of working on leading edge wireless technology development and creating new business of strategic importance for product manufacturers. Over his career he's worked to introduce innovative new technologies at the earliest stage of their market development such as mobile phone operating systems, EDGE, GSM, Bluetooth and WiFi. As Champion of the Cambridge Wireless Healthcare SIG, Tim's objective is to create commercial discussions that further the interests of society. For more information please visit: [www.cambridgeconsultants.com](http://www.cambridgeconsultants.com)

## Profile of Speakers

### **Charles Lowe, Telemedicine & eHealth Section, Royal Society of Medicine**

Charles Lowe ran the LB Newham Assistive Technology programme for four years during which time some 3000 people had telecare installed and the Borough began telehealth implementation after winning Whole System Demonstrator status. In 2008 Charles joined Telehealth Solutions Ltd. as product manager, initiating new products and assisting to customers implement telehealth. In December 2011 he was recruited by Surrey County Council on a fixed term contract, now ended, to manage the mainstreaming of their telecare service and to establish a telehealth programme. Charles previously chaired the TAHI Assistive Living Working Group, is an Expert Reviewer for the EC and is President Elect of the Royal Society of Medicine's Telemedicine and eHealth Council. He also chairs Citizens Online, a digital inclusion charity. For more information please visit: [www.rsm.ac.uk/](http://www.rsm.ac.uk/)

### **Keith Swinburn, Papworth Hospital**

Keith Swinburne is an experienced change leader who has worked in many industries. Keith is currently one of the leaders of Cambridge University Hospital's (CUH) and Papworth Hospital's eHospital programme and has specific

responsibility for stakeholder and supplier engagement and for Papworth. For more information please visit: [www.papworthhospital.nhs.uk](http://www.papworthhospital.nhs.uk)

**Dr Afzal Chaudhry, CUH**

Dr Afzal Chaudhry, a Renal Consultant, is the Clinical Lead for IT at CUH Foundation NHS Trust and the Theme Lead for Informatics in the Cambridge NIHR Biomedical Research Centre. He has led a number of novel clinical informatics projects locally, regionally and nationally and is currently the lead clinician for the CUH and Papworth Hospitals' eHospital programme. For more information please visit: [www.cuhp.org.uk](http://www.cuhp.org.uk)

**Dr Andrew Grace, University of Cambridge**

Andrew Grace has a large clinical practice and an established reputation for research in cardiac arrhythmia. He was a Fulbright Scholar, Department of Medicine, University of California, San Diego and Adjunct Professor of Medicine, Xi'an Jiaotong University, People's Republic of China. He has published extensively (>190 papers) and given invited lectures internationally presenting highlighted late-breaking science. He has a particular interest in 'disruptive' technologies to improve patient care that have included devices, diagnostics and drugs. For more information please visit: [www.cam.ac.uk](http://www.cam.ac.uk)

**Dr Rachel Morris, General Practice Unit, University of Cambridge School of Clinical Medicine**

Dr Rachel Morris is a practicing GP in the city of Cambridge and an Assistant Director of GP Studies teaching General Practice to undergraduate medical students at the University of Cambridge School of Clinical Medicine, where she also heads up the development of the 'Doctor as Professional' theme. Dr Morris is a Member of the Royal College of General Practitioners, has a Masters degree in Medical Education and is a Fellow of the Academy of Medical Educators. For more information please visit: [www.medschl.cam.ac.uk](http://www.medschl.cam.ac.uk)

**Steve Barnard, Strategic Director of Innovation, Hft**

Steve started work with Hft in 1992 as a Regional Director. He has a background working as a practitioner, manager and director supporting people with learning and physical disabilities. In 1999 Steve became Hft's Director of Information Systems. He has been responsible for the creation and delivery of new back office systems and implementing Hft's IT infrastructure for both staff and the people they support. Steve has also been instrumental in the development of Hft's Personalised Technology Team, which focuses on identifying how people can be helped to live the lives they choose through the use of technology to meet their specific needs. Hft now has a reputation for being leading providers of Personalised Technology for people with learning disabilities in the UK and across mainland Europe. The process Hft has developed is applicable to other vulnerable groups which are now being explored by the Liverpool Dallas Technology Strategy Board funding project. As a result of developing external networks Steve is now Hft's Strategic Director of Innovation, looking for new ways to support people with learning disabilities and to develop as full citizens. This includes research and new technologies through partnerships and collaborations. For more information please visit: [www.hft.org.uk](http://www.hft.org.uk)