Improving lives through innovation and supported self-care for people with long term conditions and towards the end-of-life: evaluation of VitruCare™

Dr Carolyn Wilson

Dynamic Health Systems in partnership with University of Salford

Dynamic Health Systems is a company comprised of innovative clinicians with an affinity for IT, business transformation experts with experience in health and experienced solution designers who understand critical systems. DHS is a small business with 6 company members, including myself, who have developed a digital health system called VitruCare™. VitruCare™ is designed to help patients self-manage their health. The system was originally designed for patients with long term conditions (LTCs) such as diabetes, hypertension and hypothyroidism but recently the company has expanded its target market towards people nearing the end of their lives (EoL) and is in partnership with Sue Ryder.

The system itself has been implemented in 14 GP practices in Bradford and 3 GP practices in Cumbria for people with long term conditions (LTCs). This system, also known as VitruCare™ 1, involves patients creating goals of what they want to achieve (e.g. a drop in blood pressure, a lower consumption of saturated fat, losing weight) and developing an action plan on how they can achieve these goals. The idea being that patients could enter values and achievements onto the system alongside any data that is entered by the GP or clinician such as blood pressure, weight etc. This creates a portfolio of their health, which they can refer to and use to reach their intended goals.

DHS have also been busy developing VitruCare™ 2, which has the same intention but involves several microapps that the patient can choose to have, for instance ‘how do I feel today’ and ‘my extended care team’. The idea of VitruCare™ 2 is that it is more interactive for the patients and allows stronger communication between the user and their care team such as GPs, nurses, physio, friends and family. This version has been piloted in partnership with Sue Ryder on patients nearing the end of their lives (EoL). Many have found it useful and reassuring but as with any pilot, there have been technical and communication glitches that need altering.

DHS is expanding but has very little feedback data from the patients and clinicians using the system. Consequently, my role as a KTP associate is to provide an evaluation service for the company to ensure that their implementation of VitruCare™ 2 to all target patients is as effective as possible. Being in partnership with the department of Nursing, Midwifery, Social Work and Social Sciences at the University of Salford allows academic application to the evaluation process. Working alongside Professor Paula Ormandy and Cristina Vasilica has allowed us to develop a detailed data collection process involving quantitative questionnaires provided to patients across the 3 month (EoL) and 12 month (LTC) longitudinal studies, focus groups of different cohorts, for instance EoL patients, LTC patients, GPs, nurses and other healthcare professionals (HCPs) and qualitative satisfaction questionnaires provided at regular intervals to both patients and HCPs.

Using Paula and Cristina’s expertise in qualitative data collection/analysis and my expertise in quantitative repeated measures questionnaire data collection/analysis, we are beginning
to develop an in-depth evaluation of VitruCare over a long period of time. This presentation will outline the preliminary data from LTC patients in Bradford alongside early stage qualitative data collection from EoL patients and Sue Ryder HCPs. These results are currently being comprised with detailed literature reviews to create papers for the British Medical Journal.

This KTP has given me the opportunity to apply the experienced I gained from my PhD research on the longitudinal technology use of older adults to a digital health company. I enjoy the practical application of research and how it can benefit patients and HCPs. Originally a Durham University Business School student, I have also relished working in the healthcare profession with a variety of individuals including GPs, nurses and academics. I intend to continue working in this area, specialising on behaviour change, and so I am currently gaining all the experience and qualifications that I can.

My KTP journey is presently at the beginning with participants still being recruited and only preliminary results available, however, I have already gained a wealth of experience working in the healthcare industry and being able to apply my research skills to a practical application; the evaluation of VitruCare™, a digital health technology. Moreover, I have created good connections with Sue Ryder, developed a detailed report to extend funding, been part of a Horizon 2020 bid, drafted papers for publication, joined the Society for Consumer Psychology and applied my knowledge of behavioural economics to digital health by producing a detailed literature review. All of which will help me to secure a lectureship or research position within a UK University in September 2016.

Biography

Dr Carolyn Wilson is a research associate in digital health for DHS in partnership with the University of Salford. She obtained her PhD from Durham University Business School in May 2014, entitled “Ageing technologically: Exploring the Motivating Operations of technology use by older adults.” She has research experience in behaviour change, radical behaviourism, behavioural economics, qualitative and quantitative research methods, technology adoption and vulnerable populations. She also has teaching experience with Durham University in research methods, behavioural economics, social media strategies, crisis management, scenario thinking, practising social marketing and strategic marketing.