

A PhD student to focus on how hospital electronic prescribing can improve quality and safety

New research is focusing on how hospital electronic prescribing can be used to improve safety and quality of medication use, as a part of the UCL Institute of Digital Health (UCL IDH) and Cerner UK collaborative partnership.

Soomal Mohsin-Shaikh has been recruited as a PhD student at UCL, working with Cerner UK, to explore how introducing electronic prescribing and medication administration (EPMA) in the UK hospital context changes work flow and communication around the use of medication, the extent to which staff try to make it fit existing work processes versus process redesign, and how these changes can facilitate improvements in the safety and quality of medication use.

Consideration will be given to exploring the impact on increased patient safety as well as efficiency for integrated versus non-integrated EPMA systems. Anticipated outcomes will include a description of the changes to workflow and practice that result from EPMA, a model of how these changes are perceived to occur, and a description of the characteristics of structures, processes and environment that help organisations achieve quality, efficiency and safety with EPMA.

This studentship is based on a collaborative partnership between UCL and Cerner, an international leader in the development and implementation of healthcare technologies. Academic supervisors are based at UCL School of Pharmacy and the UCL Interaction Centre, a centre of excellence in human-computer interaction research

Dr Justin Whatling, Vice President Cerner and Visiting Professor UCL Institute Digital Health, states *“I am delighted at Soomal’s appointment. The topic is key because digitisation is not the objective: understanding socio-technological aspects of how technologies are adopted in practice will enable adaptive change, delivering safer and more cost effective care for patients.”*

Prof Bryony Dean Franklin (UCL School of Pharmacy), Prof Ann Blandford and Dr Dominic Furniss (UCL Interaction Centre), and Dr Pete Hughes (Cerner) are co-supervising Soomal, bringing together expertise in evaluating EPMA technologies and human factors.

Professor Franklin, Professor of Medication Safety at UCL School of Pharmacy, reports *“I am delighted to be supervising this PhD, on many levels. There are many important questions around the impact of technology on medication safety and there is little UK evidence to date. This particular PhD research is particularly relevant at a time when more and more UK hospitals are introducing EPMA, or changing from one EPMA system to another. It also represents exciting multidisciplinary collaborations both within UCL and externally with Cerner”*.

Soomal will spend time at Cerner to gain understanding of their systems. She will also benefit from insights from practitioners and researchers at the UCL IDH, UCL School of Pharmacy and Cerner Symposium on 8th February 2017, which will focus on the opportunities, challenges and experiences of EPMA. This will build on our partnership’s goals to bring research and innovations to market quicker.

Soomal Mohsin-Shaikh joined UCL from Imperial College Healthcare NHS Trust and up until recently was working as a resident pharmacist across the different sites. She completed her pre-registration year with the Trust, which recently underwent the transition from a paper based to electronic system and gained first-hand experience of the training, challenges and benefits of an electronic interface.

Soomal said: *“Research in the area of electronic prescribing and medication administration is growing rapidly. Being part of this developing field gives me the opportunity to bring about positive changes for the future of healthcare.”*

About UCL (University College London)

UCL was founded in 1826. We were the first English university established after Oxford and Cambridge, the first to open up university education to those previously excluded from it, and the first to provide systematic teaching of law, architecture and medicine. We are among the world's top universities, as reflected by performance in a range of international rankings and tables. UCL currently has over 35,000 students from 150 countries and over 11,000 staff.

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About UCL Institute of Digital Health

The UCL Institute of Digital Health harnesses the expertise and capabilities across all eleven of UCL's faculties in digital health. The institute was launched in June 2015 and is led by Professor Ann Blandford. Our world-class collaborative research develops novel technologies and infrastructure focused on improving the health of individuals and populations to benefit patients, healthcare professionals, industry leaders and policy makers.

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About UCL School of Pharmacy

The UCL School of Pharmacy is one of the most highly rated pharmacy schools (8th in the QS rankings for pharmacy and pharmacology 2015/2016) and has a long tradition of expert contribution to healthcare practice and policy. The School is located within the Faculty of Life Sciences, one of four Faculties that comprise the School of Life and Medical Sciences (SLMS - see: <http://www.ucl.ac.uk/slms/>).

The School enjoys a lively and stimulating academic environment in which teachers, researchers, professionals and students interact. All are connected by an interest in medicines - how they work, how they are made and how they are used by people to prevent and treat disease. Research focuses on advancing and understanding medicines and health care, and in creating new medicines. Its performance in the Research Excellence Framework 2014 marks UCL School

of Pharmacy as one of the most important centres for pharmacy and drug discovery research in UK education.

About Cerner Limited

Cerner's health information technologies connect people, information, and systems, at approximately 20,000 facilities worldwide. Recognised for innovation, Cerner solutions assist NHS Trusts and clinicians in making and documenting care decisions and enable organisations to manage the health of populations. The company provides clients with a wide range of in-house services, as well as an integrated clinical system to help organisations manage quality, outcomes and revenue.

Cerner's mission is to contribute to the systemic improvement of health care delivery and the health of communities. Nasdaq: CERN. For more information about Cerner, please visit www.cerner.co.uk, check out our blog at www.cerner.com/blog and connect with us on Twitter at [CernerUK](https://twitter.com/CernerUK) and on Facebook at www.facebook.com/cerner.

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