ELFIN: Globalization of an Electronic Patient Management system for Fracture Liaison Services
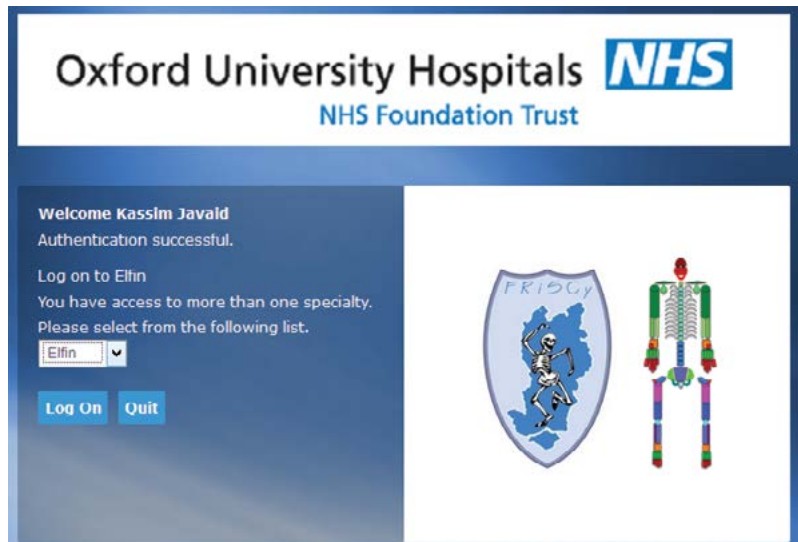
We have developed a secure web-based system to meet the complex needs of patients with fractures, saving clinicians' time and increasing their effectiveness.

Ensuring patients who break a bone are tested and treated for osteoporosis is important: it improves patient outcomes and reduces avoidable hospital admissions, resulting in significant cost savings.

Electronic patient management systems are needed to ensure consistent and efficient patient flow for this complex and high volume care pathway.

We worked with Seven Informatics to develop the ELectronic Fracture LiasoN system (ELFIN), a secure web-based application that meets the needs of this patient group and care pathway. The application uses a highly configurable open source platform based on ontology models of the data dictionary and care pathway, which can be specified by clinicians for clinicians.

ELFIN can report to different outputs – GP letters, patient information prescriptions and national audits, all using one-time data entry. It reduces the time specialist nurses spend on routine administration, and it improves clinical effectiveness by reducing variation in care and improving patient safety through the use of templates. It also permits real-time updates on service performance indicators, enabling integral service reporting as well as service benchmarking through exports into national audits.

ELFIN has now been implemented in three UK hospital Trusts, and it is in the process of implementation in one other Trust and in New Zealand. We have been awarded a UCSF award to refine the ELFIN clinical pathways, enabling improvements such as local configuration, an auto-installer function and a web-portal to market and provide critical support documentation for ELFIN.

The aim is to develop ELFIN as a global model for this patient group and apply its functionality to other long-term conditions/care pathways in healthcare.

Dr John Chelsom
CEO Seven Informatics Ltd
john.chelsom@gmail.com

Professor Kassim Javaid
Lecturer in Metabolic Bone Disease
University of Oxford
kassim.javaid@ndorms.ox.ac.uk