

100 Ways of Using Data to Make Lives Better

A series from The Farr Institute of Health Informatics Research showcasing the UK's most significant examples of using data in research

The Salford Medication Safety Dashboard

Software developers have created an easy-to-view electronic dashboard that helps general practices identify patients at-risk of medication errors and take action before any potential harm can occur.



*Principal Investigators: Prof Darren Ashcroft and Dr Niels Peek, The University of Manchester
Technical Lead: Mr Richard Williams, The University of Manchester
Research Associates: Dr Richard Keers, Mr Mark Jeffries, The University of Manchester and Mr Wouter Gude, University of Amsterdam*

*Precision and Stratified Medicine
Case Study 25*

The challenge

A recent study of English general practices identified errors in 5% of prescription medicines, with one in 550 containing a potentially life threatening error. Another study has shown that medication errors cost the NHS on average, about £500m per year.

The research

To address these issues, researchers at The University of Manchester developed a new computer system that allows general practices to avoid potentially unsafe situations by delivering carefully targeted information to health professionals.

Building on existing research from the University of Nottingham (PINCER), the research team developed a program that is able to search an entire database of patient records. Any patient identified as being 'at risk' of potential medication errors is then flagged up to pharmacists working in surgeries in an easy to view, visual dashboard of information.

Patients identified as 'at-risk' could, for example, have been receiving a repeat prescription for a long period of time without having been invited to a check-up, or be on a complex mix of medications that need to be carefully managed.

The dashboard allows health professionals to understand quickly whether any additional action needs to be taken to address the situation.

The results

The success of the SMASH intervention will be assessed by counting the number of patients that are at risk of medication-related harm before and after the trial.

The study is currently 6 months into its trial phase in Salford but there is already a significant reduction in medication safety issues in recruited GP practices across Salford.

The impact

The data gathered from this project provides invaluable insights for researchers and health service managers, for example, how medication is distributed across an entire city region.

Alongside data from the dashboard, researchers will also conduct interviews with pharmacists to understand how the system works in practice. This information will be used to draw-up a set of guidelines that can help other institutions looking to develop similar dashboard systems.

Ultimately the research team are hopeful that the impact of the SMASH dashboard will be a reduction in the number of medication errors across the UK and an improvement in health services for patients.

Find out more: <http://bit.ly/MedDashboard>

Enquiries to Stephen Melia, Communication Lead, Health eResearch Centre, stephen.melia@manchester.ac.uk