**The Health Foundation’s involvement in clinical human factors and systems work**

October 2012

*Please use the hyperlinks to find out more information on each area of work*

* We support the ***Clinical Human Factors Group****,* which is an independent campaign group set up by Martin Bromiley in 2007. It aims to stimulate dialogue and demonstrate how a better understanding of the role of human factors can impact on safety, quality and productivity in healthcare.

Find out more [here](http://www.health.org.uk/areas-of-work/programmes/clinical-human-factors-group/).

* We run the ***Safer Clinical Systems***programme, which takes a proactive approach to safety improvement. Phase I began in 2008 with 4 teams, and Phase II began in October 2011 with 8 teams. The illustrated examples below are taken from Phase I and focus on reducing harm by using a systems approach to tackle variability. The other sites, which may also be of interest, were [Hereford](http://www.health.org.uk/areas-of-work/programmes/safer-clinical-systems/related-projects/hereford-creating-safe-and-resilient-prescribing-systems/) and [Bolton](http://www.health.org.uk/areas-of-work/programmes/safer-clinical-systems/related-projects/bolton-safer-handovers-across-the-health-economy/).
1. ***Plymouth Hospitals NHS Trust***

*Project aim:* To improve the handover systems within neurology and A&E departments.

*Why this project?* Handovers were found to be unstructured, leading to delays in decision making, referrals and treatment (with the risk of resulting harm and poor outcomes). Prescribing errors had also been identified in 14.7% of all medication orders screened by hospital pharmacists.

*Approach:* The team used a system approach to identify the problematic parts of the handover process, and redefine it. A handover support tool was developed, and reliability of handover was assessed using the proportion of a core dataset discussed at handover meetings

*Outcome:* As a result, the reliability of handovers – defined as core information being passed on – has increased from a baseline of 35% in June 2009, to more than 80% as of September 2010.

Find out more [here](http://www.health.org.uk/areas-of-work/programmes/safer-clinical-systems/related-projects/plymouth-design-and-implement-a-reliable-handover-system/).

1. ***NHS Lothian***

*Project aim:*To create safe and reliable systems for managing the flow of information about patients.

*Why this project?* Identified problems with duplicate registrations and many patients having multiple sets of case notes on file. This contributed to a lack of clinical information at clinics, negatively impacting on patient safety.

*Approach:* Using a systems approach, various techniques were used to diagnose the problems. The team developed a core data set and reduced duplicate entries to an acceptable level, whilst also introducing a monitoring system to minimise further duplication.

*Outcome:* Registration errors have fallen significantly since the start of the programme, with duplicate registrations now at their lowest level. Correct registrations have risen from a baseline of 74% in April 2008, to a consistent 95% since May 2010.

Find out more [here](http://www.health.org.uk/areas-of-work/programmes/safer-clinical-systems/related-projects/lothian-provide-the-right-information-at-the-right-time-for-the-right-patient-every-time/).

See page 22 of our 2011 [Annual Review](http://www.health.org.uk/media_manager/public/75/publications_pdfs/Annual%20Review%202011.pdf) for a feature on this work.

* ***Phase II*** of the ***Safer Clinical Systems*** programme is currently underway (due to complete in September 2013), and therefore we do not have the same evaluative information about it. There are 8 project sites looking at areas of care ranging from end stage renal failure to improved prescribing practice. Building on Phase I, the project approach involves mapping the clinical pathway, understanding how it is influenced by the wider system, assessing potential risks and implementing and testing solutions.

Find out more [here](http://www.health.org.uk/areas-of-work/programmes/safer-clinical-systems/projects-phase-two/).

* Between 2004-2008, we funded the Institute for Healthcare Improvement (IHI) (based in Cambridge, Massachusetts) to run the ***Safer Patients Initiative***. 24 hospitals tested and implemented 29 different interventions, based on an established evidence base in the following areas: medication management, general ward, perioperative care, critical care, leadership. In March 2011 we published some useful case studies to look at how the programme has been working at various sites. I have provided some selected information about two of the case studies below:
1. ***Royal Free Hospital and the University Hospital of Wales***

Several interventions were used to tackle central line bloodstream infections, including the IHI Central Line checklist, to ensure all aspects of insertion and maintenance were completed. An insertion kit was also implemented, which included all the necessary equipment to insert a line properly. This was complemented by education, training and incentives. As a result, both hospitals eliminated their infections within a year of starting phase II.

Find out more [here](http://www.health.org.uk/media_manager/public/75/SPIcasestudies/case%20study%201.pdf).

1. ***Musgrove Park Hospital***

Amongst a number of initiatives, the team spent a lot of time on medication management. In particular, they provided education in emergency areas on the importance of knowing what medication patients were taking already and how that might conflict with what they were prescribing. The PDSA approach was used to test medication reconciliation forms, which were implemented across multiple doctors across multiple shifts. This led to the hospital going from 60% to 10% of patients not receiving medication reconciliation.

Find out more [here](http://www.health.org.uk/public/cms/75/76/313/2315/Musgrove%20Park%20Hospital%20case%20study.pdf?realName=fMwgIF.pdf).

Find out about the rest of the case studies [here](http://www.health.org.uk/areas-of-work/programmes/safer-patients-initiative/embedding-the-learning/).