Improving the Electronic Prescribing Journey

J Capps, C Hayton, J Helbrow, N James, P Kathuria, R Patel, A Trehan,
Safer Clinical Systems
Salford Royal Foundation Trust

Background
Accurate prescriptions are essential for optimal care and patient safety. A systematic review found prescribing error rates for hospital inpatients of 7%.

A North West prescribing study found error rates of 8.9%, and errors were 70% more likely on admission than during the rest of the patient stay. Baseline data illustrated 26% of prescriptions on our Emergency Admissions Unit (EAU) were incorrect at the time of medicines reconciliation. Our electronic prescribing system enables large-scale data collection and innovation.

Objective
Reduce the error rate of prescriptions on our EAU to less than 5% prior to pharmacy medicines reconciliation.

Methods
Process mapping to identify steps involved in prescribing

Interventions derived based on process map including printing primary care records, education of junior doctors, and use of a prescribing checklist (see Fig 1)

Interventions implemented via small tests of change

Overall improvement assessed using error rates measured once weekly by pharmacists

Results
The first intervention proved effective in small-scale tests of change. This was then promoted at handovers, teaching sessions, and via email. Error rates fluctuated despite this (see Fig 2).

We looked at ways to sustain the lower error rates previously achieved. Consequently we developed a prescribing checklist (see Fig 1). This is now undergoing small tests of change, and has been provided to all new junior doctors joining the trust in August 2013.

Conclusion
We have achieved a reduction in prescribing error rates, but have demonstrated the difficulties in sustaining improvement. We are now looking at methods to maintain lower error rates, and continue to strive towards our original aim in order to achieve optimal patient care.

Background References