Introduction
When clinical teams want to improve patient care, they often make changes based on gut feeling, anecdotal evidence and unreliable data, as they commonly don’t have access to factual, accurate and timely feedback. Whilst local information systems are mostly geared to provide suitable management and accounting reports, they are rarely granular and recent enough to inform any controlling action in the process they are measuring.

Over a period from 2013 to 2014 a team on an acute medical unit sought to use a data driven approach to achieve high priority quality improvements.

'Some boards use data simply for reassurance, rather than the forensic, sometimes uncomfortable, pursuit of improvement.' — Sir Bruce Keogh

Improvement Aims
Commissioning for Quality and Innovation (CQUIN) have been introduced to provide important levers for quality improvement as well as providing income for NHS Trusts, so the team focused on two key CQUIN targets:

1) Dementia Screening: at least 90% of all patients over 75 should receive an initial screening 4 for dementia to prompt appropriate referral and follow up after they leave hospital.

2) 12 Hour Consultant Review: at least 90% of all patients admitted as an emergency should see a consultant within 12 hours 5, 7, which has evidenced links to decreased length of stay with no change in mortality.

Methods
In the Set-Up Phase, views were obtained from clinicians, management and the information team. The decision was made to explore obtaining recent, local data for review and discussion at the already established weekly team meeting. Problems, feedback and possible improvements were being discussed at these meetings with every member of the team encouraged to contribute in turn, but this gave the opportunity to use real time data to drive discussion. Conflicting priorities between management and clinical demands on information resources were negotiated in a number of meetings.

In the Intervention Phase, data were collected continuously and then extracted and presented in real time to the weekly consultant-led AMU departmental meeting. Update run-charts were displayed in the clinical and management offices each week, as well as being circulated by e-mail. Trends and unexpected data returns were identified and investigated immediately. Improvements were positively reinforced and reasons behind any deteriorations were discussed and acted upon. Statistical process control analysis using Xmr charts 6 was used to identify change in the two measures. 11 Process changes included dementia-screening training for junior doctors, real time data inputting with computers on wheels and review of the consultant rota.

Results
Statistical process control analysis shows that dementia screening improved from 82% to 97% on average (chart 1). 12 hour consultant review improved from 48% to 70% to 82 on average (chart 2). Feedback suggested that all teams highly valued the way the information was presented and the insights that this provided. All reported feeling more engaged and more motivated to achieve the CQUIN targets.

Conclusion
There has been a significant improvement in both dementia screening and consultant assessment that has been maintained over time. Our model for quality improvement to enhance weekly meetings by appropriate presentation of weekly runcharts with feedback and follow-up could serve as a helpful framework for other hospitals.

The set-up phase revealed that the clinical, management and information teams had different approaches and expectations of the data. Management tended to focus on overall outcomes and financial incentives, whilst clinicians were more interested in patient benefit and operational aspects.

Presenting the agreed measures in a way that was meaningful to all groups overcame boundaries, opened up dialogue and drove changes that impacted on achieving targets. The gap between clinicians and managers can be closed through the intelligent use and interpretation of data and feedback, to the mutual benefit of all and foremost the patients.

FY1 perspective
Weekly discussion between clinicians and managers has resulted in presentation of data that is meaningful to everyone. This has been developed further recently by a formal departmental teaching session on quality improvement and statistical process control. It is useful to understand why the data is presented in this way and enables concerning trends to be acted upon quickly and improvements to be positively reinforced. Feedback on the performance of dementia screening and 12 hour consultant assessment each week serves as a constant reminder that these are important targets for improving patient care.

References
(6) Wheeler, J. (2003). Understanding Xmr charts. Understanding Xmr charts.