**Effects of changes** Discontinuing the use of midazolam sedation has prevented children undergoing a stressful procedure that was unsuccessful in 82% of cases. This has improved patient care in the form of reducing delays in diagnosis and lowering parental anxiety. It has also saved the trust £70,000 per year in failed scans and referrals to BCH.

**Lessons learnt** This project has shown that using a structured approach when considering a problem makes it easier to change systems/processes. Our department knew that midazolam wasn’t particularly successful but when you present that as a 82% failure rate it makes things a lot clearer. Forming an MDT to try to find a solution was also of huge benefit as it very quickly became clear that the radiology department shared our frustrations regarding failure of sedation. This in turn has enabled us to move forward with development of our own GA scan service quite quickly.

**Message for others** If you feel there is a problem/issue in your department analyse it in a structured way and try to form a solution to the issue rather just presenting a problem.

If an MDT needs to be involved ensuring that there are clear goals identified is very important so as to avoid being sidetracked.

**Context** The prescription of IV fluids is a commonplace task on the paediatric ward and its importance is often underestimated. National Patient Safety Agency (NPSA) has issued an alert in 2007 advising clinicians about the risk of hyponatraemia in children receiving intravenous (IV) fluids. Accurate prescription of IV fluids and careful monitoring are crucial in preventing fluid induced hyponatraemia in children.

Hence, a local IV fluid prescription guideline was developed and a patient safety improvement project was set up to ensure that the guideline is adhered to.

**Problem** A prospective audit was performed in November 2012, looking at all children who were admitted to a busy district general children hospital and prescribed IV fluids over a 2 week period. Prescription of IV fluid rate, type of fluid used, potassium content as well as monitoring of patient’s renal function, fluid balance and daily weight were audited.

**Assessment of problem and analysis of its causes** The results of this audit show that type of fluid, rate of fluid and daily monitoring of UEs are done relatively well. Weight monitoring and fluid balance were poorly done.

**Intervention** We took few actions to improve the outcome.

Further education of junior doctors, nurses and allied health care professionals was provided.

Fluid prescription chart was updated to act as a visual cue and to enable accurate calculation of fluid rate and renal function monitoring.

**Strategy for change** Our strategy to improve the compliance to the standards was by focussing on the targeted education package for both medical and nursing team.

We designed an IV fluid teaching booklet with assessments to be carried out by all junior doctors during the departmental induction followed by a seminar every few months.

Awareness regarding the standards was created among nursing colleagues.

**Measurement of improvement** A similar prospective reaudit was performed in November 2013 on all children admitted over a 2 week period in the same hospital.

**Effects of changes** The prescription of type of fluid, rate of fluid and daily monitoring of UEs are done relatively well. Prescription of potassium containing fluids, monitoring of daily weights and fluid balance which were badly done on the initial audit with compliance rate of 40%, 40% and 58% respectively improved to 71%, 71% and 61% during the reaudit.

**Lessons learnt** This project highlights the importance of education and enhanced training for staff. We are highlighting the results to all clinician as well as nursing staff during departmental meetings to raise awareness and identify solutions to barriers identified on a regular basis.

**Message for others** Targeted staff education and training are paramount important in improving the quality of care.

These can be cost effective and by effective organisation, can successfully implement locally.