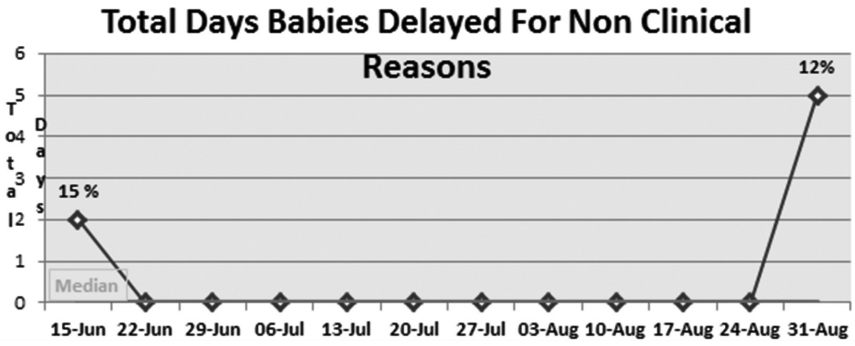

Abstract G528(P) Figure 1

community to canvass opinion with regards to regional cot capacity issues. Discussions confirmed that issues with limited availability of cots often became apparent late in the day and left clinicians spending significant amounts of time locating cots. Units and NTS were not always aware what was happening elsewhere until multiple phone calls and time had been spent trying to find out such information. Consent was gained to set up a daily teleconference call between the units and NTS to obtain information about the regional cot capacity.

Intervention The call takes place each day at 12.30pm, chaired by the Transport Consultant. Each unit is represented by the Duty Consultant and/or Nurse in Charge. Information is collected upon unit status, staffing issues, cot availability, expected admissions and babies awaiting repatriation or transfer for specialist investigation. The call takes less than 15 min. The information is recorded by NTS and electronically shared with Network administration where it is regularly analysed.

Study design A PDSA cycle was undertaken to set-up, test, implement and analyse effectiveness of the intervention.

Strategy for change Mock calls were undertaken by the working group to trial the call, test the process of change and refine the data to be collected. Following small adjustments the call went live. A start date, time and telephone number was communicated with senior staff within the region. Data was collated.

Measurement of improvement Data was collated as above then analysed and shared with unit managers using real time figures and run charts. Analysis revealed that there were no delays in transport due NTS but that delays in repatriation due to receiving unit cot capacity issues are not uncommon.

Effects of changes When units are busy, other units in the region have worked together to relieve capacity issues when able. Units and NTS are aware earlier in the day what the cot issues are. Units are including the regional activity information in their handovers. The call allows efficient planning of workload and implementation of solutions more effectively. The teleconference call has now been extended to include large units elsewhere in the country.

Lessons learnt Through feedback and analysis, we have further refined the data collected, maximising call effectiveness. Data collection has demonstrated significant issues with cot capacity which will be used to campaign for funding for more cots and staff.

Message for others The conference call was rapid to implement and embed into clinical practice. This is because it is quick and addresses issues close to the priorities of all users. Transfers can be undertaken more efficiently, ultimately saving clinician time.

G529(P) THE PAEDIATRIC SHORT STAY UNIT: THE POWER OF DATA IN TACKLING A 'WICKED' PROBLEM

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Context This improvement project took place within the paediatric short-stay unit (PSSU) of a busy inner-city tertiary referral hospital. The aims were firstly to streamline care pathways of patients using the unit, and secondly, to improve patient's and staff's experiences.

Problem The PSSU, which opened 9 years ago, was designed as an unit for acute paediatric short-stay admissions and a facility to accommodate ambulatory work. It comprises of eight inpatient beds, one clinic room and a waiting/playroom.

Since opening, unit activity has grown rapidly, with numerous teams using the facility for a variety of reasons. Rapid-access, surgical pre-assessment and prolonged jaundice clinics were incorporated, and more inpatients were discharged early, to complete ambulatory antibiotic courses facilitated by the unit.

There were no robust systems in place to record the unit's type and amount of activity. The 'short stay' identity was progressively lost with the inpatient beds often occupied by long-term chronic patients.

Staff morale was low and it was suspected that patient experience was suboptimal due to the significant time spent waiting for clinic rooms to be available. Notes were often missing due to the multiple poorly defined referral routes into the unit.

Assessment of problem and analysis of its causes The problem was brought to the 'Quality Improvement Sprint', an innovative forum in which healthcare professionals teamed up with artists, musicians and designers to use creative thinking to tackle problems within the trust.

It became apparent that without information regarding activity and patient journeys through the unit, it would be impossible to identify interventions which would improve function.

Intervention A seven-day data gathering exercise was designed to map the journey of every patient who passed through PSSU. Each child and family completed a patient experience proforma and staff kept daily activity diaries.

Activity in the Emergency Department (PED), other inpatients wards and day surgery unit was also collected.

Strategy for change The data clearly showed that the high level of activity on PSSU was unsustainable within its confines. Conversely, activity on the adjacent surgical day unit was much

lower, indicating suboptimal use of space and highlighting an opportunity to redesign and improve functionality.

Many short-stay patients were admitted to the other wards, whilst longer-stay patients were admitted onto PSSU. Particular breeches in the PED were felt to have been avoidable if short-stay beds had been available.

Although patient experience was positive, feedback from the staff emphasised the frustration of working in such a chaotic environment.

The information was fed back to the Paediatric Executive Board.

Effects of changes The PSSU is reclaiming it's short-stay status. Nurse-led discharge has been introduced and admission pathways from the PED redesigned to improve patient flow. A 'virtual PSSU' trial is underway on the ward, with ring-fencing of a number of beds to be reserved for short stay patients and to be staffed by PSSU. Relevant workload has been diverted to outpatients and a merger of PSSU and surgical day unit is being considered. Modelling of very short-stay patients suitable for a co-located observation bay, is informing plans for the PED rebuild.

Lessons learnt Initially the 'PSSU problem' seemed too complicated to solve. Working with designers in the QI Sprint allowed us to devise a novel approach to improving the quality of care provided within the PSSU. The data gathering exercise was very powerful and quantified the issues objectively. This enabled us to devise a clear message when disseminating findings and campaigning for change. Mapping individual patient journeys brought a human face to the unit.

Message for others Data is powerful and can help define an 'undefinable' problem.

G530(P) TO GIVE OXYGEN OR NOT? ARE WE ADHERING TO LOCAL GUIDELINES ON ADMINISTERING TARGETED OXYGEN THERAPY TO OUR NEONATAL POPULATION?

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Context This "spot audit" was carried out in a level 3 neonatal unit.

Problem Supplementary oxygen therapy is a vitial to the vulnerable neonate. We know that in excess, oxygen can be toxic, contributing to retinopathy of prematurity (ROP). The recent BOOST 2 study has made clinicians rethink what our oxygen saturation limits should be. However, given the increased mortality in those with lower saturation limits, the exact limit remains controversial.

The aim of this "spot audit" was simply to determine whether we were adhering to our local guidelines regarding oxygen saturation targeting.

Assessment of problem and analysis of its causes This audit was carried out on a weekly basis. The initial few weeks, before any change, ensured that we obtained baseline numbers. The staff were aware that the audit project was being carried out.

We quickly identified that there was a need to intervene and a discussion was had with ward sisters. We identified that nurses were key to ensuring that the limits on the saturation monitors were set correctly.

Intervention We realised that verbal communication/education alone would be insufficient to increase our compliance. A visual aid, or quick reference card, was developed. This briefly summarised our protocol, i.e. what the saturation limits should be for neonates, based on their risk of ROP. This was produced in a size which ensured that it could be attached to the saturation monitors.

Study design A initial prospective audit was carried out over a period of 8 weeks. information regarding risk of ROP and whether or not stauration limits were achieved was collected on a proforma. When possible, I would then refer to the neonates case notes and/or speak to nursing staff caring for them to determine why the monitors may have been set differently to protocol, i.e. medical decision or in error.

2 years after the initial audit, we've reaudited the same thing to determine if compliance has been maintained.

Strategy for change Initially discussions were had with the ward sister regarding the audit project, but it became apparent that there was a lack of awareness of our local protocol. The quick reference card was produced on a home computer. Medical physics (who ensure up keep of our saturation monitors) were given additional copies of the visual aid. I presented the inital results at a local quality improvement evening.

Measurement of improvement Percentages were used to demonstrate compliance. This ensured that all staff could easily interpret the results obtained. During the initial four weeks of the audit, our compliance with our local guideline, regarding oxygen saturation targets within the neonatal population, ranged from 43–70%. After the introduction of the quick reference card, our compliance was 79–94%. We re-audited this recently and our compliance is sustained at 92%. In the majority of cases, the reasons for non compliance included no quick reference card on the saturation monitor!

Effects of changes Our change has increased compliance with local guidelines and ensures that oxygen therapy is being targeted appropriately in the majority of cases. It has also increased staffs awareness of the importance of targeted oxygen therapy.

Lessons learnt This simple regular audit process can be applied within any healthcare setting. The simplicity of the concept makes it easily reproducibile. Furthermore, it helped identify a key, often overlooked, problem within our unit, and attempted to address it.

Message for others We have demonstrated how simple auditing can result in sustained improvement in neonatal care by targeting our oxygen saturations more effectively in compliance with our local guideline.

G531(P) IMPROVING THE SAFETY AND QUALITY OF HANDOVER

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Context This project aimed to improve handover for paediatric medical specialties, paediatric surgery and general paediatrics at a regional tertiary paediatric centre. As well as doctors of varying grade and specialty, others involved include the nursing outreach team and bed manager.

Problem Handover occurs three times a day and with 50–80 complex patients it needs to be an efficient process ensuring patient safety and communication of essential appropriate information. Issues around the quality and safety of handover were highlighted from clinicians within the department, trainee feedback and the GMC survey.

Assessment of problem and analysis of its causes Baseline measurements were obtained over 16 consecutive handovers.