Effects of changes Blood investigations done were more regularised and not excessive in comparison from those done previously. Nursing behaviour with regard to initiation and maintenance of iron infusion became more independent. Consequently, it freed up doctor-time and empowered nursing decision making skills. This also resulted in improved team morale and ultimately patient safety by mitigating human errors.

Lessons learnt The checklist was improved based on feedback obtained after the first PDSA cycle. A second cycle showed that investigations done were now optimised. The third cycle showed improved adherence and compliance with prevention of over treatment with iron infusion.

Message for others For any QI project, interventions should be carefully designed. Stakeholder buy-in and easy accessibility of the intervention improves sustainability. Performing multiple PDSA cycles and incorporating the feedback is vital to any QI project.

G527(P) BUCKLE FRACTURES OF THE DISTAL RADIUS: INCREASED EFFICIENCY AND COST SAVINGS THROUGH A NEW MANAGEMENT PATHWAY

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Context This quality improvement project took place in a tertiary centre, involving the Paediatric A&E and Orthopaedic teams. It required minor changes in practice by paediatric A&E doctors and nurses, and affected children between 3 and 15 years who presented with a radial buckle fracture.

Problem Fractures are a common reason for children to attend A&E. During the summer months, fracture incidence tends to increase. Our summer fracture clinics were quickly filling up with minor injuries (up to a 3 week wait) and this impacted upon patients with severe injuries who needed urgent orthopaedic review.

Buckle fracture of the distal radius was one type of injury seen with disproportionate frequency.

Assessment of problem and analysis of its causes A joint paediatric/orthopaedic meeting addressed the issue of overbooked clinics. The orthopaedic team noted that many patients with a buckle fracture were discharged with no intervention at their first fracture clinic appointment.

Analysing the previous summer's buckle fractures, over 90% were managed with a cast, repeat x-ray and fracture clinic review. Our practice was outdated – recent studies advocate conservative management of this injury with a removable splint, and no further review.

Intervention A new management pathway for buckle fractures was created. If a set of criteria were met, the patient could be discharged with a splint rather than a cast.

The criteria were: fracture of radius only; no break in opposite cortex; minimal angulation on AP and lateral X-rays; no child protection concerns.

The emergency department sourced paediatric splints. Parents were educated before leaving, and given an information leaflet. As a 'safety net', all X-ray reports were reviewed by a registrar – if the fracture was more serious than first thought, the child was recalled.

Study design All children with suitable fractures during June–July 2014 were managed according to the new guideline. Their

records were later analysed and a follow up telephone survey evaluated how the child and family had coped with the splint. Clinic waiting times were monitored.

Strategy for change A draft guideline for buckle fracture management was agreed between paediatric A&E and orthopaedic doctors, and disseminated by email to all A&E staff. Posters displayed around the department reminded everyone of the change in practice.

A parent information leaflet was produced in the two common languages of our area.

During an initial two week trial period, staff were encouraged to share their experiences of using the new guideline, which allowed certain details to be amended before the two month study period.

Measurement of improvement Fracture clinic bookings were monitored, and a telephone survey evaluated parental satisfaction with management.

We used electronic records to check whether there were any post fracture problems presenting to A&E, and also calculated how much money and time the department would save using this new pathway.

Effects of changes In two months: 37 fewer fracture clinic appointments were booked, equating to three full clinics' worth of appointments. 22.2 nursing hours were saved as fewer casts were applied. Only two out of 24 fracture clinics that took place were overbooked. There was a 65% response rate in the telephone survey; all families contacted were very happy with the removable splint. Of those who did not respond, none reattended.

The department saved over £90 per child. The new guideline is now our standard practice.

Lessons learnt Modernising guidelines in line with latest research may lead to greater efficiency, and significant savings.

Message for others Cooperation between different teams can be the catalyst for effective change.

G528(P) A DAILY REGIONAL CONFERENCE CALL: MAXIMISING EFFICIENCY OF REPATRIATION. THE IMPACT ON NEONATAL UNITS IN THE WEST OF SCOTLAND

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Context This project has been carried out between the regional neonatal units, the Neonatal Managed Clinical Network (NMCN) and the Neonatal Transport team (NTS). It has involved multidisciplinary team work between all the health boards in the region with input from key medical, nursing and network staff.

Problem It became apparent to the NMCN that neonatal cot capacity in the region was frequently highly occupied and under pressure. We wanted to have a proactive method of identifying cot capacity issues early and maximise our repatriation processes whilst identifying any delays. As a trainee representative at the NMCN meetings, I suggested setting up a regional teleconference call to address these issues. A multidisciplinary team were tasked with setting up this call.

Assessment of problem and analysis of its causes The working group contacted key staff within the region's neonatal

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