Quality improvement methodology included tools such as process mapping, cause and effect analysis using Fishbone diagram, Driver diagram to identify focus aim and evaluation, Pareto chart, survey questionnaire to maximize focused QI efforts, neonatal pharmacist and microbiologist involvement.

An educational initiative 'Neo Train' posters (1&2) in clinical areas, implementation of structural changes such as Sepsis Screening Pit-stop, example drug charts and sepsis booklet were created as a reminder to follow protocol.

Results

Cycle 1: Baseline issues and QI strategy defined. Issues identified: delay in time to treatment, second CRP, No blood culture reporting within 36 hours.

Cycle 2: Significant delay in transport and processing of blood culture were leading to delay in reports.

Cycle 3: Improved documentation overall but time of decision to treat not well documented.

Administrative issue: Time of 36 hours blood culture reports only in neonatal inpatients. But, the majority of babies were based on postnatal ward.

Cycle 4: Average time treatment decreased from 120 minutes to 90 minutes.

Conclusion

- The outcome improved the average time of antibiotic administration from 120 minutes to 90 minutes.
- Systematic use of QI tools can help to focus in right areas. Pareto chart based staff survey identified areas for delay.
- Key feature for the success of the Neo-train Quality Improvement initiative was its use of a multidisciplinary team approach to strategically design and deliver the implementation program.

G160(P) TRANSITION OF YOUNG PEOPLE WITH EPILEPSY – ARE WE DOING IT RIGHT?

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Aims

- Young people with epilepsy have an agreed transition period during which their continuing epilepsy care is reviewed jointly by paediatric and adult services
- The need for continuity of care during transition from paediatric to adult services is particularly important for young people managing the physical and mental transition from adolescence to adulthood
- To study the current transition service in paediatric epilepsy against NICE quality standards
- To identify good practice, gaps and develop a more comprehensive transition pathway and to set targets to achieve the desired results

Methods Electronic case notes and clinic letters of 43 patients were reviewed over a period of 4 years between 2015 to 2018.

Conclusions

- All children and young people seen in Paediatric epilepsy clinic have been appropriately transitioned to adult services except 2 (one completely discharged and not on treatment, the other one – care transferred to local epilepsy service/GP)
- Age range when seen in transition clinics – 16 yrs 5 months – 18 yrs 10 months

- Compliant with NICE guidance quality standards of transition of Paediatric epilepsy patients
- We are the only Paediatric Unit in the region with appropriate Transition Service for children with epilepsy apart from an adult regional neurosciences centre and a tertiary children's centre

Recommendations

- Earlier Transition to be planned if possible so that they are transitioned before 18 and possibly to do more transition clinics
- Patients seen at peripheral epilepsy clinic to be encouraged to attend teenage epilepsy clinics
- To move patients from General Epilepsy clinic to Teenage Epilepsy clinics where appropriate
- Improve documentation about who was present in the clinic which will help when re-auditing

G161(P) INTUBATION-SKILL TRAINING AND RECORD-KEEPING (I-STAR)- TO IMPROVE INTUBATION IN NEONATES IN A DGH

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Aim and Objectives

- To assess the quality of intubation
- To assess confidence of junior doctors in intubation and opportunity for training
- To assess Record keeping of Intubation procedure on NICU

Methods Initial retrospective data collection done in February 2019, for the practice of intubation which happened over previous 6 months. Subsequently an action plan was formulated and strictly followed. The changes brought by this new action was studied prospectively over 4 months from April 2019 till July 2019.

Action plan included:

- Implementing updated guideline for intubation
- Availability of airway adjuncts
- Weekly consultant led simulation training for junior doctors and nurses.
- Change of practice was constantly encouraged with encouragement of junior doctors to do procedures.
- Pre-checklist for intubation and documentation sheet were introduced and everyone in the team educated to use those.

Results In the initial retrospective study 28 intubations were analysed and subsequent prospective study included 13 intubation.

- ETCO2 use to confirm ETT position had increased from 57% to 100%
- Registrars succeeding in intubation became 100% (previously 84%)
- Only 57% neonates were intubated in 1st attempt earlier which improved to 85%
- Earlier we required anaesthetic help in 7% but in the repeat study none required
- Premedication use during intubation had increased from 61% to 100% with the use of pre-checklist
- With improvement in practice around intubation, there was no accidental extubation, which was earlier noted to be around 14%

- 30% of the times junior doctors (SHO) were given the opportunity to intubate in comparison to 3% earlier
- Confidence in BVM ventilation among SHOs and intubation among registrars are significantly high in the repeat survey, due to continued teaching and simulation training.

Conclusions Effective simulation, training, education and perseverance in change in practice improved the intubation in neonates in DGH and confidence of doctors and nurses working in the unit. Improvement is likely to improve outcome of the babies.

British association of child and adolescent public health

G162 ADOLESCENTS AND THEIR PARENTS' EXPERIENCES OF INTERNET DELIVERED HOME TREATMENT FOR CHRONIC FATIGUE SYNDROME/ME (FITNET-NHS TRIAL)

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Aims We aimed to understand the acceptability of two internet-delivered home treatments for paediatric Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (CFS/ME) as part of the FITNET-NHS randomised controlled trial. The two interventions were: i) an online Cognitive Behavioural Therapy (CBT) programme (FITNET-NHS) supported by therapist e-consultations; ii) Activity Management delivered by clinicians via Skype.

Methods In-depth qualitative interviews were undertaken with families taking part in the FITNET-NHS Trial to understand the acceptability of receiving treatment at home via the internet. Participants were purposively selected for maximum variation (intervention, age and gender). Interviews followed a checklist of topics. All interviews were audio-recorded, transcribed verbatim, uploaded to NVivo and analysed using thematic analysis.

Results Interviews were undertaken with 29 families (15 FITNET-NHS arm; 14 Activity Management arm). This included 26 young people (15 females and 11 males, ranging from 12–17 years old) and 31 parents (27 mothers and 4 fathers). Four key themes and 9 sub themes emerged. Participants talked about the 1) **benefits of online treatment** including: no need to travel reducing payback, ease of use, convenience and flexibility as well as the ability to revisit online content for clarity and motivation. The 2) **disadvantages of online treatment** included: technical problems, difficulty building a rapport and feeling unable to communicate effectively online and preferring to see the therapist in person. Participants felt 3) **Contact with a therapist is essential** to give parent support and backing and provide specialist knowledge and tailored advice. The final theme highlighted how 4) **the digital interventions need to be tailored according to: age, severity and communication preference differences.**

Conclusion Young people and their parents discussed the benefits and disadvantages of online treatment for CFS/ME. Whilst some feel it is as good as face to face contact, others found it difficult to communicate through emails and Skype and would have preferred to see a therapist in person. Therapist contact is viewed as essential to provide specialist knowledge and support. Internet-delivered interventions for paediatric CFS/ME

need to be tailored to take into account individual differences such as age, severity and communication preferences.

G163 AN ANALYSIS OF HEALTHCARE COSTS IN HIGH-NEED CHILDREN AND YOUNG PEOPLE

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Aims In the context of budget pressures, the need to keep children and young people well and reduce the burden of costly interventions is growing. Little is known about how health spending is distributed amongst the population or how we can identify children at risk of requiring higher spending. Our study aims firstly to identify total health spending costs and relative differences across services for the top 5% of high cost users and secondly to characterise the features of this group.

Methods 78,215 participants aged 0–24 were randomly sampled from the Clinical Practice Research Datalink, linked to Hospital Episodes Statistics for the year 2015/16. Total costs were estimated for primary care visits, A&E and outpatient attendances, inpatient admissions, and prescriptions. The high cost group was defined as the top 5% of individuals based on total costs and the proportion also in the same group in 2014/15 was calculated.

Results 54% (£17,321,850) of the total yearly health service spending was utilised by the most expensive 5% of participants. The proportion of spending on this group was highest for inpatient costs (88%) and lower for costs relating to Emergency Departments (31%), Outpatients (44%), Primary Care (15%) and medication (38%). Those in the most deprived decile by Index of Multiple Deprivation were more likely to be in the high cost group than those in the least deprived (6% vs 4%). 29% of those in the high cost group in 2015/16 were in the same group the preceding year.

Conclusion Just over half of health service costs for children and young people were spent on only 5% of users. While unsurprisingly, much of this was explained by inpatient admissions, spending was higher across all services including prescription costs. There was significant movement into this group, with fewer than one third also in the high cost group the previous year. Proactive strategies are needed to keep children well and reduce the need for costly inpatient care, although further research is needed to understand whether this can be accurately predicted or indeed effectively reduced.

G164 NURTURE EARLY FOR OPTIMAL NUTRITION (NEON) PROGRAMME: QUALITATIVE STUDY OF DRIVERS OF INFANT FEEDING PRACTICES IN A BRITISH-BANGLADESHI POPULATION

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Aims To explore optimal nutritional care practices and their drivers within the British Bangladeshi population as an exemplar to inform a tailored, co-adapted intervention design.