both the emergency department and inpatient setting. Advances in neonatal care and survival, the revision of neonatal guidelines on the management of extreme prematurity, and increasing prevalence of childhood obesity, mean that securing peripheral IV access in children is likely to become more common and challenging. Additionally, multiple failed cannulation attempts can cause pain and emotional trauma to both children and their parents, in addition to the significant time burden to clinicians.

Ultrasound guided intravenous access (US guided IVA) has the potential to improve patient care by enabling quicker and more reliable IV access. Improvements in US technology are making portable, user-friendly and affordable equipment readily available. Growing evidence suggests US guided IVA creates longer lasting, high quality IV access with fewer attempts, and is overall quicker.

Objectives Make US guided IVA a readily available option to all children in our institution, by designing a teaching programme to upskill paediatricians and allied healthcare professionals to obtain US guided IVA in children.

Methods This was a Quality Improvement project, following the established plan-do-study-act (PDSA) model. All stakeholders at our tertiary children's hospital were invited to conduct an anonymous online survey. Results outlined:

- Current practice of US guided cannulation
- Frequency in difficulty of obtaining IVA
- Identify the knowledge base regarding operating US, ability to recognise vessels, and insert an US guided peripheral venous cannula
- Ascertain demand to learn this procedure among stakeholders.

Results The initial survey was completed by doctors from a range of paediatric specialty and grades, paediatric specialist nurse practitioners and advanced nurse practitioners (n=57). 53% had had only one previous teaching session on US guided IVA and the rest had had more than one session. 74% were extremely interested in teaching to improve this skill. 75% reported being asked to do a 'difficult' cannula once a week or more. The average number of 4.5 times before escalating to an anaesthetist.

41 stakeholders attended one teaching session during the pilot programme. The post-session feedback for the pilot cycle was very positive with 51% rating the session 10/10. Stakeholders who attended sessions felt on average, more confident in use of US and inserted US guided IVA after the session [figure 1]. Points for improvement included increasing the quality of models, increased session time and repeat sessions. Additionally, the focus group had to adapt the programme to external factors due to the COVID-19 surge, this included rescheduling the sessions, rearranging groups into smaller sizes and gaining approval by the hospital education team.

Conclusions We have shown both a demand and a need to upskill paediatric healthcare staff in US guided IVA. Our pilot programme, having adapted to COVID-19 hospital pressures has successfully delivered teaching that has increased stakeholder confidence in this skill. The subsequent PDSA cycle will now aim to upsize the programme delivery to ensure all eligible hospital staff have the opportunity to attend as well as guide further focus group discussions on planning US-guided PIVC training.

Quality Improvement and Patient Safety

1775

DEVELOPMENT OF A NATIONAL HUB FOR REVIEWING AND LEARNING FROM THE DEATHS OF CHILDREN AND YOUNG PEOPLE IN SCOTLAND

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Background Scotland has a higher mortality rate for under 18s than any other Western European country. Of the 300 children and young people who die annually, approximately a quarter could be prevented. There is currently no national system to support review or to share national learning, and not all deaths are reviewed. The quality of reviews varies across services and Scotland.

Healthcare Improvement Scotland and the Care Inspectorate co-host the National Hub for Reviewing and Learning from the Deaths of Children and Young People.

Objectives The National Hub aims to ensure that the death of every child in Scotland is subject to a quality review by:

- developing a methodology and documentation to ensure all deaths are reviewed through a high quality and consistent process
- improving the quality and consistency of existing reviews
- improving the experiences of and engagement with families and carers, and
- channelling learning from current review processes across Scotland that could direct action to help reduce preventable deaths.

This programme reflects the commitment to fostering a learning system that increases safety and quality improvement amongst services by:

- supporting individuals to learn through its culture and networks
- ensuring everyone is informed by evaluation and reflective practice
- enabling people to assess what is and is not working through the use of qualitative and quantitative data, stories and insights
- developing processes to aid decision-making and turn knowledge into action
- building systems to identify 'bright spots' and generalisable learning, and
- linking with rUK systems to allow a four nations approach to child death reviews.

Methods We have worked collaboratively with stakeholders to support implementation of a national child death review process, which will launch during 2021. This includes:

- establishing an Expert Advisory Group to provide an advisory role through expert (including clinical) input
- developing national guidance that sets out the process for NHS boards and local authorities to follow when responding to, and reviewing, the death of a child or young person
- developing a core review data set and online portal for collating data, and

- gathering views from family members and carers who have been involved in a review process. Reviews will be conducted into the deaths of all live born children up to the date of their 18th birthday, or 26th birthday for care leavers who are in receipt of aftercare or continuing care at the time of their death

Results The national child death review process will be fully implemented by 1 October 2021.

Following implementation, the National Hub will collate and disseminate learning from reviews with the aims of changing future professional clinical practice, informing policy change and reducing avoidable deaths in Scotland.

Conclusions For the first time in Scotland, national data will be collected on the deaths of all children and young people. Working with NHS boards and local authorities, the ambition is to inform the redesign of pathways and services to ultimately reduce avoidable deaths, and where that is not possible, to improve the experiences of children, young people and their families

George Still Forum: ADHD Disorders (ePoster presentations only)

1777 ADHD ASSESSMENT IN A DISTRICT GENERAL HOSPITAL: GETTING IT RIGHT FIRST TIME

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Background ADHD is a common neurodevelopmental condition of childhood which persists into adulthood. There is significant burden of co-existing neurodevelopmental disorders, mental health problems and other comorbidities. A delayed or mis-diagnosis can have significant negative impact on a person's development and later social or occupational functioning.

In 2015 recurrent issues with the assessment pathway for children referred to community paediatrics with possible ADHD were identified, which were taken as a proxy for poor patient experience and system inefficiency. A Quality Improvement project was undertaken, which assessed a cohort of 50 patients and identified a range from referral to 'decision to treat' of 42–594 days, variable outcomes and poor documentation of registrar supervision. Due to complexities of patient profiles and assessment pathways, further QI targets were difficult to identify.

Objectives Five years on we wanted to assess whether the service was 'Getting It Right First Time' for children referred with difficulties labelled as possible ADHD, and identify where service provision could be improved. We took the same cohort of 50 patients identified in 2015 to look at whether outcomes were changing over time, amount and type of contact patients had with hospital services, and to assess presence of indicators of poor or positive outcomes.

Methods Data was used from the 2015 QI project as a starting point.

Electronic notes were reviewed and data collected for:

- outcome recorded in 2020 (ADHD/not ADHD)

- number of contacts with paediatric staff (clinical and clinical administration) and the Emergency Department/local Minor Injuries Unit
- 'Red flags' as identified through discussion with consultant colleagues, NICE guidance for ADHD, and a PubMed search for poor outcomes ADHD. These included: re-referral if 'not ADHD' in 2015, safeguarding concerns, significant risk or accidental harm, police involvement, substance misuse, school exclusion, progressive school failure, family or peer relationship breakdown, parent/patient dissatisfaction, problematic low self-esteem, and obesity
- Notes were made about co-occurring diagnoses and EHCP/SEN status
- Positive signs were identified and included: evidence of school achievement, positive feedback from a guardian/young person, engagement with hobbies, documentation of growth, and not being re-referred if discharged from the service

Results Diagnostic outcome changed in 18% of patients. These patients had significantly more clinical paediatric contacts (mean 6.5 vs 2.6, $p=0.0134$) and red flags (mean 4.4 vs 1.4, $p=0.005$) than where outcome was unchanged.

There was no significant difference in total number of red flags between those with or without ADHD diagnosis in 2020. However, children with ADHD were more likely to have mental health problems (24% compared to 14%), more likely to have not been brought to two or more appointments or disengaged with services (48% compared to 34%), and more likely to have evidence of family or peer relationship breakdown (43% compared to 32%).

Of those with 3+ red flags, 42% had an ADHD in 2020 and 58% did not. 58% were aged 8–13 years compared to 47%, and 33% were diagnosed with ASD within 5 years, compared to 5.3% in those with fewer red flags. 75% of those in the 3+ red flags group had EHCP/SEN support instigated since 2015, with 83% being in receipt of an EHCP/SEN support in 2020. This compared to 18% with EHCP/SEN support in the lower red flag group, with just an 8% change in this status since 2015.

Conclusions This project demonstrates the importance of GIRFT when assessing possible ADHD. This includes timely consideration of ASD as a co-occurrence, a potentially greater need for close follow up of children aged 8–13 years (transitioning to secondary school) with close liaison with education services, and the importance of assessing mental health in ADHD follow up.

Quality Improvement and Patient Safety

1782 A HAVEN FOR FATIGUE: STANDARDISING FIRST OUTPATIENT VISIT EXPERIENCE FOR YOUNG PEOPLE WITH CHRONIC FATIGUE SYNDROME

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Background Chronic fatigue syndrome (ME/CFS) is a debilitating illness that significantly impacts on a young person's physical health and mental well being. All patients accepted by the University College London Hospital multidisciplinary team should all be offered an initial comprehensive appointment