A previous study performed just over twenty years ago, suggested a general lack of standardisation of BP measurement techniques and little consensus on the criteria for diagnosing HTN amongst paediatricians.\(^1\) Updated clinical practice guidelines have since been published.\(^2\) Through sending a questionnaire consistent with that sent twenty years previously,\(^1\) we hoped to compare clinical practice between the two time periods, in order to evaluate whether progress has been made, and identify further ways to standardise and improve patient care.

**Methods** A national quality improvement survey was sent to the General and Adolescent Paediatric Research in the United Kingdom & Ireland (GAPRUKI) committee for feedback and circulation to consultant-grade general paediatricians.

**Results** The survey ran from 18/11/2021 – 12/01/2022. 125 analysable replies from 34 different sites were received and compared with the 1997 data. 106 (84.8%) reported clinical nurse involvement in BP measurement, more than double the previous data (40.6%). Most paediatricians (53.6%) now rely on BP recording systems, whereas previously the mercury sphygmomanometer was favoured (82.7%). If assessing BP manually (n=89), most (79.8%) now use Korotkoff phase V as the auscultatory endpoint for diastolic BP (phase IV was manually (n=89), most (79.8%) now use Korotkoff phase V as the auscultatory endpoint for diastolic BP (phase IV was previously used (52.1%)). 102 (81.6%) paediatricians had access to Ambulatory BP Monitoring, making it six times more available than in 1997. For a diagnosis of HTN, the criteria (more available than in 1997. For a diagnosis of HTN, the criteria

**Conclusion** There is greater availability of BP equipment/technology, however nowadays paediatricians are more likely to rely on oscillometric technology. Less paediatricians are responding to high diastolic pressures than twenty years ago.

**REFERENCES**

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**COMBINATION TRANS-ANAL IRRIGATION PACKAGE IMPROVES TREATMENT COMPLIANCE IN CHILDREN WITH INTRACTABLE CONSTIPATION AND FECAL INCONTINENCE**

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**Aims** Constipation and faecal incontinence is a common distressing symptom affecting about 3% of the childhood population.\(^1\) Regular trans-anal irrigation (TAI) has become an established intervention to reduce the impact of this condition on affected children.\(^2\) Treatment failure is seen in 5-36% of children.\(^3\) As part of a quality improvement programme on the management of childhood constipation and incontinence, we sought to determine the compliance levels for children in whom we offered a combination of high and low volume irrigation packages as part of their multi disciplinary management plan.

**Methods** We reviewed the records of 80 children who were referred to a weekly consultant delivered dedicated community based multi disciplinary clinical programme for constipated and encopretic children. 24 children received different modalities of trans-anal irrigation after a structured training programme accompanied with ongoing community nursing support. We used The Quifora Click \(^{\text{®}}\) System (high volume irrigation) alone, The Qufora MiniGo System \(^{\text{®}}\) (low volume irrigation) alone or a combination of high and low volume irrigation packages depending on the needs of the child. Children and carers provided progress reports via a secure online platform Qualtrics XM\(^{\text{®}}\) We analysed patient characteristics, the compliance after 4 weeks of treatment and clinical outcomes in this group of children. We used descriptive and statistical analytical methods to evaluate our data.

**Results** 80 children (M:53) were referred to the service. Of these, 25 (M:16) received trans-anal irrigation in addition to other interventions by the multi-disciplinary team designed to improve their care. The average age of the TAI cohort was 10.2±1.4 yr (range 4-18yr). The 25 children all complained of constipation but 23 had faecal incontinence. 17 children (68%) had recorded elevated average Cleveland constipation score of 15.9±4.9 and elevated average St Marks score of 16.9±2.1. 13 children received high volume TAI alone, 6 children received low volume trans-anal irrigation alone and 6 children received a combination of high and low volume irrigation package. Across the cohort, 9 children have discontinued the use of TAI, 7 because they improved temporarily or permanently and no longer required the treatment, and 2 because they could not tolerate the procedure within the first 4 weeks of treatment. One child in the high volume irrigation group and one child in the low volume irrigation group stopped treatment within 4 weeks of initiating TAI. No child in the combination group has stopped trans-anal irrigation. 18 children continue to use TAI after 4 weeks of treatment to minimise their symptoms. In total, 22 out of 25 children (88%) in the cohort were compliant with their tailored trans-anal irrigation programme over an average follow up period of 18 months (range 1-39) months with improved symptoms.

**Conclusion** Flexible use of trans-anal irrigation packages including a combination of low and high volume irrigation programmes improve compliance with treatment in children with intractable constipation and faecal incontinence.

**REFERENCES**
A QUALITY IMPROVEMENT APPROACH TO NON-EMERGENCY MANAGEMENT OF ANAPHYLAXIS

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Aims The National Institute for Health and Care Excellence (NICE) Clinical Guideline 134 details best practice in management of patients presenting with anaphylaxis after their emergency treatment is complete. We audited our compliance against these standards with the goal of improving our quality of care.

Methods We retrospectively audited care provided to 41 patients presenting to Birmingham Children’s Hospital with anaphylaxis between March 2020 and March 2021 by reviewing details in the emergency department (ED) and inpatient electronic patient records and discharge letters. We created a process map to illustrate the steps taken in management and used this to create a driver diagram to aid quality improvement efforts. We developed change ideas to improve performance against these drivers, implemented them individually and studied the outcome in a cyclical ‘plan-do-study-act’ (PDSA) fashion.

Results Performance against the NICE Guideline was mixed. 85% of patients were discharged with adrenaline autoinjectors (or already possessed at least two spares). However, only 41% of letters mentioned training patients and families how to use these autoinjectors. Based on the written record, only 22% of patients left with written Allergy Action Plans, and only 15% were signposted to additional information and support. Approximately half of patients (51%) were not referred for specialist follow-up. A process map unsurprisingly showed that the above tasks should be performed between ward round review and discharge.

Our driver diagram used the four main standards from the NICE guideline as the primary drivers. Education and training would potentially address all four main targets for improvement. However, the mandatory training burden for clinical staff is already significant; additional training and ‘working harder’ is not an ideal or sustainable approach, particularly for uncommon conditions. We recognised the need to create a systemic barrier to poor compliance. A documentation change was therefore the first change idea implemented. After discussion in the departmental governance meeting, a discharge checklist on the electronic patient record was preferred to a specific ED proforma to be generated at presentation.

Figure 1 shows the checklist as it appears on a discharge letter generated from our electronic patient record. As anaphylaxis is thankfully an infrequent presentation, we do not yet have comparable data to analyse before targeting another driver with a change idea in the next PDSA cycle. Anecdotally, we have demonstrated 100% compliance with NICE Clinical Guideline 134 since implementation.

Abstract 725 Figure 1

Conclusion We identified weaknesses in our current practice. Applying the principles of continuous quality improvement allowed us to improve our compliance with national best practice for non-emergency management of anaphylaxis. We plan to continue to improve this process through repeated PDSA cycles. It is possible that our performance against the

REFERENCE

1. (Glucose-6-phosphate dehydrogenase deficiency | Genetic and Rare Diseases Information Centre (GARD) – an NCATS Program, 2022).