Conclusion • The incidence of significant bacteraemia per year was relatively steady and did not appear to be influenced by the activity of the hospital.
  • *Escherichia Coli* and *Staphylococcus Aureus* remain the top significant illness-causing bacteria for general paediatric cases.
  • In 2020, the proportion of significant blood culture results was highest (figure 2). This may be due to less minor illness presenting to hospital or possibly better aseptic technique and more frequent handwashing.

HEALTH CARE UTILISATION ACROSS THE FOUR NATIONS – A VIEW THROUGH THE LENS OF DEPRIVATION

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Aims Data from some individual UK nations identify an association between deprivation and increased healthcare utilisation. A ‘four nations’ perspective would identify whether the relationship between deprivation and healthcare utilisation was stable over time and was consistent across the four independent NHs. Our aim was to describe the relationship between deprivation and unscheduled (emergency) hospital admissions across the four UK nations between 2007 and 2017.

Methods Routinely collected data were collected from individuals aged <25 years as part of the RCPCH’s Paediatrics 2040 project. Unscheduled admissions were standardised to/1000 population <25 years and from the period 2007-2017. The multivariate models considered unscheduled admissions in the context of deprivation quintile, and also included year and nation. Interactions terms between deprivation quintiles and time and/or nations were sought to explore changes in trends over time.

Results Data were available from England, Scotland, and Wales but not Northern Ireland. There was a relationship between increasing deprivation and increased admissions, figure one. The mean difference between admissions between the most and least deprived quintiles was 36.4/1000 [95% CI 34.7, 38.1]). The deprivation*time interaction term was not significant. In contrast the deprivation*nation*time interaction term was significant (p<0.001), i.e. the relationship between deprivation and time was different across nations. In England and Wales, the smallest % change in emergency admissions between 2007 and 2017 was seen for children living in the most deprived quintile (11.6% and 8.2% respectively) whilst those from the least deprived quintile had the greatest % change (33% and 21%), see figure two. For Scotland, there was no linear relationship between % change and deprivation. The incidence of unscheduled admissions was highest in Wales (mean difference compared to England 23.3 [22.0, 24.6]).

Conclusion Deprivation is associated with increased unscheduled admissions across the four UK nations. The ‘socioeconomic gap’ seems to be narrowing in England and Wales, and this is explained by increased unscheduled admissions from among the least deprived quintile rather than reduced admissions among the most deprived quintile. Differences in the organisation of the NHS in different UK nations may be important to the associations described.

MEASURING BLOOD PRESSURE IN CHILDREN AND ADOLESCENTS: 20 YEARS OF CHANGE

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Aims Our aim was to update our knowledge on the practice and interpretation of blood pressure (BP) measurement and treatment of hypertension (HTN) in children and adolescents.
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 analyisable replies from 34 different sites were received and compared with the 1997 data. 106 (84.8%) reported clinic 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 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 cri-\(\text{\textsuperscript{1}}\)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 cri-\(\text{\textsuperscript{1}}\)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 cri-\(\text{\textsuperscript{1}}\)previously used (52.1%).

**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.

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**COMBINATION TRANS-ANAL IRRIGATION PACKAGE IMPROVES TREATMENT COMPLIANCE IN CHILDREN WITH INTRACTABLE CONSTIPATION AND Faecal 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 Qufora Click \(^1\)System (high volume irrigation) alone, The Qufora MiniGo \(^1\)System (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.\(^1\) 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**

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**MOTH TO A FLAME – BUT DON’T BE DISTRACTED BY OTHER CAUSES TO BLAME!**

Brittani Barford, Darshika Gonapoladeniyage, Mya Aye. Milton Keynes University Hospital

**Aims** Accidental ingestion in children is not uncommon presentation in paediatric emergency department.

**Objectives** To discuss how underlying diagnosis of G6PD deficiency was unfolded after accidental ingestion.

**Methods** Retrospective review of electronic admission notes.

**Results** A 22-month-old boy presented to MKUH PED as a pre-alert following an incidental ingestion of an unknown amount of camphour. Paramedics noted the child to have a