The feedback initially identified problems with the quality of teaching, and through organisation and communication with Consultants from the Deanery, we have been able to create a well-structured teaching timetable for the next year involving Tertiary Centre Consultants and District General Hospitals, which complies with the RCPCH curriculum.

We hope to extend this programme to become an 18 month rolling programme. We will continue to undertake regular feedback surveys and forum discussions to continually develop the programme and make it a success.

G127(P) IMPROVING VITAMIN D SUPPLEMENTATION IN CHILDREN AGED 0–5 YEARS BY IMPROVING HEALTH PROFESSIONALS' KNOWLEDGE OF UPDATED VITAMIN D GUIDANCE

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10.1136/archdischild-2018-rcpch.123

Guidance from the RCPCH and Public Health agency (PHA) recommends all children 0–5 years should receive vitamin D supplementation (excluding those receiving more than 500 ml of formula milk/day).

Aim Our aim was to assess current level of vitamin D supplementation in children aged 0–5 years within our trust and assess awareness of RCPCH/PHA guidance among parents and health professionals.

Methods A survey was completed with parents/carers of children aged 0–5 years attending outpatient clinics. We surveyed if children were in receipt of vitamin D supplementation and parental awareness of vitamin D guidance. Education via vitamin D information leaflets was provided to all surveyed.

An online survey was circulated to medical and health visiting staff. 99 responses were received.

Results 40 children were surveyed. 34 of these children should have been receiving supplements. Our survey identified 15% of these children were receiving supplementation. 75% of parents/carers had no awareness of vitamin D guidelines. There was no uptake of healthy start vouchers for vitamins. Healthy Start is a government scheme aiming to improve the health of low income families including the provision of vitamin coupons.

72% of health professional respondents were aware of vitamin D guidance yet only 14% correctly identified children who should receive vitamin D supplementation. 63% were not aware of how parents/carers apply for healthy start vouchers. 74% stated they had not received training in vitamin D supplementation. Respondents suggested that they would benefit from face to face teaching sessions and e-learning modules.

A teaching programme was created to improve health professionals' awareness of vitamin D guidance. Following attendance at the session 100% of attendee's reported that they felt more informed about vitamin D guidance. 89% suggested that the teaching will change their practice with 93% stating that they will now recommend vitamin D supplementation to children aged 0–5 years in their care.

Conclusion Our project identified the lack of awareness around vitamin D supplementation and emphasises the importance of education amongst professionals to improve vitamin d supplementation within the paediatric population. Ongoing

engagement with the PHA is necessary to improve public awareness and uptake of supplementation.

G128(P) SAFER PRESCRIBING IN ADHD – ALIGNING DOCUMENTATION WITH NICE GUIDELINES

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10.1136/archdischild-2018-rcpch.124

Aim NICE provide evidence-based guidance for the prescription of medication used to treat school-aged children diagnosed with severe ADHD. A local audit undertaken in 2014 evidenced that prescribing standards were not recorded fully or clearly in the patient's notes. As part of the changes to practice, a new ADHD prescribing proforma was introduced throughout the department to improve patient safety in line with NICE guidelines. As part of a PDSA cycle, a further audit was then undertaken to assess the effectiveness of the changes to practice implemented.

Method Hospital Coding was used to identify children commencing ADHD medication in 2016 in a local hospital. Retrospective analysis of medical notes was carried out to review documentation of the medication prescriptions. NICE CG72 was used as the gold standard.

Results 48 cases were identified with 10 excluded (unable to obtain notes). Male 87%; Female 13%. Following an in-depth analysis of medical notes and clinic letters, the results were not dissimilar to the 2014 findings. Whilst highlighting several positives in prescribing practice, other standards of documentation remained poor (table 1). The proposed prescribing proforma was also not in regular use with only 8% of notes containing a copy.

Abstract G128(P) Table 1

Nice CG72 gold standard	Percentage of cases
First line medication	100%
School-Aged	100%
Professional with ADHD Expertise	97%
Baseline Observations	74%
Part of Comprehensive Treatment Plan	71%
ADHD Severity	8%
Consideration of Comorbidities	34%
Assessment of Cardiac PMH	5%
Cardiac Fhx	32%
ECG	39%
ECG if Positive Fhx	100%
Mental/Social Assessment	13%
Substance Misuse/Drug Diversion	8%

Conclusions Similar to 2014 audit data, documentation in ADHD prescribing remained substandard and did not meet the gold standards of NICE CG72. Through presenting the data and talking to clinicians, it became apparent that some were not aware of the prescribing proforma or did not have access to it. Others were resistant to using something that was felt to be time-consuming or dictatorial to their practice after years of experience.

Subsequently, an abbreviated 'prescribing checklist' has been created in conjunction with prescribers, focussing on the weaker areas of documentation. It aims to being more user

friendly whilst still prompting the prescriber to meet prescribing gold standards and improve prescription safety.

G129(P) AN UNUSUAL CASE OF NEONATAL METABOLIC ALKALOSIS CAUSING SEIZURES

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10.1136/archdischild-2018-rcpch.125

Introduction Metabolic alkalosis in neonates is very rare and attributed to gastric fluid losses, diuretics and congenital chloride diarrhoea (CCH). There were four cases reported: due to maternal bulimia and Bartter's, vomiting and CCH. None of them had seizures.

Case report A new-born was born in good condition by emergency LSCS for IUGR, preeclampsia and suboptimal CTG. She developed desaturation of 80% at 30 min of age followed by apnoea and seizures. Antenatally, Mother had persistent vomiting for last one month, cocaine and amphetamine abuse and active Hepatitis C infection. The examination revealed irritability and hypertonia. Rest of the history and examination weren't significant. Mother and the baby showed hypochloreaemic metabolic alkalosis with deranged renal function and electrolytes except potassium of 3.5 and 2.4 in baby and mother respectively; urine was positive for opiates and cocaine. CFAM showed seizure activities. EEG and MRI head were unremarkable. Infections and metabolic screening remained negative.

She was ventilated and treated with designer electrolytes solution, antibiotics and anticonvulsants. Due to renal impairment acyclovir was not given. Both made uneventful recovery.

Because of maternal substance abuse baby was discharged to grandparents with supervised access to parents.

Discussion

- Maternal hypochloremic metabolic alkalosis was likely secondary to prolonged vomiting
- The placental simple diffusion and haemodialysis effects explain the similar levels of electrolytes and renal function in mother and New-born except potassium.
- Initial normal (3.5 mmol/L) and later low (2.4 mmol/L) potassium levels are explainable by unidirectional placental potassium fluxes and intracellular shifting in alkalosis respectively.
- Desaturation and apnoea were due to shift of oxygen dissociation curve to left and hypoventilation by alkalosis.
- Early onset seizures were likely secondary to neuromuscular effect of alkalosis.
- This case illustrates the importance of close follow up of new-borns with maternal deranged electrolytes and renal impairment.

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G130(P) AN UNUSUAL CAUSE OF DELAYED WALKING: A CASE PRESENTATION

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10.1136/archdischild-2018-rcpch.126

We present a case of a 22-month-old girl who was found to have an underlying metabolic bone disease as a cause for delayed gross motor development.

The patient was referred to a district general hospital outpatient department as she was not yet cruising and had possible speech delay. However, she was crawling and had no fine motor or social developmental concerns. She had a normal birth history with no past medical or family history of note, her immunisations were up-to-date and she was on no medication. Examination showed her weight was on the 2nd-9th centile and her length was on the 0.4th centile. She had prominent notched clavicles with splayed wrists, mild scoliosis and a small thorax. She appeared to be in significant pain on hip abduction.

Bloods showed a significantly raised alkaline phosphatase (5882), but low corrected calcium and phosphate. Her 25(OH)D₃ was normal but her parathyroid hormone was raised. Radiographs were consistent with features of rickets and she had femoral, radial and ulnar fractures. After 1,25(OH)₂D₃ was returned as slightly low at 47, a diagnosis of 1-alpha-hydroxylase deficiency was made. She was commenced on oral alfacalcidol, calcium gluconate and phosphate. Upon review at 3 months, her biochemical markers were improved and she had made marked developmental progress.

1-alpha-hydroxylase deficiency was first identified in 1961 and is thought to be autosomal recessive with a mutation in the CYP27B1 gene, which prohibits conversion of 25(OH)D₃ metabolite to the active 1,25(OH)₂D₃. Biochemical disturbance includes: moderate hypophosphataemia, severe hypocalcaemia, elevated parathyroid hormone and alkaline phosphatase, normal 25(OH)D₃, and low 1,25(OH)₂D₃. Treatment aims to maintain corrected calcium levels within normal range by using large doses of 1,25(OH)₂D₃. The main concerns with treatment are nephrocalcinosis and intraocular calcification. Therefore, recommendations for monitoring are performing a bone profile, kidney function, parathyroid hormone and urinary calcium/creatinine ratio every 3 months and ophthalmology assessment, renal tract ultrasound and hand radiographs once per year.

G131(P) ASSESSMENT OF INJURIES UNDER 1 YEAR OF AGE WITHIN A PAEDIATRIC EMERGENCY DEPARTMENT

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10.1136/archdischild-2018-rcpch.127

Aims To review our assessment of infants discharged directly from the emergency department who had presented with an injury under 1 year of age. To review adherence of usage of the injury under 1 proforma. To ascertain the number of children who had more than 1 injury under 1 year of age. To