changes included massive increase in telephone and video consultation to limit direct clinician contacts. Only about a third of clinicians were aware of pandemic-specific guidelines.

Quality Improvement and Patient Safety

1790 SYSTEMIC ADVERSE EVENTS AND SIDE EFFECTS FOLLOWING INTRAMUSCULAR BOTULINUM TOXIN A (BONT-A) INJECTIONS IN CHILDREN WITH CEREBRAL PALSY AND MOVEMENT DISORDERS

Lucy Murray, Joanna Coghill, Lesley Katchburian. West Suffolk Hospital; Cambridgeshire and Peterborough NHS Trust, Great Ormond Street Hospital

Background Botulinum toxin A injections are recommended for use by NICE to treat spasticity in children with cerebral palsy and movement disorders.

Objectives To explore the frequency of adverse events and side effects within a Paediatric Botulinum Toxin Service.

Methods This was a retrospective review of children (aged 2 to 17 years) attending the Botulinum Toxin Service between 2016–2019. We investigated systemic adverse events (generalized weakness, lower respiratory tract infection, dysphagia and death) and side effects occurring at time of injection and at follow-up with physiotherapy, occupational therapy or medical teams.

Results 50 children underwent 93 toxin episodes. 45 children had a diagnosis of cerebral palsy (GMFCS I (9), II (12), III (6), IV (14), V (5)) and 5 had other movement disorders. 5 were excluded from analysis (1 child did not attend follow up and, 4 were excluded as follow up was not yet complete). In total, 88 toxin episodes were included.

No children were reported to have systemic adverse events. Side effects were reported in 27% (24/88) of toxin episodes. Only 2 children (2/88, 2.2%) experienced side effects at time of the injection (pain 1/88 (1.1%), distress 1/88 (1.1%)).

The most common side effects experienced at follow-up was bruising (12/88, 13.6%) GMFCS I (1), II (3), III (5), IV (3). Other reported side effects included pain (11/88, 12.5%) GMFCS I (2), II (2), III (4), IV (3), flu-like symptoms (6/88, 6.8%) GMFCS I (1), II (1), III (1), IV (2), V (1), localised weakness (4/88, 4.5%) (all GMFCS I-III), and skin problems (2/88, 2.27%) (GMFCS I-II). There were no reported urinary or bowel problems and no increase in seizure frequency in children with epilepsy.

Conclusions No systemic adverse events were noted in our local Botulinum Toxin Service over a three-year period. Most of the side effects reported were minor and self-limiting. This data is in line with recent national and international studies. These results support that botulinum toxin injections are a safe intervention for tone management in children with cerebral palsy/movement disorders.

REFERENCE
78% (n=7) of patients who had a GDP requested a specialist dental check-up at Alder Hey. Three patients already under the dental department, were no longer registered with a GDP. Only one patient (11%) who hadn’t been seen in the dental department previously knew of its existence. 67% (n=2) of patients who had been seen within the dental department previously, requested a dental review. Dental review was arranged for all the patients who requested it.

Conclusions
- There was generalised high demand for specialist dental review and oral health information
- Most patients were post-transplant or CKD 4 & 5, who require specialist dental management
- Few patients had been seen within the department previously, and few were aware that there was a dental department at Alder Hey
- Data collection was disrupted due to the COVID-19 pandemic but highlighted the need for formal renal-dental pathways

Recommendations
- Specialist dental assessment for all haemodialysis patients
- Dental assessment of pre-transplant patients during work up
- Annual or semi-annual specialist dental review post-transplant

Development of an oral health leaflet for renal patients

British Association of Child and Adolescent Public Health

**1792** PREDICTORS OF HEALTHCARE UTILISATION IN CHILDREN: A POPULATION SEGMENTATION APPROACH IN NORTH WEST LONDON

Thomas Beaney, Jonathan M Clarke, Thomas Woodcock, Rachel McCarthy, Kavitha Saravanakumar, Mauricio Barahona, Mitch Blair, Dougal Hargreaves.


Background There is a growing role for health services in managing population health. Segmentation approaches are widely used in the adult population to identify individuals with similar healthcare needs, based either on demographics and long-term conditions (LTCs), or on healthcare utilisation. Although the two approaches are closely linked in adults, the link between demographics and co-morbidities were strong predictors of utilisation segment, a significant amount of variation remained unexplained, suggesting a less well-defined trajectory of utilisation in children than in adults. Further research is needed to understand whether additional factors available in electronic health records can explain variation in utilisation, and can enable early identification and intervention.

**1793** COMPARISON OF THREE PAEDIATRIC EARLY WARNING SCORES FOR CHILDREN REQUIRING UNPLANNED PICU ADMISSIONS RETROSPECTIVE OBSERVATIONAL STUDY

Sapna Singh, PRUHKings

Background Paediatric early warning system (PEWS) is a well-recognised multi-faceted structure used to detect and manage clinical deterioration in children. There are multiple systems used in various clinical settings with limited evidence despite its widespread implementation in healthcare. However, it has been identified that there is a need for standardisation to help improve patient safety. The three tertiary children’s hospitals in the ‘South Thames Paediatric Network’ in London (Evelina children’s hospital, Kings College Hospital and St Georges hospital) use three different types of PEWS.

Objectives The overall aim of this study was to compare the three different PEWS to identify clinical deterioration in children requiring unplanned PICU admissions. The primary hypothesis was that there were differences in the time for escalation based on the type of PEWS tools used for a sample of population requiring unplanned PICU admission.

Methods This was a single centred retrospective observational study of 35 patients with unplanned PICU admissions from