Of 37 infants, 16 had a lumbar puncture performed, with a further three having attempted lumbar puncture. In the < 1 month old group, who should be considered as high risk for SBI, only 5 of 9 infants had a lumbar puncture performed. Additionally, a number of lumbar punctures were delayed, with one lumbar puncture delayed by 4 days.

Regarding treatment, 26 infants received parenteral antibiotics; 16 of these infants received 'triple antibiotic therapy' consisting of amoxicillin, gentamicin and cefotaxime. Additionally, 6 infants who were treated with antibiotics due to concerns regarding sepsis did not have a lumbar puncture.

Conclusions This audit shows that while we are compliant with investigations such as blood tests, and urine sampling in most cases, compliance with guidance regarding lumbar puncture and antibiotic treatment is still poor, and the audit revealed significant variation in these areas, suggesting greater education regarding guidelines is required.

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P147

THE DEVELOPMENT OF THE DOWN SYNDROME HEALTH SURVEILLANCE CLINIC

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The problem Down syndrome (DS) is the most prevalent chromosomal abnormality accounting for 8% of all registered cases in Europe. One baby with DS is born out of every 444 live births in Ireland. Recent decades have seen a substantial increase in the life expectancy of children with DS. The implementation of medical guidelines with preventative health care programmes have helped to improve life expectancy and quality of life.

Aim The development of a multidisciplinary one stop clinic to provide health surveillance for children with Down Syndrome to improve adherence to guidelines outlined by the Down Syndrome Medical Interest Group UK and Ireland (DSMIG).

Making a case for change

In 2015, an audit of adherence to medical guidelines outlined by DSMIG was performed comparing children attending a disability-based service in comparison with a hospital-based service. Compliance to guidelines was higher in the hospital-based clinic. An interprofessional group performed a root cause analysis and subsequently developed a dedicated multidisciplinary DS Health Surveillance Clinic (DSHSC) amalgamating the clinic run in the disability service with children attending hospital-based general paediatric clinics.

Improvements seen The DSHSC occurs twice monthly and caters for 207 children with DS. Families are reviewed by the medical team and DS Clinical nurse specialist and rotate through audiology and phlebotomy as required. A clinical proforma has lead to significant improvement in assessing for symptoms of obstructive sleep apnoea, coeliac disease, atlantoaxial instability and arthropathy associated with DS as well as developmental assessment. Compliance to national

guidelines improved on re-audit of 58 patients attending the DSHSC chosen at random of similar demographics.

In conjunction with re-auditing of adherence to guidelines, parental questionnaire was distributed at random to families attending the clinic. Parental satisfaction was 100% (n=24) good to excellent on a 5-point Likert scale. Sixty-six percent (n=16/24) had a wait-time of less than 30 minutes. Additional dietetic and play therapy support was reported to enhance the clinic experience by 58% (n=14/24) and 79% (n=19/24), respectively, of respondents.

Conclusion The DSHSC provides parents with a 'one stop' clinic with access to medical and nursing support, phlebotomy and audiology. The co-ordination of same day appointments reducing time missing from school and work, and sharing of information. The use of a clinical proforma reduces the cognitive burden of medical staff in reviewing children and improves adherence to guidelines. We aim to continue to run health promotion projects, such as immunization education, through the clinic.

P148

A GUIDELINE FOR THE SECONDARY CARE MANAGEMENT OF TICS IN CHILDREN IN THE BELFAST TRUST

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Background Tic Disorder is a common problem that affects 1:1000 children. Tics can either be an isolated phenomenon, causing minimal stress or can be functionally significant causing interference with day to day life.

Within the Belfast trust many children are referred by General Practitioners to general paediatricians in the Royal Belfast Hospital for Sick Children because of concerns about tics. It was noted after discussion with the general paediatric team that investigations, management and referral patterns differed among general paediatricians.

Aims The authors therefore concluded it would be helpful to develop a guideline to

1. encourage a consistent investigation and management approach for Tic disorder and
2. clarify referral pathways from Belfast Trust general paediatrics to psychology, neurology and community based services including Child & Adult Mental Health Services (CAHMS)

Methodology In 2018, a small working group was established in RBHSC, consisting of two general paediatricians, one consultant paediatric neurologist, the lead paediatric psychologist and a paediatric trainee. An initial draft, based on information and evidence from current medical literature, was produced. It was subsequently amended several times after working group meetings and regular email correspondence. Belfast Trust Community paediatricians and the CAHMS lead were consulted, with particular attention to the referral pathways. The wider general paediatric medical team was asked to review the final draft. Help was obtained from a quality improvement manager to ensure the guideline met Trust quality and formatting standards.

Results The guideline is now complete and awaiting final approval from the Belfast Trust. It contains advice on

structured approach to the history and examinations of a child with possible tic disorder and when investigations are indicated. Management is discussed under two categories of (a) Simple tics and (b) Tics with co-morbidities. Advice is given on who will benefit from psychology input and what to do when co-morbidities are noted. Indications for paediatric neurology and CAHMS referral are discussed. The Appendix includes community referral forms, the Yale tic questionnaire and some links to information for carers.

Conclusion The authors are hopeful this guideline has fulfilled the aims outlined. Consideration will be given to seeking feedback from users when it is formally adopted. Paediatricians from other Trusts may also find much of the guidance helpful though caution would be needed with the referral pathways which are different in different Trusts.

P149 IS VIRTUAL THE FUTURE OF OPD?

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Introduction The General Paediatric Outpatients Department at Our Lady's Children's Hospital Crumlin has a greater than two year waiting list for new routine appointments. Long waiting time is considered as one of the most concerning matters in the majority of health care organisations¹. A wait time of no more than 6 months for routine appointments is proposed². A virtual clinic was run by three General paediatricians from November 2017 to October 2018, with the aim to reassess and prioritise the 'long-waiters' on the waiting list. A Virtual clinic is a contact between the clinical team and the patient, without a face to face meeting, to plan clinical care with the use of telecommunication³.

Methods Parents of the longest waiting children were called by the paediatricians, after going through their referral letters. If parents were not contactable, their GPs were contacted. Progression of the symptoms, persistent concerns, any reviews in the meantime were recorded. Subsequently patients were either removed from the list with parental consent or remained on the list with or without prioritisation.

Results A total of 65 patients were reviewed via virtual clinics. 43 patients were subsequently removed from the list with parental consent. In 15 (23%) referring reason was resolved, 4 (6%) were seen by other hospitals and 2 (3%) were seen privately, while 7 (11%) were reviewed by other specialities. 22 patients remained on the waiting list. Among these 65, 41 (63%) parents were contactable, GPs were contacted in 9 (14%) cases while no one was contactable in 15 (23%) cases. Most common referral diagnoses were developmental concerns and gastrointestinal issues including abdominal pain, constipation and reflux, each contributing to 30% of the cohort. 10% were referred for recurrent UTIs, 3% with respiratory symptoms, 8% with seizures and headaches, while 18% were miscellaneous including eczema and fatigue.

Conclusion Virtual clinics can play an important role in dealing with the long waiting lists in paediatric population.

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P150 PRIME (PRETERM INFANTS NEED MILK EARLY); A QUALITY IMPROVEMENT INITIATIVE IN A TERTIARY NEONATAL UNIT

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Aim Maternal milk (MM) protects against necrotizing enterocolitis and sepsis. PRIME is a multi-disciplinary initiative to improve the early provision of MM for preterm infants and enhance outcomes. Our aim was to increase the number of high-risk infants receiving MM in the first day life in our tertiary neonatal unit.

Method We retrospectively reviewed time to first MM for infants born <32 weeks gestational age (GA) or with a birth weight (BW) <1500 g in 2016. We conducted a cross-sectional survey to evaluate the knowledge and attitudes of staff towards breast milk for preterm infants. Deficits in background knowledge and training informed a teaching programme. Education involved training sessions, development of guidelines, distribution of posters, and presentation at meetings. The first 5 infants per month born <32 weeks GA or BW <1500 g were included in the post-intervention analysis. The effect of the interventions were evaluated using a before and after study design. Time to first MM was our key performance indicator.

Results We reviewed 123 infants born in 2016 [Median (IQR) GA 29 (26, 31) weeks, BW 1140 (820, 1410) g]. Many infants didn't start feeds in 1st24 hours as MM was not available; median (IQR) time to 1st MM 35 (17, 55) hours, 34% of infants received MM in the 1st24 hours of life. Prospective data was collected from 25 infants, born May – October 2018, following interventions [Median (IQR) GA 30 (26, 31) weeks, BW 997 (890, 1560) g]. The median (IQR) time to 1st MM was 17 (8, 25) hours and 76% of infants received MM in the 1st24 hours.

Conclusion The initial results of this hospital-wide QI initiative are promising. The median time to first MM has halved in the 5 months since this initiative commenced. Further PDSA cycles are indicated to ensure ongoing improvement.

P151 ASSESSING THE USE OF THE ISBAR3 HANDOVER FRAMEWORK IN AN IRISH PAEDIATRIC HOSPITAL: A MEDICAL STUDENT PERSPECTIVE

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Intro Medical staff are routinely educated on the ISBAR₃ framework for clinical handover. This tool is implemented to encourage safer and more effective task transfer during clinical emergencies, referral to other specialties, transfer of hospital and wards.