GP105 NURSING METRICS IN TEMPLE STREET: WORKING TOGETHER TO ACHIEVE NATIONAL STANDARDS

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Background Nursing and Midwifery Quality Care-Metrics are a measure of the quality of nursing and midwifery clinical care processes aligned to evidenced based standards and agreed through national consensus in healthcare settings in Ireland. Quality Care-Metrics will enable midwifery and nursing staff to frequently review real time data in order to improve clinical practice appropriately (Harrison 2011).

Aim and objectives To highlight Quality Improvements that have occurred in Nursing Practice In Temple Street and areas for improvement that are on-going as a result of Quality Care Metrics. Quality initiatives include; safe storage of drugs, co-signing of student nursing documentation, safe discontinuation of drugs. quality improvements involve; nurses, pharmacists and doctors.

Methods/Intervention Test Your Care generated quantitative data which highlighted areas of the Nursing process which required improvement. The Quality Initiative took place and the data was re-evaluated using Test Your Care.

Results/Findings Improvements evident in Medication Storage Custody Metrics as a result of the implementation of swipe Access in the Intensive Care Unit and the Emergency Department.

Conclusions Nursing Quality Care Metrics have an important role to play in optimising safe Nursing Care. This can be achieved through working together to meet National Standards.

GP106 MACROCEPHALY: COULD IMPROVED REFERRALS LEAD TO GENTLER IMAGING?

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Background Macrocephaly and/or increasing occipitofrontal circumference (OFC) are common reasons for referral to our tertiary general paediatrics clinic. The main concern is excluding hydrocephalus, a serious but rare condition (79 per 100,000 births in high-income countries (Dewan et al, 2018)). The *Tri-age of Referrals Clinic* (TORC) is a new initiative that seeks to improve patient flow through outpatients by organising relevant investigations prior to appointments.

Methods We performed retrospective analysis of referrals and imaging of patients triaged by TORC who subsequently had neuro-imaging requested due to large/enlarging OFC during August 2017 to October 2018. We devised a standard 'ideal referral' for large/increasing OFC based on a review by Seal (2013) and evaluated referrals of infants who went on to have neuro-imaging compared to this standard.

Results Seventeen patients had neuro-imaging requested. Median age at referral was 9 months. Four infants (23.5%) were referred due to large OFC, one (5.9%) due to large anterior fontanelle and twelve (70.6%) due to increasing OFC-centile. One patient's scan was cancelled as they were seen urgently and deemed clinically normal. Two with closed fontanelles went immediately for CT-scan (both normal).

Fourteen had cranial ultrasounds; of these eleven (78.6%) were normal or showed increased subarachnoid fluid (considered normal variant). Three patients had abnormal cranial ultrasounds. The first infant had prominent lateral ventricles that were normal on subsequent CT. The second infant had a small cyst consistent with previous haemorrhage and was discharged after a normal clinical assessment. The third patient had enlarged ventricles that were confirmed on CT-scan, they had additional risk factors having undergone neonatal cardiac surgery.

Regarding referrals, 14/17 (82.4%) included ≥ 2 OFC measurements. Three referrals (17.6%) did not mention infant development. Normal development was reported in the remaining fourteen. One referral mentioned the presence/absence of symptoms of increased intra-cranial pressure (ICP). Signs of increased ICP (absent/present) were included in three referrals (17.6%). Only eleven (64.7%) detailed if the anterior fontanelle was open. A family history (absent/present) of macrocephaly was mentioned in five (29.4%) and none mentioned family disability. Seven (41.2%) included weight/length centiles and three (17.6%) infant's birth-gestation.

Conclusions Of the seventeen patients referred for neuro-imaging, one had a significant abnormality. This raises the question of whether neuro-imaging is needed in all these cases and if we may be able to reduce the number of scans ordered by improving quality of referrals.

GP107 INTEGRATED CARE FOR 22Q11 DELETION SYNDROME IN IRELAND – MEETING CHILDREN'S NEEDS THROUGH ENHANCED CARE CO-ORDINATION

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Background 22q11 Deletion Syndrome is a complex, multi-system disorder with a prevalence of 1 in 2000 to 4000 people, making it the most common microdeletion described. Affected children may present with a diverse range of medical conditions and they are extremely vulnerable to a range of physical and intellectual disabilities as well as psychiatric illness throughout their lifespan. Consensus surveillance guidelines were developed, and last updated in 2017, in the U.K. to establish 'a comprehensive and universally agreed lifelong care plan for people with 22q11DS'. Medical care for this population is frequently fragmented, and a need for a dedicated clinic in Ireland was identified by both medical professionals caring for these children and their families through 22q Ireland parent support group.

Aims Our aim is to review the needs of children with 22qDS at the time of their first dedicated tertiary clinic review with reference to the consensus guidelines and establish if a dedicated clinic can identify and address unmet needs within this population.

Methods The outcomes of all first clinic appointments since the establishment of the new clinic in October 2017 to January 2019 were reviewed. Previous specialty input along with referrals made and investigations requested were recorded.

Results In the first 6 months of the 22q11DS Clinic 17 children were assessed. This attendance rate was 94% and 29% of this group had their appointment co-ordinated with another specialist on the same day. Overall, 46 children have been seen to date. Following their first assessment, in accordance to the guidelines and clinical need, overall 82% required surveillance investigations, including: blood testing (66% of children), renal ultrasound (30%) and X-Ray spine (9%). Specialist referrals were needed in 73% of children, to a variety of services, most commonly to mental health (48%), dental (20%), cardiology (18%), immunology (14%), cleft team (14%), ophthalmology (14%), audiology (9%), endocrine (7%) and orthopaedics (7%).

Conclusion We have identified multiple areas of unmet need with reference to best practice guidance in this dedicated clinic. It is hoped that we can improve care co-ordination further by engaging other specialists to run clinics on the same day, appoint a nurse specialist and adopt a clear care pathway, tailored to the Irish healthcare system using a life course approach to ensure the regular monitoring and anticipation of issues and early intervention that helps in maintaining health, well-being and quality of life.

GP108

NATIONAL PEWS IMPLEMENTATION IN IRELAND; OUTLINING THE EXPERIENCE OF IMPLEMENTING A MANDATED PAEDIATRIC PATIENT SAFETY IMPROVEMENT INITIATIVE

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Background The Irish Paediatric Early Warning System (I-PEWS) and associated National Clinical Guideline No.12 was developed in response to a ministerial mandate as a funded workstream of the National Clinical Programme for Paediatrics. I-PEWS is a multifaceted approach to improving patient safety and clinical outcomes, based upon the implementation of several complementary interventions, including 5 age-specific paediatric observation charts incorporating a PEWS scoring tool and escalation guide, promotion of effective communication using the national standard (ISBAR communication tool for patient deterioration), timely nursing and medical input, and clear documentation of management plans.

Objectives I-PEWS was developed to improve prevention, recognition and response to children at risk of inpatient clinical deterioration in Ireland. For a defined period, national implementation was overseen by a Working Group of stakeholders and supported by a National Coordinator.

Implementation strategy Over a three-year period, we piloted and refined the PEWS charts and associated education resources and facilitated national implementation of the Irish PEWS in 29 public hospitals. We developed a centrally-delivered, standardised training programme to establish hospital-level PEWS Trainers. Locally nominated PEWS Leads and Trainers were supported by regular communications, site visits and remote support culminating in a paediatric patient safety celebration day to mark the conclusion of the Working Group and Coordinator involvement. National Key Performance Indicators (KPI) were developed to demonstrate adherence to National Clinical Guideline

recommendations by the local governance bodies to include development of locally applicable continuous education standards and regular audit to promote frontline ownership of the change.

Results Implementation of PEWS was challenging due to the number of sites involved and the different specialties, resources and levels of engagement within each. The four quarterly KPI reports from 2018 demonstrate inconsistency in implementation and embedding of PEWS.

21 of 29 (72%) hospitals overall report full compliance with the standards set out in the KPI suite. Issues include (ranges indicate variance in reporting across quarters): no local governance group (33%) no provision for continuous education programme for nurses (1–4 hospitals) or doctors (3–5 hospitals) all admitted children are not monitored using PEWS (1–2 hospitals) audit practices are not as recommended (1–3 hospitals) outcome data is not being collected (4–6 hospitals)

Learning Implementing a national QI initiative is complex. The flexibility for locally relevant adaptations is essential for applicability and buy-in. The KPI data demonstrates a deficit in implementation standards and should be addressed by the Irish health service.

GP109

DOCUMENTATION OF NEUROLOGICAL EXAMINATION WHEN DETERMINING ELIGIBILITY FOR THERAPEUTIC HYPOTHERMIA

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Introduction Neonatal encephalopathy (NE) is a clinical syndrome characterized by disturbed neurologic function. Severity of NE is based upon standardised neurological examination. In determining eligibility for therapeutic hypothermia (TH), both national and international guidelines require this standardised assessment be performed in the first six hours of life. The appropriate documentation of this early assessment is essential to ensure appropriate management is provided.

Aim To assess if the grade of encephalopathy, and/or a complete neurological exam, was documented among infants admitted with NE when determining eligibility for TH.

Methods A retrospective chart review of infants admitted with NE over a one year period was performed. Approval to conduct this audit was obtained from the local clinical research and ethics committee. The documentation of all assessments conducted following admission was reviewed; data points collected included if a grade of encephalopathy was recorded, and details of any neurological exam documented. The results were presented to staff and trainees, in tandem with educational sessions on performing and documenting a standardised exam. A planned re-audit will be conducted after a 6 month period.

Results Thirty-one patients were admitted with NE over a 12 month period (November 2017 to October 2018, inclusive). Of these infants, twenty-four received TH, and seven did not.

During the first six hours of life, an overall grade of encephalopathy was documented in only nine (29%) infants admitted with NE. The majority of infants, 28 (90%), did have at least part of a neurological exam documented during this time, however three infants had none documented. Among