Irish & American Paediatric Society
58th Annual Meeting
September 15-17th 2026
Cleveland, Ohio, USA

Hyatt Regency Cleveland at the Arcade
420 Superior Avenue East,
Cleveland, Ohio, 44114
(216) 575-1234

The aims of the Society are to promote fellowship and exchange scientific and cultural information in the broad area of child health and life in Ireland, Northern Ireland, The United States and Canada. To initiate joint collaborative clinical research projects and establish closer professional ties between Ireland and North American Pediatricians and Health Care Providers.


Next IAPS Meeting:
Cork, Ireland
September 22-24, 2027
Clayton Hotel
Blarney Stone
Kinsale Harbor, West Cork
Annie Moore statue at Cobh Heritage Center
University College Cork

Irish and American Paediatric Society Presidents

1968-1969 Thomas E. Cone Jr., M.D.
1970-1971 Professor Brain McNicholl
1972-1973 John Connolly, M.D.
1974-1975 Victoria Coffey, M.D.
1976-1977 Frederic G. Burke, M.D.
1978-1979 Eddie Tempany, M.D.
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1984-1985 John. L. Doyle, M.D.
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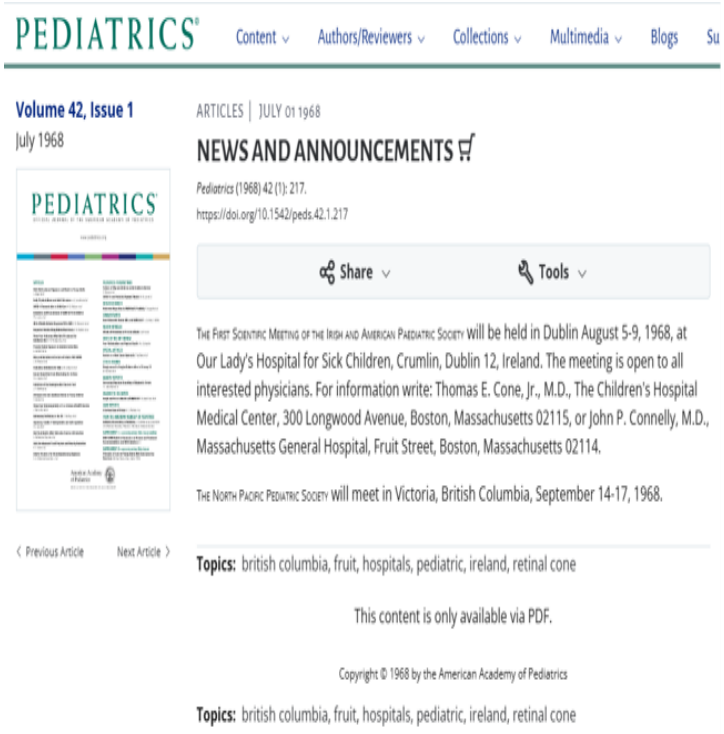
2018-2019 Prof. William N. O'Connor, M.D.
2020-2022 Professor Mariette Murphy, M.D.
2023-2024 F. John McLaughlin, M.D.
2025-2026 Sheena Durnin, M.D. President
2027-2028 Lisa M Clark, DNP President-Elect



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NEWS AND ANNOUNCEMENTS

Pediatrics (1968) 42 (1): 217.
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The First Scientific Meeting of the Irish and American Paediatric Society will be held in Dublin August 5-9, 1968, at Our Lady's Hospital for Sick Children, Crumlin, Dublin 12, Ireland. The meeting is open to all interested physicians. For information write: Thomas E. Cone, Jr., M.D., The Children's Hospital Medical Center, 300 Longwood Avenue, Boston, Massachusetts 02115, or John P. Connelly, M.D., Massachusetts General Hospital, Fruit Street, Boston, Massachusetts 02114.

The North Pacific Pediatric Society will meet in Victoria, British Columbia, September 14-17, 1968.

Previous Article Next Article

Topics: british columbia, fruit, hospitals, pediatric, ireland, retinal cone

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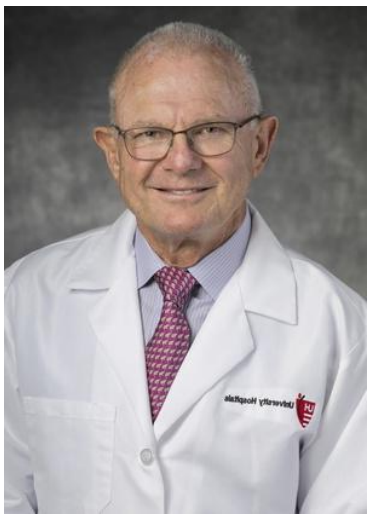
	At a Glance Irish American Paediatric Society Meeting			
	Tuesday September 15,2026			
1 pm	LOBBY	Meet Up for optional visit to Rock N Roll Hall of Fame		
1800-2130	Bar Private Dining Room	Welcome Buffet and Lecture History of Diapers -Dr. Cynthia Bearer, Chief, Division of Neonatology, RBC, and Editor, *Pediatric Research*		
	Wednesday September 16th, 2026			
		Room	**Moderators Session I –Sheena Durnin and Mariette Murphy**	
0800-0900		**Kaiser Lower Level**	Welcome and Opening Remarks Session 1	
0850 - 0900	**BREAK**			
0900 -1000	**Lower Level**	**Kaiser**	Session 1 continued	
1000 – 1030		**Kaiser Foyer**	**BREAK – TEA/COFFEE**	
1030-1230	**Lower Level**	**Kaiser**	**Moderators Session II – Dev Mukherjee and Tommy Raffay**	
1230 - 1330	**LUNCH**	**Food Buffett Emanuele Foyer**	**Move to room next door Emanuele for dinning**	
1330 – 1600	**Lower Level**	**Kaiser**	**Moderators Session III – Eche Maduekwe and Aoife Branagan**	
1600	**Closing Remarks Adjourn for IAPS Council Business Meeting All Invited**			
1800-2200	**Evening Activities and Presidents Welcome**			
1830	**Dinner**	**Food Buffett in Emanuele Foyer**	**Room Emanuele for dining & Entertainment**	
1930-2130		**Entertainment https://www.celticrushband.com/**		
2200	**Retire for Day 2**			
	Day 2 - Thursday, September 17th, 2026			
	Transportation	**Room**	**Title**	
6:30 am	**Hotel Breakfast**	**1890**	**Breakfast**	
0700-0730	**own/group up**	**Auditorium Rainbow Babies**	**Grand Rounds 2101 Adelbert Rd Cleveland**	
0800 - 0900	**Introduction: Rita Ryan**	**Lecture: Rachel Stanley**	**Building a Culture of Resilience and Joy in Medicine – Emergency Medicine Example**	
0900 - 0930	**Community Room Meet and Greet**			
0930 – 1030		**Community Room**	**Moderators Session I – Rita Ryan and Meredith Kinoshita**	
1030 - 1100	**BREAK**			
1100 – 1200		**Community Room**	**Moderators Session II – Sheena Durnin and Colm Travers**	
1200 - 1300	**Closing Remarks and Adjourn for Lunch**			
1330pm	**Transportation own/grouped**	**LUNCH at The Harp at 4408 Detroit Ave in Cleveland**		

Keynote Speakers

 *Thomas Cone Lecture*	Professor Rachel Stanley is a nationally recognized pediatric physician leader, researcher, and academic mentor, currently serving as Physician-in-Chief at Connecticut Children's and Chair of the Department of Pediatrics at UConn School of Medicine having previously worked as Division Chief of Emergency Medicine at Nationwide Children's Hospital. She is a former pediatric resident of the UConn School of Medicine and was a former recipient of the outstanding pediatric resident award. She has successfully competed for more than $10 million in federal grants and served as the Principal Investigator of the Great Lakes Node of the Pediatric Emergency Care Applied Research Network (PECARN) study.
 *Bill Kidney Lecture*	Professor Richard J. Martin, MD, is a professor of pediatrics, reproductive biology, and physiology at the Case Western Reserve University School of Medicine. He is the director of Neonatal Research Programs at Rainbow Babies & Children's Hospital at University Hospitals Cleveland Medical Center.
 *Fred Burke Lecture*	Associate Professor Nathan Stehouwer is the Program Director of the Internal Medicine-Pediatrics Residency Program. Nathan Stehouwer was raised in Northeast Ohio and later, central Pennsylvania. He received his BA from Calvin College in Grand Rapids, Michigan. He received his MD at Case Western Reserve University, completed residency and chief residency in combined Internal Medicine and Pediatrics, and now practices and teaches both adult and pediatric medicine.

	Irish and American Paediatric Society, Cleveland, 2026 Scientific Programme		
	Wednesday September 16th, 2026		
	Moderators Session I –Sheena Durnin and Mariette Murphy		
		Authors	**Title**
0800-0805	Presidents Address	Sheena Durnin CHI Tallaght Consultant (IAPS President)	Welcome and Opening Remarks
0805 – 0820	1	Roisin Cullinane CHI Tallaght (Specialist Reg)	Quality Improvement Initiative: Documentation of Injuries in Children under two years old - A Completed Audit Loop
0820 – 0835	**2 Sentec IAPS Travel Award**	Anitha Sokay UCC, Ireland (Registrar)	Atopic Outcomes at 5 Years in the Coral Cohort Born in Covid-19 Lockdown 2020
0835 - 0850	3	Freya Guinness CHI Crumlin (Specialist Reg)	Paediatric Readiness Assessment Tools in Emergency Care: A Scoping Review
0850 - 0900	**BREAK**		
0900 -0915	4	Eche Maduekwe Stonybrook, USA (Professor) (Council Member)	Evaluation of point-of-care hemoglobin testing vs. central laboratory measurements in neonates: a prospective study in the neonatal intensive care unit
0915 – 0930	5 **Sentec IAPS Travel Award**	Orla Mary Coffey UCC, Ireland (Student)	The Geographical and Socioeconomic Determinants of Children on Paediatric Waiting Lists for >6 months in Cork University Hospital
0930 - 1000	6	Ariane Marie-Mitchell Loma Linda, USA (Assoc. Professor)	Families Implementing Resilient Systems Together (FIRST)
1000 – 1030	**BREAK – TEA/COFFEE**		
	Moderators Session II – Dev Mukherjee and Tommy Raffay		
1030 – 1130 Founders Lecture	**Introduction: Colm Travers**	**Fred Burke Lecture: Richard Martin**	**Lessons Learned… and Still Learning**
1130 - 1145	**7 Sentec IAPS Travel Award**	Eilís O'Halloran UCC, Ireland (Student)	Antenatal Corticosteroids and Magnesium Sulphate in Very Low Birth Weight and Premature Infants
1145 - 1200	8	Shreya Patel CWRU, USA (Student)	Improving LISA Practice: An Ongoing Observational Quality Improvement Initiative Following Initiation of Less-Invasive Surfactant Administration in a Level IV NICU
1200 - 1215	9	Aoife Branagan McGill, Canada (Council Member)	Neonatal Encephalopathy – A Novel International Multidisciplinary Real-Time Delphi Consensus Definition

1215 - 1230	10	Rita Ryan Marshall University, USA (Chair and Professor)	Predicting chronic phase ventilation in bronchopulmonary dysplasia: The time (constant) has come!
1230 - 1330	**LUNCH**		
	Moderators Session III – Eche Maduekwe and Aoife Branagan		
1330 - 1430 Founders Lecture	**Introduction: Mariette Murphy**	**Bill Kidney Lecture: Nathan Stehouwer**	**Clinical Decision Making**
1430 - 1445	11	Alexandra Kinzer CWRU, USA (Resident)	Effects of Using Reticulocyte Hemoglobin to Titrate Iron Supplementation in Neonates Receiving Erythropoietin
1445 – 1500	12	Meredith Kinoshita SickKids, Canada (Council Member)	Mineral and Trace Element Loss in Multi-Nutrient Fortified Human Milk During Prolonged Enteral Tube Feeding
1500 – 1515	13	Lisa Clark Stonybrook, USA (DNP) (President Elect)	The warm baby bundle: An inter-unit quality improvement initiative to prevent environmentally induced newborn hypothermia
1515 – 1530	14	Anitha Sokay UCC, Ireland (Registrar)	Frenotomy for Ankyloglossia in Early Infancy at 6 Months in the Floral Birth Cohort Study
1530 – 1545	15	Sarah Abdalian CWRU, USA (Neo Fellow)	Bedside Upper Gastrointestinal (BUGI) NICU studies: How bougie is BUGI?
1545 - 1600	16	Colm Travers UAB, USA (Assoc. Professor) (Scientific Chair)	Prediction of Wheeze in Infants using Non-Invasive Oscillometry before Neonatal Discharge
1600	**Closing Remarks and Adjourn for IAPS Council Business Meeting** **Evening Activities**		

	Irish and American Paediatric Society, Cleveland 2026		
	Day 2 - Thursday, September 17th, 2026		
	Moderators Session I – Rita Ryan and Meredith Kinoshita		
		Authors	**Title**
0800 - 0900 Rainbow Babies Children's Hospital Grand Rounds Founders Lecture		**Introduction: Rita Ryan Tom Cone Lecture: Rachel Stanley**	**Building a Culture Of Resilience And Joy in Medicine – Emergency Medicine Example**
0900 - 0930	**Community Room Meet and Greet**		
0930 - 0945	17 **Sentec IAPS Travel Award**	Freya Guinness CHI Crumlin (Specialist Reg)	Paediatric Readiness in Emergency Medicine for Paediatric Trauma (PRe-EMPT): An All-Ireland Cross-Sectional Study
0945 – 1000	18	Sheena Durnin CHI Tallaght Consultant (IAPS President)	Implementing Communication Passports for Neurodivergent Children in Emergency Care: A Two-Site Pilot Study
1000 - 1015	19 **Presidents Travel Award**	Hannah McKay CHI Tallaght (Snr House Officer)	Demographics, management and documentation of paediatric emergency medicine presentations with issues related to ingrown toenails
1015 – 1030	20	Alaa Abdallah CHI Tallaght (Specialist Reg)	Impact of PAIRS Training on Paediatric Emergency Care in a Conflict-Affected Setting: A Quality Improvement Project
1030 - 1100	**BREAK**		
	Moderators Session II – Sheena Durnin and Colm Travers		
1100 – 1110	21	Jawad Wasif (CHI Tallaght) (Registrar)	Recurrent Fasting Non-ketotic Hypoglycaemia Revealing Glycogen Storage Disease Type Ia in an Infant: A Case Report
1110 - 1120	22	Asmara Hussain CHI Temple Street (Snr House Officer)	Case report of Nasopharyngeal Angiofibroma in a teenager female, a rare finding
1120 - 1130	23 **Presidents Travel Award**	Amel Osman Rotunda, Ireland (Registrar)	Development of Botulinum Toxin Injection Service for Sialorrhea
1130 - 1145	24 **Presidents Travel Award**	Genevieve Leon CHI Tallaght (Registrar)	Exploring the Spectrum of Extrapulmonary Manifestations in Paediatric Patients admitted with Mycoplasma Infections in CHI Tallaght
1145 - 1200	25 **Presidents Travel Award**	Chloe Lara van der Westhuizen CHI Temple Street (Snr House Officer)	Non-Invasive Ventilation (NIV) at a Tertiary-Level Paediatric Centre in Ireland: A National Service Review 2022 to 2025
1200 - 1300	**Closing Remarks and Adjourn for Lunch**		

1330pm	**LUNCH at The Harp**		
See you next year Clayton Hotel, Cork, Ireland September 20-24, 2027			
	Irish and American Paediatric Society, Cleveland, 2026		
	Programme & Room Wednesday September 16th, 2026		
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Abstracts (*in order of presentation)*

1. Quality Improvement Initiative: Documentation of Injuries in Children under two years old - A Completed Audit Loop.

Authors: **Róisín Cullinan**[1], Rachel Gallagher[1], Kanyinsola Akinluyi[1], Deirdre O'Donnell[1], Sheena Durnin[1, 2]
1 Department of Paediatric Emergency Medicine, Children's Health Ireland at Tallaght, Dublin, Ireland
2 Discipline of Paediatrics, Trinity College Dublin, Ireland

Background
Non-accidental injury (NAI) remains a significant concern, with an incidence of abuse in children of 6 per 100,000 children[1]. Younger children are at particular risk. Accurate and comprehensive review and documentation of injuries presenting to paediatric emergency care is essential to support early recognition, appropriate investigation, and timely safeguarding referrals. Clinical tools are shown to improve documentation of injuries, consideration of NAI, and increase referrals for investigation of NAI. This audit aimed to evaluate the quality of injury documentation for children under two-years-old presenting to a paediatric emergency care unit and to assess the impact of targeted clinician education and guideline implementation.

Methods
A retrospective two-cycle audit was conducted using the electronic database, Symphony. Children under two-years-old presenting in April 2025 with injury-related complaints were included. Documentation was assessed against a predefined 12-point injury documentation standard based on Royal College of Emergency Medicine NAI in Infants Guideline[2]. Following the initial audit (T1), results were disseminated to staff and targeted safeguarding education was delivered to paediatric emergency medicine clinicians. A guideline poster was displayed in clinical areas to support injury assessment, standardise documentation and enable increased recognition of NAI in this high risk group. Reference cards were also distributed to all clinicians. A repeat audit was performed in November 2025 (T2) to assess the impact of the interventions.

Results
Adequate documentation (predefined as at least 9 out of 12 criteria) improved from 3% in T1 to 16% in T2. The quality of documentation of the injury event improved (T1 50%, T2 89%), as did the recording of time and date (T1 17% & T2 66%). Minimal improvement was observed in documentation of developmental stage (T1 4%, T2 10%) and assessment of compatibility between injury mechanism and the child's development (T1 8%, T2 15%). A detailed physical exam to detect or exclude additional injuries was documented in 67% of cases in T1 and 71% in T2. Explicit classification of injury/injuries as accidental or NAI increased from 7% to 14%. Referrals to Public Health Nurse completed at the time of attendance improved (T1 5%, T2 40%). Referrals to social work and family services remained similar between audit cycles (T1 5%, T2 6% and T 1%,T2 1% respectively).

Conclusion
Targeted education and guideline visibility led to modest improvements in injury documentation and timely appropriate referrals. However, overall compliance with recommended documentation standards remains suboptimal. Further interventions are required and we need to explore the integration of a structured clinical tool into our future electronic health record. The introduction of a structured injury proforma and development of safeguarding champions in the department may enhance awareness and lead to increased recognition and management of NAI in this high-risk population.

2. Title: ATOPIC OUTCOMES AT 5 YEARS IN THE CORAL COHORT BORN IN COVID-19 LOCKDOWN 2020

Authors: **Anitha Sokay**, MD; Sinead Burke, Maria Iatan, Sarah Byrne, Siobhan Verdon, Jordan Crupper, Susan Byrne, Liam O'Mahony, Jonathan O'B Hourihane.
Authors' institutional affiliations:
Paediatrics and Child Health, Royal College of Surgeons, Dublin, Ireland.
Children's Health Ireland, Dublin, Ireland.
APC Microbiome Institute, University College Cork, Cork, Ireland

Background:
The SARS-CoV-2 lockdown in Ireland was one of the most stringent in Europe. We developed the CORAL (Impact of Coronavirus Pandemic on Allergic and Autoimmune Dysregulation in Infants Born During Lockdown) study to investigate early-life allergic outcomes and altered environment. At 2 years we showed lower food allergy and higher atopic dermatitis rates. Our present study reassesses this same cohort at 5 years to evaluate whether early pandemic-related allergic trends were transient or represented enduring alterations in childhood allergy.

Methods:
Clinical assessments, including evaluation of atopic dermatitis, skin prick testing for food and aeroallergens, and stool and blood sample collection, were performed during the study visit. Parent-completed questionnaires collected data on atopic symptoms, medication use, healthcare utilization, and environmental exposures.

Results:
Aeroallergen sensitization increased from 8.9% at 2 years to 24% at 5 years ($p < 0.001$). Sensitization strongly predicted allergic rhinitis symptoms (OR 5.68, $p < 0.001$). Parent-reported wheeze remained unchanged and was strongly associated with asthma diagnosis ($\chi^2=33.0$, $p<0.001$). Atopic dermatitis had resolved in the majority and food allergy remained uncommon.

Conclusion:
This study provides the first longitudinal evaluation of pandemic-associated early-life exposures and atopic outcomes in children. The altered environment associated with lockdown restrictions, including higher breastfeeding rates and lower antibiotic exposure in infancy, may have contributed to the reduced prevalence of early food allergy, a pattern that has held at 5 years of age. In contrast, patterns of eczema and aeroallergen sensitization were broadly consistent with population-level descriptions of the atopic march.

3. Paediatric Readiness Assessment Tools in Emergency Care: A Scoping Review

Authors: **Freya Guinness** MBBS BAO BCh[1,2], James Coveney[1], Thulani Naidoo[1], Niamh O'Shea[3], Michael J Barrett[1–4]
[1]Paediatric Emergency Research and Innovation (PERI), Children's Health Ireland, Dublin, Ireland
[2]School of Medicine, Trinity College Dublin, Dublin, Ireland
[3]Library and Information Services, Children's Health Ireland at Crumlin, Dublin, Ireland
[4]School of Medicine, University College Dublin, Dublin, Ireland

Objectives:
To identify paediatric emergency readiness assessment tools used in hospital-based emergency departments
To compare their structural domains, scoring approaches and implementation characteristics across healthcare settings

Background:
Paediatric readiness is a key determinant of outcomes for acutely unwell and injured children presenting to emergency departments. Multiple assessment tools have been developed internationally to evaluate readiness; however, variation in their structure and application limits comparability and implementation. This scoping review aimed to identify and characterise paediatric emergency readiness assessment tools used in hospital-based emergency care.

Methods:
A scoping review was conducted using Joanna Briggs Institute methodology and reported in accordance with the PRISMA extension for scoping reviews (PRISMA-ScR). Electronic databases and grey literature sources were searched to identify studies describing paediatric readiness assessment frameworks in hospital-based emergency departments. Eligible studies included those reporting the development, structure or implementation of multi-domain readiness tools. Data were charted and analysed to map domains, scoring approaches and implementation characteristics.

Results:
Eighteen studies met inclusion criteria, representing readiness assessments across more than 30 countries and five WHO regions. Four principal framework families were identified: National Paediatric Readiness Project (NPRP)–derived instruments, standards-based benchmarking tools using International Federation for Emergency Medicine (IFEM) or Royal College of Paediatrics and Child Health (RCPCH) standards, WHO Emergency Triage Assessment and Treatment (ETAT/ETAT+)–derived facility audits and hybrid multi-domain instruments. Instrument size varied substantially, ranging from 19 to 588 items. Staffing and equipment domains were explicitly assessed in 17 of 18 studies, governance structures in 14 studies and triage systems in 9 studies. Infrastructure reliability was explicitly assessed in 9 studies, trauma capability in 6 studies and organisational culture in 2 studies. Digital integration was explicitly assessed in only 1 study.

Conclusions:
Paediatric emergency readiness assessment tools demonstrate substantial international heterogeneity but converge around core structural domains, particularly staffing, equipment and governance. Key system-level determinants of emergency care capacity, including infrastructure reliability, organisational culture and digital integration, remain inconsistently assessed. These findings highlight the need for standardised, adaptable readiness frameworks to support benchmarking and improvement across diverse healthcare settings.

4. Evaluation of point-of-care hemoglobin testing vs. central laboratory measurements in neonates: a prospective study in neonatal intensive care unit

Authors: **Echezona Maduekwe** MD[1]; Wei Hou, PhD[1]; Vivian Chang, MD[1]
[1]Stony Brook University School of Medicine, Stony Brook, NY

Background:
Point-of-care (POC) testing for blood gas analysis is commonly used for neonates in the Neonatal Intensive Care Unit (NICU) to determine blood gases using small blood volumes. This helps reduce blood loss and speeds up treatment. However, many clinicians are skeptical about the accuracy of POC hemoglobin results.

Objective:
To assess the agreement between point-of-care testing and laboratory measurement of hemoglobin concentration in infants born at gestational ages >28 weeks.

Design/Methods:
This prospective observational cohort study analyzed 187 paired blood samples from infants born after 28 weeks of gestation admitted to the neonatal care unit. It compared hemoglobin measurements from laboratory tests with the blood gas analyzer. The Laboratory analyzer (Sysmex XN-9100®) needs a minimum of 500µl of blood, and the blood gas analyzer (ABL90 Flex Radiometer®) needs 65µl per sample. A Bland-Altman plot was used for statistical analysis to assess agreement and identify systematic differences. Using a non-inferiority test, a sample size of 187 was required to detect the significance with 80% if the paired difference was greater than 2g/dL. The SUNY Stony Brook Institutional Review Board approved the study without requiring informed consent.

Results:
Out of 197 eligible patients, 187 were enrolled in the study. Among the participants, 94 were female, making up 50.3% of the total, with a mean gestational age of 36.6 weeks (± 3.2). There was no significant difference between the result from the lab arterio-venous samples (16.14g/dl) and POC testing (16.04g/dl; p = 0.34). However, capillary samples from POC testing showed significantly higher results (p = 0.01) than the lab results. The Bland-Altman plot revealed a mean difference of 0.09 for arterio-venous samples and -0.41 for capillary samples when comparing POC results with lab results.

Conclusions:
POC testing for hemoglobin analysis using the arterio-venous samples may be an alternative method for quantifying hemoglobin in neonates born at a gestational age >28 weeks. However, due to notable discrepancies between capillary POC results and lab results, it is essential to exercise caution when interpreting hemoglobin measurements obtained from capillary POC testing

5. The Geographical and Socioeconomic Determinants of Children on Paediatric Waiting Lists for >6 months in Cork University Hospital

Authors: **Orla Mary Coffey**[1], Deirdre Murray[2], Colin Hawkes[2], Gillian Kelleher[3]
[1] School of Medicine, University College Cork, Cork; [2] Paediatric department, Cork University Hospital, Cork; [3] Paediatric administration department, Cork University Hospital, Cork

Introduction:
Socioeconomic and geographical factors have previously been shown to impact waiting times for public services. This study evaluated waiting times for general paediatric referrals to Cork University Hospital (CUH), examining whether prolonged waits were associated with socioeconomic status or geographical distribution, and benchmarking local performance against national outpatient waiting time targets.

Objectives:
To determine whether socioeconomic and geographical disparities exist in waiting times for paediatric outpatient appointments in CUH, and to assess hospital performance in the context of national waiting time targets.

Methods:
A retrospective chart review of paediatric outpatient referrals to CUH from January to December 2022 was conducted. The 7,572 referrals were narrowed to a final analytical sample of 2,046 when exclusions were made. Waiting time, age, area-level socioeconomic status and geographical distribution were examined for general paediatric referrals. Socioeconomic and population-based data were obtained from Central Statistics Office (CSO) census records. Population-adjusted referral rates were analysed to assess proportionality using SPSS and Python.

Results:
Waiting times ranged from 1-780 days (mean 267, median 314), with 66.9% waiting ≥180 days, exceeding the national outpatient target. Age was a factor influencing wait time (Kruskal-Wallis $p<0.001$), with children under 1 (18.4% of referrals) experiencing shorter wait times compared with several older age groups. Area level median income was used as a measure of socioeconomic status (SES) and ranged from €15,687 to €75,039. There was no significant difference in SES between children waiting ≥180 days vs <180 days (Mann-Whitney U =444,121, $p=0.146$). Referral rates did not differ across SES quartiles (Kruskal-Wallis $p=0.87$). The population adjusted referral rate was ~25 referrals per 1,000 children per year (95% CI: 23.4-26.5 per 1,000). The geographical distribution of referrals was consistent with random variation; whereby apparent extremes were confined to small population Electoral Divisions (ED), and no ED fell outside 95% confidence limits.

Conclusion
Age was a factor influencing waiting time, although no formal age-specific prioritisation framework currently exists. No age group had a mean wait time which fell within the current national target of 180 days for routine referrals. After population adjustment, there was no evidence of socioeconomic or geographical disparity in referral patterns, suggesting equitable access at a system level despite prolonged wait times overall.

6. Families Implementing Resilient Systems Together (FIRST)

Authors: **Ariane Marie-Mitchell**, Catherine A. Tan, Elizabeth Park, Gabriela A. Plascencia, and Cameron L. Neece

1. Department of Preventive Medicine and Pediatrics, Loma Linda University, Loma Linda, CA 92350, USA
2. Department of Pediatrics, Loma Linda University, Loma Linda, CA 92354, USA
3. Department of Pediatrics, SAC Health, San Bernardino, CA 92410, USA
4. Department of Behavioral Health, SAC Health, San Bernardino, CA 92410, USA
5. Department of Family Medicine, Loma Linda University, Loma Linda, CA 92354, USA
6. Department of Psychology, Loma Linda University, Loma Linda, CA 92350, USA

Background/Objectives:
Prior research suggests that it is possible to improve health outcomes in children with adverse childhood experiences (ACEs) through multi-component interventions that promote protective factors. We designed the Families Implementing Resilient Systems Together (FIRST) study to address the gaps in research on the potential effectiveness of screening for specific ACEs through pediatric practice.

Methods:
As part of our clinical quality improvement efforts to improve patient care for children impacted by ACEs, we trained a random sample of pediatricians on strategies to promote protective factors and encouraged them to make referrals to community health workers (CHWs) and parenting education resources. This manuscript describes our clinic data on practice changes associated with the FIRST physician training, and our data collection plan for our research study.

Results:
Physician training resulted in attitudinal shifts and measurable behavioral changes. Trained providers made referrals to CHWs for approximately 5–10% of well-child care visits. The majority (84%) of referrals were for multiple risk factors, most commonly ACEs and socioeconomic concerns. The most common ACEs were parental divorce/separation, parent–child verbal abuse, and caregiver mental health problems.

Conclusions:
FIRST training improves counseling, education and referrals for children exposed to ACEs. Our research study will evaluate the impact of the FIRST intervention and address important questions about associations between specific ACEs, protective factors, and biomarkers of toxic stress

7. Title: Antenatal Corticosteroids and Magnesium Sulphate in Very Low Birth Weight and Premature Infants

Authors: **Eilís O'Halloran**, Prof Eugene Dempsey, Vicki Livingstone
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Background:
Antenatal corticosteroids (ACS) and magnesium sulphate ($MgSO_4$) are key interventions for threatened preterm birth, supporting fetal lung maturation and neuroprotection, respectively. Although efficacy is established, real world utilisation and outcome associations may vary by gestation and over time, particularly for $MgSO_4$ following its adoption into routine care.

Aims:
To (1) describe temporal trends in ACS and $MgSO_4$ administration (2) examine associations between antenatal exposure and short-term neonatal outcomes (mortality, respiratory and neurological morbidity) and gestational age (GA) subgroup differences.

Methods:
This retrospective cohort study analysed 1,216 very low birth weight infants from the Cork University Maternity Hospital Vermont Oxford Network database between 2010 and 2023. Exposure rates were summarised by year and gestational age subgroup. Associations between exposures and outcomes were assessed using univariable and multivariable logistic regression adjusted for confounders. Outcomes included mortality, and neurological and respiratory morbidity. Gestational-age subgroup analysis compared <28 vs ≥ 28 weeks and tested exposure-GA interactions.

Results:
ACS exposure was consistently high (90.3% overall) and was associated with lower mortality (aOR 0.33, 95% CI 0.20–0.55) but not with respiratory morbidity after adjustment. No ACS–GA interactions were observed. $MgSO_4$ was introduced in 2012 with exposure rising to >80% in later years. $MgSO_4$ exposure showed borderline association with reduced mortality (aOR 0.68, 95% CI 0.46–1.00; p=0.050) but was associated with higher odds of oxygen at 36 weeks (aOR 1.88, 95% CI 1.32–2.68). $MgSO_4$ showed a significant interaction for oxygen at 36 weeks.

Conclusion:
ACS was strongly associated with improved survival. $MgSO_4$ did not demonstrate a short-term neuroprotective benefit, while respiratory morbidity associations varied by gestational age. Increased respiratory morbidity likely reflects confounding by indication rather than causal harm. Gestation specific analyses and linkage with long-term neurodevelopmental outcomes are needed to evaluate effectiveness in routine practice.

8. Improving LISA Practice: An Ongoing Observational Quality Improvement Initiative Following Initiation of Less-Invasive Surfactant Administration in a Level IV NICU

Authors:, **Shreya Patel**, Tynisha Koenigsaecker, Stephanie C. Martinez, Kevin Ives, Julie Bodie, Chad Weagraff, Monika Bhola, Rita M. Ryan
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Background/Objectives:
Surfactant has been delivered via less-invasive surfactant ad-ministration (LISA) in our neonatal intensive care unit (NICU) since 2020. Data have been monitored and the literature regularly reviewed to improve our LISA practice. The purpose of this project is to share the clinical practice changes made to help other NICU providers fine-tune their LISA practice.

Methods:
The original LISA criteria in-cluded babies with GA 27–36 6/7 w, on > 21% O2, on continuous positive airway pres-sure (CPAP), pCO2 < 70 if a blood gas was obtained, and radiographic and/or clinical evidence of respiratory distress syndrome (RDS). Current criteria include GA 25–35 6/7 w and minimum CPAP + 6. This manuscript highlights the changes made since 2023. To monitor these changes, targeted data from the entire cohort were examined before and after each change.

Results:
LISA was attempted on 399 babies (average (SD) GA 31.7 (2.7), birth weight 1752 (590), with a procedural success rate of 97%. Overall, 18% re-quired intubation within 7 days after LISA. The median (IQR) for FiO2 was 32 (28, 40) prior to LISA and 23 (21, 30) post-LISA and the hour of age of LISA was 4 (2.5, 9.9). LI-SA procedure success rate was increased by the use of video laryngoscopy as well as reinforcement of the use of sucrose sedation and swaddling; our first attempt success increased overall from 39% to 52%. After the introduction of a clinical RDS score (Downes), there was an expected and logical increase in the number of infants requiring intubation within 7 days of LISA indicating likely over-treatment prior to this change. After implementation of a clearly described plan for babies <28 w gestation there was a decrease in the hour of age of LISA from 3 (2.5, 4.5) to 2 (0.8, 3) h.

Conclusions:
It is critical to continually evaluate a new practice and identify strategic changes. We offer our changes to assist others starting or using LISA.

9. Neonatal Encephalopathy – A Novel International Multidisciplinary Real-Time Delphi Consensus Definition

Authors: **Aoife Branagan**[1], Tim Hurley [1,], Fiona Quirke[2], Declan Devane[2], Petek E Taneri[2], Nadia Badawi[3], Bharati Sinha[4], Cynthia Bearer[5], Frank H Bloomfield[6], Sonia L Bonifacio[7], Geraldine Boylan[8], Suzann K Campbell[9], Lina Chalak[10], Mary D'Alton[11], Linda S de Vries[12], Mohamed El Dib[13], Donna M Ferriero[14], Chris Gale[15], Pierre Gressens[16], Alistair J Gunn[17], Sarah Kay[18], Beccy Maeso[19], Deirdre M Murray[8], Karin B Nelson[20], Betsy Pilon[21], Nicola J Robertson[22], Karen Walker[23], Courtney J Wusthoff[24], Eleanor J Molloy[1], Steering Group for DEFiNE (Definition of Neonatal Encephalopathy)

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Introduction:

'Neonatal Encephalopathy' (NE) describes conditions in the early neonatal period causing disturbed neurological function. One aetiology is peripartum hypoxia ischaemia. The terms NE, hypoxic ischaemic encephalopathy, and perinatal asphyxia have been used interchangeably in literature and communications between professionals and families. The DEFiNE study aimed to create an international consensus-based definition of NE as a first step towards clarifying terminology and definitions in this area.

Methods:

An international steering group of 24 multidisciplinary experts, including parents, was formed. A systematic review of definitions used in clinical trials in this area defined the project's scope. These results were used to design an online Real-Time Delphi survey, which was live for five months. Three international consensus meetings were held online to finalise inclusions and wording in the definition, which the steering committee then approved.

Results:

The Delphi survey was open for 5 months with 235 completed and 143 partially completed responses. Respondents came from 52 countries, with 20% of these from low- to middle- income countries. Most respondents were healthcare professionals, with 8% representing parents/caregivers of infants with NE. Consensus development workshops were held online. 62 individuals attended at least one of the three meetings. The final definition was structured with primary, secondary, and tertiary domains. The primary domain is as follows: Neonatal Encephalopathy (NE) is a heterogeneous clinical condition of abnormal/impaired brain function with multiple potential causes, presenting as an altered level of consciousness, seizures, abnormal primitive and deep tendon reflexes, altered muscle tone, posture and movements, or abnormal brain-related breathing pattern, and can be associated with significant morbidity and mortality.

Discussion: This process developed a consensus definition for the term NE, with participation from a broad range of stakeholders internationally. Adopting consensus-based terminology and definitions will improve communication, facilitate enhanced research, and improve care for these infants.

10. Predicting chronic phase ventilation in bronchopulmonary dysplasia: The time (constant) has come!

Authors: **Rita M. Ryan**, MD Ricardo Vega, MD; Moshe Prero, MD; Kathleen Deakins, RRT, NPS, Kevin Ives, RRT, NPS; FAARC; Monika Bhola, MD

BACKGROUND:
Despite improved survival among extremely low birth weight infants, the incidence of BPD remains unchanged. Infants with severe BPD exhibit increasingly heterogeneous lung disease, characterized by progressively uneven distribution of airway resistance and compliance throughout the lung parenchyma. The timing of this physiological transition is variable, making it challenging to identify the optimal point to initiate a chronic-phase ventilation (CPV) strategy, which is thought to be needed in response to evolving changes in the respiratory time constant. We aim to define the evolution of the respiratory time constant.

METHODS:
Prospective observational study of infants <30 weeks GA (starting September 2024 to present). Exclusion: Major congenital lung or heart disease, not on a Drager ventilator. Data collection: Weekly assessments until 36 weeks postmenstrual age (PMA). Ventilator and clinical data recorded at each interval. Chest X-ray (CXR) evaluation: Hyperexpansion (>10 ribs expansion); Cystic lung changes (>5 mm) across 0–4 quadrants. Data management: REDCap. Descriptive statistics were used for demographics. Associations between TC and PMA or day-of-life (DOL) were tested by linear regression, and differences across cystic change quadrants were assessed using one-way ANOVA with Sidak post-hoc testing.

RESULTS:
Using linear regression for individual factors and Time constant (TC), TC increased significantly with advancing postnatal age, and also demonstrated a positive correlation with both day of life and postmenstrual age ($p < 0.001$ for both). Duration of mechanical ventilation showed a strong positive association with TC ($p < 0.001$). When all of these factors were examined in a multiple regression analysis, PMA was most strongly associated, and, when present, the other factors lost significance. Higher TC values were associated with increasing radiographic severity, with a significant relationship between TC and cystic lung involvement on chest X-ray. Infants in the highest cystic quadrant group exhibited markedly elevated TC.

CONCLUSIONS:
Time constant is readily provided by some conventional ventilators. Lack of antenatal steroids was associated with a higher TC at 28w. Maternal smoking should continue to be examined for association with neonatal lung morbidity. Progression of cystic lung disease should be studied further as a marker of a need for adjustment to chronic phase ventilation (longer inspiratory and expiratory times (lower rates).

10. Effects of Using Reticulocyte Hemoglobin to Titrate Iron Supplementation in Neonates Receiving Erythropoietin

Authors: **Alexandra Kinzer**, Jaime Marasch, Eric Tano, Mary L. Nock, Riat M. Ryan
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Background:
Recombinant humanized erythropoietin (EPO) is used to treat anemia of prematurity (AOP) due to the role of erythropoietin in red blood cell production. Iron is necessary for both red blood cell production and neurodevelopment in developing infants. Reticulocyte hemoglobin (Ret-He) can assess iron sufficiency, and we previously noted a marked drop in Ret-He with EPO therapy. We hypothesized that using Ret-He to guide iron supplementation during EPO would reduce the drop in Ret-He and increase the EPO-induced rise in hematocrit (Hct).

Objective:
To determine if a change in our neonatal intensive care unit (NICU) EPO protocol to increase iron dosing by 2mg/kg/day to a maximum of 12 mg/kg/day for a weekly Ret-He<29 pg, results in a smaller drop in Ret-He while on EPO therapy. Secondary objectives of this study were to assess whether the change results in a higher rise in Hct, fewer blood transfusions, or more feeding intolerance.

Design/Methods:
All NICU patients who received EPO for AOP were included. EPO is dosed at 300u/kg three times per week with a starting iron dose of 6 mg/kg/day. Data collected included adherence to the new protocol, Hct, weekly Ret-He, number of blood transfusions, and details about feeding tolerance, constipation, and hematochezia during and after EPO.

Results:
Data were previously collected for 172 EPO courses (cohort 1) and collected for 63 EPO treatment courses after the protocol change (cohort 2). Overall, there was a significant drop in Ret-He in each cohort ($p<0.0001$ by Wilcoxon rank sum test) but no significant difference between the two groups (4.3±3.4 vs. 3.9±3.3) (Table). There was a trend toward a higher rise in Hct after the protocol change (5.1±4.3 vs. 6.2±3.3, $p=0.07$, by t-test). Overall, rise in Hct was significantly associated with the number of EPO doses received ($p<0.0001$ by linear regression) and with iron dose at the start of EPO therapy ($p=0.01$). There was no significant difference in number of blood transfusions or in hematochezia, but percentage of patients with constipation requiring intervention (4.1% vs 12.7%, $p=0.03$) was increased after the protocol change. The new protocol was followed in 58.7% of EPO courses and improved over time.

Conclusions:
Using Ret-He to titrate iron supplementation did not ameliorate the drop in Ret-He, but there was a trend toward a higher rise in Hct. Rise in Hct was significantly associated with the iron dose at the start of EPO therapy, suggesting that a larger initial iron dose at the start of therapy may produce a better EPO response. It is possible that, as time continues, the increase in iron dictated by the protocol may happen more consistently. Much to our providers' surprise, these much higher iron doses were well tolerated.

12. Mineral and Trace Element Loss in Multi-Nutrient Fortified Human Milk During Prolonged Enteral Tube Feeding

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Background: Mother's own milk is the preferred source of nutrients for all infants and provides essential elements including sodium, potassium, magnesium, calcium, phosphorus, zinc, iron, and copper. When mother's own milk is unavailable, preterm infants require supplemental pasteurized donor human milk known to be lower in many required macronutrients and minerals. Infants born preterm have higher nutrient requirements to support rapid growth. Therefore, standard practice is to add multi-nutrient fortifier to maternal or donor milk. Until preterm infants can consume all feeds orally, they rely on enteral tube feeding to meet requirements. These tube feeds are provided either as a bolus or over prolonged duration based on tolerance and glucose homeostasis. Previous studies demonstrate that fat and calcium delivery to the infant is reduced as feed duration is increased, suggested to be due to adsorption to plastic tubing. The aim of this study was to determine if mineral and trace element delivery in fortified human milk feeds to preterm infants is also impacted by tube feed duration.

Methods: Feeds were prepared per standard clinical practice and simulated feeding through nasogastric tubes into a 50ml centrifuge tube by gravity bolus or over 45 minutes or 2 hours by hospital feeding pump. Mineral and trace element concentrations (sodium, potassium, magnesium, calcium, phosphorus, zinc, iron, and copper) were measured before and after each feed duration by inductively coupled plasma mass spectrometry (ICP-MS). Pair-wise comparisons were performed between pre-feed and post-feed concentrations. P-values of 0.05 were used to determine statistical significance with Bonferroni adjustment for multiple comparisons.

Results: Calcium and phosphorus delivery decreased by 43% ($p<0.01$) and 25% ($p<0.02$), respectively after 45 minutes and 2 hour feeding although only calcium intake was decreased to below recommended intakes. Zinc and iron decreased by 15% after the 2-hour feeding ($p<0.05$) but only zinc was decreased to below recommended intake levels. Other elements measured were not impacted by feed duration.

Conclusion: This study demonstrates that prolonged feed duration impacts nutrient delivery in fortified human milk feeds. This highlights that even fortified feeds may not result in adequate mineral and trace element provision to preterm infants, a population already at risk for growth failure and metabolic bone disease. Recognizing the clinical impact of feeding practices on nutrient delivery is essential, as amount of minerals and trace elements administered may not reflect actual bioavailable provision.

13. The warm baby bundle: An inter-unit quality improvement initiative to prevent environmentally induced newborn hypothermia.

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Background:
Neonatal hypothermia (NH) is a common problem following birth, with a reported incidence as high as 21% (1, 2). NH can contribute to neonatal morbidity, and the importance of euthermia is emphasized by the AAP NRP (9th ed.2025). In 2023, Stony Brook University Hospital identified the rate of NH occurring in the Well Baby Nursery (WBN) to be 18.5%, with the majority identified occurring prior to 6 hours of life. Additionally, it was noted that hypothermic infants more often required separation from families for rewarming, and/or a higher level of care if additional vital sign instability developed.

Aim:
To reduce the overall incidents of NH (axillary temperature < 36.5°C) from 18.5% to less than 15% in 1 yr. Additional outcome measures: the incidence of moderate to severe hypothermia (rectal temperature < 36°C), incidence of transfer to the Neonatal Intensive Care Unit (NICU) from the MBU, overall average axillary temperature, incidence of hypoglycemia as well as any concurrent hypoglycemia with hypothermia.

Methods:
A multidisciplinary inter-unit team conducted a retrospective review of 2835 newborns admitted to WBN with a GA greater than 36 0/7 weeks, born between January 1, 2025 and December 31, 2025. Stakeholders included physicians, nurses, lactation consultants, and ancillary staff. Data was collected on all infants with hypothermia <36.5°C. Control charts were generated with Minitab to examine special cause variation. The initial intervention, launched February 2024, was staff education and the "warm baby bundle," a coordinated evidence-based nursing care plan that targeted prevention of heat loss and improvement of thermoregulation from birth on the Labor and Delivery Unit until discharge from the WBN. Kamishibai cards were utilized as a visual education tool to improve compliance and data collection during three transitional periods – birth, admission nurse exam around 1 hour of life, and transfer to WBN. The process included setting ambient temperature to 72°F, additional drying off infant and changing hat/linens, appropriate covering of infant's back during skin to skin, and educating families. Data from Kamishibai cards identified educational needs for PDSA 2 (June 2025).

Results:
All NH (axillary temperature < 36.5°C) decreased from 18.5% to 13.4%, which met special cause variation. Moderate/severe NH (rectal temperature < 36°C) decreased from 7% to 4.5%. Overall NICU transfers decreased from 4% to 1.5%, with NICU transfers within 6 hours of arrival to WBN decreasing from 2% to 0.5%. Neonatal hypoglycemia (< 45mg/dL) decreased from 15 to 12%. Hyperthermia data was collected as a balancing measure, and only 1 patient required transfer to NICU for sepsis work up for persistent elevated temperatures.

Conclusion:
The results of this QI demonstrate significant improvement in process for reducing NH in the first six hours of life. Structured approaches to standardized practices can help to reduce neonatal hypothermia and improve outcomes. In our population, the warming bundle practices demonstrated a notable decrease in hypothermic events, NICU transfers and newborn hypoglycemia events. Next steps to continue the warming bundle practice include adding additional family education.

14. Title: FRENOTOMY FOR ANKYLOGLOSSIA IN EARLY INFANCY AT 6 MONTHS IN THE FLORAL BIRTH COHORT STUDY

Authors: **Anitha Sokay**, MD; Jordan Crupper, Sinead Burke ,Maria Iatan, Leah Halpenny, Sheiniz Giva, Robert Joyce, Jay Hanoudi, Iria Manas Miramontes, Madeline Dimakos, Nicole Bout, Anne Doolan, Martin White, Anna Curley, Naomi Mc Callion, Susan Byrne, Jonathan Hourihane.
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Background:
Ankyloglossia (tongue tie) affects approximately 5% of newborns. It may restrict tongue movement, though clinical significance remains debated. Most affected infants breastfeed successfully; however, common breastfeeding difficulties are often attributed solely to tongue tie. Frenotomy rates have increased internationally; however Irish rates are unknown.

Method:
FLORAL is a prospective observational birth cohort study of term infants born between March and May 2025 in Dublin's 3 maternity hospitals. Data were analysed from a 6-month parent-completed questionnaire (474 submissions).

Results:
80/474 infants (16.9%) were parentally reported to have ankyloglossia; 59 (73.8%) underwent frenotomy, most commonly before four weeks of age (54.2%). Breastfeeding difficulties were the primary indication (89.8%); additional, non-exclusive reasons included concerns about future speech (16.9%), reflux (15.3%), colic (11.9%), stridor (1.7%) and shallow latch/catching wind (1.7%). Parent-reported feeding improvement was noted after frenotomy in 81.4%. Frenotomy was most commonly performed in private clinics (44.1%), followed by dental clinics (33.9%), general practitioner settings (10.2%), children's hospitals (6.7%), and maternity hospitals (5.1%).

Conclusion:
Frenotomy rates were much higher than the presumed Irish prevalence of ankyloglossia. While most "treated" infants appeared to benefit, some improvements may have been due to other factors. The predominance of procedures in private clinical settings suggests socioeconomic disparities in frenotomy rates, consistent with international reports. Some reported indications were not aligned with current guidelines, highlighting the importance of consistent assessment and evidence-based indications to minimize potential overtreatment. The prevalence of ankyloglossia in Ireland should be determined to develop evidence-based, publicly accessible assessment and care pathways for this usually benign anatomical variant.

15. Bedside Upper Gastrointestinal (BUGI) NICU studies: How bougie is BUGI?

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BACKGROUND:
The upper gastrointestinal (UGI) series is the current gold standard for diagnosing malrotation when evaluating infants with bilious emesis. However, for neonatal intensive care unit (NICU) patients, a trip away from the NICU is suboptimal. Therefore, a bedside upper gastrointestinal (BUGI) protocol was developed at our institution to minimize the risks of transporting critically ill infants in the neonatal intensive care unit (NICU) such as dislodgement of endotracheal tubes, hypothermia, and disruption of lines to evaluate for malrotation.

OBJECTIVE:
To evaluate the feasibility of using BUGI to evaluate malrotation in critically ill infants in the NICU. A successful study was one on which the duodenal jejunal junction (DJJ) was identified.

METHODS:
BUGI utilized X mL of barium or water-soluble contrast and plain radiographs were obtained at 1 and 2 minutes after contrast was given into the nasogastric tube. We retrospectively reviewed BUGI examinations performed in 19 infants admitted to the NICU. We report standard demographic data including gestational age, weight, indication for study, whether an abdominal ultrasound was also performed as initial imaging modality, whether malrotation was identified, ruled out or indeterminate and study-related details.

RESULTS:
There were 20 NICU patients with either bilious residual (n=16), bilious residuals (3) and gastroschisis (1) who underwent BUGI. These babies were approximately 26 weeks gestational age and 1000 grams ab birth and 27 weeks postmenstrual age and 15 days of age at the time of the study (Table 1). One baby was identified with malrotation, while 17 babies were easily identified as normal.

CONCLUSIONS:
BUGI is a feasible technique to evaluate malrotation in critically ill infants in the NICU with bilious emesis when it is undesirable to perform a study in the fluoroscopy suite. We will provide an updated BUGI protocol, improved by our experience, as well as our new local protocol for evaluation of bilious emesis using BUGI/UGI and ultrasound.

16. Prediction of Wheeze in Infants using Non-Invasive Oscillometry before Neonatal Discharge

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Background:
Impulse oscillometry (IOS) is a non-invasive method to assess lung function widely used in older children and adults. We previously reported that IOS can objectively measure severity of lung disease in neonates, but whether neonatal IOS data predicts later respiratory disease is not known.

Objective:
To test the hypothesis that neonatal IOS data predicts parental report of wheeze at 12 months corrected age (CA).

Methods:
Single center prospective observational cohort study of children born 22-34 weeks' gestation with and without lung disease and healthy controls (≥ 35 weeks' gestation, controls) without lung disease, who had pulmonary mechanics measured using IOS at discharge or 40 weeks' PMA (whichever occurred first) using the Tremoflo N-100 Airwave Oscillometry device (Thorasys, Montreal). We collected parent-reported respiratory outcome data using a modified International Study of Asthma and Allergies in Childhood questionnaire every 6 months until 12 months CA. We used regression and XGBoost models to determine the area under the receiver-operating curve (AUC) for the prediction of wheeze at 12 months using key baseline characteristics, neonatal respiratory data, and IOS data adjusted for weight at testing.

Results:
We included 582 infants (145 controls, 93 preterm without lung disease, 221 with respiratory distress syndrome (RDS) but no bronchopulmonary dysplasia (BPD), and 123 with BPD) of whom 478 children (82.1%) have completed 12 month CA follow up. Resistance at 7Hz (R7), which represents overall respiratory system resistance, was the strongest predictor of wheeze at 12 months, followed by birth weight, reactance at 7 Hz (X7) and area under the reactance curve (AX), representing peripheral airway stiffness and overall respiratory system stiffness, respectively (Figure 1). BPD and BPD severity were weak predictors of wheeze. The models were well calibrated (Figure 2). Baseline characteristics and neonatal respiratory data combined with neonatal IOS data were good predictors of wheeze at 12-months CA (AUC=0.80) (Figure 3).

Conclusion:
These data suggest that impulse oscillometry is a strong independent predictor of wheeze in infancy and validate the use of IOS as an endpoint in clinical trials of respiratory interventions.

Figure 1: Feature importance plots (permutation + SHAP bar, paired) ranking predictors by how much they contribute to XGBoost model accuracy and predictive strength.

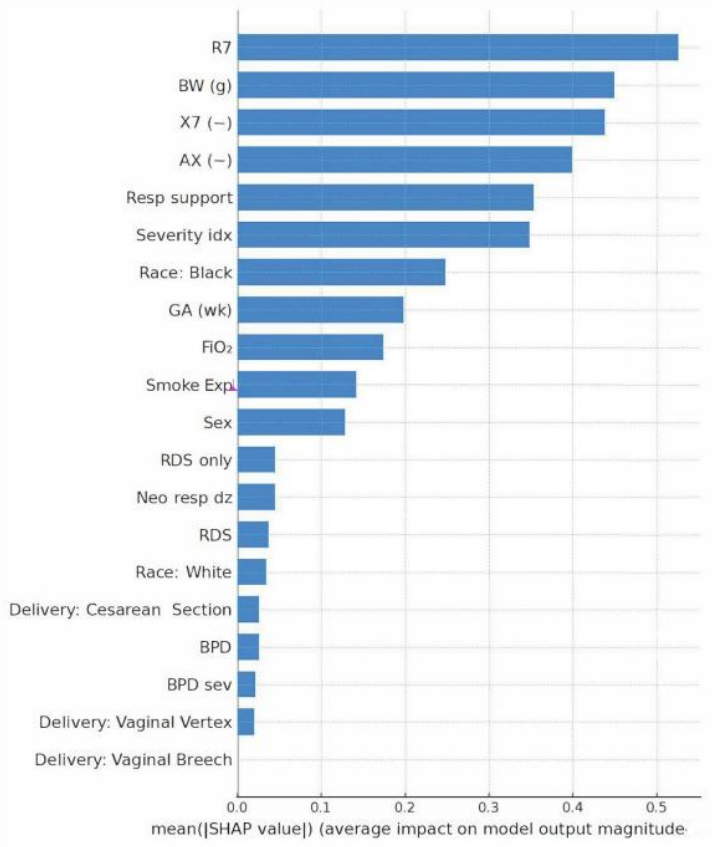


Figure 2: Calibration curve (logistic + XGBoost) for predicted versus observed wheeze probabilities. The diagonal 45-degree line represents perfect calibration.

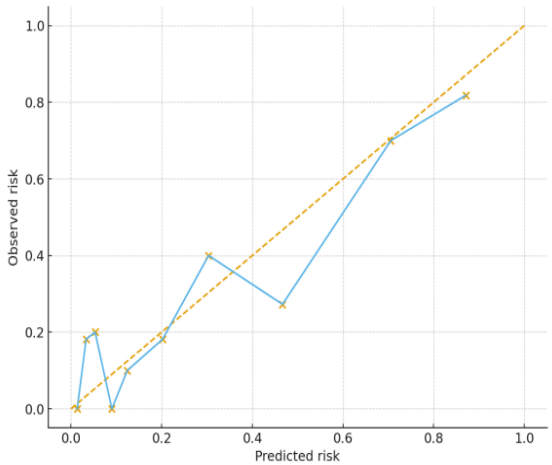
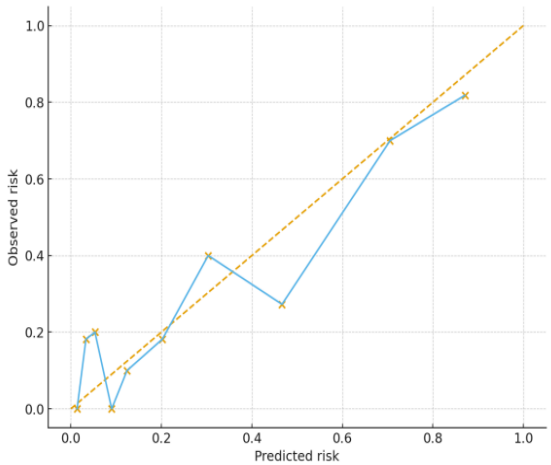


Figure 3: Area under the reactance curve for the prediction of wheeze at 12 months with models incorporating IOS and clinical data.



17. Paediatric Readiness in Emergency Medicine for Paediatric Trauma (PRe-EMPT): An All-Ireland Cross-Sectional Study

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Objectives:

To assess paediatric readiness for major trauma across hospitals in Ireland

To compare organisational capability with frontline clinician preparedness

Background:

Paediatric major trauma remains a leading cause of death and disability in children. Outcomes depend not only on definitive care but also on the readiness of the initial receiving facility. Ireland lacks a formalised paediatric trauma network and national guidance for early management and baseline data on paediatric trauma readiness are limited.

Methods:

We conducted a cross-sectional, multi-perspective study assessing paediatric readiness for major trauma across hospitals in the Republic of Ireland and Northern Ireland. Two complementary electronic surveys were administered: a site lead survey (n = 37 hospitals) assessing organisational structures, processes and resources and a frontline staff survey (n = 177 respondents) evaluating training, experience and perceived preparedness. Surveys were developed using international frameworks, refined through expert consultation and distributed between December 2025 and April 2026.

Results:

Site leads reported the presence of key structural components of paediatric trauma care, including access to guidelines, simulation training and specialist input. However, frontline staff reported limited preparedness, with only 40.1% feeling somewhat or extremely prepared and 31.1% reporting their department was not prepared for Paediatric major trauma. Training exposure was inconsistent, with 39.0% reporting no paediatric teaching and 66.7% reporting no outreach education. Clinical exposure to paediatric major trauma was limited; notably, this included both clinical and simulation-based experience, with up to 62.7% reporting no exposure to high-acuity scenarios such as thoracotomy. Awareness of trauma systems and guidelines was also variable. Across multiple domains, site leads reported higher performance than frontline staff.

Conclusions:

Paediatric trauma readiness in Ireland is characterised by the presence of organisational structures without consistent translation to frontline capability. Limited clinical exposure and insufficiently distributed simulation-based training contribute to low preparedness. A structured, locally delivered paediatric trauma outreach education programme is required to bridge this gap.

18. Implementing Communication Passports for Neurodivergent Children in Emergency Care: A Two-Site Pilot Study

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Background:
Neurodivergent children face sensory and communication barriers affecting their assessment and management in hospital. Families consistently report frustration when staff do not understand their child's needs. Hospital passports are an effective means of communicating reasonable adjustments. This audit aimed to evaluate the pilot introduction of communication passports which were developed through an iterative process with staff and patient involvement in Children's Health Ireland to evaluate engagement.

Method:
A retrospective review of the pilot of communication passports in the Paediatric Urgent Care Unit in Connolly from December 9th 2025 to 14th April 2026 and in Paediatric Emergency Care unit in Tallaght from 29th April 2025 to 5th December 2025 was conducted. Data was collected from the electronic record system (Symphony) on scanned communication passports and analysed in excel. Audit Committee approval was granted for the quality improvement project.

Results:
Over 18 weeks, 100 communication passports were completed in Urgent Care Connolly with completion average of 5.5 passports per week. Over 31 weeks in Paediatric Emergency Care Unit, 100 communication passports were completed with a completion average of 3.3 passports per week. The combined analysis of the 200 patients showed a male predominance of 76.5%. The age range was 2 to 16 years with a median age of 7 years. There were 4% awaiting assessment (n=8/200), 82% identified as Neurodivergent (n=164/200) and 15% did not complete this question (n=27/200). Neurodivergent diagnoses included 90.5% were autistic (n=181/200), 30.5% have sensory processing disorder (n=61/200), 21% have attention deficit hyperactivity disorder (n=42/200), 18.5% have intellectual disability (n=37/200), 11.5% have dyspraxia/dyslexia (n=23/200), 3% have epilepsy (n=6/200), 1.5% had hearing or vision impairment (n=3/200) and 15.5% have other mental health conditions (n=31/200). Communication formats and preferred techniques are detailed in Table 1. Sensory sensitivities to noise occurred in 73% (n=146/200), touch in 53.5% (n=107/200), smell in 36.5% (n=73/200) and lights in 30% (n=60/200). Interventions to aid with sensory overload are described in Figure 1. Information and communication technology (ICT) issues with electronic flags or uploading were identified in 10% of cases (n=20/200).

Conclusion:
Communication passports have identified and flagged Neurodivergent children and their associated diagnoses, communication formats and sensory sensitivities. From completion has been high with rich data to elicit patient likes, pain recognition, techniques to use if overwhelmed and modifications to examine a neurodivergent child. Training support has been developed to address ICT issues. This pilot will be rolled out across the organization with modifications based on issues identified. The data obtained from this audit will be used to help finalize the launch of the electronic patient passport in Epic for our organization.

Table 1: Communication Formats and Preferences

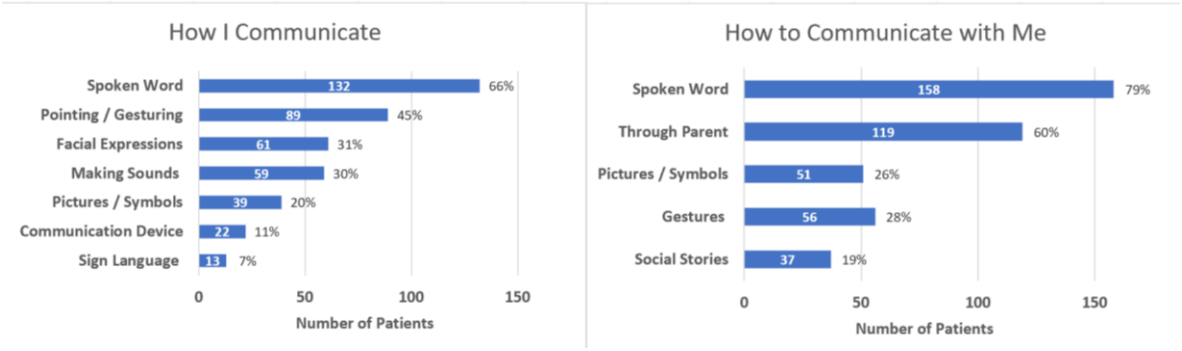

Figure 1:

Word Cloud of Interventions to Aid with Sensory overload (AI Generated)

19. Demographics, management and documentation of paediatric emergency medicine presentations with issues related to ingrown toenails

Authors: **Dr Hannah McKay** MB BCh BAO[1] (presenter), Dr Bakir Hussain MD[1], Dr Francesca Cleugh MB ChB FRCPCH[1] and Dr Sheena Durnin MB BCh MHSc FRCPCH FRCPI [1,2]

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Background

Ingrown toenails (onychocryptosis) are a common disease affecting approximately 5% of the general population. Often beginning in childhood, early conservative management can reduce complications, while delayed or inadequate treatment may lead to severe symptoms and need for surgical intervention. This study aimed to describe the assessment, management and outcomes of patients presenting with ingrown toenails to an Irish paediatric emergency medicine (PEM) department. A secondary aim was to evaluate quality of physician documentation.

Methods

A retrospective single centre chart review was conducted on all patients treated in the Paediatric Emergency Care Unit (PECU) in Tallaght, Dublin between 01/02/2024 and 26/02/2026 with diagnosis of ingrown toenail. Current practice was audited against the American Academy of Family Physicians clinical guidelines on ingrown toenail management.

Results

Ingrown toenails accounted for 79 PEM attendances pertaining to 74 patients over a two-year period; 2 cases were excluded due to diagnostic inconsistency. Of the final total of 77 PEM presentations from 74 patients, 56% (n=43/74) were male and 74% (n=56/74) were aged between 10-15 years old (range: 2 months-15 years 11 months). The duration since symptom onset at presentation was <7 days in 14%, 1-4 weeks in 22%, 1-3 months in 20%, 3-6 months in 13%, 6-12months in 9%, >1 year in 13%, and unknown in 9%. Analgesia use was documented in 79% of cases, and 91% documented a description of the toenail(s) on examination. However, documentation of key clinical features was inconsistent: granulation tissue presence was documented in 31%, while oedema, lateral nailfold involvement, or coexistent athlete's foot, were omitted in 40%, 78% and 97% of clinical notes respectively. Antimicrobials were prescribed to 55 patients (71%), with five different antimicrobials used. Of these, 5 patients received topical treatment and 3 received intravenous antibiotics. Treatment duration ranged from 5-14 days, with 80% of patients (n=44/55) receiving 7-14 days. Only 4% of patients required surgical intervention in PECU, while 69% were referred to General Surgery outpatient services for follow-up. Dressing application was documented in 23% of cases. Documentation of discharge advice was variable: 84% received guidance on nail-cutting technique and 82% on local massage of the affected area. No patient information leaflets were documented in the discharge information, and podiatry involvement was low at 5% of total (n=4/77). Sixteen patients had previous presentations (range 1-4), accounting for a total of 30 attendances. Wound swabs were performed in 12% of cases (n=9/77) and no fungal cultures were obtained.

Conclusion

Ingrown toenails are a painful condition which can have a protracted course and occasionally require surgical intervention. They can place a notable burden on patients and carers. This audit demonstrates variability in both clinical management and documentation, with several areas identified for improvement. We plan to develop and implement institutional guidelines alongside a patient information leaflet to standardise care. Following staff education, a re-audit will be undertaken to assess the impact of these interventions.

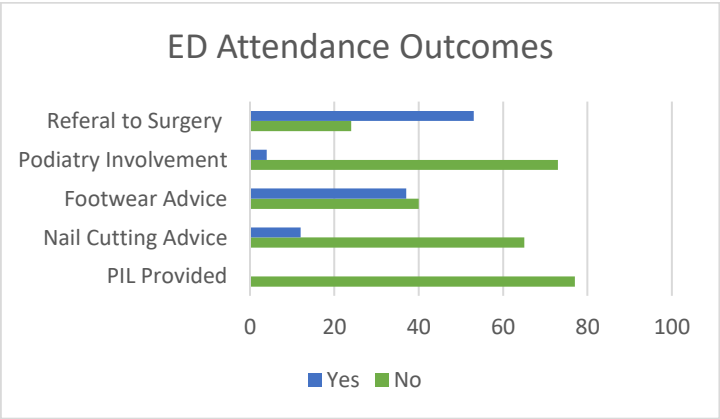

Table 1: Discharge outcomes for patients who were treated for ingrown toenail(s) in PECU

20. Impact of PAIRS Training on Paediatric Emergency Care in a Conflict-Affected Setting: A Quality Improvement Project

Authors: **Alaa Abdallah**[2], MRCPI (Paediatrics), MRCPCH; Enas Mohammed[1]; El Harith Hatim[1]; Ahmed Ali[2]; Amna Gasim[1]
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Background
Significant gaps exist in paediatric emergency care in low-resource and conflict-affected settings, including inconsistent clinical assessment, limited access to training, and lack of standardised protocols. Existing training programmes are often resource-intensive, costly, and poorly adaptable to such environments. The PAIRS (Paediatric Acute Illness Recognition and Stabilisation) programme is a volunteer-led initiative providing locally adapted, practical paediatric resuscitation training designed for low-resource settings.

Methods
In October 2025, eight paediatric specialist doctors from across Sudan attended a four-day PAIRS training programme delivered in Tanzania, which served as a safe training hub in the context of ongoing conflict. The programme included QuickPAIRS, Basic training, and a Train-the-Trainer (TTT) component.
A structured quality improvement approach using Plan–Do–Study–Act (PDSA) cycles was implemented following training. In Cycle 1, participants delivered local training to 20 healthcare staff at Albuluk Children's Hospital. Outcomes assessed included use of structured ABCDE assessment, staff confidence, and feedback.
In Cycle 2, the programme was expanded through repeated teaching sessions, bedside training, and mini-simulation exercises. Efforts were also made to promote wider team adoption and develop local protocols to support sustainability.

Results
overall, Implementation of PAIRS training resulted in improved clinical skills, teamwork, and increased use of structured resuscitation approaches, particularly ABCDE assessment. Staff reported increased confidence and positive feedback following training.
The Train-the-Trainer model enabled local capacity building and facilitated rapid scale-up, with training initiated within one week of participants returning and subsequently expanding to multiple hospitals. Integration into routine clinical practice was observed, with improved consistency in emergency care delivery.

Conclusion
PAIRS training significantly improved the quality of paediatric emergency care in a conflict-affected, resource-limited setting. The Train-the-Trainer model proved effective in supporting sustainable practice change and local capacity building.
This project demonstrates that structured, adaptable training programmes can be rapidly implemented and scaled, even in challenging environments, offering a practical solution to strengthen paediatric emergency care in similar settings.

21. Recurrent Fasting Non-ketotic Hypoglycaemia Revealing Glycogen Storage Disease Type Ia in an Infant:

A Case Report

Authors: Jawad A Wasif[1] MBBS MRCPI, Kim Bleazard[2], Christine Merrigan[3], Kaustuv Bhattacharya[3,4], Sheena Durnin[1,4]

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Background: Glycogen Storage Disease Type Ia (GSD-Ia, von Gierke disease), is a rare autosomal recessive inherited metabolic disorder caused by deficiency of glucose-6-phosphatase enzyme. The defect results in impaired glycogenolysis and gluconeogenesis, leading to severe fasting intolerance and accumulation of glycogen and fat in organs including the liver and kidneys. Early recognition is essential to prevent acute morbidity and long-term complications. However, the condition may initially present with non-specific symptoms. Affected infants commonly present with fasting hypoglycaemia, lactic acidosis, hepatomegaly, hyperlipidaemia, and feeding difficulties.

Case Presentation: An 8 months old girl presented with recurrent episodes of pallor and floppiness associated with fasting periods of approximately four hours, with a witnessed episode of bilateral upper-limb jerking lasting 30 seconds following a sleep. She was afebrile and systemically well on examination. She had a background history of a term infant who had neonatal hypoglycaemia requiring neonatal intensive care admission for 3 days. On presentation to the emergency care unit her initial blood glucose was 11.2 mmol/L (3.3 – 5.5) with ketones (β-hydoxybutyrate) of 0.3 mmol/L (>0.5 consistent with fasting ketosis). She was investigated for an afebrile seizure. Venous blood gas performed 3 ½ hours later showed profound hypoglycaemia of 1.9 mmol/L with low ketones and laboratory glucose of 0.3 mmol/L, lactate of 5.4 mmol/L (0-2 mmol/L) with suppressed ketones. Additional investigations revealed hypertriglyceridemia of 21.0 mmol/L (<2.0) and hypercholesterolemia. Abdominal ultrasound demonstrated marked hepatosplenomegaly and enlarged kidneys. The infants' weight was 9.4 kg (91st centile), length was 69 cm (50th centile) and head circumference was 43 cm (25-50th centile).

Results: The patient received urgent intravenous dextrose therapy followed by continuous glucose support. The differential diagnosis of hypoketotic hypoglycaemia included hyperinsulinism, fatty acid oxidation defects and glycogen storage defects. A presumptive diagnosis of GSD-I was made based on the biochemical profile and clinical findings. Management included avoidance of fasting with3-hourly nasogastric or bottle feeds, additional uncooked corn flour with titration of glucose delivery facilitated by continuous glucose monitoring.

Conclusion: GSD Ia occurs in 1 in 100,000 live births. Typical presentation occurs at 3 to 6 months of age with hepatomegaly, signs and symptoms of hypoglycaemia, poor growth and doll like facies. It is imperative for contemporary biochemical assessment of hypoglycaemia in childhood. This incorporates endocrine assessments including insulin and counter regulatory hormones. In addition, metabolic biochemistry characterizes substrate utilization such as fatty acids or amino acids and products such as lactate and ketones. A complete clinical and biochemical assessment, allows definitive treatment, avoiding long-term complications. In GSD Ia, intensive, titrated delivery of enteral glucose or complex carbohydrates improves growth, preventing long-term complications such as cognitive delay and hepatocellular carcinoma.

This case highlights the importance of considering inherited metabolic disorders in infants presenting with recurrent fasting intolerance, hypoglycaemia, seizures, or lactic acidosis. Early recognition, critical sampling, and prompt multidisciplinary management are essential to reduce morbidity and improve long-term complications. Increased awareness among emergency physicians, paediatricians and primary care clinicians is crucial to facilitate early diagnosis and intervention in children with GSD 1a.

22. Case report of Nasopharyngeal Angiofibroma in a teenager female, a rare finding.

Authors: **Asmara Hussain** [1], Nausheen Qureshi[2], Colleen Heffernan[1]

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Introduction: Juvenile nasopharyngeal angiofibroma (JNA) is a rare, histologically benign but locally aggressive vascular tumour that almost exclusively affects adolescent males. Despite its benign histology, the tumour is characterized by local invasiveness and can cause significant morbidity due to progressive nasal obstruction, epistaxis, and extension into adjacent structures. Although the exact pathogenesis remains unclear, hormonal influences involving androgen and oestrogen receptors have been proposed to explain its marked male predominance. Reports of JNA occurring in females are exceptionally rare, with only a small number of cases documented in the literature. Such atypical presentations are clinically important as they challenge traditional diagnostic assumptions and may provide insights into the underlying pathogenesis of the disease.

Case presentation: A 17-year-old female presented to the outpatient department of Holy Family Hospital, Rawalpindi, Pakistan, in September 2020 with progressive bilateral nasal obstruction and bilateral mucoid nasal discharge for one year. The symptoms initially began on the right side and gradually progressed to involve both nasal cavities. The patient also reported mild dysphagia to solid food for six months, associated with a sensation of a lump in the throat. There was no history of epistaxis, oral bleeding, or significant response to medical treatment.

Clinical examination revealed a left-sided deviated nasal septum and a grey polypoidal mass occupying the posterior aspect of the right nasal cavity near the choana. The mass was insensitive to touch and did not bleed on probing. Oral examination demonstrated a pinkish mass extending from the nasopharynx into the oropharynx, predominantly on the right side. Computed tomography of the nose and paranasal sinuses revealed a large cystic/polypoidal lesion arising from the nasopharynx, extending towards the right posterior choana and upper oral cavity, measuring approximately 1.8 × 2.6 cm. Histopathological examination following surgical excision confirmed the diagnosis of nasopharyngeal angiofibroma.

Discussion: JNA is traditionally regarded as a disease of adolescent males, and its occurrence in females remains extremely uncommon. Consequently, clinicians may not initially consider this diagnosis when evaluating female patients presenting with nasal obstruction and nasopharyngeal masses. This case highlights the importance of maintaining a broad differential diagnosis regardless of patient sex. The absence of epistaxis, one of the classical presenting symptoms of JNA, further increased the diagnostic challenge in this patient. Radiological imaging and histopathological confirmation were essential in establishing the diagnosis.

The rarity of female cases reported in the literature makes each additional case valuable. Such reports contribute to a better understanding of the epidemiology, clinical spectrum, and possible hormonal influences involved in tumour development. Increased awareness may facilitate earlier diagnosis and appropriate management in future patients.

Conclusion: Although juvenile nasopharyngeal angiofibroma predominantly affects adolescent males, it can rarely occur in females. Clinicians should consider JNA in the differential diagnosis of female patients presenting with persistent nasal obstruction and nasopharyngeal masses, even in the absence of epistaxis. Reporting rare cases such as this may enhance awareness and contribute to future research into the pathogenesis and clinical behaviour of this uncommon tumour.

Keywords: Juvenile nasopharyngeal angiofibroma; female adolescent; nasal obstruction; dysphagia; nasopharyngeal mass; case report.

23. DEVELOPMENT OF BOTULINUM TOXIN INJECTION SERVICE FOR SIALORRHEA

Authors: **Amel Osman**, Aoife Mahony, Aedin Collins

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Background:
Sialorrhoea (drooling) can cause issues such as; skin irritation, dehydration and aspiration adversely affecting quality of life and leading to social isolation for children and their families. Management strategies include conservative approaches, oral-motor exercises, medication, botulinum toxin A injections, and surgical interventions. Traditionally, stages 4 and 5 treatments in Ireland have been managed by ENT surgeons or interventional radiologists, often requiring general anaesthesia (GA). Recently, we developed a pathway for physician-administered botulinum toxin A injections without GA for children unresponsive to other treatments. We aim to audit our service to assess its effectiveness.

Method:
This study conducted a retrospective chart review of patients receiving injections, examining demographics, referral sources, diagnoses, sedation types, and perceived benefits. It also documented any subsequent injections performed or planned for each patient.

Results:
The audit involved 20 paediatric patients (30% male, 70% female) aged 4 to 17 years, with 40% under 10 and 60% over 12. External referrals from neurology or Neurodisability consultants country-wide counted for 35% of patients. No sedation was used in 55% of patients. All patients had topical anaesthesia prior to injections. One patient (5%) experienced a focal seizure (known seizure disorder), while 95% had no complications. Families and patients found it effective in 75% of cases. Despite noting efficacy, two patients did not wish for further injections.

Diagnosis	Number
Cerebral palsy	2
Severe neurological impairment- total Cerebral Palsy Genetic Brain malformation Arthrogryposis	11 7 2 1 1
Congenital Cytomegalovirus	3
Bulbar palsy	1
Facial hypotonia	1
Intellectual disability (genetic)	1
Acquired brain injury	1

Conclusion:
Botulinum toxin A injections for paediatric sialorrhoea showed variable outcomes, with 75% achieving improvement. This underscores the need for individualized assessment and follow-up. Standardised scales should be used routinely to further delineate degrees of change. Further research with larger cohorts and long-term follow-up is necessary to refine patient selection and treatment protocols.

24. Evaluation of Outcomes and Sustainability of the PAIRS (Paediatric Acute Illness Resuscitation Skills) Train-the-Trainer Paediatric Resuscitation Programme in Tanzania: A Mixed-Methods Study

Authors: **Genevieve Leon**, Rachel MacDonnell
Children's Health Ireland, Dublin, Ireland.
Royal College of Physicians, Ireland.

Background
Since 2016, the PAIRS Group has partnered with Tanzanian healthcare institutions to deliver context-appropriate paediatric resuscitation training to frontline healthcare workers at minimal or no cost. Two major centres—Muhimbili National Hospital (MNH) and Kilimanjaro Christian Medical Centre (KCMC)—have established PAIRS Training Centres with dedicated interprofessional faculties. The newly developed two-day Train-the-Trainer (TTT) course aims to build sustainable, locally led paediatric resuscitation training capacity within hospitals and regions.
Objective
This multi-site evaluation explores the experiences, perceptions, and impact of the PAIRS TTT programme on healthcare professionals in Tanzania. The study examines how TTT graduates deliver PAIRS training, challenges encountered, the sustainability of training activities, and the influence on clinical practice and system strengthening. Baseline demographic and professional information will contextualise findings.
Methods
This mixed-methods study will be conducted at MNH and KCMC. Participants include graduates from four TTT cohorts (2023–2025). Data collection comprises (1) an anonymous census survey of all graduates (approximately 62) to ensure representativeness across cohorts, and (2) purposively sampled in-depth interviews and 2–3 focus group discussions exploring individual and collective experiences. Quantitative data will be analysed descriptively and using logistic regression to identify predictors of sustained training activity. Qualitative data will undergo thematic analysis following Braun and Clarke's six-step framework, supported by NVivo software. Saturation will be defined as the point at which no new codes or themes emerge across three consecutive transcripts. Integration of quantitative and qualitative findings will occur through a joint display matrix to identify convergent, divergent, and complementary insights. All survey and interview data will be anonymised, handled via GDPR-compliant platforms, and overseen by Tanzanian co-investigators. A qualitative methods expert will support coding and analysis to enhance rigour.
Expected Results
The study is expected to generate robust evidence on the uptake, application, and sustainability of the PAIRS Train-the-Trainer model within selected Tanzanian hospitals. Anticipated findings include the proportion of graduates actively delivering training, the extent to which resuscitation skills are incorporated into routine clinical practice, and the institutional and contextual factors that support or hinder sustained training activities. These insights will inform strategies to strengthen paediatric emergency care training and build long-term, locally owned educational capacity.
Keywords
Train the Trainer; paediatric resuscitation; workforce development; mixed-methods evaluation

25. Non-Invasive Ventilation (NIV) at a Tertiary-Level Paediatric Centre in Ireland: A National Service Review 2022 to 2025

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Background
This is a review of the NIV service at a tertiary paediatric centre in Ireland, across three physical hospital sites, between 2022 to 2025 inclusive. Non-invasive ventilation has grown rapidly both nationally and internationally over the past decade. It provides respiratory support in hospital and at home for a broad range of infants and children, many of whom have complex care needs. NIV includes both continuous positive airway pressure (CPAP) and bilevel positive airway pressure (BiPAP). Close monitoring of data helps ensure quality care and appropriate resource allocation and planning.

Methods
A retrospective review was conducted of all paediatric patients using NIV, attending a national NIV service in Ireland from 2022 to 2025 inclusive. Data was collected and analyzed from the NIV database and healthcare records. Data collected included patient demographics, NIV modality (CPAP or BiPAP) and device, and primary diagnoses.

Results
In 2022 the total number of patients attending the NIV service was 283. By 2025 this had increased to 412. This represents an increase of 146% (n=129). Of the 412 patients attending in 2025, sixty percent of these were male (n=249) and 40% female (n=163**).** The cohort spanned a wide age range, including 15 infants under the age of one year (4%), 104 children aged 1–5 years, (25%), 108 aged 6–11 years (26%), 162 adolescents aged 12–17 years (39%), and 23 (6%) aged over 18 years continuing under paediatric care. Fifty seven percent of patients (n=236) were using CPAP while 43% (n=176) were using BiPAP. The most common indications for NIV were neurodevelopmental disorders (47%, n=193), neuromuscular disorders (10%, n=43) and obesity (8%, n=34). In our service, CPAP was predominantly used to treat patients with neurodevelopmental disorders (48%, n=114 of which 60 patients had trisomy 21); obesity (11%, n=25) and prematurity (8%, n=18). BiPAP was more frequently prescribed in patients with neurodevelopmental disorders (45%, n=79, of which 12 had a diagnosis of myelomeningocele) and patients with neuromuscular disorders (21%, n=37).

Conclusion
The number of patients who are dependent on NIV attending the national, tertiary NIV service in Ireland has increased significantly over the last four years. This data reflects international trends. An increasing number of patients with complex care needs are being offered and are benefiting from this intervention. Regular data monitoring is essential for patient quality care, resource management, and future funding.