

#### Abstract PS-119 Figure 1

This study was designed to determine the impact of the internship experience on the BSTP.

The survey evaluated job allocations, intern education, clinical skills development, and exposure to patient care. A combination of binary responses (yes, no) and Likert scoring (cuing at 1 never/disagree, and at 6 always/strongly agree) were used to code responses.

Thirty five trainees responded (all those present at a study day), representing 60% of all trainees. These trainees undertook approximately 130 rotations, with 12 (34%) undertaking a paediatric rotation.

Relating to intern education; only 10 (28%) of trainees had a mentor. Education was frequently provided as scheduled (Likert mean (LM) 3.82). The preferred method of teaching was bedside delivered.

Interns strongly agreed that time management (LM 5.0, Positive skew (PS) 82%) and communication skills (LM 4.9, PS 71%) were clinical skills developed during intern year

Relating to exposure to patient care; Interns were frequently out of their comfort zone in dealing with patients (LM 4.3, PS 41%). Most said they had never been debriefed after attending an emergency situation (LM 1.7, PS 3%). An elevated Early Warning Score (EWS) in Irish hospitals precludes intern assessment however this rule is frequently ignored (LM 4.9, PS 80%). Interns infrequently clerked patients in the emergency department (LM 2.6, PS 14%), although many agreed that interns should be clerking patients (LM 4.4, PS 55%)

This survey highlights the variability of the internship experience in Ireland, and highlights some areas where direct improvements could be made.

# PS-119 **DIAGNOSTIC DECISION MAKING IN PAEDIATRICS**

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Background and aims The cognitive processes underlying diagnostic thinking are complex and the strategies used by paediatricians to arrive at a diagnosis are poorly described. The aim of this study is to identify the most frequently used diagnostic strategies in hospital paediatrics.

Methods The online survey employed a 7-point Likert scale and was designed using a three-stage model of diagnostic reasoning. It was pre-tested and administered using SurveyMonkey, an online survey tool. Participants were invited to participate by email.

Results The overall response rate was 38% (118/310). Respondents included paediatric consultants (31.6%), registrars (44.5%) and senior house officers (21.4%). Respondents were practicing paediatrics for a median of 7 years.

Figure 1 summarises the frequency of use of different diagnostic strategies. Diagnostic strategies are frequently combined within a single consultation to both initiate and refine a diagnosis. Diagnostic strategies were generally equally utilised among different groups, regardless of level of experience. Trainees use a 'test of treatment' more frequently to define a diagnosis compared to consultants (0 = 0.35).

Conclusion Restricted rule-outs, a strategy aimed at preventing errors in clinical practice, is commonly used to refine a diagnosis. Probabilistic reasoning, using a clinical sign or test to 'rule in' or 'rule out' a diagnosis, is also frequently utilised but is prone to diagnostic error. It requires awareness of the diagnostic accuracy of tests and the impact of false positive and false negative results on the probability of disease. Understanding the cognitive processes underlying diagnostic thinking can improve decision-making and decrease diagnostic error.

PS-120 DIAGNOSTIC ERROR IN PAEDIATRICS – A NATIONAL SURVEY

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#### Poster symposium

Background and aims A reduction in diagnostic errors is key to patient safety. Paediatric consultants and trainees were surveyed to elicit their perceptions regarding the frequency, contributing factors, and preventative strategies of diagnostic error.

Methods This online survey was pre-tested and administered using SurveyMonkey. Participants were invited to participate by email. Weighted averages of ranked outcomes were computed. Friedman's test was used to assess non-randomness of ranking.

Results The overall response rate was 38% (n = 310). Respondents included paediatric consultants (31.6%) and trainees (65.9%). 50% of Consultants reported making a diagnostic error at least 1–2 times per quarter, this frequency was significantly higher among trainees (75.9%) (p = 0.027). 36.4% and 29.7% of trainees and consultants respectively reported making a diagnostic error that results in patient harm at least once or twice per year (p = 0.69).

Inadequate staffing levels and/or inexperience of healthcare staff was the most commonly reported system-related factor contributing to diagnostic error. Inadequate data gathering and failing to consider other possible diagnoses were the most common causes of cognitive process breakdown. Excessive workload and physician fatigue were highly ranked additional factors. With regard to reducing diagnostic error, asking for second opinions and increased access to consultants were ranked as the most effective strategies to reduce diagnostic error.

Conclusion This study highlights diagnostic error as a potentially under-recognised patient safety issue. A few key systemicand cognitive-related factors are identified, while many factors contribute equally to diagnostic error. Further research should focus on methods to instruct clinicians on strategies to reduce recurrence.

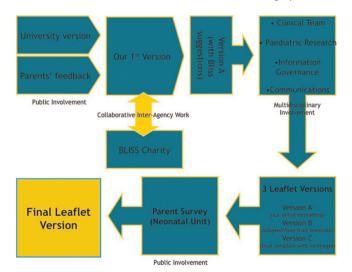
## PS-121

# IMPROVING THE DELIVERY OF NEONATAL RESEARCH - DEVELOPING AN INFORMATION LEAFLET FOR PARENTS

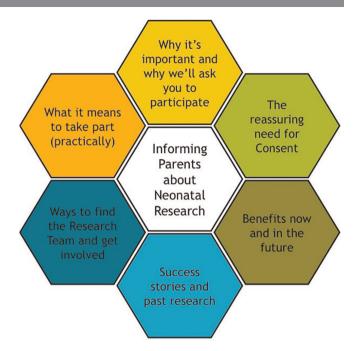
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Background Medical and technological developments within Neonatal Care over the last decade have increased the demand for Neonatal Research. ELCH's Neonatal Unit is highly research



**Abstract PS-121 Figure 1** Key topics of information valued by parents



**Abstract PS-121 Figure 2** Key topics of information valued by parents

active. Parents can be approached for up to 5 or 6 studies. As a consequence, we observed an increased need for a sensitive management of multi-study approaches.

Aims As part of a service improvement project to improve the delivery of Neonatal Research, we aimed to develop an information leaflet for parents of infants admitted to the Neonatal Unit. Methods We invited parents to help construct the leaflet involving them in all stages of development of the leaflet and worked

ing them in all stages of development of the leaflet and worked closely to ensure multidisciplinary input. We did a survey asking parents to elect their favourite version of the leaflet from three different layouts.

Results All parents found the leaflet helpful (n = 18). The preferred version was mostly described as "clear" and "informative". Parents selected pictures that they would like to see in the leaflet and considered them helpful. The topics they valued the most are represented in Figure 1.

Conclusions Parental involvement in all stages of research can present many opportunities for service improvement. Enhanced recruitment rates and project coordination, optimised parental experience of care and increased public awareness are some of the potential advantages. Implementing patient involvement is key in making research more meaningful and in developing successful translational research.

### PS-122

# THE EFFECTS OF ECONOMIC DOWNTURNS ON CHILD MORTALITY: A GLOBAL ANALYSIS, 1981–2010

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Background The effects of economic downturns on population health in high-income countries have been well studied, but less so in low- and middle-income countries. We analysed how