AN EXPLORATION OF HEALTH PROFESSIONALS' EXPERIENCES AND PERCEPTIONS OF THE CLINICAL UTILITY AND ACCEPTABILITY OF AN ELECTRONIC PAEDIATRIC EARLY WARNING SYSTEM (THE DETECT STUDY)

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Aims The Dynamic Electronic Tracking and Escalation to reduce critical care transfers (DETECT) study implemented a proactive end-to-end deterioration solution (the DETECT surveillance system) across a tertiary children’s hospital. The DETECT surveillance system, included an electronic paediatric early warning system (DETECT e-PEWS), aimed to reduce complications and emergency transfers to critical care following deterioration in hospital by screening children for early signs of serious deterioration or sepsis.

This presentation focuses on the findings from a sub-study which explored health professionals’ experiences and perceptions using the DETECT e-PEWS across a tertiary children’s hospital.

Methods Health professionals participated in single, semi-structured qualitative interviews comprised of 15 questions about their professional role and background, their experience with key aspects of serious deterioration (vital signs, raising a concern and/or responding to a child’s potential or actual deterioration) and questions about the clinical utility and acceptability of DETECT e-PEWS.

Results Fourteen HPs participated in the interviews. HPs were broadly categorised into two groups according to their use of DETECT e-PEWS. The first group use the e-PEWS to assess and document children’s vital signs: the Documenting Vital Signs (D-VS) group. The second group use the e-PEWS to review children and respond to tasks and alerts: the Responding to Vital Signs (R-VS) group. Three main themes were identified (figure 1): ‘complying with DETECT e-PEWS’; ‘circuit-maneuvering DETECT e-PEWS’; and ‘disregarding DETECT e-PEWS’. These themes relate to the clinical utility and acceptability of DETECT e-PEWS and reflect how health professionals responded to and engaged with the technology.

Conclusion Speed and accuracy of real-time data, automation of triggering alerts and improved situational awareness were key factors that contributed to the acceptability of DETECT e-PEWS. Mandating use of both recording and responding aspects of DETECT e-PEWS is needed to ensure full implementation.
ABRAMH MASLOW’S HIERARCHY OF NEEDS:

Abstract 930 Figure 1  Abrahm maslow’s hierarchy of needs

Conclusion The WEMWBS survey results showed that most Trainees are in the median range of happiness quotient. The key lessons learned are that wide collaboration is the key to success with early trainee involvement. Surveys can provide a wealth of information but should be validated for their specific use. High completion rates can be achieved through incentives and ensuring access to the survey is widely publicised in multiple formats. The journey of improving well-being of junior doctors has just begun and we seek to build on success to create a culture of well-being.

MRI BRAIN SCAN REQUESTS DURING COVID PANDEMIC IN A DISTRICT GENERAL HOSPITAL

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Aims Remote outpatient consultations during the COVID pandemic have been found to be feasible and safe but has led to concerns of increased reliance on urgent requests for imaging including MRI brain scans. We aim to study the requests for MRI brain scans during the pandemic period compared to the pre-pandemic period.

Methods MRI brain scan requests on all children between 0-16 years in a district general hospital during the pandemic period (P) (March 2020-August2021) were compared to pre-pandemic period (PP) (September 2018-February 2020). Apart from one consultant (consultant A) who was shielded and did only remote telephone and/or video outpatient consultations, the remaining consultants (consultants B) were flexibly working with combination of face-to-face examinations (F2F) and remote consultations. All children who needed an ‘urgent scan’ (to be done within maximum 14 days) had to have a F2F examination before scan request was made. ‘Routine scan’ requests (to be done within maximum 6 weeks) either followed from remote consultation or after F2F. Consultant A requested only routine scans during the period P. All significant scan abnormalities on MRI brain scans were noted.

Results During period PP the total scan requests were 467; urgent scans were requested in 29% children (32% requests in children <12 years). Urgent scans were done within a mean of 5 days (0-14 days); significant abnormalities in these urgent scans were seen in 23% cases. During period P total numbers of patients seen were 13794 (consultants B) and 2217 (consultant A) respectively. Total number of scan requests were 453 (397 consultants B and 56 consultant A). Urgent scan requests were total of 176 (44.3%) with 108 (61.3%) requested in children <12 years. 34 (19.3%) urgent scans showed significant abnormalities. Urgent scans were done in average of 3.6 days in 147 children but were done after 14 days (average 28.6 days) in remaining 29 (16.5%) children with urgent scan requests. Significant scan abnormalities were found in 6 children in whom the urgent scan was delayed. No significant abnormalities were seen on routine scans asked by consultant A. Mean routine scan request per total number of patients seen were 2.9% (consultants B) and 2.5% (consultant A) respectively.

Conclusion Significantly more urgent requests for MRI scans were made during the pandemic period especially in children below 12 years. Extreme parental anxiety about presenting symptoms during the pandemic may have significantly contributed to the increased urgent requests. This may have also contributed to a delay in getting urgent requests and delay in diagnosis in 6 children.

Similar total levels of routine scan requests in the two periods, P and PP, suggest that remote consultations have not increased the requests for MRI brain scans. There was no significant difference in the average number of routine scan requests in the 2 groups, Consultants B and Consultant A. In addition the scan requests following remote consultations appear to be safe with similar significant scan abnormalities seen in the two periods.

Parental reassurance and adherence to recommended guidelines may help in reducing urgent scan requests especially in younger children.

IN-SITU SIMULATION IN THE PAEDIATRIC EMERGENCY DEPARTMENT: IMPROVING PATIENT SAFETY, ENCOURAGING TEAMWORK AND DELIVERING EDUCATION

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Aims We want to improve the quality and safety of patient care within the paediatric emergency department (PED). We want to be able to deliver education, encourage teamwork and communication, and identify and act upon clinical risk seen in the PED. We look to use in-situ simulation to address these issues.