recorded at the Newborn & Infant Physical Examination (NIPE) by paediatricians or midwives.

**Methods** Using electronic systems (Cerner, Smart4NIPE, BadgerNet), data was prospectively analysed for all babies born at the trust in a 2-week study period in May 2020 (pre-intervention phase). Simultaneously, anonymised questionnaires were distributed to all staff trained in performing the NIPE, assessing their understanding and current practice of pulse oximetry (surveillance phase). A four-pronged intervention was subsequently carried out over a 1-month period (intervention phase). The results of the interventions were studied for all babies born in a 1-week period in August 2020, assessing the performance of pulse oximetry and its short-term outcomes (post-intervention phase).

**Results** During the 2-week pre-intervention phase, 32/298 babies (10.7%) had pulse oximetry recorded at the NIPE; approximately half of these were performed only due to clinical concerns (murmur, tachypnoea or abnormal fetal echocardiogram). Of all NIPEs performed by paediatricians, 6.9% (6/86) included pulse oximetry, compared with 12.2% (26/212) by midwives. This inconsistent performance correlated with the questionnaire results; 7/55 (12%) practitioners reported performing pre/post-ductal saturations routinely, with less than half correctly stating the acceptable saturation threshold and pre/post-ductal gap, according to local guidelines. Based on the responses, four key areas of improvement were postulated, and changes implemented altogether: these included upgrading ICT facilities for documentation, re-writing trust guidelines, widening multidisciplinary education, and improving the availability of neonatal pulse oximeters. In the 1-week post-intervention phase, 151/151 babies (100%) had routine pulse oximetry throughout the trust. One baby in this cohort was admitted to NICU for 48 hours because of post-ductal hypoxaemia; he was diagnosed with mild PPHN, required oxygen therapy and an echocardiogram showed a structurally normal heart.

**Conclusions** This project has demonstrated an effective implementation strategy for routine pulse oximetry at a large NHS maternity trust, through multi-disciplinary collaboration and careful QI planning. Future directions are to ensure this is maintained over a prolonged period of study, as well as assessing outcomes of babies with ‘positive’ pulse oximetry screening and its impacts on long-term CHD detection rates.

**British Paediatric Neurology Association**

**1747 VESTIBULAR MIGRAINE IN CHILDREN**

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**Background** Vestibular Migraine (VM) and the migraine variant Benign Paroxysmal Vertigo of childhood (BPV) are the commonest causes of vertigo in childhood (Langhagen et al., 2016). Studies suggest VM and BPV are the cause in between 24–56% of childhood vertigo (Brodsky et al., 2016). Between 2–10.6% of school age children are affected by VM/BPV (O’Reilly et al, 2012). VM is a clinical diagnosis with no specific vestibular diagnostic features or other biomarkers (Langhagen et al, 2016).

**Methods** Using electronic systems (Cerner, Smart4NIPE, BadgerNet), data was prospectively analysed for all babies born at the trust in a 2-week study period in May 2020 (pre-intervention phase). Simultaneously, anonymised questionnaires were distributed to all staff trained in performing the NIPE, assessing their understanding and current practice of pulse oximetry (surveillance phase). A four-pronged intervention was subsequently carried out over a 1-month period (intervention phase). The results of the interventions were studied for all babies born in a 1-week period in August 2020, assessing the performance of pulse oximetry and its short-term outcomes (post-intervention phase).

**Results** During the 2-week pre-intervention phase, 32/298 babies (10.7%) had pulse oximetry recorded at the NIPE; approximately half of these were performed only due to clinical concerns (murmur, tachypnoea or abnormal fetal echocardiogram). Of all NIPEs performed by paediatricians, 6.9% (6/86) included pulse oximetry, compared with 12.2% (26/212) by midwives. This inconsistent performance correlated with the questionnaire results; 7/55 (12%) practitioners reported performing pre/post-ductal saturations routinely, with less than half correctly stating the acceptable saturation threshold and pre/post-ductal gap, according to local guidelines. Based on the responses, four key areas of improvement were postulated, and changes implemented altogether: these included upgrading ICT facilities for documentation, re-writing trust guidelines, widening multidisciplinary education, and improving the availability of neonatal pulse oximeters. In the 1-week post-intervention phase, 151/151 babies (100%) had routine pulse oximetry throughout the trust. One baby in this cohort was admitted to NICU for 48 hours because of post-ductal hypoxaemia; he was diagnosed with mild PPHN, required oxygen therapy and an echocardiogram showed a structurally normal heart.

**Conclusions** This project has demonstrated an effective implementation strategy for routine pulse oximetry at a large NHS maternity trust, through multi-disciplinary collaboration and careful QI planning. Future directions are to ensure this is maintained over a prolonged period of study, as well as assessing outcomes of babies with ‘positive’ pulse oximetry screening and its impacts on long-term CHD detection rates.

**Children’s Cancer and Leukaemia Group**

**1748 ELECTRONIC PATIENT REPORTED OUTCOME MEASURES – NEXT GENERATION CANCER PATIENT MONITORING?**

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