health of both parents and resulted in feelings of despair and confusion.

Conclusions Our intensive care is one of the largest paediatric units in the UK and during the pandemic we increased our capacity to accommodate intensive care patients from other paediatric units that reconfigured to treat adult patients. During the pandemic, our usual approach to carer support was challenged by visiting and communication restrictions, the impact of which may have long-term consequences. Despite these challenges, we were able to sensitively provide the high standards of care expected by patients and their families.

Quality Improvement and Patient Safety

1372 PAPERLITE: ELECTRONIC DOCUMENTATION FOR TRANSITIONAL CARE (NTC) IN A TERTIARY NEONATAL UNIT IN LONDON, UK

Ayne Zaharoff, Julia Oleksiewicz. *Barts Health*

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Background Electronic documentation (Paperlite) was introduced at The Royal London Hospital's Neonatal Transitional Care Department in November 2020. All documentation pertaining to neonates under the care of paediatricians transitioned from handwritten patient notes to electronic entries used across Barts Health NHS Trust.

Objectives Prior to Paperlite, all documentation was handwritten which presented several problems. Primarily, only 70% of patient notes were available during perinatal clinic follow-up appointments which is a patient safety issue. Our aim was to ensure 100% patient record accessibility both during admission and post discharge.

Methods The availability of handwritten patient notes in follow-up perinatal clinics was audited. Subsequently, electronic templates were introduced and relevant staff (paediatricians, nurses and midwifery teams) were informed. The availability of patient notes in perinatal clinics was re-audited in February 2021 and paediatricians were surveyed.

Results 100% of patient documentation was available in perinatal clinics in February 2021.

Statement	Mean score
The Paperlite NTC templates are accessible	4.9
The Paperlite NTC templates provide a useful and relevant guide to what information should be documented	4.7
You prefer using Paperlite Documentation as compared to documenting on paper notes	4.9

We carried out a post-intervention survey amongst junior doctors, senior doctors and consultants and the results were overwhelmingly positive.

We asked participants of the survey to rate on a likert scale how much they agreed with the statements below (0=strongly disagree, 5= strongly agree)

Conclusions The introduction of Paperlite documentation helps clinicians have better access to patient information, saves

clinical time and accelerates patient discharge as well as provides guided and uniform templates for documentation.

It also allows many aspects of patient care to be audited and ensures medico-legal compliance. Moving forward, we hope to use this electronic system to also streamline documentation for common neonatal procedures (such as lumbar punctures) and to record referrals and patient observations electronically.

British Association of Perinatal Medicine and Neonatal Society

1373 RAPID EXOME SEQUENCING FOR ACUTELY UNWELL CHILDREN: EXPERIENCES FROM YORKSHIRE REGIONAL GENETICS SERVICE

¹Dimitra-Ilektra Lerou, ¹Jasmine Meng Yin Chen, ²Melody Redman, ³Zena Lam, ²Verity Hartill, ²Jennifer Campbell. ¹School of Medicine, University of Leeds, Leeds LS2 9JT; ²Yorkshire Regional Genetics Service, Leeds Teaching Hospitals NHS Trust, Chapel Allerton Hospital, Chapeltown Rd, Leeds LS7 4SA; ³Clinical Genetics, Birmingham Women's and Children's NHS Foundation Trust, Birmingham, UK

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Background Rare monogenic disorders in children and babies are difficult to diagnose, however establishing the diagnosis plays an important role in informing patient management and influencing clinical decision-making. On 1st October 2019, the National Rapid Exome Sequencing Service for acutely unwell children with a likely monogenic disorder (R14) was introduced across NHS England, via the National Genomic Test Directory. All Neonatal Intensive Care Units (NICUs) in England have access to the national R14 service. Informed consent for this test is essential, as the results may give uncertain or unexpected information, including about a child's biological parents. Rapid trio Whole Exome Sequencing (WES) via R14 has enabled urgent diagnoses to be sought where this may affect the clinical management of the child.

Objectives We undertook an audit and service evaluation of the R14 service in our region by reviewing all referrals to Yorkshire Regional Genetics Service (YRGS) over a one-year period since the commencement of the R14 service.

Methods We reviewed all R14 referrals from YRGS to the nationally-commissioned Exeter Genomics Lab between 1st October 2019 and 30th September 2020. Our data collection tool enabled a standardised screening of patient notes, electronic patient records and genomic and other test results. Patient demographics, clinical and phenotypic information, and genomic outcome data were collected.

Results 46 cases were identified; 18 male (39%), 28 female (61%). The median age of the proband at time of review was 20 days. A heat map demonstrated that most patients who had accessed the service were concentrated in West Yorkshire. At the time of request, 65% (n=30) of patients were on NICU. In 50% (n=23), the neonatal unit requested the test. In 43% (n=20), Clinical Genetics requested the test. In 4% (n=2), the test was requested by neurology, and 2% (n=1) by a High Dependency Unit. Request forms were fully complete in 74% (n=34) of cases. In 46% (n=21) of cases, consent for testing (via a record of discussion form) was not documented. The mean turnaround time from receipt of samples by the Exeter Genomics Lab to issuing of final reports was 12.7 days

(range 7–25 days). In 52% (n=24) of cases, a genetic cause for the patient's presentation was identified. Of these 24 cases, 96% (n=23) resulted in a change in management. The most common change in management was referral to a specialist (52%; n=12).

Conclusions The R14 service for acutely unwell children heavily relies on effective collaboration between Neonatal and Clinical Genetics teams, as both teams are involved in the referral process. It is important that we improve our documentation – particularly around consent for testing – and ensure request forms are fully completed before submission. In over half of our cases, a genetic cause for the patient's presentation was identified; in all but one of these cases, this affected some aspect of patient management. This audit has helped us to identify strategies to ensure equitable access to the R14 service across our region.

Paediatric Critical Care Society

1375

SURVEY OF THE EXPERIENCES OF STAFF WHO CARED FOR ADULT PATIENTS WITH COVID-19 ON PAEDIATRIC INTENSIVE CARE UNITS DURING THE FIRST WAVE OF THE PANDEMIC

¹Sukesh Mohta, ²Gillian Colville, ³John Alexander. ¹Oxford University Hospitals NHS Foundation Trust, UK; ²St George's University Hospitals NHS Foundation Trust; ³University Hospitals of North Midlands NHS Foundation Trust

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Background As the first wave of COVID 19 pandemic was gripping the nation and patient numbers on adult intensive care (AICU) were increasing rapidly, Paediatric Intensive Care Units (PICUs) across the UK offered to admit adults on PICUs.

Objectives To collect data regarding personal reflections, emotional well-being and stresses on staff who managed adults with COVID-19 on PICU.

Methods An anonymous online survey, comprised of eleven fixed response and four free text questions, conducted between May and June 2020.

Results A total, 211 responders from six English PICUs included 134 nurses, 56 physicians and 21 allied health practitioners (AHPs). Two third had > 5 years PICU experience and 47 (22%) had previous adult ICU (AICU) experience.

A majority, 113 (54%) reported that required to take care of adults was most concerning whereas only 58 (28%) were concerned due to COVID 19. Those with previous AICU experience were much less likely to report concerns about caring for adults (10/47 (21%) v 103/164 (63%) $p<0.001$).

119 (56%) staff reported burnout - nurses (92/134 – 69%) and AHPs (12/21 – 57%) reported higher burnout than doctors (15/56 (27%) - $p<0.001$). Sleep difficulties were reported by 137 (65%) - nurses affected more than their colleagues (102 (76%) v 10 (48%) AHPs and 25 (45%) doctors, $p<0.001$). Staff with previous AICU experience reported lower rates of burnout (16 (34%) v 103 (63%), $p<0.001$) and sleep difficulties (16 (34%) v 121 (74%), $p<0.001$).

Fear of spreading infection was reported by 139 (66%) and the need to be extra vigilant by 128 (61%), with no significant differences found between professions. A third 76 (36%), were concerned that their patients had received sub-optimal care and 29 (14%) felt that the care they had provided had

been compromised by their personal concerns, with this response being more common in those without previous AICU experience (27 (16%) v 2 (4%), $p=0.032$).

Staff found it difficult not being able to communicate face to face with patients' families; having to care for people that were their own age or their parents' age; working in full PPE; absence of clear guidelines and staff shortages. Their main methods of coping were relying on existing team relationships; obtaining support from friends and family; maintaining personal resilience and accepting they were doing their best. Positive aspects included networking with AICU colleagues, a feeling of enhanced comradeship and pride in learning new skills eg proning, but there were requests for greater visibility of managers, better communication and more training.

Conclusions The finding that so many staff in this survey reported burn out and sleep problems suggests that the provision on the management of traumatic stress symptoms and sleep hygiene may be helpful.

Although several PICUs managed adult patients, there were paediatric staff redeployed to adults' units as well. This survey suggests that staff with previous AICU should be used first and that extra support may be needed for others redeployed later, to maintain their connection with their base team in the interests of minimising the psychological repercussions which they may be at increased risk of experiencing.

British Inherited Metabolic Disease Group

1376

SUPPLEMENTARY FEEDING IN CHILDREN WITH MITOCHONDRIAL DISEASES

¹Victoria Nesbitt, ²Judy Wadsworth. ¹Oxford University Hospitals; ²NHS Highly Specialised Services for Rare Mitochondrial Diseases Oxford

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Background Mitochondrial diseases are the most common group of neurometabolic disorders in childhood affecting all age groups. It can present with isolated organ involvement or as multi-system disease. Growth is commonly affected. Short stature and a progressive reduction in body mass index are recognised features of mitochondrial disease. Those children with complex neurodisability may particularly need supplementary feeding due to increased metabolic requirements associated with seizures and movement disorders, and those with cardiomyopathies commonly have increased calorific requirements. Supportive therapies are the mainstay of management for mitochondrial disease, which is currently an incurable condition. Adequate nutrition is essential to support metabolic demands, encourage growth and development, and enhance quality of life.

Objective To determine the number of children with mitochondrial disease who receive supplementary feeding and the reasons why supplementary feeding is required.

Methods Both authors reviewed the medical records of children aged 1–16 years with known or suspected mitochondrial disease currently attending the NHS Highly Specialised Service for Rare Mitochondrial Diseases in Oxford with evidence of receiving supplementary feeding.

Results 45 children aged 1–16 years were included (25 male: 20 female) of whom 35 had confirmatory genetic diagnoses of mitochondrial disease, 8 had biochemical diagnoses only and 2