hospital management for use in future inductions. We received excellent feedback and the areas we highlighted were used as a basis to frame induction requirements in subsequent redeployments.

Conclusions Paediatric trainees have much to gain from the redeployment experience. As a trainee group we have sufficient medical training to revert to adult medicine and have the procedural, situational awareness and communication skills to thrive in unfamiliar settings. However, uncertainty can adversely impact well-being whilst preparedness allows trainees to both better cope and to excel in new environments. From our experience of redeployment we identified key areas of uncertainty and addressed them in a framework that can be translated to other trusts and for other specialities. We believe that providing structured information to trainees moving out of their comfort zone helps them to best support their adult colleagues, to take advantage of development opportunities and builds resilience.

British Society of Paediatric Endocrinology and Diabetes

GENETIC VARIATIONS CAUSING NEONATAL DIABETES MELLITUS

1Hazem Helmy Elemam, 2Davida Hawkes, 3Anneli Allman. 1ABUHB; 2Aneurin Bevan University Health Board, Grange University Hospital

Background Neonatal Diabetes Mellitus (NDM) is rare with an approximate incidence of 1:100,000. More than 80% of cases have a genetic origin. We present 4 patients with NDM occurring within one health board.

Objectives Our aims were to compare and contrast the characteristics of our cases and to discuss the genetic variations causing them with a view to developing a mechanism for early detection and management. We also sought to share information more widely about this highly unusual condition.

Methods This was a retrospective case series analysis. The study period was 2007 to 2021. Data were collected from BadgerNet and health board clinical records

Results Case 1 was born at term. Growth restriction and oligohydramnios had been identified antenatally and birth weight was 2060g. Apgars were 1, 5 and 10 at 1, 5 and 10 minutes respectively. A blood sugar measured on day 2 was 17.3mmol/l. The infant was admitted to NICU and due to persistent hyperglycaemia was commenced on intravenous sliding scale insulin. This was switched to an insulin pump and the infant was discharged home after 38 days. Genetic analysis showed a 6q24 duplication. Cases 2 and 3 were siblings, one born at 34 weeks gestation and the other at term. Both were growth restricted in utero and developed hyperglycaemia on days 2 and 4 respectively. They also had congenital hypothyroidism and pancreatic/renal cysts. They were found to have homozygous partial GLIS 3 gene deletion. Both were discharged after prolonged hospital stay on pump delivered insulin. Case 4 born at term with a birth weight of 2030g and known to have been growth restricted in utero with low liquor volume, presented at 3 weeks of age with diabetic ketoacidosis. He was discharged on an insulin pump and had STAT 3 mutation.

Conclusions The most common cause of transient NDM is chromosome 6q24 duplication but there are more than 20 genetic disorders associated with permanent NDM. Chromosome 6q24-related transient NDM is characterized by intrauterine growth restriction and low birth weight, with neonatal hyperglycaemia resolving by 18 months and an increased risk for type 2 diabetes in adulthood. GLIS3 is a protein with roles in β cell survival and insulin secretion. Mutation in GLIS 3 is associated with neonatal diabetes, congenital hypothyroidism, polycystic kidney disease and liver fibrosis. Signal transducer and activator of transcription 3 (STAT3) is vital to the development of a normally functioning pancreas. STAT3 mutation causes neonatal diabetes through premature induction of pancreatic differentiation. In all 4 of our cases of NDM the infants were known to be growth restricted antenatally, with low birth weight postnatally and hyperglycaemia developed from the second day of life onwards. It is remarkable that this cluster with 3 distinct genetic causes occurred in a small geographical area. An infant born with lower than expected birth weight for gestational age will usually be monitored for hypoglycaemia. If higher than average levels of glucose are detected, there is a need to consider NDM with involvement of the specialist diabetes molecular genetics team.

British Association of General Paediatrics

A RESEARCH JOURNEY IN THE TIME OF CORONA VIRUS DISEASE (COVID-19)

Rebecca Horner, Sakeena Samar, Deepthi Jyothis. Birmingham Children’s Hospital

Background COVID-19 has seen a global research effort to address the pandemic and U.K has been at its forefront with flagship trials such as RECOVERY trial which have transformed COVID-19 management. RECOVERY trial involved hospitals and healthcare professionals in research in an unprecedented scale and provided opportunities for trainees to engage in research.

While children have been relatively spared from acute COVID-19, emergence of the novel hyperinflammatory condition Paediatric Inflammatory Multisystem Syndrome Temporally associated with Severe Acute Respiratory Syndrome Coronavirus 2 (PIMS-TS) was a diagnostic and treatment dilemma. Commencement of treatment trials for PIMS-TS in the paediatric arm of RECOVERY trial coincided with the roll out of NIHR Associate PI scheme, which is an opportunity for trainees to gain experience in research.

Objectives We aim to describe the trainee experience of research during COVID-19, as part of the RECOVERY trial team at a specialist children’s hospital.

Methods Interviews were undertaken with non-consultant grade paediatricians involved with the RECOVERY trial as Associate PIs, regarding their research journey.

Results Undertaking the Associate PI scheme was a structured introduction to research, requiring completion of the training and familiarity with trial protocol. As a specialist children’s hospital with a regional paediatric intensive care unit, the number of patients eligible to participate in the trial increased rapidly during the peaks of the pandemic. The increment in numbers meant that Associate PIs had to be skilled up quickly in all the aspects of this ‘platform trial’ which evaluates...