Abstract 1411 Table 1 Total costs of maintaining a gastrostomy per patient per year by age group

Age Group (n)	Mean Costs (£SD)
0–4 years (9)	£525.44 (330.33)
5–9 years (13)	£867.05 (341.71)
10–14 years (9)	£551.55 (388.33)
15–19 years (5)	£918.18 (533.64)

analysis were: staff time for telephone calls and home visits from the community nursing and nutrition teams and equipment costs related to maintaining or replacing the gastrostomy device in use.

Staff costs were determined using midpoints of pay scales in the NHS Service Handbook and unit costs of equipment using rates negotiated by the local Clinical Commissioning Group.

Results The mean cost of maintaining a paediatric gastrostomy across all ages was £709.87 (SD 403.18) per year. Costs varied by patient age (table 1).

Button devices had much higher equipment costs than PEG tube devices with a Mini button device using £573.38 of consumables each year compared to £279.34 for a PEG. This was due to a combination of increased staff costs to change and maintain the device and increased disposables used in maintaining the device.

Conclusions The community cost of maintaining a gastrostomy in a child averages just over £700 per patient per year. The cost varies over time with peaks in early primary school age children and around the time of transition into adulthood. Button devices are more costly to maintain in the community than PEG tubes.

Quality Improvement and Patient Safety

1412

INCORPORATING PARENTAL CONCERN AS AN INTEGRAL ESCALATION ENTITY ON A PAEDIATRIC EARLY WARNING SYSTEM

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Background It is recognised that parents and carers are often able to identify deterioration in their sick child before healthcare professionals. This is especially true in children with complex medical needs. The Birmingham Women's and Children's Hospital Paediatric Early Warning System (PEWS) has had a section for parental concern since 2014. A review identified gaps in how this information was assessed, recorded and escalated.

Objectives Our objective was to enhance parental escalation in the PEW System using ergonomic principles.

Methods A comprehensive review in 2017 analysed data from incident reports and feedback from key stakeholders using parent focus groups and staff questionnaires, to identify system gaps. An ergonomist conducted clinical observation of the system in use and a review of the PEWS chart. Results were analysed by an expert group, including doctors, nurses, an

ergonomist and a graphic designer. We used the data to adapt and refine the process in which we would engage parents/carers. We also made ergonomic design adaptations to the chart.

Teaching of the adapted system was delivered to the majority of nurses before piloting was started on a mix of four medical and surgical wards for four weeks. Daily sense checks to these clinical areas were carried out. Feedback was actively sought and analysed. Results demonstrated that only minor refinements were required. The process and charts were then signed off at relevant Trust committees. Over 80% of front-line clinical staff were then trained before roll out in December 2019. Post roll out evaluation was also completed.

Results Pre intervention parental focus groups revealed that 59% of parents were asked about their opinion of their child's health. This increased to 76% post pilot and 72% post roll out. The new parent question 'How is your child different since I last saw them?' made 100% of parents feel able to escalate concern. This enabled 50% of parents questioned post rollout to escalate a deterioration they had recognised in their child. Post roll out 78% of nurses felt that asking parents this question made it easier to identify a deterioration and 50% of the 325 nurse respondents felt that asking the question had led to earlier detection of deterioration. Allied health professionals liked the specific condition checklist on the PEWS chart designed to improve situational awareness. Although universally welcomed by doctors of all grades, there were some apprehensions around changes leading to increases in unnecessary escalation. The results of the pilot were helpful in addressing these as no such increases were reported.

Conclusions Parental opinion is a key safety feature of our paediatric clinical systems. Through engagement of stakeholders and use of an ergonomic approach we have been able to safely adapt and embed this within our escalation systems to influence work as done.

We would like to thank the West Midlands Academic Health Science Network for funding this review.

RCPCH Trainees Committee

1413

PILOTING A VIRTUAL 'SAFE SPACE' FOR FACILITATED PEER SUPPORT DISCUSSION

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Background The COVID-19 pandemic has placed unprecedented stress on the healthcare system and the professionals that work within it. It is increasingly recognised that peer support helps to strengthen resilience for professionals working within stressful systems, whether in healthcare or in other industries. Models such as Schwartz rounds and Balint groups focus on emotional responses to pre-determined themes or participant-suggested clinical cases in a facilitated, supportive group discussion setting away from the clinical area. Both methods have been shown to improve staff wellbeing whilst preventing the development of 'burnout' in participants. However, the need for social distancing during the pandemic increased the difficulty of organising safe face-to-face group

discussion at a time when peer support methods were arguably needed more than ever.

Objectives To pilot a facilitated peer support session in a virtual format and assess the acceptability of the format for trainees.

Methods A themed discussion entitled 'In This Bleak Midwinter' was incorporated into the January 2021 regional ST3 trainee study day, which was convened virtually via Zoom videoconferencing software. 21 ST3 trainees were split into three virtual breakout rooms, with at least one trainee per group given a short briefing beforehand and asked to prepare something to begin the discussion. One trainee was removed from the session due to camera issues, as the faculty felt video was crucial for maximising engagement with the session and maintaining the trust necessary to develop a 'safe space' for open discussion. Three members of a local chaplaincy team, trained in Schwartz and Balint methodology, facilitated group discussions which lasted for approximately 55 minutes. A scheduled break followed to allow trainees to reflect and recover before continuing with the rest of the day's programme. Feedback was gathered via anonymous online survey.

Results 85% of trainees rated the session as 'excellent' on a five-point Likert scale, the most positive rating possible. 58% of respondents specifically mentioned the session in a free text question asking for 'three good things about the day'. Three trainees stated in a free text question asking 'how could the day be improved?' that they would like facilitated peer support sessions to be scheduled during every monthly teaching programme. One trainee subsequently sought professional help for their mental health and directly cited the session as the driver to do so.

Conclusions The considerable positive feedback suggests that facilitated peer support sessions can be successful when held in a virtual format. Data on lasting effects were not gathered and future research could try to ascertain whether the positive reactions produced medium-term and long-term benefits, similar to face-to-face sessions. Future research could also examine the effect of cameras on engagement, as this seemed the main barrier to participation and engagement in our pilot session.

1415 PAEDIATRIC LESS THAN FULL TIME TRAINING SURVEY ACROSS OUR REGION: AN INITIATIVE TO SUPPORT TRAINEES

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Background Paediatrics has a higher number of Less Than Full Time (LTFT) trainees in comparison to other hospital specialities. 34% of paediatric trainees in our region are in less than full time training. Trainees working LTFT have a different work experience and can encounter different challenges. The paediatric LTFT trainee representatives and the consultant trainee programme director (TPD) for LTFT training organised a survey looking at different initiatives to support less than full time trainees.

Objectives Aim of the survey was to explore the experiences of the paediatric LTFT trainees across our deanery and to look at the measures to be put in place to improve.

Methods An anonymous questionnaire was created using survey monkey. This was distributed via email to all 86

LTFT trainees in our region and it was kept open for 4 weeks. Data was subsequently collated using Microsoft excel.

Results

- The questionnaire was completed by a total of 50 trainees (58%) at all levels of training.
- Majority of the trainees opted to work 60% of the whole time equivalent slot.
- Childcare was the main reason for working LTFT (76%).
- Most of the trainees (87%) were able to get all 'Work Based Assessments (WBA)' required for the given training period.
- Only 55% of the LTFT trainees received their Rota on time.

Conclusions

- Providing the Rota on time has been one of the major concerns across many trusts. At deanery level, we are now introducing a recommended timeline for rota production to facilitate the LTFT rota provision on time.
- In the following placements after the survey, LTFT trainees received the confirmation of their placements and their job sharers well in advance.
- We are aiming to conduct a LTFT survey annually to address trainees concerns.

Paediatricians with Expertise in Cardiology Special Interest Group

1418 ARTERIAL FUNCTION IN PREADOLESCENT CHILDREN WITH CONGENITAL HEART DISEASE: A SYSTEMATIC REVIEW

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Background Congenital heart disease (CHD) can increase long-term cardiovascular disease risk. Studying arterial stiffness, an independent predictor of cardiovascular morbidity and mortality, can improve understanding of the pathophysiology of cardiovascular disease in CHD.

Objectives To systematically review the literature to examine how CHD affects arterial stiffness in children ≤ 12 years, following PRISMA guidelines.

Methods PubMed was searched using the terms: 'pulse wave velocity' (PWV), 'carotid intima-media thickness' (cIMT), 'arterial stiffness index' (SIx), 'flow-mediated dilation' (FMD), 'flow imaging', 'laser flow Doppler', 'venous plethysmography', 'cardi* magnetic resonance imaging', 'aortic intima-media thickness' (aIMT), 'vascular ultrasound' and 'neonat*', 'paediatric*', 'infant*', 'child*'. Case reports, case series, reviews, commentaries, conference proceedings, animal studies, articles not in English and articles with children >12 years were