Aims To determine the impact of parent/carer presence during medical ward rounds on parents/carers and staff. Specifically with regards to communication, parental inclusivity and time management.

Methods Parents/carers of children admitted to Paediatric Critical Care including PICU and HDU were provided with a questionnaire containing 11 questions. Medical and nursing staff were provided with separate questionnaires consisting of 9 questions. The response to each question was on a scale of 0 to 10, with 0 being strongly disagree, 5 being neutral and 10 being strongly agree. Each questionnaire also included 3 free text questions.

Results 26 parents/care and 40 staff members completed questionnaires.

76.9% of parents/carers think they should be allowed to be present on the ward round. 65.4% felt less involved in their child’s care and 61.5% felt their child’s admission to paediatric critical care was more stressful by not being present on the ward round.

57.5% of staff members think parents/carers should be allowed to be present for the ward round. Staff felt the ward round would take longer if parents/carers were present but it would likely reduce the time spend updating families later. Staff also think there would be a reduction in communication issues and parents/carers would feel more involved in their child’s care if they were present. There were concerns from staff that social issues could be missed.

A shared concern from both parents/carers and staff questioned was maintaining confidentiality between patients.

Conclusion The majority of parents/carers think they should be allowed to be present during medical ward rounds, with healthcare staff agreeing to a lesser extent. Both feel their presence improves family inclusivity and understanding.

Abstract 512

COMPARISON OF SEVEN PAEDIATRIC EARLY WARNING SCORES, INCLUDING THE PROPOSED NATIONAL PEWS FOR ENGLAND, TO PREDICT CRITICAL DETERIORATION EVENTS IN HOSPITALISED CHILDREN: A RETROSPECTIVE COHORT STUDY

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Abstract 512

Abstract 512 Figure 1

<table>
<thead>
<tr>
<th>PEWS</th>
<th>Maximum score 24 hours</th>
<th>Maximum score 12 hours</th>
<th>Maximum score 6 hours</th>
<th>Maximum score 4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area under ROC (95% confidence interval)</td>
<td>Area under ROC (95% confidence interval)</td>
<td>Area under ROC (95% confidence interval)</td>
<td>Area under ROC (95% confidence interval)</td>
</tr>
<tr>
<td>Alder Hey</td>
<td>0.94 (0.93, 0.96)</td>
<td>0.95 (0.93, 0.97)</td>
<td>0.95 (0.93, 0.97)</td>
<td>0.95 (0.93, 0.96)</td>
</tr>
<tr>
<td>Bedside PEWS</td>
<td>0.92 (0.90, 0.94)</td>
<td>0.94 (0.92, 0.96)</td>
<td>0.93 (0.91, 0.95)</td>
<td>0.93 (0.91, 0.95)</td>
</tr>
<tr>
<td>Newcastle PEWS</td>
<td>0.91 (0.89, 0.93)</td>
<td>0.93 (0.91, 0.95)</td>
<td>0.92 (0.90, 0.95)</td>
<td>0.93 (0.91, 0.95)</td>
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<tr>
<td>Irish PEWS</td>
<td>0.92 (0.90, 0.94)</td>
<td>0.94 (0.92, 0.96)</td>
<td>0.94 (0.92, 0.96)</td>
<td>0.94 (0.92, 0.96)</td>
</tr>
<tr>
<td>National PEWS</td>
<td>0.89 (0.87, 0.92)</td>
<td>0.91 (0.89, 0.94)</td>
<td>0.90 (0.88, 0.93)</td>
<td>0.92 (0.89, 0.94)</td>
</tr>
<tr>
<td>Scottish PEWS</td>
<td>0.87 (0.84, 0.89)</td>
<td>0.89 (0.86, 0.91)</td>
<td>0.89 (0.87, 0.90)</td>
<td>0.88 (0.87, 0.92)</td>
</tr>
</tbody>
</table>

Abstract 512 Figure 2

Results 423,321 observations were independently analysed, representing 11,601 patients and 17,519 patient visits. Median age was 57 months (IQR 16 – 128). The most common admitting specialties were General Paediatrics (5569 patient visits, 31.7%), Haematology-Oncology (2682 visits, 15.3%) and General Surgery (2369 visits, 13.3%).

CDEs occurred on 250 of these visits, involving 217 patients (42.8% female). Median age was 8 months (IQR 1 – 61.25). CDEs most frequently occurred in patients admitted under General Paediatrics, (89 CDEs, 35.6%), Cardiology (59 CDEs, 23.6%) and Respiratory (38 CDEs, 15.2%).

Figure 2: Performance of maximum PEWS to predict CDE at 24, 12, 6 and 4 hours before event.

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Optimal cut-offs for sensitivity and specificity for the maximum proposed National PEWS at 24 and 12 hours prior to CDE was ≥6, and at 6 and 4 hours prior, was ≥5.

Conclusion All PEWS evaluated, including the National PEWS demonstrated excellent discrimination for CDEs. This single centre study supports the widespread roll out of proposed National PEWS, for predicting the occurrence of CDEs in hospitalised children, but further validation is required in other settings.

Aims Provision of paediatric Critical Care is divided into three levels: Critical Care Level 1 (CCL1) accounts for most District General Hospitals (DGHs), Critical Care Level 2 was previously defined as High Dependency Unit (HDU) care, and Critical Care Level 3 refers to hospitals with a Paediatric Intensive Care Unit (PICU).

Hospitals are allocated a level and are commissioned to care for patients who fulfil criteria in accordance with that level.

A retrospective audit was carried out at a CCL1 London DGH to identify the number of patients managed at the unit who qualified as requiring Critical Care Level 2 (CCL2) care between September 2019 and September 2020. Secondary outcomes looked at reasons for satisfying CCL2 criteria and duration of time cared for as a CCL2 patient.

Methods Data was collected through a variety of platforms: the Emergency Department database was searched to identify patients who required treatment for a prolonged period in the Resuscitation Room, and the ward matron’s list of CCL2 patients, ward handover lists and local Morbidity and Mortality meeting lists were reviewed.

CCL2 patients were identified based on the NHS England Service Specifications for Paediatric Critical Care. Physical patient records were requested and screened.

Results Over the 13 month period reviewed, 108 out of a total of 2338 ward admissions fulfilled CCL2 criteria. 79 of these (73%) occurred in period between November 2019 and February 2020. CCL2 patients therefore accounted for 4.6% of all admissions, rising to 8.9% (1 in 11) over the winter months.

The majority of patients were admitted for management of bronchiolitis and viral induced wheeze. The most common reason for fulfilling CCL2 criteria was requiring High Flow Oxygen Therapy for longer than 24 hours, requiring CPAP, or requiring an Aminophylline infusion for longer than 24 hours. Some patients required all three interventions. 12% of the total number of CCL2 patients were transferred to a higher-level unit; the remaining 88% were managed at the CCL1 DGH. Patients who qualified for CCL2 care were admitted for between one and nine days duration in the CCL1 hospital, amounting to a total length of stay for all CCL2 patients of 211 days.

Conclusion Critical Care Levels are in place to ensure patients are managed in an appropriate setting with appropriate availability of trained staff, medical equipment, and expertise. This shows that 88% of patients qualifying for higher-level care were managed in this CCL1 unit; the majority over the busy winter period when CCL2 and CCL3 units are saturated. This implies an argument for enhancing existing CCL1 services. Commissioned provision of infrastructure, training and support would help to facilitate effective and safe care of these patients within the CCL1 locality, where they commonly present and are managed. Meeting the needs of this patient population where it occurs will improve continuity of care for those local to CCL1 units, reduce the need for risky patient transfers, reduce costs within the network and, most importantly, have a considerable positive impact upon quality of care for these critically unwell patients.