days). The pre-test probability of a diagnosis of COVID-19 was 12.3% for the first radiograph, and 8.5% for the second radiograph.

On the initial chest radiograph the presence of consolidation was negatively predictive for a positive COVID-19 test (p = 0.03). No significant predictive value was identified for the presence of collapse, bronchial thickening, effusion or hyper-expansion. Assessment of consolidation broken down by laterality, confluence and zone did not result in a significant association with COVID-19 status (table 2). Diffuse consolidation (as opposed to patchy consolidation), lobar consolidation and upper zone consolidation was only seen in COVID-19 negative patients, but p values for these findings was non-significant. The second chest radiograph did not show any significant difference in any extracted finding between COVID-19 positive and negative patients.

**Conclusions** Chest X-ray findings in children with COVID-19 are non-specific and do not contribute to diagnostic evaluation. Given the relatively mild illness course in the majority of children with COVID-19, chest X-rays should only be undertaken when clinically indicated.

### British Association of General Paediatrics

**1703**

**MDT CLINIC AT CUH: A SUCCESSFUL CARE PATHWAY FOR CHILDREN WITH 22Q11.2 DELETION SYNDROME**

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**Background** 22q11.2 deletion syndrome is the most common microdeletion syndrome in the world, occurring in approximately 1:4000 live births. The clinical phenotype is variable and involves different Systems. Thus, the management of children with this syndrome requires a multidisciplinary approach and necessitates the care of various Specialists.

**Objectives** The Multidisciplinary Team (MDT) Clinic at Cambridge University Hospital (CUH), started in November 2016, is led by a team of Paediatric specialists, who follow the Max Appeal Consensus Document guidelines regarding the investigations and assessments required at different stages of the child development. The aim of this study was to analyse if attendance at the MDT Clinic at CUH improved the number of investigations and assessments a child received.

**Methods** This study compares the percentages of the investigations and assessments listed in the Max Appeal Consensus Document that were completed before being referred to the MDT Clinic and after the first encounter with the paediatricians at CUH. The data of 29 patients (age range: 2 months-17 years) who were seen in the clinic from November 2016 to January 2021 were analysed through the CUH informatics system, EPIC.

**Results** The results are presented in three sections: investigations, assessments and recommendations to the GP. The figures obtained show that, prior to attending the MDT clinic, none of the patients had a complete screen and an average of 53% of the investigations and 48% of the assessment were performed. Even though all the investigations and assessments listed in the Max Appeal Consensus Document were recommended by the MDT, the patients received an average of 93% of investigations and 83% of the assessments after the first visit. This shows an improvement of 40% and 35% respectively, as detailed in table 1a and table 1b.

The letters sent to the GP and local hospital after the visit at the MDT Clinic, gave recommendations for yearly assessments. The actions and analyses of the GP are reported in table 2. It is important to remark that 100% of the children received their vaccinations and approximately one third of the blood tests were arranged by the GP.

**Conclusions** The results highlight how the MDT succeeds in improving quality standards of care to the patients and helps the children and their families to have access to all the investigations and assessments recommended by the Max Appeal Consensus Document.

### British Association for Paediatric Nephrology

**1704**

**PATTERNS OF PRESENTATIONS AND OUTCOMES IN CHILDREN WITH C3 GLOMERULOPATHY: ASPECTS FROM A DEDICATED CLINIC AT GREAT ORMOND STREET HOSPITAL**

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10.1136/archdischild-2021-rcpch.805

**Background** C3 glomerulopathy in children is a rare disease with an incidence of 1–2 per 1,000,000 population and a has a high risk of progressing to end stage renal disease (ESRD). Cluster hierarchical analysis has recently shown that patients tend to fall into four major subgroups. Each
subgroup has their own different pathogenetic patterns and therefore may respond to anti-complement therapies differently. Current strategies involve treatment with RAAS blockade, immunosuppressive medication and complement inhibition, albeit with a lack of randomised controlled trials for any of the above.

**Objectives**
The objective of establishing this clinic, designed to assess and manage children with C3 glomerulopathy, is to evaluate the efficacy of a harmonised treatment approach. Thereafter, attempt to define management therapies and review who may benefit from enrolment in clinical trials with complement inhibitors.

**Methods**
Sixteen children with the diagnosis of C3 glomerulopathy were followed in the last two years at GOSH. Clinical, histological characteristics, estimated glomerular filtration rate (eGFR), albuminuria, serum C3 and C4, genetic and biochemical analysis were assessed before and after treatment.

**Results**
At onset, the median [IQR] age was 9.5 [8.0–11.5] years, with an eGFR of 108 [88–129] mL/min/1.73m², serum albumin of 26 [23–35] g/L and urine albumin:creatinine ratio of 616 [262–825] mg/mmol. All patients had microhaematuria and five presented with macrohaematuria. Oedema was present in 69%. C3/C4 levels were low in 93%/37% of the patients and C3 nephritic factor was positive in four cases (25%). The majority (15/16) of patients demonstrated immune complex glomerulonephritis with C3 predominance associated with IgG, C1q and IgM positivity. Electron microscopy revealed that only 3 cases had intra-membranous lesions.

Twelve were treated with oral prednisolone, five of whom also received mycophenolate mofetil (MMF) and one with cyclophosphamide.

At twelve months of follow-up, all patients were on ACE inhibitors (ACEI) with improvement of albuminuria in all, except one (table 1). Six patients continue with prednisolone, eight with MMF and two commenced Tacrolimus (one due side effects of MMF and other due to renal impairment).

At present, three patients are in remission, two who were treated with immunosuppressive medication, the third was only treated with ACEI and had spontaneous recovery.

One patient is in stage 3 CKD and two patients are in ESRD. These latter two were treated with Rituximab without success.

**Abstract 1704 Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Serum Albumin (g/L)</th>
<th>eGFR (ml/min/1.73m²)</th>
<th>Urine Albumin: Creatinine (mg/mmol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 6 month follow up</td>
<td>-</td>
<td>116 [96–140], 153 [88–331], 15</td>
<td></td>
</tr>
<tr>
<td>(Median[IQR], N⁰)</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At 12 month follow up</td>
<td>-</td>
<td>114 [102–128], 155 [80–181], 11</td>
<td></td>
</tr>
<tr>
<td>(Median[IQR], N⁰)</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most recent follow up</td>
<td>37 [32–41], 112 [96–133], 69 [14–315], 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Median[IQR], N⁰)</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Table of outcomes: *IQR = interquartile range, N⁰=number of values

**Conclusions**
Establishing this clinic, learning to identify which of these clusters the patients fall into and collating further data will help predict treatment response and therefore create more personalised management plans and guide prognosis.

**REFERENCE**


**Association of Paediatric Emergency Medicine**

**1705 THE IMPLEMENTATION OF PEDIATRIC EARLY WARNING SYSTEM IN SIDRA PEDIATRIC EMERGENCY, QATAR**

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**10.1136/archdischild-2021-rcpch.806**

**Background**
Establishing paediatric early warning system in a paediatric emergency department is a complex process and more so with COVID-19 pandemic. PUMA (PEWS Utilisation & Morality Avoidance) is a qualitative system assessment survey tool which assess the strengths and weaknesses of the patient care safety processes and systems within a department. This model draws together evidence from two theoretically informed systematic reviews.1 2

**Objectives**
To establish a Paediatric early warning system in the Sidra Paediatric Emergency Department

**Methods**
The Sidra Medicine ED Quality group surveyed online 200 staff in the department (physicians/nursing team) focussing on processes of monitoring patients and documentation, communication amongst the team and parents, staff empowerment, situational awareness, escalation processes and response to deteriorating child in the three broad domains of Detect, Prepare, and Act with further seven smaller domains (monitor, record, interpret, review, prepare, escalate and evaluate) (figure 1). Survey analysis enabled us to review our current practice, identify areas that are working well, and areas for improvement.

**Results**
The online survey platform helped us to achieve 85% return rate and to identify seven areas for improvement in our system. The spider diagram (Figure 2) illustrates the areas of strength and weakness in the seven domains of Detect, Prepare, and Act. We collaborated with Cerner team, created automatic documentation of vital signs from triage and treatment areas to patient Electronic Medical Record by associating patient’s cardiac monitors to reduce manual errors and for the timely vitals monitoring. ‘Back to Basics Training’, a one day refresher course for nursing team has been conducted. A Senior Nurse as a watch in the triage and treatment area identified children at high risk of deterioration. A Pediatric ED Situational Awareness Tool (PEDSAT) was developed locally and is in trial in the department to help manage sick children effectively.

**Conclusions**
PUMA, a novel system assessment tool empowered our emergency department to tailor a quality program with an aim to deliver effective and efficient patient care.

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