over the same time period the following year and we have made changes to the proforma based on these results, which we will continue to re-assess, and further improve.

Results Between 2017 and 2018 we saw a 60% increase in numbers of children attending ED with asthma. We were initially poor at recording patient/carer smoking status with this being done in 23% of patients. Following proforma introduction, this increased to 51%. The objective assessment of chronic severity of asthma also improved, from 67% having this documented in 2017 to 99% in 2018. However, we remained poor at documenting assessment of inhaler technique, recording this in only 23% of patients in 2017 and 13% in 2018. Documentation of follow up plans was also poor and did not improve with proforma introduction. We also saw significant changes in practice; new preventative therapies were introduced in 2% of patients in 2017, but 14% in 2018.

Conclusion We found that by designing a proforma with specific prompts we could affect what questions people asked, long-term management and documentation. This worked well for prompts we included such as smoking status and objective assessment of severity, though it did not work for other key points. We have now re-designed the proforma which is rolling out alongside education sessions. This includes a revised discharge checklist highlighting key care standards. We have included information to signpost parents/carers to smoking cessation services and flowcharts to ensure correct follow up is arranged. We have attempted to shift the approach of clinicians from treating just an exacerbation, to thinking about treating asthma as a chronic condition.

A NEW SEPSIS TOOL: IMPROVING THE MANAGEMENT OF CHILDREN WITH SUSPECTED SEPSIS IN OUR EMERGENCY DEPARTMENT, WITH AN UNEXPECTED BONUS

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Aim Sepsis is a leading cause of morbidity and mortality in children. Early recognition and appropriate management can save lives.

With on-going staff cover challenges in our busy District General Hospital we wanted to implement sustainable changes to improve early recognition and prompt senior review and delivery of antibiotics to potentially septic children in the Emergency Department.

Method Following focus groups with key stakeholders and the multidisciplinary team (MDT), a sepsis triage tool based on the Wessex Paediatric Sepsis Tool was introduced to enable nurses to screen all children presenting with ‘illnesses’. Retrospective analysis of ED data was performed before and after implementation. Three mini PDSA cycles helped us improve the tool, increase the MDT’s engagement and make its continued use sustainable.

Results Focus groups suggested that the ED team found the tool easy to use and that it resulted in early review of children identified as potentially septic. Promptly amending the tool in response to feedback anecdotally helped keep staff engaged.

The pre-implementation audit undertaken in January 2019 screened 368 children who presented to the ED with an illness. Post-implementation, 300 children were screened. The time from arrival to a senior being notified of a potentially septic child who met the criteria for triggering the tool improved from 53 minutes to 19 minutes, while the time to senior review decreased to 2 hours 17 minutes, from 4 hours 29 minutes. Senior review of potentially septic children increased from 50% to 85%.

Conclusion We achieved improvements in key times in the patient’s journey, which could lead to improvement in patient flow in paediatric ED and reduced time to antibiotics. Implementation of this tool also encouraged regular education sessions on sepsis for the MDT.

Importantly, staff feedback through PDSA cycles has also opened other doors. It led to the conversion of two ED cubicles into paediatric critical care bays to facilitate rapid senior review, shorten the time taken to give antibiotics and improve patient flow in ED for other critically unwell children.

Social Deprivation and Upper Respiratory Tract Infection in the North East

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Aims This project aimed to identify a relationship between social deprivation and patients presenting to Paediatric A&E with upper respiratory tract infection (URTII) in [region]. It also aimed to analyse the geographic spread of URTI patients presenting to Paediatric A&E in the North East.

Methods This was a retrospective study using data from the European MOFICHE and PERFORM study databases. The postcodes of patients presenting to Great North Children’s Hospital Paediatric A&E with a working diagnosis of URTI (n=1685) between April 2017 and March 2018 allowed classification of patients into Index of Multiple Deprivation (IMD) deciles using the English indices of deprivation 2015 tool. Individual patient postcodes were colour-coded by deprivation decile and pinned onto a visual map using the My Maps tool on Google Maps.

Results 58.4% of URTI patients in Paediatric A&E came from the most deprived households (IMD deciles 1 – 3), 15.7% from the least deprived households (IMD deciles 8 – 10) and 25.9% from households in between (IMD deciles 4 – 7). Whilst there was a general trend of decreasing patient presentation with decreasing levels of deprivation, there was a slight increase in patients in IMD deciles 9 and 10 (see table 1).

<table>
<thead>
<tr>
<th>IMD Deciles</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of URTI Patients Presenting to Paediatric A&amp;E by IMD Decile</td>
<td>32.5</td>
<td>14.7</td>
<td>11.2</td>
<td>10.0</td>
<td>6.7</td>
<td>5.5</td>
<td>3.8</td>
<td>3.6</td>
<td>4.8</td>
<td>7.3</td>
</tr>
</tbody>
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Abstracts