Centre and occurred in older infants (average age 1.3 years), clinical severity was not high and the majority were discharged within 48 hours. There was another spike of bronchiolitis cases in October 2021 exceeding the numbers in October 2019. However, the expected spike of bronchiolitis cases did not occur in November and December 2021 (children presenting with bronchiolitis to the emergency department were 32% lesser compared to November and December of 2019, 371 versus 548). The number of admissions in November and December 2021 was 37% lesser when compared to a similar period in 2019, (112 versus 178).

Conclusion It is likely that use of NPIs and lockdown was associated with an overall reduction in respiratory infections and an unprecedented decline in emergency department attendances and admissions for bronchiolitis in the winter of 2020-2021. Case numbers then surged in an out of season pattern from June 2021 onwards.

The reason for the absence of the expected winter spike in 2021/2022 is not clear. It is possible that many children were infected in the summer and the susceptible pool of children was reduced, perhaps that is why we did not see a large winter peak in this centre. NPIs such as hand-hygiene and facemasks could be encouraged in winter in the future to protect infants and adults and reduce the pressure on emergency departments.

Aims The widespread usage of non-pharmaceutical interventions is associated with a change in the non-COVID-19 related respiratory infections in children. These measures seem to affect viruses in different ways. Laboratory confirmed cases of rhinovirus has shown a rise after children returned to school in September 2020 and September 2021. Paediatric emergency departments (PED) see an increase in asthma and viral induced wheeze (VIW) every year, thought to be driven by rhinovirus. Exposure to allergens and stress are also thought to be contributory factors. An unprecedented increase in children presenting with asthma and VIW was noted from September to November 2021 in this trust. This was notably different from the seasonal spike that normally appears when schools reopen, with increase in both numbers and acuity.

Methods The data of PED attendances and admissions with asthma/VIW from March 2020 to December 2021 was analysed. The data was extracted from the electronic database and compared with a similar time period in 2019.

Results The PED in the trust receives 3300 attendances of paediatric asthma and VIW annually with 780 hospitalisations. There was a dramatic (90%) reduction in emergency department attendances for children with asthma and VIW from the time of the first lockdown in March 2020 to August 2020 with fewer severe asthma presentations. However, the seasonal spike in asthma attacks which happens yearly when children return to school in September did happen in 2020. With the announcement of the second lockdown in December 2020, asthma/VIW attendances dropped by 84-91% from December 2020 to March 2021.

An unusual increase in the number of children presenting to PED with asthma and VIW was observed in the trust from September to November 2021 (1370), a 35% increase compared to the same time period in 2019 (887) and 53% increase compared to the same time period in 2020 (633). (Figure 1) There was also a significant increase in the number of children who were admitted with asthma and viral induced wheeze from September to November 2021 (316) compared to the same time period in 2020 (217) and 2019 (234). Increase in acuity of presentation was noted in the children who presented with asthma and viral induced wheeze from September to November 2021.

Conclusion The COVID-19 pandemic has resulted in change in the infectious rhythm of the seasonal viruses causing unexpected outbreaks. Whilst an unseasonal RSV outbreak was predicted, the sudden increase in the number and severity of illness in children presenting with asthma and viral induced wheeze from September to November 2021 put an unprecedented pressure on the emergency department. It may be worthwhile to study the epidemiology of the respiratory viruses from the evolving patterns in the COVID-19 pandemic to help in predicting future outbreaks.

Aims A huddle is defined as a team gathering to strategise. In a clinical setting, this is a short, scheduled and structured meeting to ensure patient safety. It is a rare but devastating presentation where a toddler is brought into Accident & Emergency (A&E) peri-arrest during handover. Despite double staff numbers, this ensues in semi-organised chaos.

The Resuscitation Council UK guidelines state ‘every hospital should have a resuscitation team’ that ‘meets at the beginning of every shift’. Some tertiary paediatric centres have designated personnel attending arrests within the hospital. Learning from our experiences and other service models during the peak of the COVID-19 pandemic, we aimed to develop a Cardiac Arrest Huddle to prepare for the unexpected.

Methods The Cardiac Arrest Huddle is a one-page laminated document placed in Paediatric A&E. After handover, the Paediatric Registrar allocates team members to ‘Leader’, ‘Airway & Breathing’, ‘Circulation & Access’, ‘Monitor & Drugs’, ‘Chest Compressions’ and ‘Scribe’ roles. The Paediatric Registrar is recommended to be ‘Leader’ promoting essential leadership skills. The Nurse-in-Charge allocates 1-2 nurses to...
‘Monitor & Drugs’. Paediatric SHOs, GP and A&E trainees are encouraged to rotate through the remainder of roles, building confidence in each. This ensures every member is aware of their role and are known personally by name, allowing for enhanced communication vital in increasing efficiency. Furthermore, it highlights the skill mix of teams, which enables appropriate allocations and also identifies trainees and nurses who require refresher training.

Results A trainee survey at our District General Hospital (DGH) prior to implementation showed 83% were involved in a cardiac arrest and 69% had not always known their roles. 92% of trainees felt their confidence would improve with pre-allocated roles and 100% felt teamwork would improve.

Our team implemented the Cardiac Arrest Huddle in January 2021. Trainees were given formal verbal and written information prior. A weekly randomised audit was undertaken to evaluate success of incorporation, which showed 56% to 78% of the various roles had been allocated on shifts.

Trainees’ opinions were re-surveyed after six months. 100% either ‘always’ or on ‘most occasions’ knew their role during a resuscitation. 100% felt the Cardiac Arrest Huddles improved teamwork, 71% felt it improved confidence, 80% felt it saved time before the ‘2222’ call was made, and 100% felt pre-allocation of roles increased efficiency. The feedback obtained was positive; trainees felt they had greater situational awareness and were more mentally prepared for their actions. Some difficulties included the variation in A&E shift patterns resulting in occasional insufficient staff. In addition, at times allocated nursing staff were unavailable resulting in a hurried replacement.

On a broader scale, the Cardiac Arrest Huddle presented multiple training opportunities; junior trainees recapped their advanced resuscitation and senior trainees gained supervised leadership opportunities. Trainees requiring additional experience had training run by the resuscitation officers.

Conclusion This Cardiac Arrest Huddle in a DGH has proved successful across multiple levels from clinical and patient safety to education and training. It prompts us to recommend that other DGHs may benefit from adopting a similar model.

Investigating prescribing errors and clinician grade highlight the need to improve safe prescribing, which is a priority in many departments. This study highlights the importance of following guidelines and ensuring all healthcare professionals are aware of their role.

Aims Prescribing and managing acute Paediatric presentations in A&E varies on experience and confidence of clinicians, availability of trained nursing staff and using correct guidelines. Coupled with recent pressures from Covid-19, this can increase prescribing errors and incorrect management of patients. This audit investigated prescribing errors against the Trust’s latest Acute Asthma guidelines for patients aged five and above in Scarborough Hospital’s A&E department to determine levels of safe and correct prescribing in severe/life threatening asthma.

Methods Data was interrogated from A&E admissions between 1st September to 31st December 2021, for patients treated for Severe/Life Threatening Asthma, or allergic reactions needing nebulisers. Patients with viral wheeze, no nebuliser prescriptions on admission (CAS) cards, and presenting to A&E as mild/moderate asthma but were severe/life-threatening in ambulance were excluded. 47 patients were produced, and 21 were used after matching the Trust’s Acute Asthma guideline (figure 1) [1].

Results Findings show almost every patient requiring nebulisers received them; however there were fewer than expected patients receiving correctly prescribed nebulisers that met the guidelines (figure 2). This appeared to be due to smaller than required nebuliser doses or being transferred when they required a further set of nebulisers.

Further analysis identified when a Paediatric ED nurse was on shift there were substantially more correct prescriptions (figure 2). This indicates the importance of having Paediatric trained nurses in A&E departments to help cross-check prescriptions. The 19% of patients where Paediatric ED nurses were present who had incorrect prescriptions was from smaller prescribed doses of nebulisers than required.

Investigating prescribing errors and clinician grade highlighted there were more common errors among Registrar doctors, and fewer among Foundation Doctors, ACCS and GP trainees (figure 3). These again account for smaller nebuliser doses being prescribed for five year old patients, possibly from following the 2019 guidelines stating 2.5mg Salbutamol nebulisers were for two to five year olds [2].

Finally some patients failing the guidelines highlighted concerns, mainly in the delay of giving nebulisers in an adequate timeframe. These included initial nebulisers being prescribed but no follow up nebulisers being given quick enough.

Conclusion This Audit shows the importance of having confident and experienced Paediatric trained nurses in A&E, as well as showing that the presence of Paediatric ED nurses improves safe prescribing. It also highlights difficulties in keeping up-to-date with latest guidelines as registrar grades showed more deviation away from current guidelines than junior staff, showing their reliance on previous experience. Follow up will include auditing the department while incorporating a modern prototype laminated flipbook for acute/emergency Paediatric presentations following standardised WETFLAG numbers, conditions, and management requirements all by age and cross checked by Paediatric ED nurses to improve confidence and prescribing in A&E staff as well as teaching sessions for new starters to the department highlighting where to find departmental guidelines.

[1] Protocol for the Management of Acute Asthma in Children 5 years and over, Authors Felicity Dick, Paediatric ED Sister & Jen Brownbridge, Paediatric Respiratory Nurse