Background The year 2020 saw unparalleled global health care service upheaval in response to the CoVID-19 pandemic. Insights into the European Paediatric Emergency Department (PED) approach to organising health care for children with acute illness in response to infectious pandemics and global disasters are lacking.

Objectives This study aimed to understand the types of changes in PED service structure and care delivery which were implemented in response to the first wave of CoVID-19.

Methods This multinational, cross sectional European survey was distributed online via the Research Electronic Data Capture (REDCap) platform as part of the EPISODES (the epidemiology, severity and outcomes of children presenting to emergency departments across Europe during the initial wave of the SARS-COV-2 pandemic) study.

The survey explored baseline hospital demographics and pre and during CoVID-19 changes; focussing predominantly on service provision and referral pathways.

Results There were 39 study sites in 18 countries; 97% (n=38) of sites remained open during the pandemic. There were 6 UK based sites in 5 cities, the largest represented country within the survey. The capacity of 18/28 (68%) short-stay units (SSU) decreased, in contrast 2 units increased their capacity. All UK sites had SSUs with 5 (83%) reporting decreased or no availability during the pandemic period. As a result of restructuring of local healthcare services 12/39 (31%) sites acted as referral units from other hospitals which treated paediatric patients in non-Covid times.

There was minimal change to the availability of consultant telephone advice services, direct or indirect consultant supervision or responsible specialists within the emergency departments. There was an overall decrease of 8% (n=3) in redirection of children with underlying co-morbidities away from ED during the pandemic.

The number of changes implemented in the department was not directly related to the peak 14 day incidence of SARS-CoV-2 reported nationally during the first wave.

Conclusions Overall, there was minimal change to service organisation or delivery across PEDs during the first wave of the CoVID-19 pandemic. Combining the small changes made by some and learning from large scale changes adopted by a few may be essential in future disaster management.

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A RETROSPECTIVE STUDY EXAMINING THE CLINICAL SIGNIFICANCE OF TESTING RESPIRATORY PANELS IN CHILDREN WHO PRESENTED TO THE PEDIATRIC SERVICES IN 2019

Lulwa Almannaei, Ebrahim Alsaadoon, Sultan Albinali, Mohamed Taha, Imelda Lambert.
King Hamad University Hospital, Bahrain

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Background Respiratory tract infections are a leading cause of hospital visits in the pediatric population and carry significant associated morbidity and mortality in this population. They also may pose a challenge to treating physicians, in terms of differentiating viral from bacterial and hence subsequent treatment. The introduction of respiratory panel testing has been said to guide clinicians in the overall management of patients.

Objectives In this study, we examine the use of respiratory panels in our hospital and the impact it had on our clinical practice.

Methods We conducted a retrospective study examining all respiratory panels carried out in our hospital between February 2019 and December 2019 on pediatric patients (all children below 14 years of age). All patients were consented on admission for use of their clinical and demographic information on admission while maintaining confidentiality. Patients included were those who had symptoms indicative of respiratory infections who presented acutely, including those with chronic respiratory conditions.

A total of 188 respiratory panel results were obtained along with collected patient data. These were analyzed using SPSS V. 25.0 to get the below mentioned results.

Results The majority (76.6%) of our patients fell within the age group of less than 3 years with 59% of total population being males. The majority (80.9%) had mild clinical severity score.

The most common pathogen that was detected on the respiratory panel was Human Rhinovirus, followed by the Influenza viruses. Only 4 cases were positive for bacterial pathogens (2 *Mycoplasma pneumoniae*, 1 *Bordetella pertussis* and 1 *Chlamydia Pneumoniae*), which accounts for 2.1% of all panels analyzed.

The significance of respiratory panels in influencing treatment were analyzed in the forms of change of management plans before and after results of respiratory panels. This was observed in 14.4% of patients who were not on any empiric medication and then based on panel results were started on medications, as well as 11.7% who were on medications already, and the medications were altered based on the result of the panel (Chi square $P=0.057$). This was mainly seen with cases of H1N1 patients and to a lesser extent, mycoplasma pneumonia.

Conclusions The use of respiratory panels in our hospital had little impact on patient care and management. The main organisms that influenced clinician decision in treatment were Influenza viruses and bacterial organisms (*Mycoplasma*, *Chlamydia* and *Pertussis*). Other than that, the use of clinical judgment proved more beneficial. We recommend use of specific testing for these organisms rather than the whole panel as case to case bases, which would be more cost-effective and consistent with patient management.