

| Infection Prevention & Control risks | Environmental preparedness.

**Conclusion** These recent exercises have demonstrated the potential applications of simulation to support process improvement. Beyond the Pandemic, we aim to continue to deliver Systems Safety Simulation exercises to help make our clinical systems and spaces safer for patients and the teams who care for them.

105

#### THE USE OF A HIGH FIDELITY SIMULATOR TO FACILITATE COACHING IN THE IMPLEMENTATION AND MANUAL TITRATION OF NON-INVASIVE VENTILATION (NIV) DURING A CARDIORESPIRATORY SLEEP STUDY IN A CONTROLLED AND SAFE ENVIRONMENT

Gabrielle Simpson, Matthew Davies. *Great Ormond Street Hospital*

10.1136/archdischild-2020-gosh.105

**Introduction** The aim of this programme was to pilot a simulation to help develop practitioners' confidence in decision making and implementation of NIV in set scenarios whilst having the support of senior practitioners' in debrief.

**Methods** Using a high fidelity simulator candidates were exposed to an immersive simulation which accurately obtained physiological data within the sleep recording system as expected in clinical practice. The level of immersion was hugely increased with the utilisation of Simulation Technicians' knowledge in the capabilities of the high fidelity manikin, together with subject matters and experts enabling an authentic environment. Trialling this over a 6 month period was required to create complex paediatric respiratory sleep patterns which are commonly seen in clinical practice when CYP are treated with NIV, such as apnoeas, hypopnoeas and changes in gas exchange parameters including oxygen saturations and carbon dioxide measurements.

Two half day sessions were built around 2–3 scenarios allowing for substantial debrief to identify any human factors or gaps in clinical knowledge. Further, a pre and post confidence survey was conducted.

**Results** As previously discussed, a pre and post confidence survey was conducted. The questions were focused and specific to match the learning objectives and the needs identified in the initial educational needs analysis. The overall increase in confidence averaged 2.1 and all candidates discussed the direct impact this would have on their clinical practice.

**Discussion** The use of simulation for paediatric sleep studies with manual titration of ventilation has not been undertaken before in the UK. The pilot study identified the need to progressively increase the complexities of each scenario, whereby candidates feel comfortable to make appropriate clinical decisions in a safe controlled environment. Furthermore, it highlighted a necessity for the manufacturers to develop instant paediatric respiratory pattern and gas exchange alteration packages within the manikin software.

106

#### SUPPORT FOR INTERNATIONAL MEDICAL GRADUATES (IMG) IN PANDEMIC AT GREAT ORMOND STREET HOSPITAL (GOSH)

Ashwin Pandey, Pinki Munot, Daljit Hothi. *Great Ormond Street Hospital*

10.1136/archdischild-2020-gosh.106

**Background** They are overseas trained doctors. In 2013 GMC declared that 37% of medical workforce in the UK are overseas trained. GOSH has the highest number of overseas trainee in the UK. In June 2020 we had 116 IMGs. Key challenges faced while settling are knowing the NHS, Governance, communication skills and cultural expectation in the UK. PGME at GOSH works with IMGs to overcome these challenges.

**The Pandemic** Due to COVID 19 outbreak, IMGs faced many new challenges. With most IMG's living away from their families, major concerns during the pandemic were sickness, social support, personal transport, accommodation, health of family members back home, travel restrictions, financial difficulty, visa renewal and many more. A targeted approach was devised to resolve the day by day emerging unique challenges. IMG support team made assessment of situation at the start of pandemic and existing IMG specific social media platforms were utilized in gathering information and providing customized support. Early recognition of IMGs as vulnerable group and establishing good communication channel by including IMG members in bronze meetings were the major steps that helped us to provide essential support.

Support GOSH provided – arranging accommodation for isolation, care during sickness, supply of food, emotional support for the sick ones, nursery support letters, staff testing, liaison with HR and pensions, liaising with home department to resolve visa renewal issues, helping in visa extension, training and support to the new recruits, raising the concerns to medical bodies like RCPCH and BMA.

**Conclusion** It was possible to address these issues in a timely fashion as GOSH had a pre-existing robust IMG support team. Ongoing challenges like travel to see family abroad, quarantines in both countries, impact on training still remains to be addressed and requires continued work towards improving the stay of IMG in the UK.

107

#### THE EXTENDED SISTRUNK PROCEDURE FOR THYROGLOSSAL DUCT CYSTS: A REVIEW OF 168 CASES

<sup>1</sup>Nikita Mehtani, <sup>2</sup>Claire Frauenfelder, <sup>2</sup>James Rudd, <sup>2</sup>Benjamin Hartley. <sup>1</sup>Imperial College Healthcare NHS Trust; <sup>2</sup>Great Ormond Street Hospital

10.1136/archdischild-2020-gosh.107

**Objectives** Thyroglossal duct cysts are the most common paediatric midline neck mass. Recurrence reported in literature following classical Sistrunk's operation remains a problem for 10% of patients, up-to 20% if there has been previous surgery.

We have previously published a short series advocating the extended Sistrunk's procedure: comprehensive removal of a block of midline infrahyoid tissue to the level of the thyroid isthmus, incorporating the tract remnant, medial adjacent strap muscles, mid-portion of the hyoid, and superiorly to the submucosal tongue base. We present a large, patient series from a single institution to describe outcomes of this procedure which we perform routinely for thyroglossal duct cyst excision.

**Method** A retrospective, single centre case series is described, analysing clinical outcomes of patients treated with an extended Sistrunk's procedure between 2003 – 2020.

**Results** 168 patients underwent an extended Sistrunk's procedure during the study period. 32 patients were referred for