

# COVID-19 Airway and Equipment 'Grab' Boxes at North Devon District Hospital

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in partnership with

## Introduction

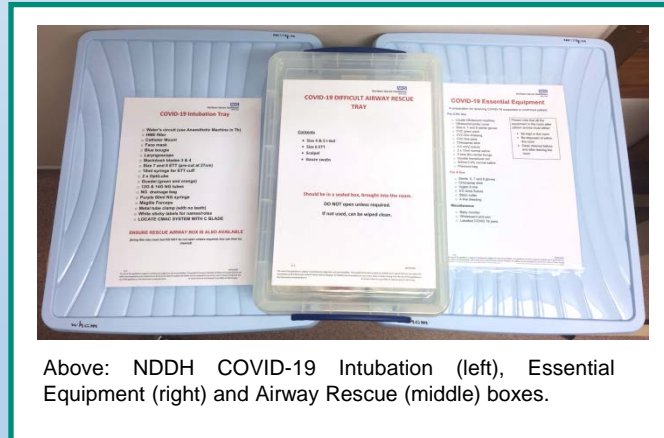
In order to expand critical care capacity during the COVID-19 pandemic, many hospitals underwent significant reorganisation of staff, space and 'stuff'. As a result, many intubating teams found themselves working in unfamiliar environments. Access to equipment also became more regulated for infection control and supply reasons. In line with joint national guidelines<sup>1</sup>, at North Devon District Hospital (NDDH) we created designated COVID-19 'Grab' Boxes containing essential intubation, lines and difficult airway equipment.

## Methods

In March 2020 we introduced 3 transparent plastic boxes to intubating areas in ICU, Theatres, Recovery and the Emergency Department (ED). Each box had a laminated list of contents on the lid.

The first box contained essential equipment for intubating a COVID-19 patient as per national guidelines, except for a videolaryngoscope blade and screen due to availability. This was listed on the box lid as a reminder.

The second box contained essential equipment for inserting a central and arterial line (except for the ultrasound machine which was listed on the box lid).



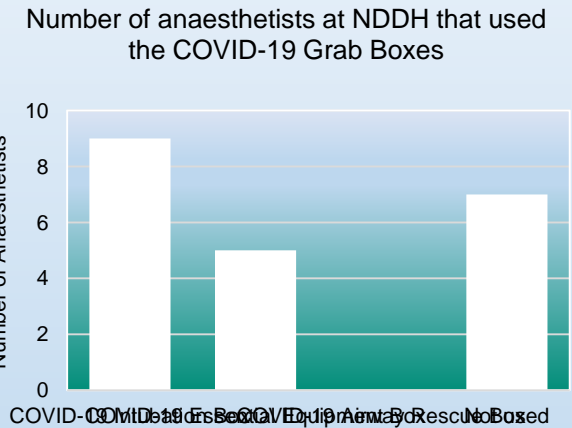
Above: NDDH COVID-19 Intubation (left), Essential Equipment (right) and Airway Rescue (middle) boxes.

The third box contained essential difficult airway equipment i.e. size 4 and 5 igels, size 6 endotracheal tube, scalpel and gauze (bougie already in first box).

If unopened, the boxes could simply be wiped clean. If opened, equipment would be appropriately disposed of or cleaned and boxes restocked. In July we sent out an online feedback questionnaire to all the anaesthetists working at NDDH about the COVID-19 Grab Boxes.

## Results

All 15 respondents had been involved with intubations with COVID-19 precautions and 9 had used the COVID-19 Grab Boxes. The Intubation Box had been used by 9 anaesthetists, the Essential Equipment Box by 5 anaesthetists and no one had needed to use the Airway Rescue Box. 7 anaesthetists had used the boxes in Theatres, 6 had used them in ICU, 2 had used them in Recovery and no one used the boxes in ED. 100% of respondents said they would like the boxes to be available for COVID-19 patients in the future.



## Discussion

The COVID-19 Grab Boxes helped intubating teams at NDDH access essential equipment quickly at a time when there was significant reorganisation of staff, clinical spaces, and equipment. Even as we become more familiar with these new ways of working, there continues to be a demand for COVID-19 Grab Boxes. This is possibly because the boxes reduce cognitive load, allowing intubating teams to focus on following infection control precautions and keeping themselves and patients safe.

## References

1. Consensus guidelines for managing the airway in patients with COVID-19: Guidelines from the Difficult Airway Society, the Association of Anaesthetists, the Intensive Care Society, the Faculty of Intensive Care Medicine and the Royal College of Anaesthetists, *Anaesthesia*.