

# The Impact of COVID-19 on Resident Self-Reported Procedures

Megan Bivins MD, Robert Garner MD, Daniel Mulhall MD, Angela Etzenhouser MD

Children's Mercy Kansas City, Kansas City, Missouri

## Background

The novel coronavirus (COVID-19) pandemic has created unprecedented challenges in healthcare, including barriers pertaining to trainee education and graduate medical education (GME). Restrictions surrounding the number of healthcare providers entering respiratory patient rooms (including resident physicians), resource constraints, social distancing, and suspension or limitation of in-person simulation training, has resulted in a reduction of procedures available to residents; however, the expectation remains that all graduating residents are proficient in performing ACGME-required procedures independently.

## Objective

Identify gaps in resident training during the COVID-19 pandemic and ensure competency with ACGME-required procedures prior to graduation from residency.

## Methods

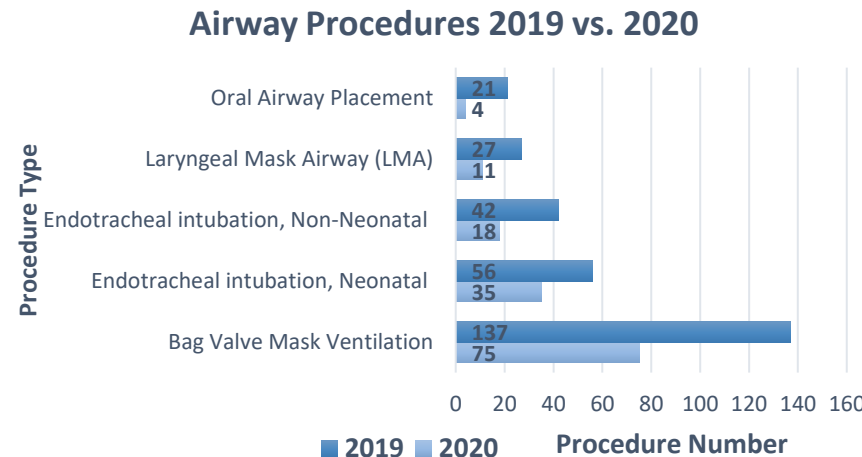
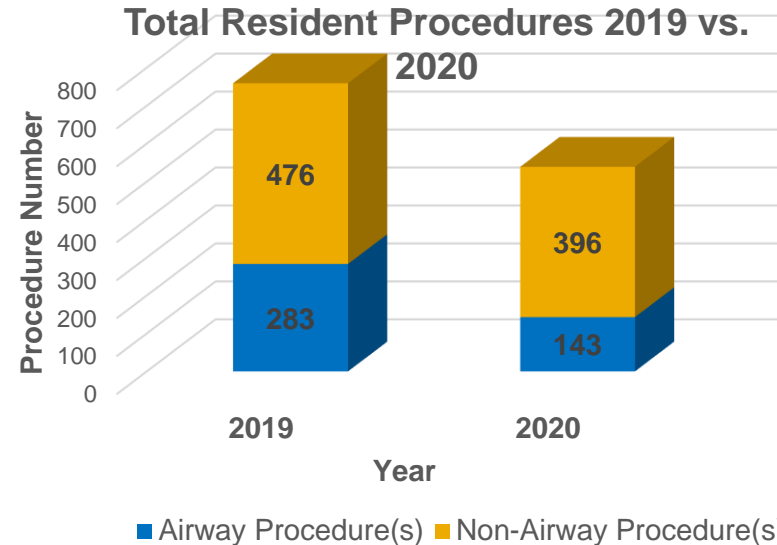
- Retrospective analysis of self-reported procedures for all residents within the Children's Mercy Kansas City pediatric residency program were compiled from March 1<sup>st</sup>-June 30<sup>th</sup>, 2020 (amid the COVID-19 pandemic)
- These data were compared with the same dates from the year prior (pre-pandemic)

## Results

- Procedure reports were available for 101 residents for both the 2019 and 2020 academic years
- Specifically, the mean number of airway procedures (including endotracheal intubation, bag valve mask, laryngeal mask airway, and oral airway placement) were reduced by 49.5% in 2020
- Neonatal endotracheal intubation procedures were reduced by 37.5% whereas oral airway placement decreased by 80.9%

## Implications

These data indicate that trainees may require alternate opportunities, such as more regular simulation exercises, to attain adequate procedural experience prior to autonomous practice.



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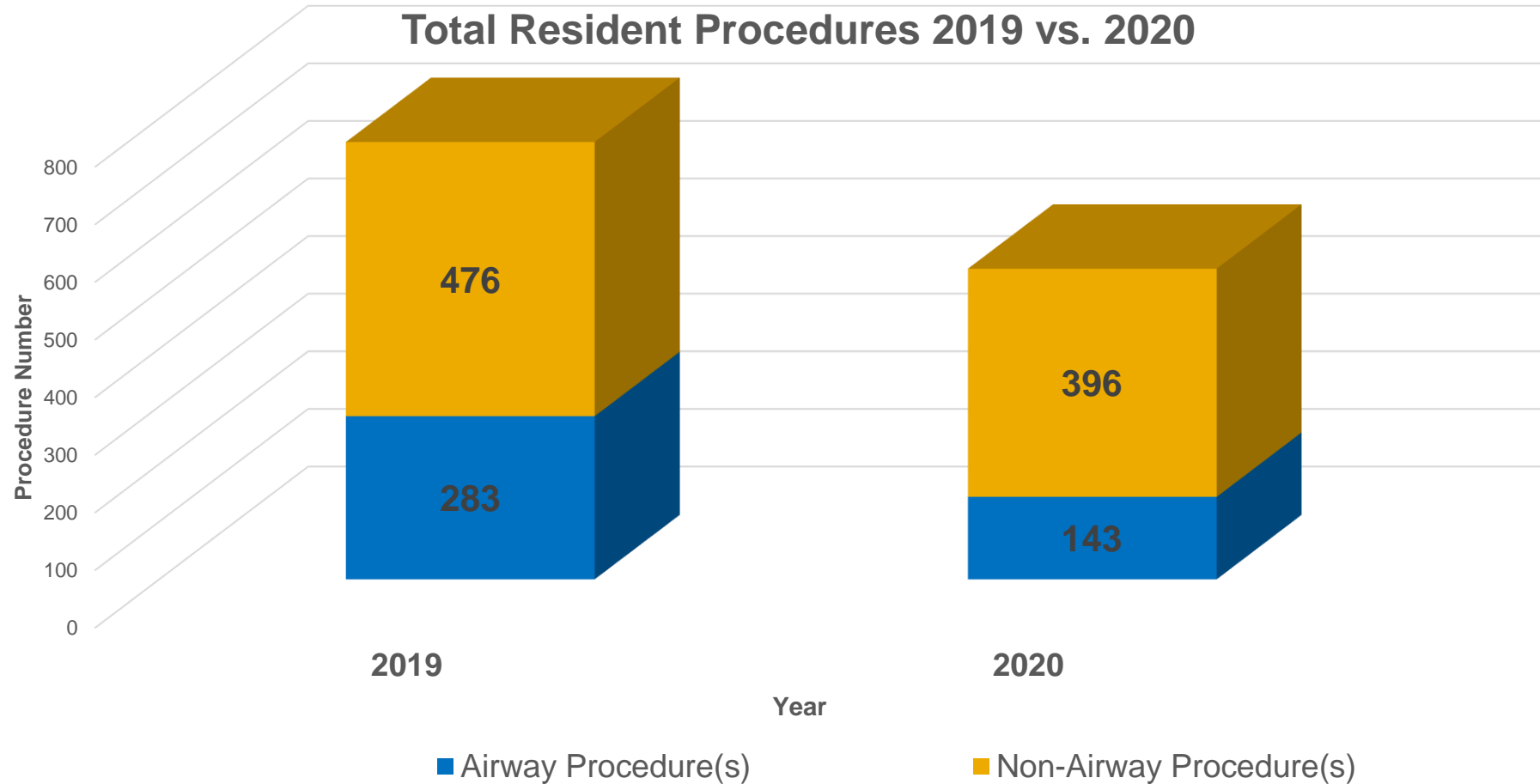
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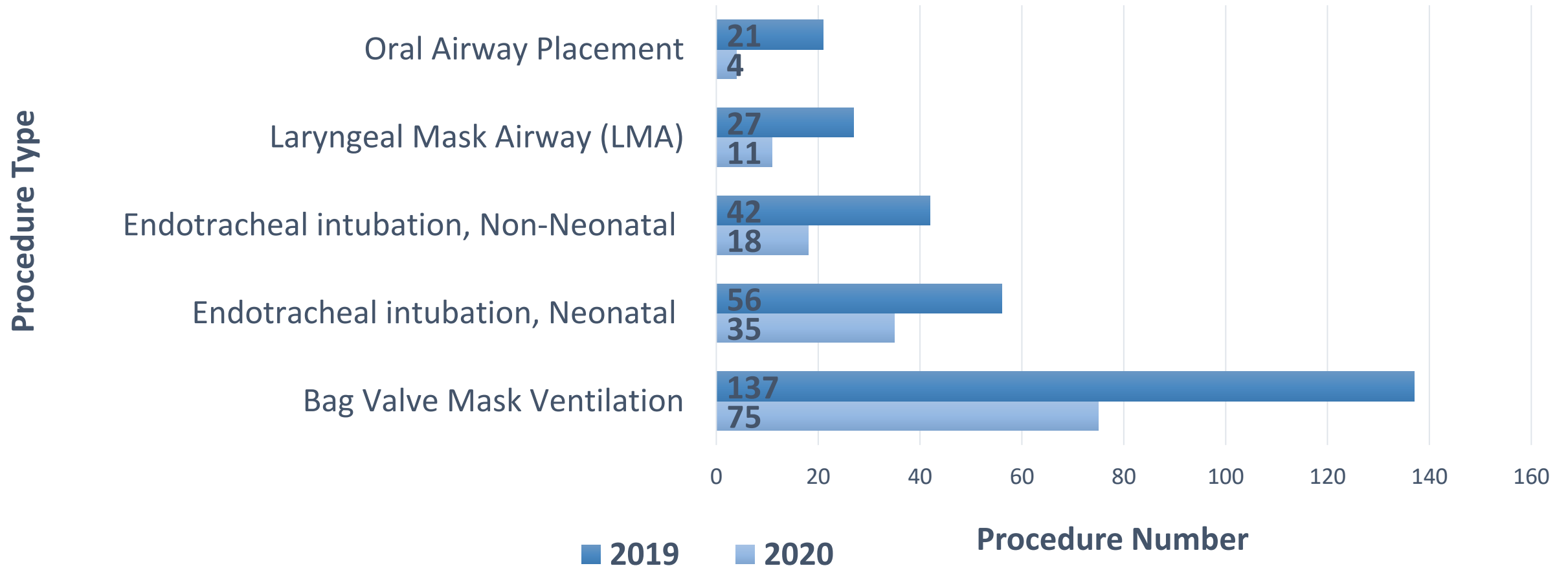
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## Airway Procedures 2019 vs. 2020



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