DEVELOPMENT AND IMPLEMENTATION OF A COVID-19 SPECIFIC PERIOPERATIVE WORKFLOW FOR ANESTHESIA PROVIDERS
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What’s the Problem?
- Needed to develop and clarify the use of PPE in the COVID-19 era
- New considerations for infection control in OR
- Unique airway equipment and filter placement considerations
- Potential shortages of equipment and medications, need for conservation
- Need to incorporate human factors principles into protocol release and procedural compliance

We realized that there was no standard protocol for these functions existing in a visually compelling graphic form for wide distribution throughout anesthesia care areas, and sought to create one.

Needed to Address 3 Core Elements:
- PPE (what to wear)
- Team workflow (OR setup, infection control)
- Transport of intubated patient to and from ICU

Cause analysis
Root causes of this problem included:
- Existing OR infection protocols were limited in scope and did not require the same level of precautions anticipated for current pandemic
- Components of equipment setup to minimize infection were confusing
- No existing strategy for reducing contamination of Pyxis and OR workstation

How Might We: Clarify and Protocolize the Anesthesia Team Workflow for the Perioperative Care of COVID+ Patients

Recognizing that these workflows were logistically complex and highly nuanced, we used graphic design and human factors principles to create a document inspired by anesthesia intraoperative crisis checklists. These were posted in the anesthesia workrooms as a reference for providers.

Fig 1: PPE Guide for intubated vs. non-intubated patients
Fig 2: OR Pre-Op Setup and Workflow for Anesthesia team
Fig 3: Transport To/From OR and Safe airway circuit assembly diagram

Above are 3 sample pages from a 7 page PDF document. Email amo009@jefferson.edu to see complete content