A Proactive Nurse Driven Systematic Approach for COVID-19 Screening for Patients Undergoing Aerosol Generating Procedures
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Background Information
Our complex healthcare systems were dramatically disrupted by COVID-19, an emerging virus that swept the nation in early 2020. The nurses in the Perianesthesia unit took a proactive approach when confronted with this evolving pandemic. Our hospital offers highly specialized services that appeal to domestic and international patients. In January of 2020, during the admission process we discovered patients who had recently traveled and returned from a quarantined area within China. It was also noted that we had an increase of patients who had symptoms that could be presumed as COVID-19 positive. These patients were arriving to our facility with no solid process in place for COVID-19 screening. We anticipated the need for a better process and took initiative to implement a nurse driven systematic approach for COVID-19 screening.

Purpose of Project
- Promoting a safe work environment
- Isolate and contain the further spread of COVID-19
- Creating an effective system to prescreen for COVID-19
- Alleviate anxiety regarding upcoming admission/procedure with an ongoing pandemic
- To promote efficiency of the operating room schedule and to prevent day of surgery delays due to resulting COVID-19 tests

Process of Implementation
- Utilizing Peri-operative float pool (PFP) nurses to prescreen patients prior to Planned Admission or Day Surgery procedures
- PFP nurses performed chart audits and called all patients the day before surgery to screen for COVID-19 symptoms or exposure
- Collaboration with the Center for Preoperative Evaluation to ensure patients received the appropriate COVID-19 testing
- Process evolved into the PFP nurses reviewing patients’ needs for COVID-19 testing, while planning for the cases scheduled for the next day, four and seven days ahead
- The current process has now transitioned into incorporating a centralized Mass General Brigham (MGB) access center to facilitate Covid-19 test ordering
- PFP nurses will address any clinical questions that arise; the nurses will review and order tests as appropriate for patients that are add-on surgical cases, patients that failed to test or were not reached by the MGB access center
- Communication of any outstanding issues or concerns are conveyed to the Perianesthesia team to allow planning for Covid-19 safety measures on the day of surgery

Current Process
- Surgical Procedure Scheduled
  - Pre-Screen for COVID-19 Symptoms/Exposure
  - Ordering COVID-19 testing or delaying procedure based upon CDC recommendations
  - Provide patient education for COVID-19 symptom identification and reducing potential exposure
  - Collaborative Communication with Perianesthesia team

Results of Successful Practice
- Education provided during phone screening process eliminated patients arriving on day of surgery with COVID-19 symptoms
- Patients undergoing aerosol generating procedures have had their COVID-19 status reviewed by the PFP nurses
- Nursing staff in the pre-op area noted less cancellations of procedures on day of surgery related to unexpected COVID-19 positive results
- Decreased anxiety for both patients and staff with concerns of COVID-19 exposure while in the Perianesthesia setting
- The efforts of this proactive nurse driven systematic approach has upheld our safe care commitment to strive for the safest possible environment

Implications for Practice
- With the use of the MGB access center and our utilization of PFP nurses the COVID-19 screening and testing process has evolved into a more sustainable practice; streamlining the process for the next day surgical cases as we advance to our full volume operating room capacity
- Multidisciplinary team collaboration allows for a smooth process to ensure safety of all patients and staff
- The nurse driven systematic approach for COVID-19 screening process will continue to evolve as the pandemic shifts over time

Acknowledgements
The success of this work would not be possible without the daily dedication of the staff in the Perianesthesia units and the leadership teams led by Robert Mihalos, MSN, RN, Director of Perioperative Services. We would also like to recognize the staff of the Center for Preoperative Evaluation and acknowledge the support and guidance received from Kristin Raymond, BSN RN, Assistant Nurse Director and David Hepner, MD MPH, Medical Director of the Weiner Center for Preoperative Evaluation.

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