AUTUMN 2020 SPECIAL EDITION

First Do No Harm

Quality and Patient Safety Division, Massachusetts Board of Registration in Medicine

Message from QPSD Leadership

Julian N. Robinson, MD
Chairperson, QPS Committee

Daniela Brown, MSN, RN, CIC
Director, QPS Division

Dear Colleagues,

The arrival of autumn is often met with expectation. Summer is behind us, and we look forward to resuming familiar routines. Much like the past spring season, the upcoming fall season will be unlike any other that we have previously experienced. The reopening of Massachusetts continues to challenge us. Healthcare clinicians and administrators are dealing with the economic, logistical, and psychological consequences of the pandemic. We have seen the disproportionate impact of Covid 19 to racial and ethnic minorities. In our next newsletter, we will focus on health equity and highlight how some facilities have attempted to close the gap to improve equity in healthcare.

Despite the challenges, we continue to move forward. Healthcare facilities and organizations have adapted to create safe spaces enabling the residents of the Commonwealth to obtain the quality health care that they require. Careful planning and execution of new protocols and polices designed to protect patients, clinicians, and ancillary staff have been implemented. New protocols for the treatment and management of Covid 19-related illnesses have been developed and shared.

In this issue of the Quality & Patient Safety Division (QPSD) autumn newsletter, the QPSD provided an opportunity for healthcare facilities to share the experiences that allowed them to move forward in caring for their patients, staff, and employees. We received dozens of narratives which highlighted the incredible work being done throughout the Commonwealth. We are thankful to the healthcare facilities that were able to share their stories. We have chosen a few of the narratives to share with our readers. Please contact the QPSD if you would like additional information regarding our featured narratives.

QPSD also is moving forward. We are pleased to announce the addition of Dorothy T. Doweiko, BSN, RN, MHA. Dorothy comes to us with many years of Quality and Risk Management experience. We are fortunate to have her join our team. We will continue the process of growing our division and look forward to our ongoing collaboration with the hospitals and ambulatory clinics of the Commonwealth.

Finally, in the last issue, we provided a brief update regarding QPSD's intent to transition to electronic reporting. We have made tremendous progress and are confident that the process will provide a more efficient reporting experience and allow for timelier and more streamlined correspondence. Due to delays beyond our control, we are not yet ready to make an announcement. However, we will share this information with our PCA Coordinators as soon as we are able to do so. We thank you for your patience.

Best,

Julian N. Robinson, MD and Daniela Brown, RN

In This Issue

QPSD Mission is to assist Massachusetts healthcare facilities in maintaining and improving systems for patient care that are evidence and team based, sustainable, safe and inclusive. We achieve this by reviewing data, listening, collaborating and educating teams in healthcare facilities throughout the state.

Baystate Medical Center
Response to an Outbreak

Karen Johnson, BSN, RN, Senior Director, Patient Safety, BORIM QPS Committee Member
Doug Salvador, MD MPH
Chief Quality Officer, Baystate Health
Chief Medical Officer, Baystate Medical Center

In mid-July Baystate Medical Center (BMC) identified a cluster of COVID-19 positive employee cases on one nursing unit. Approximately 300 employees who spent time on this unit between 7/15/20 and 7/23/2020 including 70 core staff members on this unit were tested. Thirty-six (36) employees were infected. This cluster exposed 102 patients on one nursing unit with 25 patients being infected.
Our investigation yielded opportunities for improvement in some key areas. The following outlines what we learned and what mitigation strategies were implemented. It is our desire to share this information so that others can learn from our experience and consider implementing these preventive strategies.

What We Learned:

- Employee to Employee transmission
  - Employees traveled to "hot spots" and returned to work.
  - Employees worked with symptoms.
  - A lapse in mask wearing and social distancing during breaks/meals. Shared food on the unit-pizza, sandwiches and cake.
- Employee to Patient Transmission
  - Caregivers were wearing masks in patient rooms. Masks may be less protective if staff are working when sick.

What We Did:

- Established a Baystate Health Comprehensive Travel Policy aligned with Governor Baker's policy.
- Worked to change the culture around working while ill, even if the symptoms are mild. This included messages from Leadership, blast communications, and supporting managers who were concerned with staffing. Increased number of callouts suggested a change in practice.
- Shared details about the event widely in the organization reinforcing correct mask wearing and social distancing during breaks/meals. Distributed email communication for all staff, posted stories/messages to the intranet, held town halls on affected units, etc.
- Leaders reestablished expectations with increased leadership rounding schedule for accountability and reinforcement. Smartphone App developed for the auditing of compliance. Results of audits shared twice a week with the leadership. Committed to using corrective actions for nonadherence to masking expectation.
- All breakrooms and workrooms were reconfigured for social distancing with occupancy limits noted. Additional conference room space inside and picnic tables and tents set up outside for staff meals/breaks. These areas are monitored for compliance with social distancing and occupancy limits.
- Terminal cleaning of involved unit and breakrooms.
- Established a visitor's log for all visitors entering the building.

Follow-up:

- Provide support to patients/families via our CARe program.
- Provide peer support to our staff
- Maintain vigilance in anticipation of schools reopening.

Beth Israel Deaconess Medical Center Reflections

Pat Folcarelli, RN, MA, PhD
VP Health Care Quality

In early June a viewpoint article by Tat Shanafelt MD, Jonathan Ripp MD and Micky Trockel MD, PhD was published in JAMA entitled "Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID - 19 Pandemic". Based on interviews with 69 individuals early in the pandemic, a list of requests from professionals to their health care organizations was created. The requests were summarized as: Hear me; Protect me; Prepare me; Support me; Care for me.

Now at the back end of the first pandemic wave, I would like to share an example of a practice from BIDMC that was helpful for our staff and responsive to many of the desires, concerns and recommended responses summarized in the JAMA article. It was a low- cost, high impact communication process.

Over the 17 weeks of our Hospital Incident Command, our hospital leadership and communications team created 50 videos airing approximately twice per week on our hospital intranet for all staff to view. Each video was 2-3 minutes long and about 90% of them featured hospital president Pete Healy. Others featured Marsha Maurer CNO, Sam Skura SVP for Ambulatory Operations, Tony Weiss CMO, Gyongi Szabo Chief Academic Officer. In each of these videos we hospital staff who were involved in the response.

Examples included the EVS staff cleaning and disinfecting the rooms; the Pharmacy team making hand sanitizer, the Nursing staff redeployed to the new ICU spaces; the Food Services team serving meals to our patients; the OR teams redeployed to be a part of the newly formed proning teams; the workers assembling test kits or staffing the mobile testing units. Each of these highlighted the teamwork, flexibility, and dedication to the quality and safety of our hospital.

Notably, Pete Healy ended each video with this tag line, which became the mantra of the organization: "Take care of yourselves; Take care of our patients; and Take care of each other".

These simple videos – unscripted and genuine were the reminder to all of us that we were in this together and that we would get through this together. They demonstrated the intent of leadership to protect, prepare, support and care for our staff during this most challenging time.

Reference:
Shanafelt T, Ripp M, Trockel M, Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID-19 Pandemic. JAMA. June 2, 2020 Vol 323, Number 21

Beth Israel Deaconess Medical Center

Kym Peterson, RN, MSN, CNL
Nurse Specialist Medicine Neuroscience

My staff are afraid! On a typical day, under normal circumstances, my role is to be their clinical leader and to guide them. Now, I find myself as protector and supporter to my nurses. When I look into their faces the only visible feature is their eyes looking back at me from behind head covers, masks, and eye protection shields. Some say the eyes are the mirror of the soul…if that is the case, these souls are hurting.

What I see is fear, exhaustion, frustration, and worry. As the days, weeks, and months go by it gets more difficult to look into those eyes without getting emotional. I find myself fighting back my own tears when I look at them. I worry for them as if they were my own family, I see my own children in their eyes. They are my children, they are your children, and they are our children. They are isolated when they are not at work due to the restrictions and out of fear of unintentionally getting others sick. They are unable to find comfort, solace, and healing from the people closest to them - their parents, grandparents, and loved ones.

I hope that their families know that we are looking out for them right now, watching over them, protecting them and doing our best to provide support and comfort as they care for our patients like they were their own family members.

Brigham & Women's Hospital
Pandemic Communication Strategies
Jodi S. Freedman, MA, ABC,
Office of Strategic Communication

Throughout the pandemic, the Office of Strategic Communication implemented a clear strategy grounded in providing accurate, timely and usable information related to the spread of the virus, the status of the pandemic and details of Brigham Health's response.

To inform and inspire our employees, we published a daily email update and posted critical information on our intranet, digital screens and printed signage. To ensure employees could get answers to their questions, we actively managed a Q&A inbox and FAQ section on our intranet and hosted a series of virtual town halls where leaders responded to employees' questions directly. We also ran a campaign focused on hand hygiene and physical distancing. Results from an institution-wide employee survey showed that 83 percent of employees agreed or strongly agreed that these communications had kept them well-informed, and 87 percent agreed or strongly agreed that they understood how the hospital was responding to the crisis.

To establish Brigham Health as a leader in educating the public, providing patient care, and ensuring safety, we connected clinicians, researchers and frontline healthcare workers with top-tier local and national media to share their expertise, their experience, and their stories. As a result, Brigham staff were featured in hundreds of publicly accessible news items available in a variety of formats (print and online articles, videos, TV, radio, and social media). We also shared research and clinical breakthroughs with physicians across the United States.

To reach the general public directly, we leveraged our social media channels, sharing educational and engaging content across our four social media platforms. We saw significant growth in followers and engagement during this time period (year-over-year increase in followers: at 220 percent on Instagram, 117 percent on Twitter, 85 percent on Facebook, and 76 percent on LinkedIn). Additionally, we constantly updated our website and published blog articles, informational graphics and videos on timely topics. We ran a campaign to encourage patients to adopt virtual care, and actively promoted testing centers in hardest hit communities. To enable the public to connect back to us, we hosted an online thank you board that garnered nearly 200 comments of gratitude.

Brigham & Women's Hospital
Covid Airway Team
Douglas Shook, MD
Jill Lanahan, MD
Luigino Nascimben, MD, PhD
Karen Griswold, MBA, RN, CPPS

Early in our COVID-19-related emergency planning, it was recognized that the hospital would likely be caring for a much higher volume than is typical of ventilated patients during the predicted COVID-19 surge. Typical census at Brigham Health includes 30 to 40 ventilator dependent patients in the Intensive Care Units (ICUs). However, during the COVID-19 surge, there were approximately 90 ventilator-dependent patients with COVID-19 in our ICUs. COVID-19 patient population challenges made urgent bedside intubation procedures more complex due to several factors including rapidly falling oxygenation, necessitating rapid and accurate endotracheal tube placement (ETT) that should be accomplished on the first attempt. Providers placing airways were at a higher risk for transfer of COVID-19 infection to themselves, and the process of donning and doffing PPE extended the time necessary for safe care.

Recognizing the unique needs of this patient population, including earlier consultation for intubation, a new COVID Airway Team and activation process was created. In conjunction with pre-existing emergency teams, this created a second airway team able to provide urgent /emergent airway support to all inpatients twenty-four hours a day, seven days a week. Both teams consisted of an attending anesthesiologist as the team leader, an anesthesia resident or CRNA, respiratory therapist, nurse, and anesthesia technologist. Airway team members rounded on COVID floors and ICUs to proactively identify patients possibly needing intubation and evaluate potential challenging airways. The team was available for consults, elective intubations, and STAT airway management. Team activation communication posters were hung on COVID floors and ICUs to facilitate early activation.

To enhance COVID airway team safety, staff drilled donning and doffing of PPE prior to their first

intubation, practiced techniques to avoid aerosolization during ETT placement and limited the number of individuals in the room during intubation to only those who were necessary. To increase the chance for first time successful placement of the ETT, video laryngoscopes were used by the most experienced anesthesiologists.

The COVID Airway Team was active from April 3, 2020 to June 4, 2020, responding for consults 92 times, with the highest volumes being at the peak of our COVID census.

Emerson Hospital

Reflection: COVID-19 at Emerson Hospital- Taking Care of our Caregivers

Jacqueline Clancy
VP Strategic Marketing & PR

Early in the pandemic, we established an Incident Command Center. We promptly secured our PPE supply chain to provide maximum protection for staff and patients according to CDC guidelines. We created a second ICU, acquired 32 additional ventilators, and deployed rapid COVID-19 testing in-house for inpatients. Through every decision we made, the safety and well-being of our staff and patients was our foremost priority.

Through the generosity of our community, we received numerous donations allowing us to acquire additional PPE. We also delivered PPE to local assisted living and skilled nursing facilities. We deployed a universal mask policy before it was mandated and secured sufficient N95 supplies and the ability to decontaminate N95s for reuse as necessary safely. We purchased scrubs for front line staff to change into when they arrived at the hospital so they would not have to wear scrubs home. We also provided our staff with cloth face masks to wear when they were not at work.

Communication was paramount to inform our staff of frequently changing policies and procedures for their safety. We held daily leadership huddle calls, sent out daily email updates to staff, and placed pertinent information on screensavers to ensure our messages reached every corner of the organization.

During the height of the pandemic, we offered complimentary food in our cafeteria and partnered with local restaurants and volunteers through "Fuel the Fight" to provide complimentary meals and snacks to staff. We created the Be Well Center, which is still in place today. This Center is a relaxing location to help staff decompress and relieve stress. It features luxury massage chairs, ergonomic chaise lounges, virtual reality goggles, refreshments, and more.

It was also important that our employees had some fun. We designated a "Code Happy" for patients with COVID-19 being discharged from the hospital and staff contributed to an Emerson "Happy" music video. We also secured celebrity video shout-outs from Steve Carell and Chris Evans to boost morale among staff. We now focus on our recovery and preparation for a second surge, not losing sight of the uncertainty our staff faces.

Milford Regional Medical Center

New Protocol: Remdesivir

Stacy Bazinet, B.S., Pharm.D., Director of Pharmacy
Michael Newstein, M.D., Infectious Disease

The staff at *Milford Regional Medical Center* began discussing treatment details specific for remdesivir since it first appeared in global clinical trial databases. We reviewed available primary literature, ongoing clinical trials, treatment algorithms in use at other institutions and engaged medical leaders within our institution on how to organize options available within our resources. Additionally, considerations for achieving a safe environment for delivering, administering, and evaluating patients receiving remdesivir were thoroughly reviewed.

Our Infectious Disease (ID) and Critical Care experts, along with other medical providers, hospital leaders, and clinical support staff identified workflow challenges, including but not limited to physical, administrative, and supply chain obstacles.

When learning our initial allotment of remdesivir was limited to nine patient courses, our Infectious Disease experts and Ethics Committee convened to evaluate our patient eligibility criteria respective to pertinent clinical trial information, existing treatment pathways at other institutions, and our four ethical

principles: autonomy, beneficence, non-maleficence, and justice.

Treatment criteria highlights both inclusion and exclusion criteria, and which data supported the highest likelihood of survival. Inclusion criteria: adult inpatient with a COVID-19+ lab result, or highly suspected COVID-19+, and clinically significant progression of hypoxemia or mechanical ventilation/HFNC within seven days of presentation. Exclusion criteria: patients older than eighty years of age on mechanical ventilation, patients older than seventy with multi-system organ failure, AST or ALT greater than five times the normal limit, renal failure or creatinine clearance less than 30 mL/min.

Additional guidance for allocation decisions in less frequently seen patient populations, such as pregnancy and pediatrics, were also made available.

Upon ID consult and evaluation for remdesivir candidacy, the ID providers committed to dual approvals in combination with the Ethics Committee Medical Chair for initiation of remdesivir treatment. Next steps for therapy involved pharmacy and nursing coordination of appropriate administration of remdesivir and patient education. The healthcare teams tracked remdesivir usage daily and monitored parameters to ensure treatment criteria and tolerability were sustained throughout the five-day course and until discharge. As of July 31, 2020, 51 doses were given.

Milford Regional Medical Center
Quick Guide for Approach to Patients with Suspected/Confirmed Covid-19 Disease

Leslie G. Selbovitz, MD
Senior Physician Consultant, Former Chief Medical Officer and Senior Vice-President for Medical Affairs; Clinical Professor of Medicine, Tufts University School of Medicine; Member, Quality & Patient Safety Committee, Board of Registraion in Medicine
Michael Newstein, MD, PhD
Chair, Department of Medicine and Chief, Division of Infectious Diseases
Associate Professor of Medicine, University of Massachusetts Medical School
Dost Sarpel, MD
Division of Infectious Diseases and Viral Hepatology

Newsletters entitled *Covid-19 Update* were initiated in January to distribute information on coronavirus disease. Beginning in March, a Quick Guide for Approach to Patients with Suspected/Confirmed Covid-19 Disease was developed by the Chief Medical Officer, Infectious Disease and Infection Control experts, to provide support in the management of admitted patients with suspected or confirmed Covid-19. The information in this document was intended to assist in differential diagnosis, guide practice, and keep the medical and other professional and nursing staff up to date on the rapidly evolving developments related to the clinical approach and treatment. As of July 31st, 2020, 17 updated versions of these "pocket guides" have been disseminated.

The Quick Guide includes the various clinical presentations of Covid-19 illness which challenges differential diagnosis, appropriate laboratory and imaging work-up, testing protocols on admission and serially, lab results seen with hospitalized Covid-19 patients and to track their clinical trajectories, when to consult specialists, information on the use of PPE, general management approaches, targeted pharmacologic treatment options, thrombotic and bleeding manifestations, respiratory, cardiac, and renal considerations, the management of rapid responses, codes, and more. There was an emphasis on the multiple ways Covid-19 can present in adults and children, including

delineating the broad range of neurological manifestations including strokes and encephalopathy even in younger patients. The Quick Guide discusses the phases of illness: viral replication, inflammation and cytokine storming plus scoring system for HLH as well as thrombotic mechanisms to target optimal use of various therapies. A table was developed for Covid-19 VTE prophylaxis based on the severity of the disease, renal function, weight, and a combination of therapeutic approaches while guarding against the bleeding risk. There is also an ever-expanding section on autopsy results to allow an appreciation for clinicopathologic correlations to better understand the disease and construct approaches to treatment.

Each Quick Guide was accompanied by a newsletter cover letter summarizing the updates. On July 31st, Newsletter Number 36 was distributed with the sixteenth revision of the Quick Guide for Suspected/Confirmed Covid-19 Inpatients. Included in this revision was updated information on the use of antivirals, anti-inflammatory and immune-based therapies, enhanced discussion of the status of testing for diagnosis, Massachusetts travel restrictions, and additional information on the causes, consequences and treatment approaches of the exaggerated thrombotic state with the ever-present concern of bleeding risks. This edition also brought forward further attention to inflammatory cardiomyopathy including in a Red Sox pitcher who was stated to have "myocarditis" after initial recovery. The information contained in the Quick Guide has been helpful in assisting our providers in the care of our Covid-19 inpatients.

North Shore Cataract and Laser Center Pandemic Response

Veronica Feltz, RN, Clinical Leader

North Shore Cataract and Laser Center (NSCLC) has taken extraordinary measures to maximize the safety of our patients, employees, and physicians. NSCLC temporarily postponed elective surgeries March 16, 2020-June 1, 2020. During this time, NSCLC remained vigilant with current recommendations and regulations, keeping abreast of CDC, WHO, American Academy of Ophthalmology (AAO) along with state and local regulatory updates.

Management attended numerous training webinars pertaining to the pandemic and infection control. Virtual conference meetings with the Board, the anesthesia department, and management were held to discuss necessary staffing needs and safety measures to implement in order to reopen safely. All staff members were contacted on a weekly basis to keep up to date of the situation and offer support.

Additionally, management alternated workdays during the closure to provide maintenance to the facility. Equipment was shut down to preserve electricity and temperatures, medication expiration dates, and PPE were continuously monitored.

A "Covid-19 Infection Control and Safety Program" was developed and the following policies were adopted (COVID-19, Patient Process, Social Distancing, Patient and Employee Screening, and COVID-19 Travel Advisory). All employees, contracted staff, and physicians received training in the program upon returning to work. In addition, our standardized "Infection Control Program" and "Emergency Preparedness Plan" were updated with COVID-19 information/protocols.

NSCLC reopened in "phases" once COVID-19 cases in the area remained reduced for 14 days. During phase 1 of reopening, a committee of physicians was established to review and approve surgical cases based on the AAO and Massachusetts Eye and Ear Infirmary's criteria. All surgical cases had to be reviewed and approved by the committee. During Phase 2, procedures were scheduled based on prioritization and time sensitivity per the practicing surgeon's clinical judgement (per DPH guidelines). All practicing physicians provided attestation to the above listed criteria prior to performing surgery.
To date, COVID-19 policies continue to be updated as needed and communicated to staff and physicians. Limited case load, social distancing, screenings, and assurances of sufficient staffing and PPE are paramount in our continued efforts to serve our patients, while safeguarding all during this unprecedented time in healthcare.

Plymouth Laser and Surgical Center, P.C.

Elizabeth Chaisson, BSN, RN, Clinical Director

2020 has turned out to be quite the year. When I begin to reflect upon the year and everything that has happened, I cannot believe just how far we've come. In March I thought we were doomed for sure.

I believed there was no possibility that elective surgery would be able to resume before the fall and maybe even longer. As a Clinical Director, the months of being closed were very trying. I was the only person in the facility on a regular basis. Everyone I spoke with would ask if I was bored. Quite the contrary. It was an incredible grind of reading new guidelines, preparing policies and procedures, constantly re-writing policies and procedures to fit new guidelines, preparing to re-open and then re-preparing to re-open. The fear and the stress of the unknown was more present than ever before.
However there has been a silver-lining. Upon re-opening, we adjusted our patient process and patient flow quite a bit. Our goal was to limit contact between each patient and staff member, as well as conserving supplies and personal protective equipment as much as possible. This change in process has improved patient satisfaction significantly.

Prior to Covid-19, we had a different nurse for admission, pre-op care, transferring to operating room, post-op care and accompanying the patient to their vehicle once discharged. Since the changes were implemented, one nurse is responsible for caring for their patient from admission through discharge. Most patients and staff have had heartening comments regarding these changes. It has given us the opportunity to build relationships with one another. The patients find their experience more at ease and have expressed how comfortable, safe and well-cared for they feel while in our facility.

I distinctly remember feeling that our patient care process was too overwhelming prior to Covid-19. The patient's comments in the patient surveys had also reflected the same sentiment. We continue to evolve our patient process in attempts to improve patient satisfaction. With all the challenges that we have faced, I feel the most confident that we have successfully determined the best methods to keep patients and staff safe while improving the quality of patient care.

Spaulding Hospital Cambridge

Development of Covid Units in a LTACH – The Spaulding Hospital Cambridge Experience

Joanne Fucile, RN, DNP, CRRN,
Vice President Operations & Director of Nursing
Jonathan Schwartz, MD, Chief Medical Officer
Mary O'Quinn, CPHQ, Senior Director Quality & Compliance

Spaulding Hospital Cambridge (SHC) is a long-term acute care hospital (LTACH) located in Cambridge, Massachusetts. It is a member of Spaulding Rehabilitation Network and Mass General Brigham. SHC converted four LTACH units to treat patients with COVID-19. To execute this conversion, admission criteria was developed based on patient need and facility capability. Then SHC also developed a transfer plan for current inpatients and trained staff to ensure optimal outcomes for patients with COVID-19.

Two COVID-19 units were opened in late March. By mid-April, there were four COVID-19 units with a total of 120 beds. Changes were made to the physical space on the units and to staff workflows to minimize the risk of infection spread.

To ensure safe PPE utilization:

• Developed instructional videos and competency requirements for the utilization of enhanced respiratory precautions.
• Determined spaces on the units for storage of staff brown bags with their N95 mask, goggles and face shields.
• Posted precaution signage inside and outside each patient room with instructions on how to don and doff PPE.
• Designated staff members were present on units to assure proper donning and doffing of PPE.
To minimize the number of times staff were entering patient rooms, SHC:

- Obtained patient-specific iPads for staff to communicate with patients from outside of the room.
- Set up storage carts outside patient rooms so staff could easily access PPE and cleaning equipment.

- Utilized disposable food trays to eliminate the need to pick them up from rooms.
- Installed fire-rated glass in the patient doors so that clinicians could easily check in on a patient without entering the room.
- Expanded utilization of the portable x-ray equipment.
- Instructed staff to cluster care to minimize number of clinicians entering rooms. For example, if a therapist went into a patient's room, they would also take additional time to assist with activities of daily living (ADLs), such as helping the patient use the toilet.
- Patients were cohorted in semi-private rooms so staff could provide care to two patients at a time.
- A "runner" role was created to bring needed equipment to patient rooms.

SHC continues to admit patients as appropriate to maintain acute care throughput and to promote patient recovery.

UMass Memorial Marlborough Hospital

Marlborough Hospital COVID 19 Experience- When We Work Together- We Win!

Vibha Sharma, MD, Medical Director, Infection Control, Infectious Disease Consultant
Kimberly A. Robinson, MD, MPH
Director of Critical Care
Padma R. Bheri, MBBS, MBA, CIC
Director of Quality, Patient Safety and Regulatory
Joan Davis, MHA, BSN, RN
VP Quality, Patient Safety and Regulatory

In early March, our first COVID positive patient presented. They had previously attended the Biogen conference in Boston. The patient did not meet COVID criteria for DPH testing but we discharged the patient home on a 14-day quarantine. We are quite proud of the early recognition of this patient's potential illness and the ability to prevent widespread transmission from this source patient.

Subsequently, several patients were admitted to our facility with COVID pneumonia. Every aspect of hospital care was affected by this. We quickly developed surge-space planning for our ICU, ED and regular floors. Facilities played a vital role in converting regular floor rooms to negative pressure rooms at very short notice. Our lab-processed several hundred COVID test samples including drive-thru testing. Pharmacists worked to help treat with remdesivir. All staff extended their services with the influx of sick patients. They were phenomenal in following PPE protocols. Infection preventionist and Hospital epidemiologist helped efficiently communicate necessary changes in PPE, isolation guidelines, timely removing patient precautions to maintain patient flow along with trying to clear staff concerns. Our unit managers upheld the daunting task of updating the rather frequent changes in guidelines in tackling this unknown and new virus. Housekeeping increased their cleaning frequency and constantly cleared up the waste generated to keep the environment safe. Communications created a staff COVID resource webpage for easy reference and promoted community awareness. We explored new ways of providing care through telehealth and virtual meetings. Daily electronic updates from senior leadership, command center operations, virtual town hall meetings, and being part of a system wide COVID management task force was critically important to our success.

We feel that we are better equipped to handle a second surge if that should happen and are confident that the lessons learned about teamwork, proper planning, proactive interventions, constant communication, assessment of surge status and supply needs, strong support from management, medical staff and leadership will serve us well. We have come together as a strong family of caregivers at various levels, for a community that has supported us with supply donations and encouraging words. We will continue to serve our community the best we can.

UMass Memorial Marlborough Hospital

The Evolution of COVID-19 in the ICU

Dr. K.A Robinson, Dr. V. Sharma, Ms. P.R. Bheri, Ms. J. Davis

COVID 19 clinical lessons learned:

Early intubation – initial thoughts were to intubate early to obtain artificial airway in controlled environment and that closed-circuit ventilation would be protective to health care workers. Unfortunately, patients who required intubation spent an average of 2 weeks on the ventilator and there did not seem to be an advantage to early ventilation. We quickly realized that with the use of high flow nasal cannula oxygen (at 40-60L) we

could prevent intubation in a number of patients. Going forward we plan to obtain more high flow oxygen blender units.

Tracheostomies-performed 2 bedside percutaneous tracheostomies in the ICU without complication. Will use this technique as indicated
going forward to prevent needing to use the OR for COVID 19 patients.

DVT prophylaxis-high incidence of micro thrombi in COVID 19 patients. We utilized lovenox 40 mg BID for COVID 19 patients with normal renal function and heparin 7500 units TID for those with impaired renal function. No bleeding complications or documented thromboembolic events were identified.

Steroids- initially used steroids only in patients with ARDS per SCCM guidelines. Subsequently started using dexamethasone 6 mg iv daily x 10 days in all COVID patients on oxygen per RESOLVE trial.

Therapy-patients did best with combination of convalescent plasma (up to 5 units in some patients), remdesivir, and tociluzimab. Early in pandemic used hydroxychloroquine which was subsequently abandoned based on emerging data regarding ineffectiveness.

Proning-most intubated patients were proned for 16 hours at a time to improve gas exchange.

- Accomplished this without difficulty-team of nurses and respiratory therapy
- No ETTs dislodged
- No facial pressure ulcers
- Used regular hospital beds and did not require "Rotoprone" beds

Non intubated patients were strongly encouraged to self-prone. This was tolerated poorly due to discomfort but was helpful in those patients who could/would comply.

Lung physiology- low PaO2/FiO2 ratios consistent with ARDS but minimal issues with barotrauma or elevated plateau pressures. This was different than typical ARDS that we have previously seen.

Important Reporting Due Dates

October 30, 2020
Quarterly SQRs and Q3 Pressure Injury & Patient Falls Report

January 30, 2021
Quarterly SQRs and Q1 Pressure Injury & Patient Falls Report

March 30, 2021
Annual Report and Semi-Annual Report for Ambulatory Clinics and select Acute-Care Hospitals

April 30, 2021
Quarterly SQRs and Q2 Pressure Injury & Patient Falls Report

May 30, 2021
Annual Report and Semi-Annual Report for Non-Acute Care Hospitals and select Acute-Care Hospitals

For additional information regarding the narratives featured or for any questions and/or comments, please contact Mali Gunaratne, Administrative Assistant, Quality & Patient Safety Division

mali.gunaratne@mass.gov