

Jefferson Health: Response to the COVID-19 Pandemic





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### PREPARATION PHASE

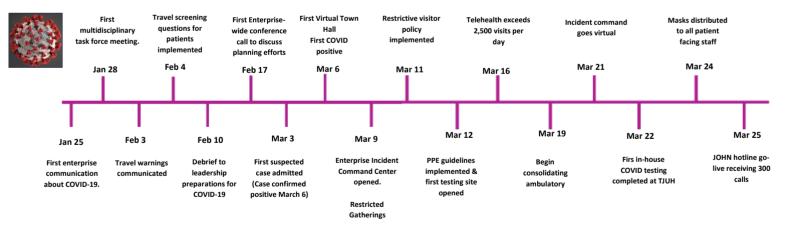
## **Chapter 1: Preparation Task Force**

Jefferson Health (JH) has maintained a pandemic plan for decades. JH leadership began actively monitoring the novel coronavirus in early January, 2020. The first enterprise communication occurred on January 25, 2020.

#### Early activities included:

- 1. Broad communication regarding the novel coronavirus beginning on January 25<sup>th</sup>.
- 2. Implemented screening criteria in all electronic health records.
- 3. Conducted weekly enterprise leadership calls to discuss the developing situation.
- 4. Implemented travel guidelines.
- 5. Formed a multi-disciplinary COVID-19 Task Force comprised of 28 critical areas that would be needed for executing a response to a pandemic. Each area was given the task of preparing for worst-case scenario.
- 6. Secured additional supplies of hydroxychloroquine and personal protective equipment.
- 7. Expanded telehealth training in the first week of February. Trained more than 1,000 providers to conduct tele-health visits.

### **Jefferson Health COVID-19 Response Timeline**

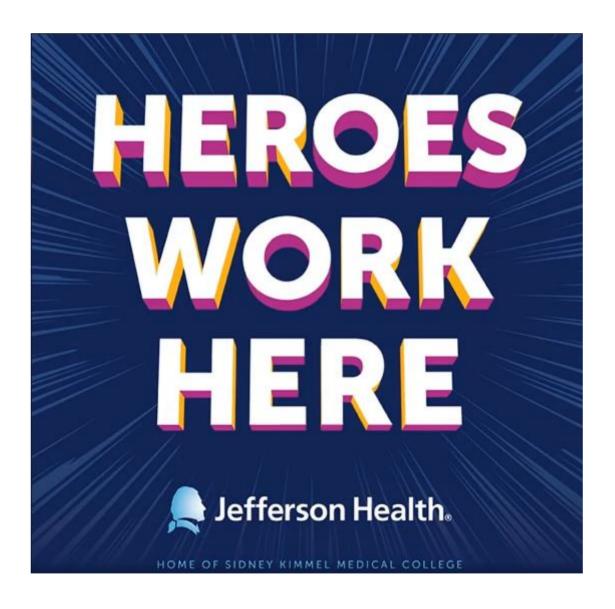




### **INCIDENT PHASE**

The COVID-19 pandemic is the most significant health crisis in more than a century. Jefferson Health's top priority during this crisis was the safety of our patients, staff and students. Our goal was to mitigate risks and to alleviate and avoid as much suffering as possible.

This report highlights tactics and processes that were developed by the enterprise and divisional teams to ensure the safety of staff, students, patients and community.





## **Chapter 2**

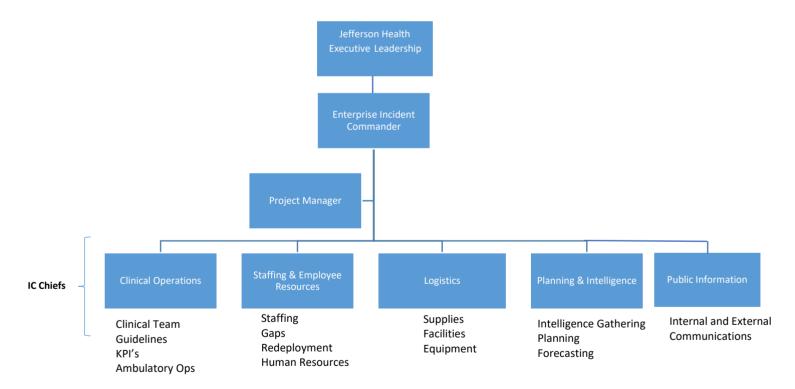
## **Enterprise Incident Command Center Structure**

On March 10, 2020 Jefferson Health, Jefferson Health initiated the Enterprise Incident Command Center, or EICC, in order to proactively respond to the rising numbers of COVID-19 cases across the region. The Chief Operating Officer for Jefferson Health, oversees the EICC which includes representation from the clinical pillar and corporate services.

The EICC is charged with the following goals:

- 1. Provide information and guidance for the organization
- 2. Use limited resources most efficiently
- 3. Issue standard guidelines for the enterprise to be implemented locally
- 4. Coordinate activities and processes critical to the incident
- 5. Serve as a conduit for the executive team

#### Below is the structure of Jefferson's EICC:





#### **EICC Key Roles and Responsibilities:**

#### • Enterprise Incident Commander

- Leader of the Enterprise Incident Command Center
- Communicates daily with COO and JH executive team to identify and assign priorities for the day
- Leads the daily enterprise call
- o Makes final decisions and as appropriate escalates to executive leadership
- Ensures enterprise command center priorities are communicated and completed

#### Project Manager

- Takes notes, schedules meetings, prepares reports and ensures assignments of all priorities
- o Identifies and escalates issues from the divisions
- o Other duties assigned by the Enterprise Incident Commander or Chiefs
- Ensures communications are distributed and attends the communications and IS&T subgroup meetings
- Responds to hotline and email requests

#### **Incident Command Chiefs**

#### • Clinical Operations Chief

- o Leads projects related to operations and knowledge management
- Prioritizes the work for the operations teams
- o Identifies subject matter experts as needed
- Reports out progress of the operations team

#### • Staffing & Employee Resources Chief

- Takes lead on priorities related to staffing
- Identifies appropriate teams to work on priorities and ensures work is being completed
- o Reports out progress of the staffing team
- o Coordinates efforts with Human Resources

#### Logistics Chief

- o Leads projects related to supplies and facilities
- o Prioritizes the work for the supply chain and facilities
- Identifies subject matter experts as needed
- o Reports out progress of the team

#### Planning and Intelligence Chief

- Takes lead on priorities related to surge planning
- o Gathers and distributes internal and external intelligence
- Develops projections to inform scenario planning
- Identifies appropriate teams to work on priorities and ensures work is being completed

#### • Communication Chief/Public Information Officer

- Provides support for incident command to communicate messages out to the organization in multiple modes
- o Helps construct, format and edit documents





#### **Other Key Roles**

- Finance
  - o Ensures all costs associated with an incident are charged to the appropriate cost center
  - Partners with staffing, facilities, IS&T and supply chain to prioritize purchases for incident command to review
- Human Resources
  - o Helps with all employee issues from an enterprise perspective
  - o Serves as a liaison to JOHN
- IS&T
  - o Assists with technical needs of the command center
  - Coordinates Zoom meetings

#### **Documentation:**

The EICC team serves as the single source of truth for all divisions. Thus, documentation serves an important role in standardizing all messages. The project manager performs the following:

- Key performance indicators are collected each day from each division and used to create enterprise KPI's
- Minutes from all meetings are kept on a shared location to be viewed by executive leadership and members of the command center
- An update report is sent at the end of each day with what was accomplished and still being worked on by the enterprise team
- Daily priority log of the enterprise command center priorities and priorities of chiefs

In order to ensure that all information is updated on a daily basis, the project manager (PM) distributes daily reports outlining the tasks completed by the command center. The report outlines the topic, progress, accomplishments and owners of each of the projects. Not only does this report establish transparency and accountability across the enterprise, it also ensures that all leaders are updated on all initiatives occurring. Additionally, the PM keeps track of all questions presented during the 10:00am call and sends out a daily report accounting for all questions and answers.

#### Example of Jefferson Health List of Initiatives

|    | Topic   | Progress   | Accomplishments  |
|----|---|--|--|
| 4  | Laboratory Testing  | Determining need for additional Abbott machine. May<br>be able to use existing equipment.                          | Preparing for testing of pre-procedure patients and L&D patients. The Abbott test will be used for the L&D patients and the Roche test for the pre-procedure patients.                             |
| 7  | Personnel and Staffing<br>Mitigation Planning                     | Working through staffing models for all surge plans.   | Focused on critical areas such as respiratory therapy.     Nurses being trained to do some respiratory therapy treatments.     116 employees need to be redeployed and will be notified this week. |
| 14 | JOHN  | Database for reporting is being repaired.  | Continue to focus on returning employees to work.  |
| 26 | Supply Inventory  | Continue to look at sourcing PPE for staff from available channels.  | Meetings with Center City and New Jersey today to review supply and equipment needs related to surge.  |
| 42 | Enterprise Surge Planning   | <ul> <li>Meetings with Northeast and Abington scheduled for<br/>later this week.</li> </ul>                        | <ul> <li>Meetings with Center City and New Jersey today to review<br/>surge plans and phases.</li> </ul>   |
| 44 | Elective Surgeries  | <ul> <li>Group meeting regularly to prepare to be able to do<br/>elective surgeries when able to do so.</li> </ul> | Pre-procedure testing guidelines completed.  |
| 46 | Guidelines for masking<br>anyone entering Jefferson<br>buildings  | <ul> <li>Closing monitoring inventory around additional masks<br/>going to patients and visitors.</li> </ul>       | Communication out for all patients and visitors to wear a mask.  |
| 47 | Cleaning of N95's   | Continue to work with the state on cleaning processes<br>that will occur at the Navy Yard.                         | Defined a workflow for collecting and returning masks to staff.  |
| 48 | Policy statement on facial<br>hair                                | Staff to work with their HR business partner for any questions.  | Communication sent regarding shaving except for religious reasons.   |
| 49 | New! Organization of data<br>requests from government<br>agencies | Receiving many different requests from many<br>organizations regarding PPE, supplies and occupancy.                | •  |





# **Chapter 3 Clinical Operations**

#### **Clinical Operations at Jefferson Health**

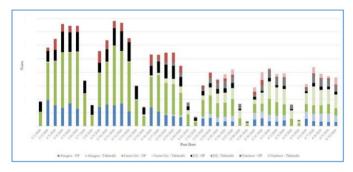
The team focuses on creating clinical guidelines and protocols to inform and guide safe and effective inpatient, outpatient and ambulatory operations. Below are examples of policies and protocols that are disseminated and regularly updated by the operations team.

#### Ambulatory Operations

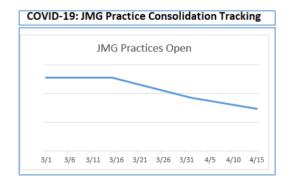
Jefferson Ambulatory Operations quickly responded by prioritizing the continuity of care for patients while maximizing safety for providers and support staff. This strategy can be summarized in the following key areas:

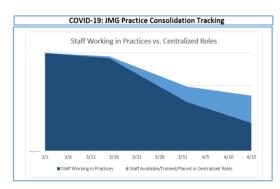
- Shift to telehealth with only medically necessary visits being done in the office
- Practice consolidations- implemented progressive 3 phased plan of practice consolidations; over 60 practice locations consolidated
- · Coordinated results management and communication process for patients awaiting COVID-19 test results
- Mobilized providers across the enterprise to assist with COVID-19 needs; these include, rotating between telehealth, clinical care, Covid-Testing Centers, Jefferson Employee Health Network (JOHN), and Respiratory Centers
- Administrative and Clinical support staff across were mobilized and trained (>400 FTE) to provide support to critical areas including:
  JOHN Hotline, Acute Care Hospitals, Jefferson Laboratory, COVID-19 Testing Centers, Patient Communication Teams, Respiratory
  Centers,
- Ambulatory support staff trained and deployed to support patient engagement center and IS&T focusing on providing quick resolution to patients with MyChart questions and issues;
- JMG Partnered with Philadelphia Firefighters and Paramedics Union to provide a coordinated seamless process to test Firefighters and first responders following potential exposures
- Partnered with Camden County Governmental leaders to open testing location with expedited testing for first responders and health care workers
- Mobilized staff to create central support teams to enable accelerated scaling of telehealth across the ambulatory enterprise





Examples of Jefferson Medical Group Practice Consolidation Tracking as of 4/5



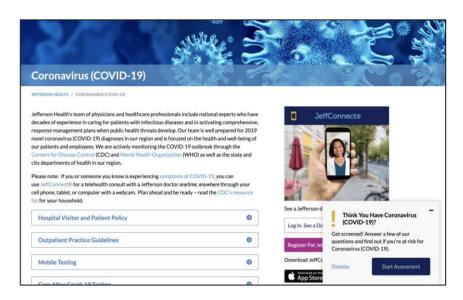




#### ❖ Telehealth:

Current Jefferson patients with known risk factors have been advised to consider converting office visits to telehealth visits. Resources for physicians to get enrolled in telehealth training are available on MyJeffHub:

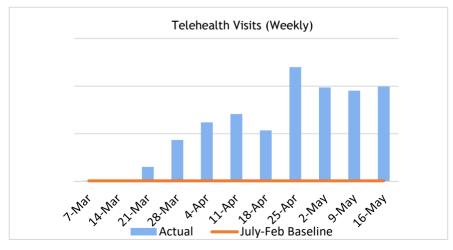
- Telehealth Training Enrollment Guide
- Use of Telehealth Across State Lines Policy
- Teleprescribing Controlled Substances



Additionally, the team developed a new workflow in our appointment Chatbot with LifeLink that allows people to self-assess their COVID-19 risk after answering a few questions. This will help alleviate traffic to JeffConnect and ED Registration.



Jefferson provided care virtually for over 1,000 patients a day across specialties (baseline had been 40-60 per day at JeffConnect).





#### Testing:

• Example of I COVID-19 Testing Guidelines:

This is meant to be a clinical guideline for testing for the COVID-19 infection, based on the best information we have to date. We recommend deferring to clinical judgement where appropriate.

| Clinical Features  | Risk Factors?  | SARS-CoV-2<br>Testing?                             |
|--|--|--|
| Asymptomatic   | See below*   | No*  |
| Symptoms of acute respiratory infection (fever, new cough, new shortness of breath, myalgias, etc.) and DO NOT require hospitalization | None   | Test if the result is likely to change management† |
| Symptoms of acute respiratory infection (fever, new cough, new shortness of breath, myalgias, etc.)                                    | Special Populations:  Older adults (age ≥ 60 years),  immunocompromised individuals (e.g., cancer, solid organ transplant,  immunosuppressive drugs,  chronic lung disease,  hemodialysis, advanced HIV),  homeless or in congregant facilities (such as dorms, fraternities, sororities, shelters, jail, prison, skilled nursing facilities, adult family homes). | Yes  |
| Symptoms of acute respiratory infection (fever, new cough, new shortness of breath, myalgias, etc.) and DO requiring hospitalization   |  | Yes  |

<sup>\*</sup> No current guidelines from public health agencies recommend testing of asymptomatic persons.

WE DO NOT RECOMMEND testing asymptomatic persons since a negative test is not sensitive to rule out COVID-19. These are the unique situations in which we have agreed to testing asymptomatic persons:

- · Asymptomatic Gift of Life Transplant Donors.
- Asymptomatic transplant recipients.
- Asymptomatic ED or in-house patients who cannot be discharged without a negative COVID-19 test (nursing home, assisted living, group homes, homeless, etc.).

#### • Mobile Testing Teams:

On 3/13/20, Jefferson Health opened the first drive-through testing centers in the southern New Jersey region. Mobile-testing sites for COVID-19 are open at all major Jefferson locations, including the Navy Yard, which are designed to control infection and limit symptomatic (non-emergent) patients from entering enclosed care spaces such as crowded emergency rooms. Patients are accepted through JeffConnect and from allied primary care providers in the area.

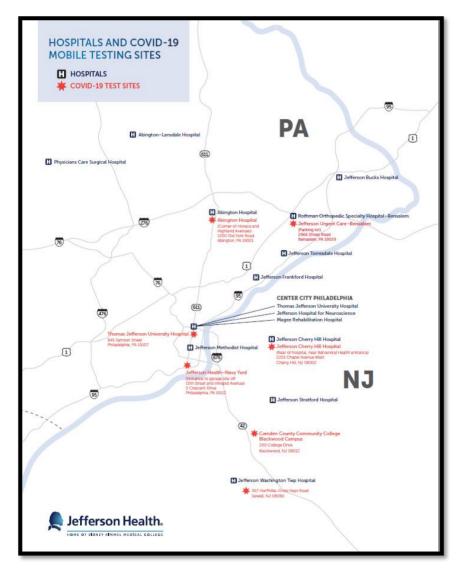


<sup>†</sup> Given the limited availability of testing supplies and the fact that most patients without risk factors will recover, consider testing only if the results of testing will change clinical management.





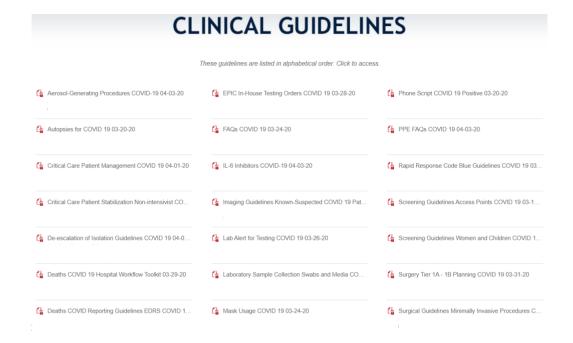






#### Utilization of MyJeffHub as platform to house all clinical guidelines:

Jefferson is utilizing the MyJeffHub platform in order to house all published clinical guidelines. Additionally, all staff receive a broadcast email notifying them of any new and updated guidelines. Below is a snapshot of the Clinical Guidelines page on MyJeffHub:



#### Visitation Policies:

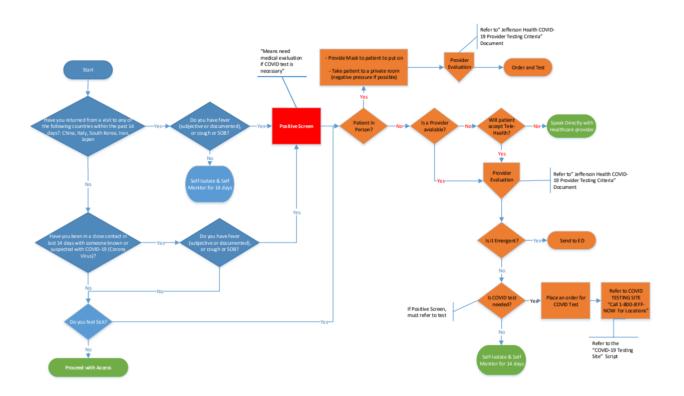
- There will be no inpatient visitation unless authorized by the clinical leadership team. Exceptions will be
  made for circumstances involving clinical authorization (e.g., one visitor will be allowed in cases of informed
  consent, discharge support, maternity and labor & delivery and family meetings; for end-of-life situations
  one visitor will be permitted in 15 minute increments).
- Outpatient and Emergency Department visitation will be limited to one support person.
  - Screening of all visitors and patients will take place at the designated entry points for each hospital.
    - Persons with upper respiratory or flu-like symptoms are not permitted
- Signage announcing these restrictions are at these designated points of entry and visitor information is also
  posted on our websites. Current inpatients and outpatients have been notified of these restrictions.

These measures may be inconvenient, but they are important steps for keeping our patients—and ourselves—safe. We will regularly re-evaluate these visitor restrictions as we monitor the CDC and all relevant state and local health official recommendations.

Thank you for everything you are doing to get through this challenging time.



#### Visitor Screening:



#### **!** Elective Surgery Guidelines:

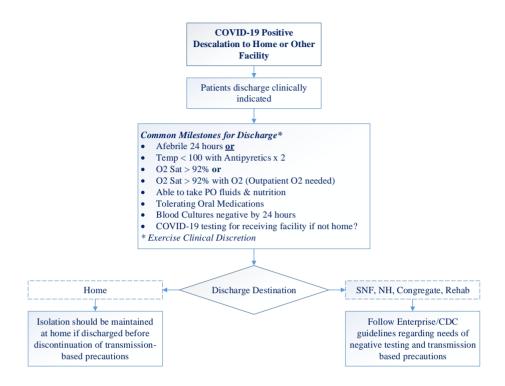
Following the American College of Surgeons' recommendations, Jefferson Health developed guidance regarding the scheduling and performance of elective procedures:

- Urgent procedures (Tier 1): Move forward.
- Elective, medically necessary (Tier 2): Further reduction of cases with goal of delaying all cases.
- Elective, non-urgent (Tier 3): Further reduction of cases with goal of delaying all cases.

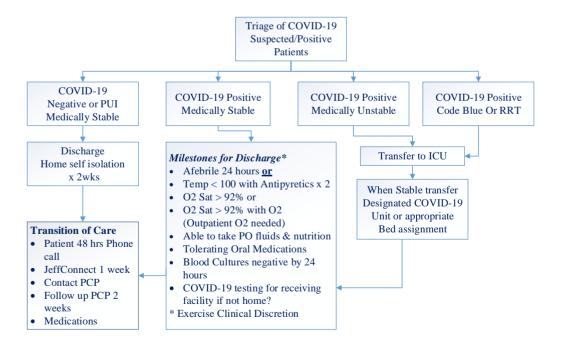
As of 4/3/2020 Jefferson will delay electives surgeries until further notice in compliance with the Governor's cessation of all elective surgeries.



#### Patient Discharge Milestones Algorithm:



#### **COVID-19 Triage and Non-ICU Clinical Care algorithm Example:**





#### Jefferson COVID-19 Clinical Experience:

The clinical team uses data to inform clinical guidelines and treatment protocols. Using EPIC, Infections Disease shared both patient demographics and Jefferson specific clinical experience and outcomes in treating patients with COVID-19.

Example of COVID-19 Clinical Experience to Date 3/11/2020 - 4/8/2020 Center City (CC) and Jefferson New Jersey (JNJ)



#### Jefferson COVID-19 Patient Death Protocols:

#### **Preparation & Release of COVID-19 Positive or Pending Positive Bodies**

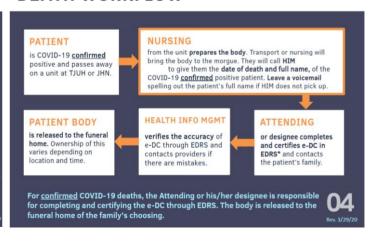
## The body must be double body bagged with a disinfected, wet barrier in between before transporting to the morgue. The outside of **both body bags** must be **wiped down** with disinfectant/virucidal wipes. Any patient belongings must be **placed in-between the double body bags**. The **zipper must be shut with a zip tie**, to ensure that the bag cannot be easily opened. **Write the following on the outside of the body bags**:

- - DECONTAMINATED
  - · Patient's First & Last Name
  - Medical Record Number
  - "COVID-19 CONFIRMED", "COVID-19 PENDING", or "COVID-19 SUSPECTED"
  - COVID-19 pending = patient has been tested for COVID-19 but died while waiting for test results.
     COVID-19 suspected = patient may have COVID-19 but died before getting tested.

    Upon release of COVID-19 positive, pending, or suspected bodies, gloves and a face mask must

- After the body has been released, staff must wipe down gurney using disinfectant/virucidal wipes or spray while wearing gloves and a face mask.

#### **COVID-19 CONFIRMED POSITIVE** DEATH WORKFLOW





#### **Weekly Highlights and Accomplishments**

- Jeff Health Ethics Steering Committee delivered an Ethical Critical Care Allocation Framework, unanimously adopted by all Divisional MECs and Boards, as a Standard of Care during a State activated crisis.
- Organized a COVID-19 networked In-situ simulation plan, that enabled divisions to stress test critical COVID care situations
- Structured a network of frontline clinical guideline coordinators and worked with them to produce COVID-19 Clinical Management Guidelines.
- In collaboration with the Epic@Jeff & Enterprise Clinical Informatics team, developed an essential documentation data set based on CDC recommended guidelines for a reduction in documentation during a pandemic

# Chapter 4 Staffing and Employee Resources

#### **Staffing and Employee Resources Overview:**

The team focuses on assuring adequate staffing for both normal and surge operations. The team provides support to maintain morale and assures that staff have the resources to continue to work.

#### **Employee & Student Safety**

#### Universal Face mask policy:

 Our number one priority is patient and workforce safety. Given evidence of widespread transmission of COVID-19 in our community, beginning Monday, March 23, all workforce receive a face mask (surgical or procedural mask) to wear continuously throughout their entire shift, while on the premises. New masks are distributed each day.

#### Large Group Gatherings:

- Jefferson strongly advised employees against Jefferson sponsored in-person gatherings where 30 or more attendees are anticipated through May 12, 2020. For all internal meetings, Jefferson recommended the use of audio visual technologies such as Zoom or phone conferencing.

#### Jefferson Occupational Health Network (JOHN):

- Developed an automated system to follow exposed employees.
- Developed policies to address the major concerns of both the Academic Pillar and the Clinical Pillar.
- The JOHN COVID-19 hotline was opened to handle the volume of calls, address the exposures across the enterprise and to enable Jefferson employees to be assessed and tested for SARS CoV-2.
- The call center is staffed by 30+ people at times enough that the center needed to spread out for social distancing and the teams of providers intake, exposure, sickness, testing, and return to work were moved to 3 different locations.
- Edited algorithms for the standardization of care as guidelines change rapidly.

#### Jefferson Travel Policy:

- All Jefferson supported international air-travel by students, faculty, and staff remains suspended through May
   12, 2020
- All Jefferson supported domestic air-travel by students, faculty, and staff is suspended through May 12, 2020.

## ❖ Jefferson launched two hotlines that will be manned by Jefferson volunteers, staff, medical residents and APPs:

- 1. Jefferson Occupational Health Network (JOHN) COVID-19 Enterprise Employee Hotline
- 2. Jefferson COVID-19 Employee Hotline



#### Jefferson University in-person classes transition to online format:

- There will be no in-person classes as of Friday, March 13. Classes will begin in an online format on Monday, March 16 for those who are not on spring break. For students on spring break, classes will be delivered in an online format beginning on Monday, March 23.

#### **Employee and Student Mental Health and Morale**

Team Wellness and Mental Health Resources:

Examples of Mental Health & Coping Resources selection available on MyJeffHub:



Managing Your Anxiety About Health Risks: document that outlines common signs of anticipatory anxiety and coping mechanisms.

<u>EAP Contact Information: document that provides contact information for Jefferson's Employee</u>
Assistance Program (EAP), and outlines services available, i.e. mental health counseling, work life services, and legal & financial services.

For Clinicians - How to Manage Anxiety: document that outlines best practices for clinicians to prevent and manage stress at work and outside of work.

#### Employee Benefits:

- Child Care: Jefferson was able to support employee childcare needs through a partnership with YMCA and KinderCare Centers.
- Food Deliveries: All employees received a voucher for \$25 dollars off Go Puff. Additionally, vendors from the community supply employees with free food on a daily basis.
- Discounted hotel fares for employees
- Free Parking: Free parking available for employees in Center City.
- ❖ Better Together Fund: Jefferson established a Better Together Fund and 100% matched donations in order to establish a relief fund for employees in need. The fund has so far has garnered almost \$3.3M in donations and has allocated more than \$1M in employee assistance. The team purchased 15,000 milk chocolate bars with a specially designed wrapper that states Jefferson Hero. 40 of the bars will have a golden ticket that will be redeemed for a gift card. Jefferson Hero t-shirts will be sold to support the better together fund. Staff can purchase at the hospitals or on line.





16
Days remaining
Match Gifts! 16 days left!
GIVE NOW!





#### Employee Wellness Rooms:

Several divisions across the enterprise are setting up wellness rooms for their employees. In combination with the mental health resources that are supplied to employees via Zoom and other platform, Jefferson Health puts an emphasis on the stress that a physical environment can induce. Such rooms exist at Jefferson Northeast, Jefferson Abington, and Jefferson Center City, Neuroscience, and Methodist locations.



#### **\*** Employee Morale:

Jefferson believes its team of heroes who work tirelessly on a daily basis, are our most important and critical asset. Enterprise and divisional teams organize activities to assure staff feel appreciated. The communities we serve have also thanked our heroes. Below are examples of the community's salute to Abington's staff and the painted rocks that greeted staff at Northeast as they enter the hospital.





#### Micro Markets:

Several divisions across the enterprise are setting up micro markets for their employees to safely and conveniently obtain necessities while at work. Below is an example of the minimarket at Jefferson New Jersey.





#### **Staffing:**

JMG, Jefferson Nursing and Human Resources have worked diligently to finalize the pool process for reallocating staff within the enterprise to high demand areas in order to staff needed positions with existing positions.

#### Telehealth:

Jefferson has trained over 1,000 providers within the system to provide telemedicine services. As of 03/30/2020 all providers can find 6 modules on how to do various components of the physical exam and document within a telemedicine visit. This will increase Jefferson's capacity of accepting telemedicine visits and decrease the amount of patients seen at the hospital.

#### Surge Preparations:

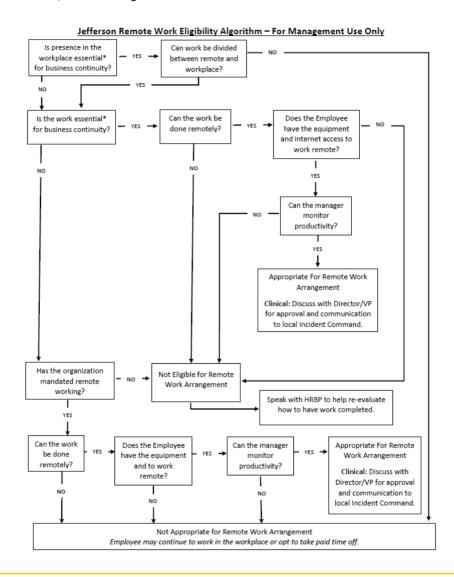
- A survey has been sent to all nurses in the enterprise to report their ICU experience in the case staff needs to be deployed from current units to the ICU.
- The current focus is on critical care and environmental services. Employees that can be reallocated have been identified from various areas and their profiles are with each division for review.
- See table below for an example of how divisions plan to staff their surge plans

| Scenario                | Staffing                      | Non-ICU Bed Capacity  | Provider Plan  |
|-------------------------|-------------------------------|---|--|
| Level 1 (current state) | 10-15% staff are out          | Manageable operations<br>and available bed<br>capacity                                      | Hospital Medicine<br>Family Medicine<br>Hospitalists   |
| Level 2                 | Assume 20-25% staff are out   | 15-20 % of hospital beds<br>delivering Non-ICU level<br>of care with Little<br>surging      | Hospital Medicine,<br>Family Medicine<br>Hospitalists,<br>Primary Care<br>Physicians, APPs                 |
| Level 3                 | Assume 25 - 50% staff are out | 25% of hospital beds<br>delivering Non-ICU level<br>of care, with surging to<br>other units | Hospital Medicine,<br>Family Medicine<br>Hospitalists, Primary<br>Care Physicians,<br>APP, Subspecialist   |
| Level 4                 | Assume 50% + staff are out    | 25% + or more hospital<br>beds delivering Non-ICU<br>level of care, with full               | Hospital Medicine,<br>Family Medicine<br>Hospitalists, Primary<br>Care Physicians,<br>APPs, Subspecialist, |



#### Remote Work:

- Jefferson's Human Resources department worked with each division and with enterprise leaders to develop an algorithm to determine those employees who are eligible to work from home. See below for an example of the algorithm managers can use to determine the eligibility of their staff to work from home.
- Jefferson expanded its Zoom accounts by 5,500 to accommodate the need for employees to work from home. Assistance and troubleshooting is provided for new and current users, maintaining same day for issue resolution, and resolving Zoom Room issues as needed.



#### **Weekly Highlights and Accomplishments**

- Nursing and clinical teams' e adopted a tiered staffing model to expand the number of patients that can be cared for safely. This is achieved by partnering non-ICU nurses and clinicians with primary care nurses and clinicians.
- While ambulatory patient volumes are declining, they are doing their part in partnering with inpatient areas. For example, they are functioning in extender roles with RNs, techs, case managers, and supporting our mobile testing sites.
- Jefferson academic teams are partnering with the clinical team through providing volunteer medical and nursing students in non-clinical and areas.
- ED patients and registrars are utilizing iPads outside patient rooms to complete virtual registration
- 855-Go2-Jeff Dedicated COVID testing patient line: 97% answer rate, 24 second average speed of answer, 3% abandoned rate



# **Chapter 5 Logistics**

#### **Logistics Overview**

In collaboration with supply chain, pharmacy, and respiratory therapy the logistics team sources and tracks the usage of supplies in each location. Surge plans included detailed estimates of supplies and equipment needed to resource the additional capacity.

❖ In order to ensure staff safety through the use of PPE conservation mechanisms were put in place. To mitigate the risk of running out of N95 masks, we procured 1,000 scuba masks and collaborated with Stanford University to create N95 alternatives.





#### **Example of Jefferson's PPE Conservation Guidelines**

#### JEFFERSON PPE CONSERVATION GUIDELINES

Context: In accordance with OSHA we have ceased fit testing in order to conserve supplies of N95 masks. These PPE conservation guidelines are derived from the Centers for Disease Control and Prevention. This statement applies just to those patient encounters where the use of PPE is indicated per CDC guidelines. For those patients who do not require the use of any PPE, staff, providers, trainees should continue to see patients as per usual process.

Definition of PPE: masks, masks with faceguard, face shields, goggles, PAPR, gowns, surgical

#### SECTION I

INPATIENT Personal Protective Equipment (PPE) Conservation Policy

- Please refer to RE-USE of PPE standards, delineated in the general PPE Usage Guidelines.
- The Centers for Disease Control and Prevention has approved the use of N95 masks with a manufacture date of 2003 and more recent.
- If PAPR is available, use is encouraged and should follow appropriate usage guidelines defined in the PPE Usage Guidelines.
- PAPR hoods are multiuse by an individual and as the situation dictates, may be used by multiusers. Cleaning the PAPR machine and hood per infection control policy.
- Cleaning will be done between use and between users by the person wearing the PAPR.
- There should be no bedside team rounding, on any patient (COVID Suspected or NOT). o Limit room entry to the physician and/or APP, and RN directly caring for the

  - Unit the encounter to just one time in and out of the room
     Consider talking with the patient via alternative modes of communication (phone, video chat); especially for encounters not requiring an examination or physical contact.
- If a bedside procedure is required, the same specifications as above for "procedures"
- · Consulting services should determine whether a direct patient encounter is necessary for each day (including initial consult); and if a consult recommendation can be provided to the primary service without seeing the patient, then the consultant(s)

o consider a non-face to face visit; or use of tele-health

#### SECTION II:

Ambulatory care clinics—primary care, urgent care, specialty care when caring for suspected COVID + Cases in private room.

- . All providers, residents/fellows will need to obtain their PPE from the unit/clinic/OR.
- Limit the encounter to just one time in and out of the room
- Limit the care team in the practice to as few individuals as possible who will interact
  with these patients in order to conserve the use of PPE.
- . Limit the use of masks for non-clinical Office staff in accordance with CDC guidelines.
- Only the attending provider or primary APP should see the patient, donning the necessary PPE for that patient encounter.
   Residents and fellows should see the patients if they are the patient's
  - primary provider in their continuity clinic. Otherwise, all other encounters in clinics should be seen by attending providers only.
- Consider talking with the patient via alternative modes of communication, s
  phone or video chat; and donning a PPE for the physical exam and any other interactions that require direct contact.
- Shared visits for attending providers and APP, should be limited to just the APP see the
  patient, unless a clinical consultation is requested for challenging situations.

3-18-20



#### <u>Jefferson Health COVID PPE & Isolation Utilization Guideline for Non-OR</u> Environments (03-31-20)

\*\*\*PPE guidelines are derived from the CDC/WHO Guidelines. Additional references below\*\*\*

The SAFETY of our patients and staff are our #1 Priority.

#### What Has Changed and/or Added:

Added a section to address N95 or PAPR use when caring for known or suspected COVID-19 positive patients.

#### Mask Guidelines for Non-OR and Non-ER Environments

- Though there have been no changes to national guidelines regarding the use of surgical masks in
  caring for COVID-19 patients, we recognize the concern raised by many caregivers across the
  enterprise who would feel better protected in using an N95 respirator or PAPR along with other
  standard PPE in caring for known or suspected COVID-positive patients.
- Any employee caring for patients with known positive COVID-19, or Persons Under Investigation (PUI), can wear an N95 mask, or PAPR.
  - o Surgical masks are acceptable if an N95 or PAPR are unavailable.
- Employees should continuously wear a mask while in a hospital or clinic setting. Ear-loop or surgical
  masks are being distributed to all staff in clinical areas.
- If switching from ear-loop or surgical mask to an N95 mask for a COVID-19 or PUI patient, the
  surgical mask can be removed and placed in a paper bag and the N95 mask can be carefully
  donned. When leaving the patients' room, the staff member may carefully switch back to their
  surgical mask.
- Masks of all descriptions do not need to be discarded or removed when going between patient rooms unless they are soiled, damaged or after aerosol-generating procedures.

<u>Inpatient</u> Guidance for Non-OR and Non-ER Environments for patients with suspected or confirmed COVID19 infection:

| Enhanced Airborne Precautions (Higher Risk Patient) |   |  |  |
|---|---|--|--|
|   | Type of Patient: ICU patients, patients with tracheostomy,<br>positive pressure ventilation (e.g. BiPAP), high flow nasal<br>cannula. |  |  |
| Patient   | Room type: negative pressure room if available, otherwise<br>private + door closed.   |  |  |
|   | <ul> <li>Patient transport: (only when essential) – patient wears a<br/>surgical mask.</li> </ul>                                     |  |  |
| Clinical Staff                                      | N-95 + face shield/goggles ( <u>or</u> PAPR )+ gowns + gloves.  |  |  |

| Enhanced Respi | Respiratory Precautions (Lower Risk Patient)  |  |  |  |
|----------------|---|--|--|--|
|                | Type of Patient: Patient not in category above.   |  |  |  |
| Patient        | Room type: private room, door closed (not negative pressure).     Patient transport: (only when essential) – patient wears a surgical mask  |  |  |  |
| Patient        |   |  |  |  |
|                | PAPR or N95* + gowns + gloves + face shield/goggles   |  |  |  |
| Clinical Staff | <ul> <li>Surgical mask is acceptable if N95 or PAPR is<br/>unavailable.</li> <li>N95 should be worn when administering nebulized</li> </ul> |  |  |  |
|                | medications and for 1 hour afterward.   |  |  |  |

#### Outpatient Guidance for patients with suspicion of COVID-19:

- Patient should wear a surgical mask and should be isolated in a private room.
- Staff having contact within 6 ft. of patient:
  - o surgical mask + eye protection + Isolation gown + gloves

#### **Emergency Department PPE**

Patients will be designated as Non COVID or Possible COVID, at check in:

- Non COVID = any patient with an entirely non-respiratory, febrile complaint such as ankle sprain
- Possible COVID = any patient with ANY of the following: sneezing, coughing, sore throat, URI symptoms, fever.



Atlantic Gasket, a local Philadelphia-based company, produced mask material and Jefferson medical and nursing students utilized the material to construct masks.

#### **Weekly Highlights and Accomplishments**

- Developed list of equipment and supplies which will be needed for surge plans.
- Secured 35,000 SF additional space in Center City and other building spaces to assist with expansion for use in COVID-19 response.
- Expanded total morgue capacity three fold through acquisition of refrigerated sea containers, and coordinated transportation to various morgues and FEMA sites
- Successfully navigated complicated, drug shortages to obtain and maintain safe levels of medications for our patients
- Built up inventory of key products and continuously scoured drug wholesaler inventory to purchase where possible to maintain a safe supply of medications to care for our patients.

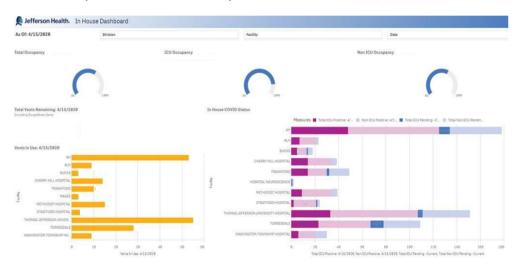


# Chapter 6 Planning and Intelligence

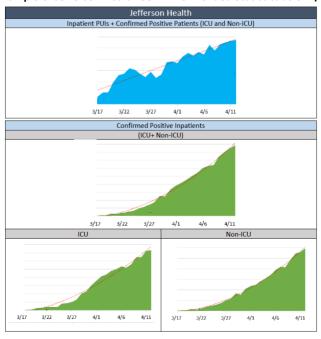
#### Planning and Intelligence Overview:

The Planning & Intelligence team coordinates surge planning, provides internal and external intelligence, utilizes predictive modelling to develop census projections and maintains a dashboard of key metrics. The team monitors trends and intelligence across the world, the US and in our region including New York, New Jersey and Pennsylvania. Using a predictive model developed by Penn Medicine, Jefferson projected lower impact and higher impact scenarios to estimate potential utilization of critical care, inpatient care and ventilation over time. The team also worked with enterprise analytics to develop an automated daily dashboard that summarizes current status of the enterprise and each division and weekly trend charts showing the progression of the pandemic.

#### Example of Jefferson Health's Daily COVID-19 Dashboard as of 4/15



#### Example of Jefferson Health COVID-19 Trended Statistics as of 4/12



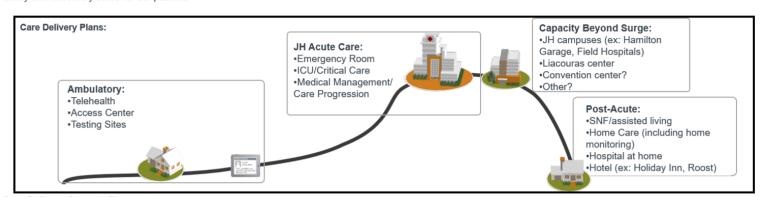


#### Surge Planning and Jefferson's Predictive Model:

Clinical leaders convened working groups with representatives from each of the divisions to develop comprehensive surge capacity plans for Critical Care, non-ICU, Emergency Department and Post-Acute Care. In addition ancillary and support department such as pharmacy, lab, radiology, medical transport, transfer center, dietary and others developed response plans to support the care delivery system. These plans informed need for staffing, supplies, equipment, IS &T and facilities changes.

#### **Jefferson Health COVID Response**

Principle: Create an integrated approach to care delivery in response to COVID-19 that maximizes the efficiency of the care team, minimizes impact on the workforce, and safely and effectively cares for our patients



Care Delivery Support Plans:

Medical Transport, Transfer Center/CORE, Lab, Morgue, Radiology, Pharmacy, SKCC, Transportation, Nutrition, EVS, and Facilities Total Beds Available:

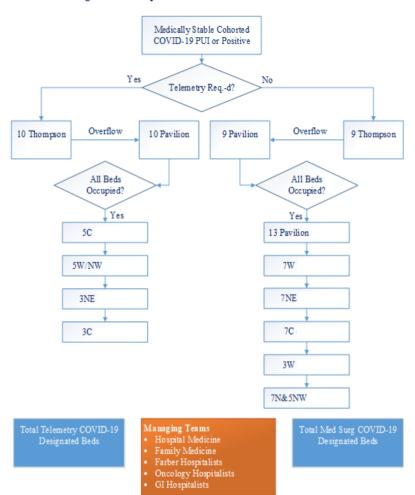
#### **Example of risks identified at each Jefferson Division**

| Location              | People                                   | Process  | Supplies                            | Space                                      | Technology                           |
|-----------------------|--|--|-------------------------------------|--|--------------------------------------|
|                       | - Recruitment and training of outpatient | - Cohorting of COVID-19 patients until the               | - PPE equipment, PAPR device        | - Expanding space for Non-ICU COVID-19     | - COWs                               |
|                       | internist, family physicians and         | system is maximized                                      | - Disinfectant wipes                | Care as indicated                          | - Remote patient monitoring tech     |
|                       | specialists                              | - Tiered discharge process for low risk,                 | - Access to scrubs                  | - Maximize inpatient and ICU space via     | - Pulse Oximetry on floors           |
|                       | - Maximizing scope of practice for NPs,  | moderate and high risk patients (being                   | - Viral media/swabs (rapid turn     | alternative use spaces                     | - Chest compression device for a cod |
|                       | PAs, all practice to top of license      | worked on)   | around time testing)                | - Potential risk of in-hospital            | blue of COVID positive patients      |
|                       | - More environmental services staff for  | - Process for monitoring discharged COVID                | ,                                   | transmissions to non-COVID patients in     |                                      |
|                       | rapid bed turnover                       | patients via telemedicine and home monitor               |                                     | inpatient unit                             |                                      |
|                       | - Loss of daytime and nighttime staffs   | devices  |                                     | - Partnership with city for care of        |                                      |
|                       | due to COVID exposure and contraction    | - Transition of Care planning for vulnerable             |                                     | overflow when space has been               |                                      |
|                       | of the disease                           | patient populations such as group home                   |                                     | maximized                                  |                                      |
|                       | - Case Management, social services, and  |  |                                     | - Dedicating additional workspaces to      |                                      |
| Center City/Methodist | pharmacy staffing to aid with rapid      | substance abuse patients, and patients with              |                                     | account for the increase in Hospital       |                                      |
|                       |  | mental disability  |                                     | Staffing while maintaining social          |                                      |
|                       | setting                                  | - CORE Admission process that is                         |                                     | distancing.                                |                                      |
|                       | - Palliative Care/Pastoral Care as surge | streamlined and standardized for non-ICU                 |                                     | - Alternative housing options for          |                                      |
|                       | increases                                | admissions   |                                     | Providers who prefer to not/cannot go      |                                      |
|                       | - More Transport personnel for patient   | - Transfer Center/CORE process for OSH                   |                                     | home                                       |                                      |
|                       | transfers within the hospital            | COVID vs Non-COVID OSH transfers and                     |                                     | - Availability of negative pressure OR for |                                      |
|                       | - Reinstitute Concierge Pharmacy         | Direct Admissions with standardized                      |                                     | COVID-positive surgical patients such as   |                                      |
|                       | services for patients in COVID units     | screening and Epic Communication for                     |                                     | hip fracture, spine osteomyelitis          |                                      |
|                       | - Burnout of clinical staffs             | accepting inpatient teams through MOD                    |                                     | inp fracture, spine osteomyentis           |                                      |
|                       |  |  |                                     |  |                                      |
|                       | - Training Internal Medicine and Family  | - Mental Health Patients with COVID                      | - PAPRs/hoods (PAPRs and hoods)     | - Expanding space for Non-ICU COVID-19     | - Additional COWS                    |
|                       | Medicine practice providers to support   | symptoms   | - Surgical masks                    | Care as indicated at three JNJ sites       | - Pulse Oximetry on floors           |
|                       | surge needs                              | - CORE Admission process that is                         | - N95s for all COVID+ patients, not | - Maximize inpatient and ICU space via     | - Workspace for additional staffing  |
|                       | - Surge plans for ICU/Intermediate care  | streamlined and standardized for non-ICU                 | just enhanced airborne              | alternative use spaces                     |                                      |
|                       | patients and when to activate them       | admissions   | - Gloves (all sizes)                | - Partnership with State of New Jersey for |                                      |
|                       | - Expectations of the hospitalists       | <ul> <li>Cohorting of COVID positive patients</li> </ul> | - Access to scrubs                  | care of overflow when space has been       |                                      |
| lefferson NI          | handling ICU patients                    |  |                                     | maximized                                  |                                      |
| Jener John 16         | - Nurses and Advance Practice Providers  |  |                                     | - Housing if needed for providers who      |                                      |
|                       | for staffing for surge                   |  |                                     | prefer not to/cannot go home due to        |                                      |
|                       | - In house anesthesia/ anesthetist to    |  |                                     | quarantine                                 |                                      |
|                       | handle airway for Code Blue or RRT       |  |                                     |  |                                      |
|                       | - Clear TOC plans with who is            |  |                                     |  |                                      |
|                       | responsible for executing them           |  |                                     |  |                                      |
|                       |  |  |                                     |  |                                      |
|                       | - Recruitment of outpatient internist,   | - Expeditious process to move patients from              | - All PPE Equipment                 | - Inpatient space and rapid turnover of    |                                      |
|                       | family physicians, medical residents,    | inpatient to home, SNF, NH, group home                   | - PAPRs/hoods                       | this space for clinical use                |                                      |
|                       | subspecialists                           | - Rapid EVS bed turnaround                               | - Surgical masks                    |  |                                      |
| Abington/Lansdale     | - Recruit and Maximizing use NPs and     | - Rapid turnaround COVID test, consider                  | - N95s                              |  |                                      |
| / Ibingtony canboure  | PAs                                      | POCT by Abbott Lab                                       | - Gloves                            |  |                                      |
|                       | - More environmental services staff for  |  | - Swabs that can be used for COVID- |  |                                      |
|                       | rapid bed turnover                       |  | 19 and influenza                    |  |                                      |
|                       |  |  | - Portable pulse ox monitors        |  |                                      |
|                       | - Recruitment of outpatient internist    | - Expeditious process to move patients from              | - All PPE Equipment                 | - Expanding space for Non-ICU COVID-19     | - COWs                               |
|                       | and family physicians                    | inpatient to home, SNF, NH, group home                   | - PAPRs/hoods                       | Care as indicated                          | - Remote patient monitoring tech     |
|                       | - Recruitment of Internal Medicine       | - What is the testing guidance for sending               | - Surgical masks                    | - Maximize inpatient and ICU space via     | - Pulse Oximetry on floors           |
|                       | Residents                                | patients to the above facilities                         | - N95s                              | alternative use spaces                     |                                      |
| Jefferson NE          | - Recruitment of APPs from in house      | - Rapid EVS bed turnaround                               | - Gloves (all sizes)                | - Partnership with city for care of        |                                      |
|                       | services to support clinical care. Will  | <ul> <li>Rapid turnaround COVID testing</li> </ul>       | - Swabs that can be used for COVID- | overflow when space has been               |                                      |
|                       | need to define the collaborative         | - Rapid Transition of care process to                    | 19 and influenza                    | maximized                                  |                                      |
|                       | practice agreements                      | outpatient settings                                      |                                     | I  |                                      |
|                       | - More environmental services staff for  |  |                                     | I  |                                      |
|                       | rapid bed turnover                       |  |                                     |  |                                      |



#### **Example of TJUH Bed Management Expansion Plan**

#### TJUH Bed Management and Expansion Plan



| Scenario                | Staffing                         | ICU Bed Capacity   | Provider Plan   |  |
|-------------------------|----------------------------------|--|---|--|
| Level 1 (current state) | 10-15% staff are out             | Manageable operations<br>and available bed<br>capacity   | Pulmonary   |  |
| Level 2                 | Assume 20-25% staff<br>are out   | 15-20 % of hospital beds<br>delivering ICU level of<br>care with Little surging                                    | Pulmonary + Non-<br>Pulmonary Critical<br>Care  |  |
| Level 3                 | Assume 25 - 50% staff<br>are out | 25% of hospital beds<br>delivering ICU level of<br>care, with surging to<br>PACU, telemetry, etc.                  | Pulmonary + Non-<br>Pulmonary Critical<br>Care + Anesthesia<br>(Cardiac then Non-<br>Cardiac)                           |  |
| Level 4                 | Assume 50% + staff<br>are out    | 25% + or more hospital<br>beds delivering ICU level<br>of care, with full surging<br>into ORs + Tented<br>Hospital | Pulmonary + Non-<br>Pulmonary Critical<br>Care + Anesthesia<br>(Cardiac then Non-<br>Cardiac) + All Other<br>Physicians |  |

#### **Weekly Highlights and Accomplishments**

- Finalized COVID-19 Surge Plans in collaboration with key enterprise and divisional leaders
- Consolidated all clinical care delivery and response plans to have an enterprise view of surge impact
- Created a process to evaluate plans at each level of surge to consolidate the supplies, staffing, and IS&T requirements and associated costs
- Utilized Qlik to automate the Daily COVID-19 Dashboard



# Chapter 7 Communication

#### **Communication Overview:**

Internal and external communication is critical to responding to the impact of COVID-19. The Communication team coordinates and streamlines communication processes, establishes consistent protocols intended to inform and reassure employees, staff and students. Jefferson's communications strategy is threefold: EICC communications, communications to employees and students and external communication to our patients and communities.

#### 1. **EICC Communications**

In order to maintain regular and transparent communication, the EICC convenes an enterprise leadership call at 10:00am daily. Following the call, notes, the COVID-19 dashboard, and intelligence report are disseminated to participants to share with staff through Town Halls and department meetings.

#### 2. Communication to Employees, Students and Patients

The largest part of Jefferson's communication strategy is based on communication to employees, students and staff. Internal communication methods are the following:

- MyJeffHub, our engagement platform, is continuously updated with all protocols and COVID-19 related news and benefits. This serves as the single source of truth for all employees, students and staff. The platform is organized in the following manner:
  - 1) Daily quick updates
  - 2) Featured guidelines, memos and videos
  - 3) Clinical Guidelines
  - 4) Resources For Everyone
  - 5) Thomas Jefferson University Updates
- Daily All-TJU Broadcast email is sent by end of day that includes the following:
  - Message Map: focuses on centering moments, daily updates, daily trainings, local updates, and mental health and coping live sessions.
  - Jefferson COVID-19 Intelligence Report: Highlights COVID-19
    cases in the world, NY, NJ and PA and TJU. Additionally,
    highlights breaking news articles related to the day before.
- Daily face-to-face divisional leadership rounding
- Virtual Town Halls





#### **External Communication:**

Jefferson's media relations strategy emphasized telehealth, which surged in popularity and aligned with a strategic investment the institution had made that allowed it to rapidly scale amid the pandemic. National media placements in the Washington Post, STAT News, U.S. News, and more positioned Jefferson as a national telehealth leader, while local media saturation helped drive visits. Jefferson drove multiple waves of telehealth coverage locally, including the benefits telehealth gives to quarantined providers, who can still provide patient care remotely. This storyline was highlighted with a front-page Philadelphia Inquirer profile

As decisions were made regarding elective surgeries and outpatient visits, all patients received phone calls and letters in the mail notifying them with changes to their appointments. They were encouraged and given instruction on how to utilize telehealth for their upcoming appointments and were aided by a call center employee to reschedule elective surgeries, radiological appointments...etc. to upcoming months.

Jefferson leveraged its internet website to reiterate its visitors and patient policy, outpatient practice guidelines, care after COVID-19 testing, COVID-19 review and CDC recommendations, preventative methods, donation needs and sites, and resources for healthcare professionals and facilities.

When it comes to social media, user-generated content from frontline staff has led to a tremendous groundswell of community support as Philadelphia rallies to celebrate healthcare workers. Jefferson has spurred public engagement through compelling photos and videos of staff, including morale-boosting dance routines by nurses that have led to influencer amplification and additional media coverage. Jefferson capitalizes on influencer amplification through various engagement mechanisms to show how connected Jefferson is to its communities.

# A CONVERSATION ABOUT CORONAVIRUS WITH JEFFERSON HEALTH PRESIDENT DR. BRUCE MEYER

Episode seven of The Health Nexus Podcast

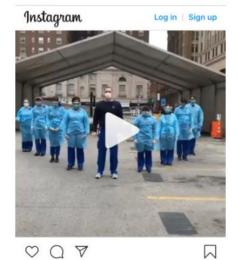


#### $\equiv$ VEICE

#### Jefferson scientists tout dual COVID-19rabies vaccine to meet 'unprecedented' scale of pandemic

Discussions underway with manufacturer as researchers hope to move toward human clinical trial





2,482,121 views

ciara Seeing the Doctors and Nurses of @Tjuh\_pool do the #LevelUp Dance brings me so much joy. Grateful for each and every one of you! You all are on a whole nother level for how you're working so hard and sacrificing so much to take care of everyone! LevelUp Champs. #WereInThisTogether

View all 7,230 comments

This document reflects the collective work of many individual and teams across the Jefferson Enterprise.