Excellence leads the way.

A playbook for navigating the clinical and operational challenges of a global health crisis

◑ RUSH

As of 4/1/20

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Executive Summary:

On March 2, 2020, Rush University System for Health stood up a Hospital Incident Command Center, or HICS, in anticipation of the growing number of COVID-19 cases in Chicagoland and the nation. The command center structure provides an organized system of command, control and coordination to eliminate potential confusion that may develop in these types of emergencies or events. It is an effective management tool consisting of procedures for organizing personnel, facilities, equipment and communication at the scene of an emergency and is flexible and scalable to be used for incidents of any size and adaptable to the specific incident.

In the case of the 2020 COVID-19 outbreak, Rush proactively set up the command center to prepare for what would inevitably affect our operations significantly. Throughout the process, lessons were learned and the dynamic nature of the situation affected our ability to consistently handle and anticipate every need. This playbook is meant to serve as a resource for others faced with similar situations and help all of us get a head start on providing the best care possible in a crisis.

Chapter 1

Command Center Implementation (HICS Command Center)

Hospital Incident Command Overview

During a disaster, emergency or event that affects daily operations, the Hospital Incident Command System (HICS) and Hospital Command Center (HCC) become operational. In a situation like the COVID-19 outbreak, Rush's immediate action to "stand up" the HICS process was imperative. As a first step, the incident commander position was activated, as well as other HICS positions based upon the scenario and the operational objectives identified by the HCC. The identified HICS personnel were trained in the National Incident Management System (NIMS) and identified through the HICS system.

Key Personnel:

As part of the overall Hospital Incident Command System, the following roles were assigned to key medical center personnel:

HICS Command Staff

- Incident Commander
- Operations Lead
- Disaster Medicine Specialist
- Medical Technical Specialist
- Public Information Officer
- Technology Lead
- Safety Officer
- Liaison Officer
- University Lead
- Command Center Manager

HICS General Staff Assignments

- Medical Director
- Medical Care Section Chief (Inpatient & Outpatient)
- Planning Section Chief
- Logistics Section Chief
- Operations Section Chief (Inpatient & Outpatient)
- Finance Section Chief

Unit Leader / Branch Director Assignments

- Security Branch Director
- Bed Management Unit Leader
- Support Branch Director-Employee Health and Well-Being Unit Leader

Command Center Infrastructure

A selection of organizational tools have been deployed within the command center to track both patients under investigation (PUIs) as well as project management efforts.

### PUI Tracking Dashboards

Dashboard of Informational Awareness

A combination of Excel, REDCap and Maestro was used to review PUIs,both locally and nationally, as well as understand hospital capacity and flow. Efforts are underway to use predictive analytics to track supplies and absenteeism as potential indicators for virus spread. Epic registries are also being created to standardize and centralize PUI tracking for patients and employees.
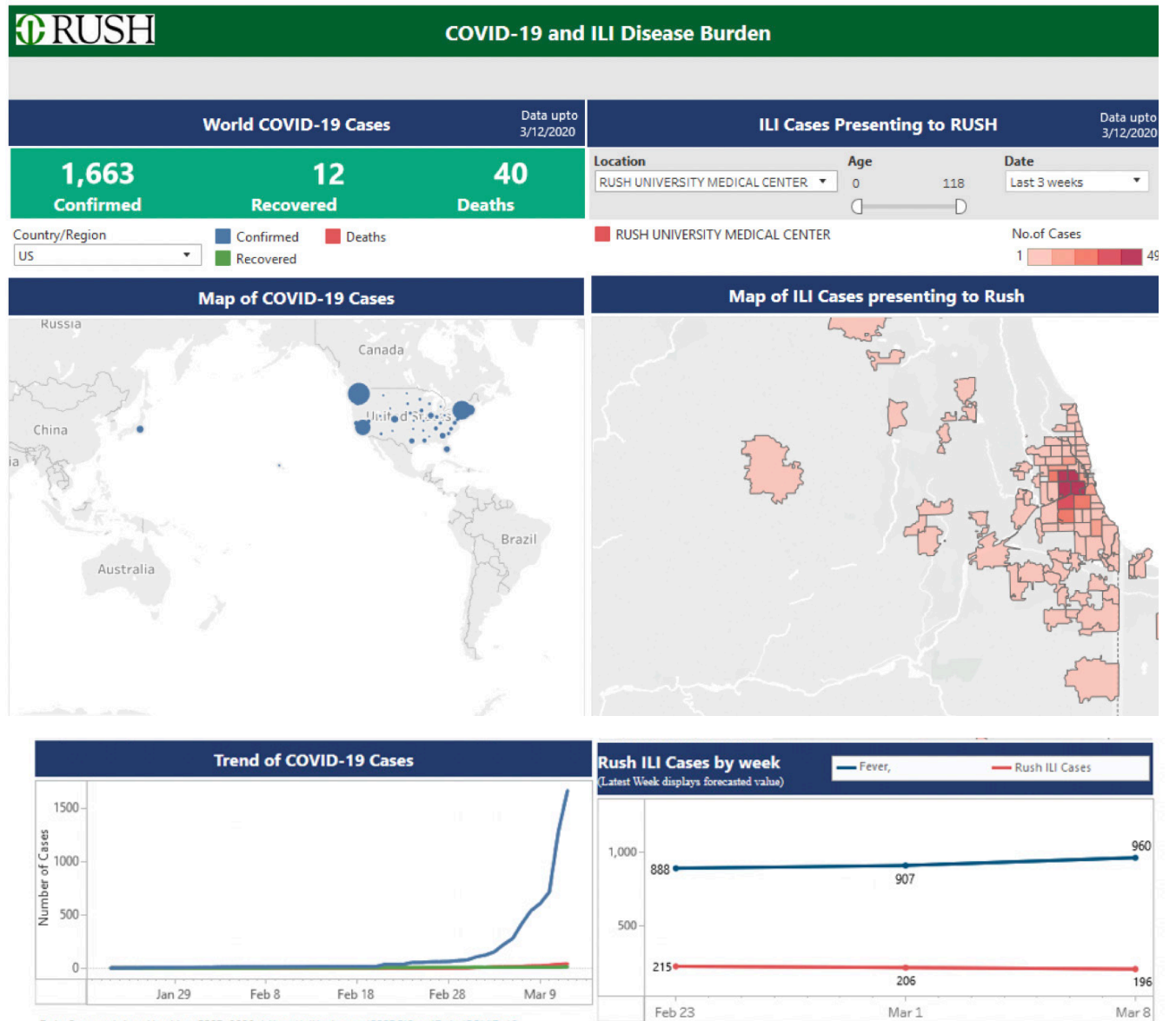
National and Local Dashboards

Epic dashboards are also being created to standardize and centralize PUI tracking for patients and employees.

Operational volumes:

Rush Patients Under Investigation Dashboard
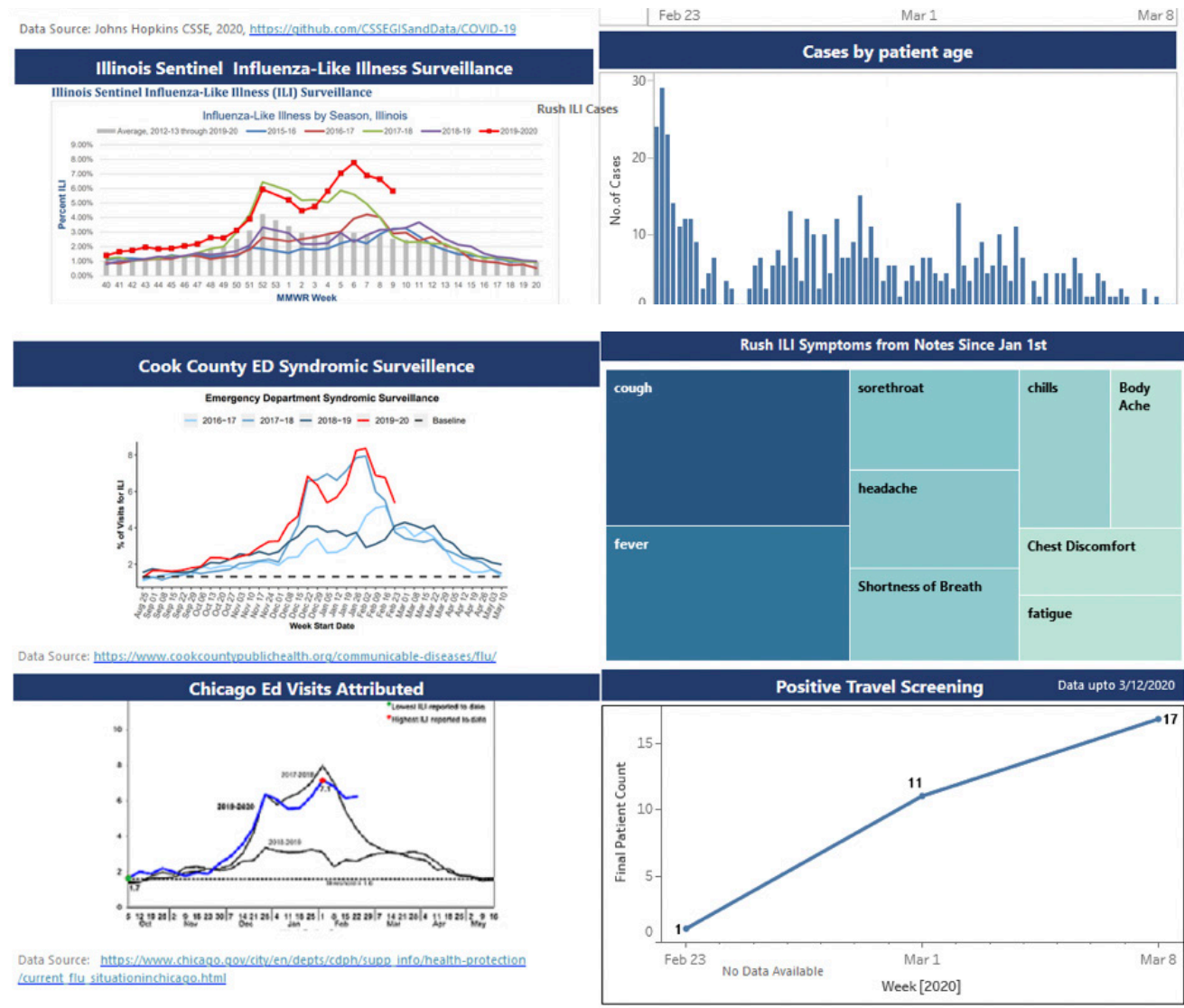
Project Management Dashboard:

Command center personnel with view and edit access have the ability to update and/or review the Trello Dashboard, which contains the following key workstreams:

- Situational Awareness
- Daily 4 p.m. Workgroup Report Outs
- Patient Screening
- Patient Care
- Surge Planning
- Visitor Management
- Employees/HR/Workforce
- Supplies/Equipment/Cleanliness
- Staff Training
- Communication
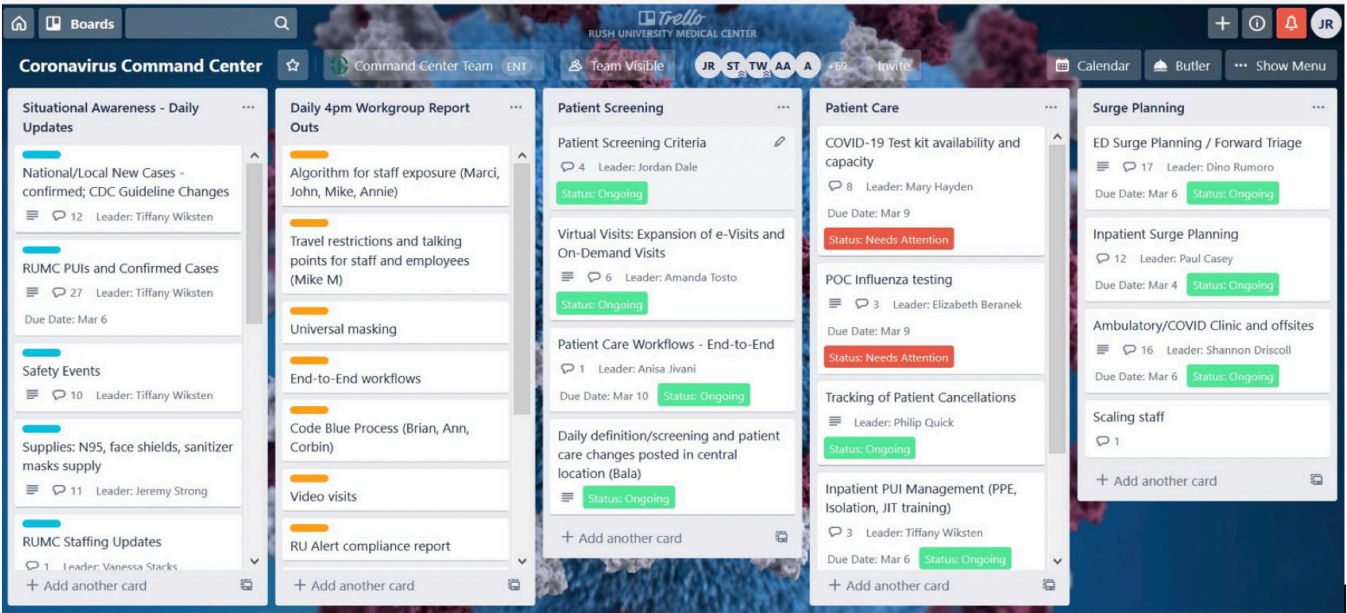
Communication Channels

Contact Numbers

Inbound COVID-19 questions and inquiries came in through a variety of channels, both internal and external, and were directed in the following ways:

- Patients, visitors and employees with general questions about prevention or Rush's plans, those experiencing symptoms and more were directed to the Rush Call Center, 24-hours a day, seven days a week.
- Employees with questions about patient care and issues specifically related to COVID-19 were instructed to call a hotline number connected directly to the Hospital Incident Command Center.

Cisco Webex

Cisco Webex is used to conduct twice-daily web-based meetings. HCC report-outs occur at 9 a.m. and 4 p.m. and include all command center staff. Virtual meetings allow command center team members to share critical information seamlessly while avoiding large gatherings. In addition to Webex meetings, the Webex Teams app is used for smaller workgroup chats and discussions throughout the day, which allows for easy information and document sharing.

COVID-19 Questions Website

As questions and concerns regarding COVID-19 naturally escalated, it was recognized that a virtual platform to answer questions would be useful. Members of the Rush community submit questions about COVID-19-related issues by logging into the Rush intranet and clicking on the "I want to submit a COVID-19 Question" link. Users can add a new discussion item or review previous question threads submitted by others. All question submissions are monitored by the HICS team and routed to subject matter experts as necessary.
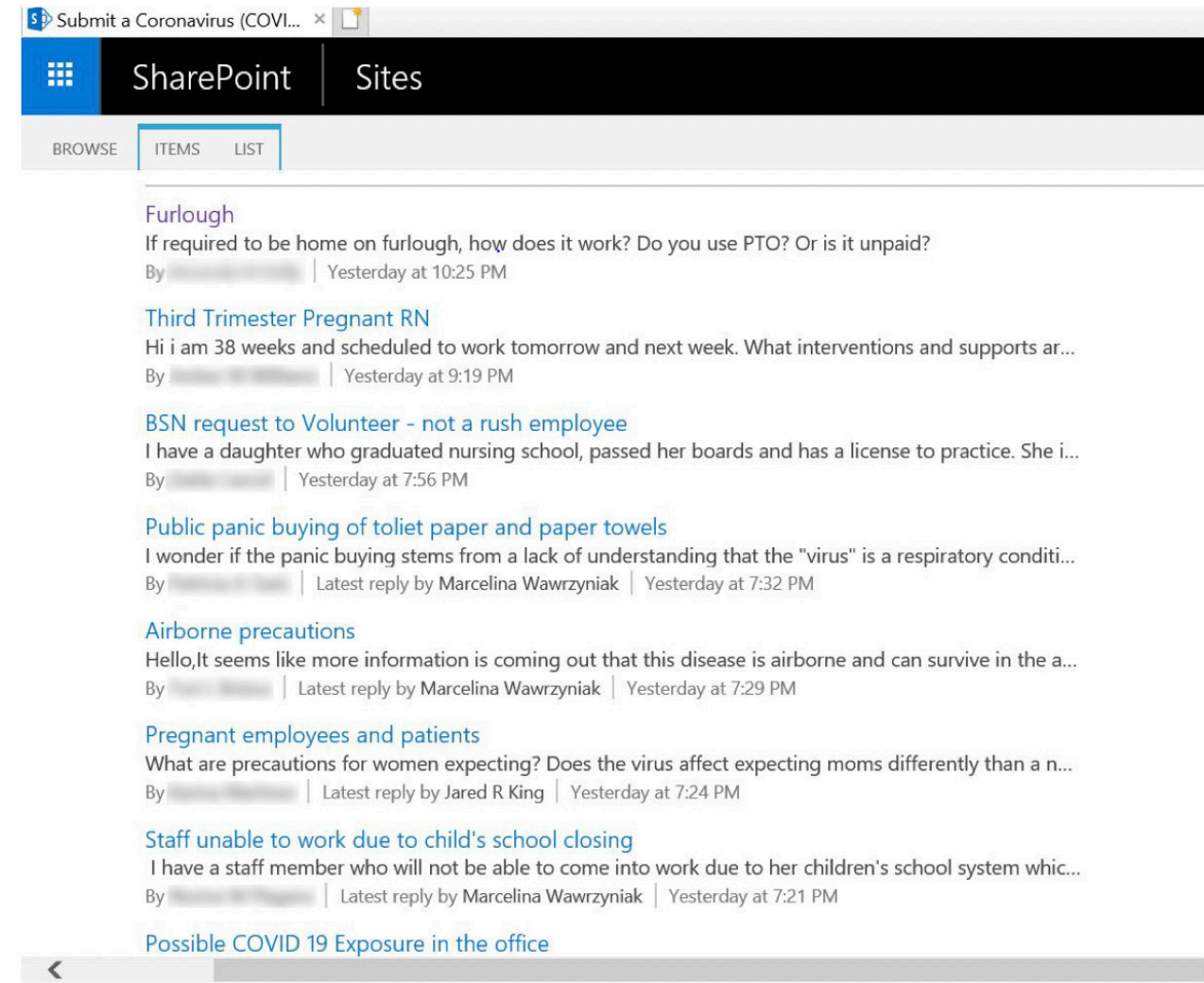
Mobilization Team

In its initial iteration, the Command Center Mobilization Team was a roving team of clinical and administrative leaders that served as a calming presence to support staff and the infection control team in the management of care for patients under investigation (PUI) or with COVID-19. This often involved troubleshooting operational needs such as supply challenges, patient movement/transport, room management or clinical support — including coaching employees and observing for compliance with personal protective equipment (PPE). Rounding in clinics and inpatient units during downtime was encouraged.

The team has since evolved and now includes a more comprehensive set of responsibilities, some of which appear below:

- Every four hours, consult the Epic Isolation Access screen in the command center to stay current withthe locations of current PUI isolated and COVID-19 positive patients.
- Every four hours, update COVID-19 Inpatient Placement Awareness Team (e.g., Pharmacy, CE, EVS, Dietary, Transport, Supply Chain, Nursing, Hospitalists) with the location of current patients who areunder investigation or have tested positive for COVID-19. This group site can be used for communication ofissues to the Mobilizer Team that requires support.).
- Remain in constant contact with the Hospital Operations Administrators (HOAs)/COVID Bed Placement Team by carrying the Mobilizer phone to be aware of available COVID-19 beds and to determine the need to begin planning for the additional opening of units designated for COVID-19.
- Ensure that the Roaming PPE Training Team is available to train unit personnel caring for either COVID-19 positive patients or PUIs.
- Collaborate with the ED, the HOA and Patient Placement to identify where the patient will be admitted. The goal will continue to be to identify appropriate PUIs and/or positive COVID patients expediently and then place patients on the designated COVID-19 areas.
- Work with Guest Relations/HOAs to mitigate visitor/family issues related to either visitor restrictions and/or discharge education/disposition.

Additional activities to continue:

- Round with the goal of keeping staff calm, ensuring that unit staff have the PPE and other resources needed to provide excellent patient care.
- Serve as runners for the Incident Command taking specimens to the lab or delivering PPE supplies to units.
- Ensure that PPE donning and doffing is being performed appropriately if asked to observe/assist in the ER or on the units.
- Set up Webex connectivity to the command structure to allow for remote conversations.
- Set up a duplicate command center with other leaders to avoid the possibility that an infected leader could contaminate key personnel.
- As guidelines evolve based on CDC recommendations, institute a rule of no more than 10 leaders in a room.

Activities that should not be assumed by the mobilizer:
- Serving as the team handling the 7-SAFE calls
- Donning PPE and going into rooms where patients are being worked up or isolated for COVID-19

Chapter 2

Communications Strategy

Communications Strategy Overview

At the first mention of the COVID-19 outbreak, Rush's Department of Marketing and Communications began monitoring its spread and preparing in a variety of ways to handle the impact the virus would inevitably have on the entire Rush community.

Focused on a mission to help Rush stakeholders get early and adequate information while expanding Rush's leadership position, Rush's Associate Vice President of Strategic Communications developed and led a strategic communications plan with support from outside counsel. It was created with input and guidance from Hospital Incident Command leadership and guided the communications team's participation in the HICS process and daily response.

Communications Goals

- Position Rush as the trusted expert on COVID-19 by showcasing leadership in infectious disease readiness nationally and locally.
- Ensure that our community of employees, students, patients and visitors feel that Rush is safe place for care and that staff feel protected and prepared.
- Inform all staff daily of current status, changing policies, how appreciated they are and why they are safe at work.
- Share critical treatment and prevention information to Rush's community, including the most vulnerable groups.
- Educate in- and outpatients that Rush is prepared and they are safe and protected from infection.
- Combat the spread of misinformation with reassuring, factual, evidence-based expert information through as many channels as possible.
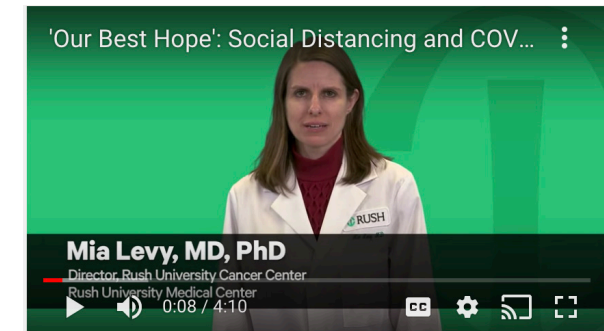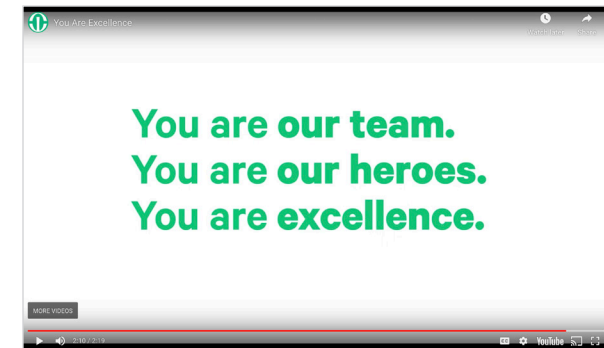
Key Messages

- The health and safety of our patients is Rush's first and foremost priority. No matter what illness we are treating at Rush, we have all the necessary precautions in place to ensure patients' safety — whether patients are coming for an office visit, hospitalization or to see someone else on campus.
- Rush cares deeply about the health and well-being of the community.
- Rush is leveraging our expertise in the use of technology to safely deliver care — through e-visits, video visits and the My Rush App.
- Rush's excellence is most apparent when responding to a major public health concern such as the spread of COVID-19.
- The Rush Tower is an ideal Chicago location for these patients to receive care, should cases be confirmed. Why?
  ▸ It was built with exactly this type of situation in mind.
  ▸ As one of only 35 hospitals recognized by the Centers for Disease Control as a leader in disease treatment, Rush University Medical Center is uniquely equipped to meet patient needs, as well as others who may contract this novel coronavirus.
  ▸ With 40 negative pressure rooms and the ability to scale up further, our facilities are extremely well equipped should the presence of the virus in Chicago escalate.
  ▸ Negative pressure rooms are designed to let air into the room, but not escape the room.
- Rush worked closely with government agencies to protect public health.
- There is one simple way to protect yourself from coronavirus: Wash your hands.
- At this time, our best medical advice is simple: Keep calm and wash your hands.

Watch video

Watch video
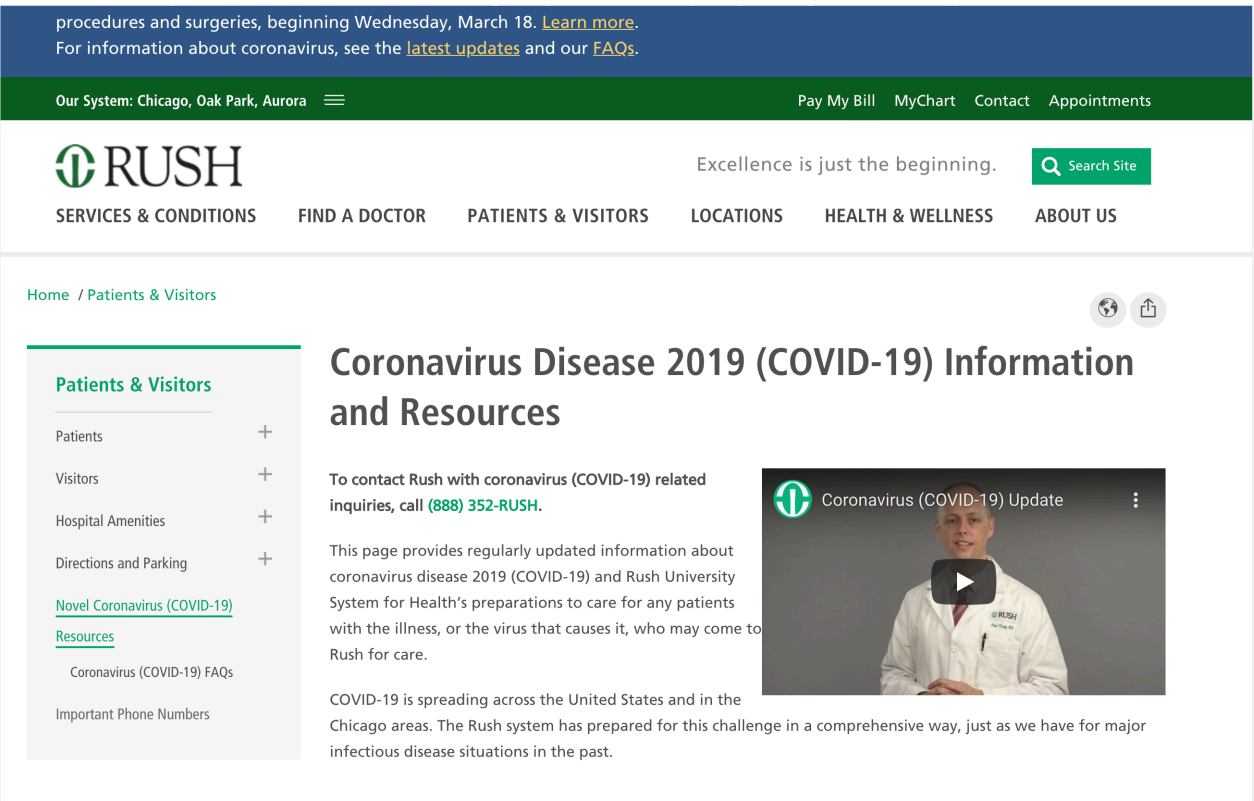
Visit page

Internal Communications

In an effort to keep our managers, employees, clinicians, students and faculty informed and empowered to perform their jobs safely and effectively during this crisis, the communications team mobilized an internal communications strategy to create a source of truth for all Rush employees. Using a variety of tactics to educate, inform and reassure internal audiences about how the virus is spread and contained, consistent communications were distributed on a regular, daily basis, and in-person leadership communications were emphasized with the following internal audiences:

- Leadership
- Managers
- Boards of trustees
- Clinicians

- Students
- Faculty
- All staff at all levels

Internal Tactics

- Daily 4 p.m. all-Rush email organized consistently into three main areas:
  - Patient update (providing daily COVID-19 case numbers at Rush each day)
  - Resources for you (useful links, guides, references, etc.)
  - Guidelines to follow (important guidelines that need to be followed by all employees)
- Face-to-face leadership rounding done in the following ways:
  - Managers were provided with a "Leadership Rounding Tool," encouraging daily rounding in their areas to share messages, solicit feedback and answer questions. Managers were asked to complete a daily survey to convey concerns and report out on issues identified during daily rounds.
  - Every senior leader was encouraged to spend at least 30 minutes a day being "present" in different locations throughout the system to talk with employees, hear their concerns or answer questions — conference rooms, cafeteria, lobby, break rooms, university hallways, departments, etc.
- Weekly town hall meetings (via Webex only) structured as a panel of Rush's most senior leaders and disease experts with Q&A
- Rush intranet site "COVID-19 Updates" refreshed daily with new information, including digest of what went out each day
- Twice-weekly leadership meetings (via Webex) to address manager concerns and answer questions
- Visual tools like posters and fliers regularly produced and updated with useful reference information, contact information and messaging
- Videos
  - CEO video reassuring staff of their safety during the crisis and how to keep self and family safe from virus transmission
  - Training video on properly donning and doffing personal protection equipment
  - Two coronavirus videos featuring Chief Medical Officer dispelling myths and providing expert information on prevention
  - Mental health and well-being video featuring Rush's Chief Wellness Officer and Chief Medical Officer to address employee anxiety and concerns

- **Rush Leader News** newsletter regularly distributed with guidelines for managers, resources and talking points for leaders to use in huddles and meetings

- Division-specific communications sent out regularly to employees from division leader

- Internal hotline phone number for staff questions and "Ask a Coronavirus Question" intranet page directs employees to web resources; new questions funneled to communications and HR teams so Q&A regularly updated
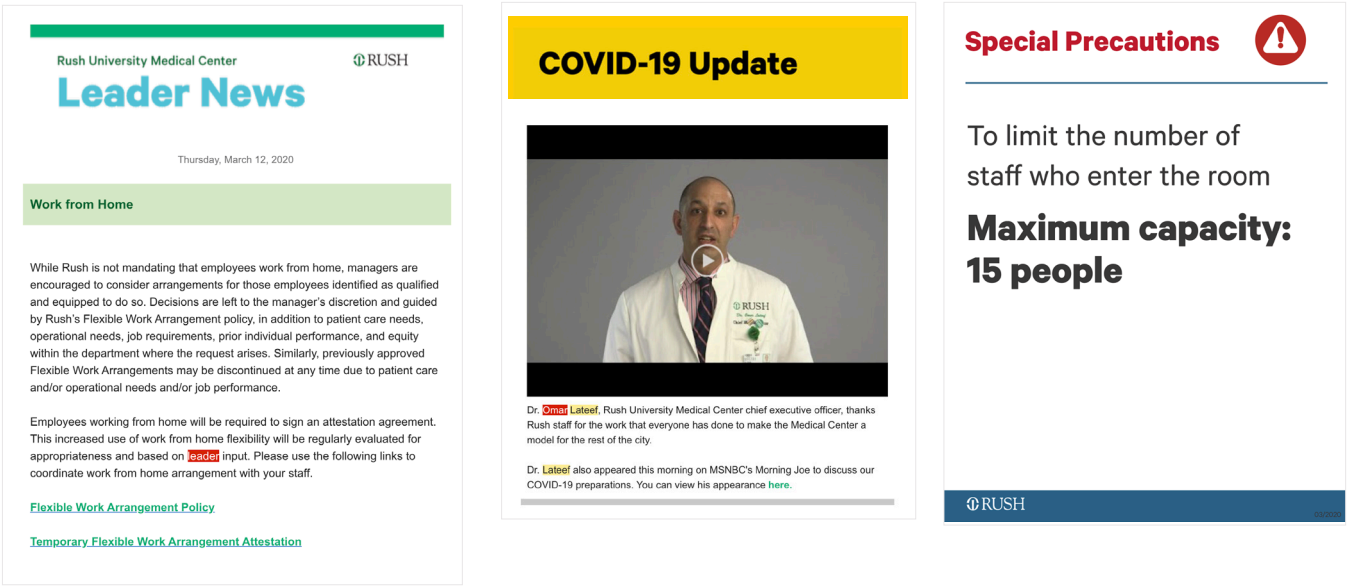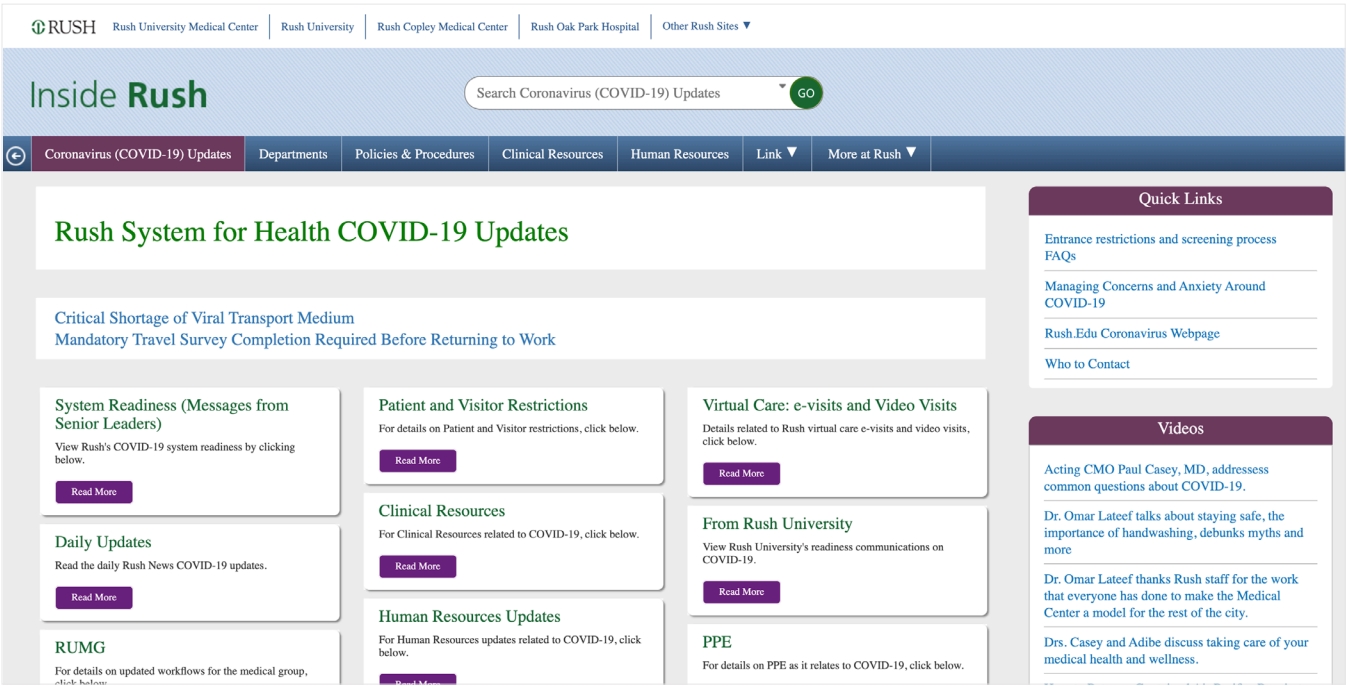
External Communications

Communications reassurance and expert advice was critically necessary to deliver to external audiences. Leveraging local and national media in addition to social media channels and posters, fliers and billboards, Rush took a multidimensional approach to spreading the word about COVID-19 preparedness. With a focus on positioning Rush as a trusted resource that cares deeply about its community, the communications plan included a number of tactics to employ engagement in the following external audiences:

- Patients — inpatient, outpatient and prospective
- General public
- Media
- Elected leaders — federal, state, local
- Community partners, churches and other organizations
- At-risk community members

External tactics

- Routine, daily posts on all of Rush's social media channels including:
  - Instagram (IGTV, feed and stories)
  - Facebook (posts and live)
  - Twitter
  - LinkedIn
  - YouTube
- Large format environmental graphics and digital
  - 130'x15' high "Wash your hands" installation
  - Digital billboad on major expressways

Take care of others by staying home when you're feeling sick.

RUSH

Keep calm. **Wash your hands.**

- Videos including:
  - [Children demonstrating how to wash their hands with pediatrician advice](#) on how to help kids with their anxiety about coronavirus
  - Advice and expert opinion video featuring chief medical officer
  - [Updated advice and expert opinion video featuring chief medical officer](#) giving up-to-the-moment updates on spread and what to do if exposed or fearful of being exposed

Teaching Children About Handwashing
Rush University Medical Center   Watch video

Coronavirus (COVID-19) Update

Watch video

- [Podcasts](#) including:
  - Q&A with infectious disease physician and regulatory and clinical effectiveness nurse
  - Updated Q&A with infectious disease physician and regulatory and clinical effectiveness nurse
- New Rush.edu page featuring updated news, advice, videos and resources for patients and visitors
- Electronic digital boards in Chicago area encouraging safety and hand hygiene (include photo)
- Mirror clings in bathrooms in more public locations near and in elevators – include resource for deeper dive on information/website (photo?)
- On-hold messaging related to readiness and visitor policies

The Rush Cast

https://feed.podbean.com/therushcast/feed.xml

Coronavirus update
February 27, 2020

An update with Michael Lin, MD, MPH, Rush Infectious Disease Specialist and hospital epidemiologist and Alexander Tomich, DNP, RN, Associate Vice President of Regulatory and Clinical Effectiveness at Rush. As this new coronavirus spreads, the two separate the misinformation from the facts.

2,375 Downloads   **12** Episodes

0:00   -0:00

[Listen to the latest Rush Cast](#)

Inpatient communications

- Flyers/posters posted throughout the Medical Center in public spaces and waiting areas
- Messaging on TVs in patient rooms

Ambulance
Traffic

IMPORTANT

Hospitals have strict rules for coronavirus (COVID-19) testing

We **ONLY** test patients with specific symptoms and medical histories

This entrance is closed

Please use Brennan Pavilion entrance.

Outpatient communications

- Call Center scripts provided for all who regularly answer phones and interact with patients – with answers to basic questions – updated routinely based on input from Call center and important news
- MyChart messages distributed to all users
- Sent emails to 130,000 patients who have been to Rush within the last three years
- Proactive messaging to outpatients as part of appointment confirmation
- Messaging in waiting rooms
- Messages posted all along the patient "journey" – from parking lot to lobby/registration to patient floor
- Video visit promotion in every channel including signs in local businesses, hotels and off-site areas, encouraging video visits with small information card and QR code leading directly to scheduling
- Hundreds of media stories pitched and running each week, commanding the local media with great quotes about our expertise and readiness with in-house patient
- Rush Experts Memorandum sent to all Chicago media, including Chicago Bureau of National Publications
- Media team proactive with national media, securing stories with CBS National, CNN, New York Times and CNBC
- Invited and hosted local, state and federal officials to tour Rush University Medical Center, with specific emphasis on the isolation rooms and Rush readiness
- Letter to government officials from CEO, highlighting Rush's capabilities and readiness to care for our community

Watch video

YOUTUBE.COM
'No One Will Critique' The U.S. If We Over-Prepare, Says Doctor | Morning Joe | MSNBC

Top stories

'No one will critique' the U.S. if we over-prepare, says doctor
MSNBC.com · 1 day ago

Coronavirus in Chicago: Hospitals place visitation limits as Illinois COVID-19 outbreak spreads
Chicago Sun-Times · 2 days ago

Hospitals are overwhelmed because of the coronavirus. Here's how to help.
Washington Post · 2 days ago

Community Communications

Rush's Community Health Equity and Engagement team mobilized to share accurate information with community partners and residents, including:

- Hosting a planning webinar to get feedback and input from community leaders on how best to get information out to residents and others
- Hosting a Town Hall Webex session that addresses the do's, dont's and myths surrounding COVID-19
- Generating a resource guide in partnership with West Side United to assist community partners and residents
- Sending FAQs in several languages and an informational video by the senior vice president of Community Health Equity on COVID-19

Chapter 3

Clinical Operations

Clinical Operations at Rush University Medical Center

Facility Infrastructure: To accommodate for an influx of PUIs arriving at hospital doorsteps, Rush University Medical Center has modified their unit infrastructure to safely triage and treat patients by flipping rooms to negative pressure rooms.

Negative pressure rooms are isolation techniques used in hospitals and medical centers to prevent cross contamination. Negative pressure is generated by a controlled ventilation system that removes more exhaust air from the room than more entry air is allowed while allowing clean air to come in. During a time of crisis, hospitals and health systems use these rooms to place highly contagious patients away from other patients and staff to appropriately isolate conditions.

Rush Negative Pressure Rooms: The Rush Tower has 40 negative pressure rooms, the most in Chicago. These assets are critical as they control air flow between the patient room and hallway.

- The Rush Emergency Department is divided into three 20-bed units — each of which can be isolated with separate air handling. Every ED bed is in its own room with a door, not a curtain that further isolates each and every patient.
- The Emergency Department has an entry bay for ambulances that is covered and can be arrayed to further isolate infected patients who are entering for evaluation and treatment.
- The Emergency Department can be rapidly converted to enable high-volume screening. Phase 1 of the preparedness plan has already been implemented, with rapid triage and screening of potential corona-virus patients in ambulance bays. It can expand to increase throughput to see an additional 100 patients a day (in addition to their usual volume).
- Rush is ready to initiate the next phase of the plan — in two hours, a wing of the hospital can be converted in to a negative pressure ward to accommodate more patients. This will increase the isolation room-capacity by 32, bringing total capacity to 72 beds, which can all be used for COVID-19 patient treatment.

Facility Preparedness: With the expectant surge in visits, patients' admissions and COVID-19 positive cases, hospitals and health systems around the nation have tweaked their visitation policies and developed their security protocol to safely manage abnormal visitation volumes within their space. This is no different than RUSH's response to their facility preparedness. Rush has implemented a series of guidelines and criteria to help keep their patients, staff, faculty and the community safe.

New Visitor Policies at Rush University Medical Center

To prevent the spread of Coronavirus Disease 2019, Rush University Medical Center is implementing changes to our policies about visitors in the Emergency Department and Rush University Cancer Center, in addition to the recently announced ... Read More

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Building Accessibility

Visitation Policies: Effective immediately and until further notice, Rush does not allow visitors in most inpatient and outpatient areas. In addition, many access points throughout the hospital will only be accessible to select Rush personnel. Exceptions have been made for certain patient groups, including children. The following changes have been implemented across the Medical Center:

Rush University Medical Center Visitor Policies:

- No one under the age of 12 may visit.
- No visitors will be allowed in adult inpatient units. Please note these exceptions:
  - ▸ Critically ill/end of life patients — the number of visitors will be managed by the care team.
  - ▸ Hospice — per Journey Care leadership discretion.
- Our pediatric patient population, including general pediatrics, PICU and NICU (patients under the age of 18), may have one visitor. Patients in the Mother Baby Unit may have one partner. While in Labor and Delivery, patients can have one partner and one doula, if needed.
- Adult patients undergoing surgery may have one visitor for the duration of the procedure.
- All visitors will be screened at the information desk nearest to their point of entry to the Medical Center. Visitors who have flu-like symptoms should not support patients.

Outpatient Visitor Policy:

- Patients in our outpatient clinics may have one support person.
- Patients having outpatient surgery may have one support person.
- Patients at the Medical Center for the outpatient laboratory or radiology therapy may have one support person.
- Emergency Department patients may have one support person.
- No one under the age of 12 will be allowed as a support person.
- All visitors will be screened at the information desk nearest to their point of entry to the medical center. Visitors who have flu-like symptoms should not visit patients.

Screening

Overall Recap of Efforts

It is important to screen and slow the spread of those who may carry the virus. This includes patients, employees, staff, visitors and vendors. Rush initially screened based on CDC guidelines for the travel to level 2 or 3 countries.

Virtual Care

Rush fully leveraged and expanded its existing capability to conduct e-visits and on-demand video visits to drive patients to virtual care options. These virtual visits are unscheduled appointments handled by a pool of providers. The majority of visits handled during this time were people concerned about Coronavirus and who reported having some level of symptoms and exposure. However, conditions like cold, flu, cough, diarrhea, etc continue to be treated.

As community spread took hold, Rush began offering video as another option for patients with scheduled visits. A bulk training plan was deployed to have providers trained and equipped to deliver virtual care. Patients were then notified of the changes and educated on virtual care.
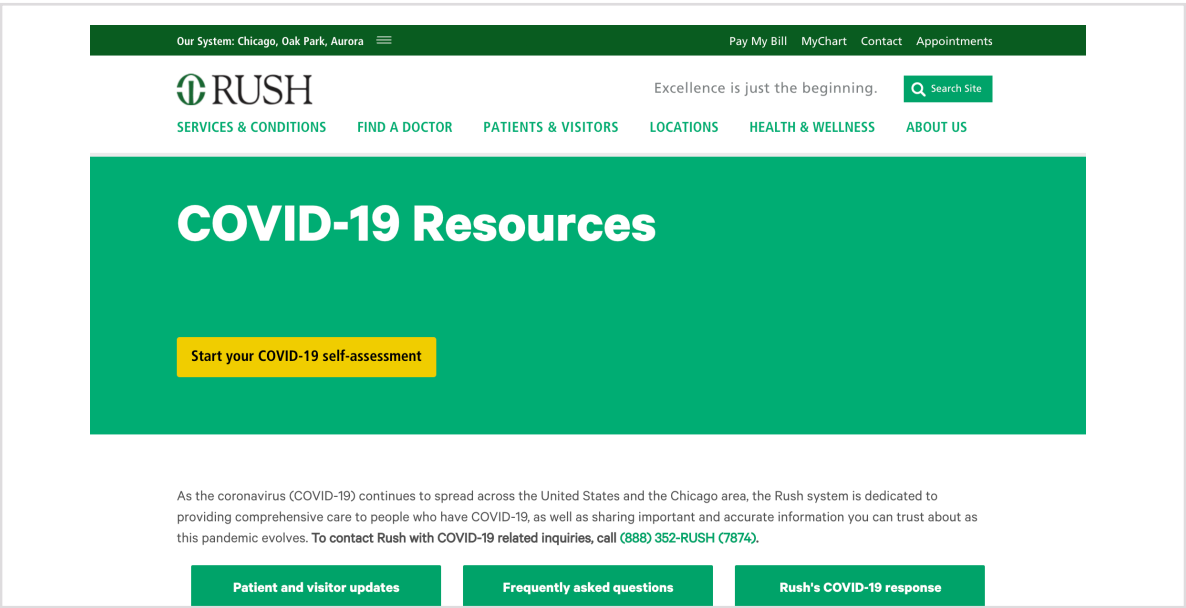

Telemedicine's role during COVID-19
Rush Internal Communications

Watch video

Rush providers discuss the role of video visits in managing COVID-19

On-Demand Video Visit Process:

Step 1:

The patient begins with a self-evaluation on the Rush consumer facing webpage. This algorithm follows current CDC guidelines and continues to change to fit these guidelines.

Step 2:

In a pre-visit questionnaire, patients are asked about exposure and symptoms. If they are high or moderate risk, they initiate a free video visit. If they are not high or moderate risk, patients are referred to other virtual care options and resources. **OF NOTE:** Employees referred to use the module are passed through to a provider for screening so we can determine if they are safe for work or should be in self-quarantine until cleared by Employee Health.

Exposure
Do you think you have been exposed to the COVID-19 novel coronavirus?

○ Yes ● No

Symptoms
Do you have a fever, cough or shortness of breath?

● Yes ○ No ○ Other Symptoms

Recommendation:
Start an **on-demand video visit** with a provider for a consultation, 7 a.m.-11 p.m, seven days a week. Select "concern for novel coronavirus" as the reason for visit.

OR

Call the Rush Call Center at (888) 352-7874, 24 hours a day, seven days a week.

Step 3:

The provider connects with the patient and has a consultation, similar to any other virtual visit or in-person patient visit. A built-in health record smart set on the side navigator guides the questions to ensure consistency of care. When the provider is done, issue a "No Charge" or 500 Level of Service for patients who use the "Concern for Novel Coronavirus" module, even if you end up providing care and medications. For patients referred to our standard paid video visits (eg. Cough, Influenza, Sinusitis) then the Level of Service is "ond," even if they ask about Coronavirus. During the call, the provider verifies the patient's symptoms.

Verify the patient's symptoms

a.　　Fever?

b.　　Signs/symptoms of lower respiratory illness?
　　　i. Cough?
　　　ii. Shortness of breath?

Close contact entails within 6 feet distance for 10 minutes or more. Depending on responses, the provider **assesses if the patient is a PUI:**

a.　　If yes, refer to in-person testing or self-quarantine and supportive care at home.

b.　　If no, treat other symptoms and refer to self-quarantine and supportive care at home.

RUMG Patient Call Workflow

An exposure is defined by coming in contact with someone who tested positive for COVID-19 with the following criteria:

- Within 6 feet
- No mask
- For greater than 5 minutes

COVID-19 like illness (CLI) can present in ANY ONE of the following symptoms:

- Fever
- Shortness of breath
- Cough
- Sore throat
- Myalgia (body aches)

The following patients are considered high risk and should be tested for COVID-19 if presenting with any Covid-19 symptoms:

- Over 60 years of age
- Pregnant
- Considered immunocompromised
- Cardiopulmonary disease
- Patients that are homeless or those that live in congregate facilities (nursing homes, etc.)
- Under 5 years of age

Anytime the BPA criteria are met, patient will be transferred to RN triage for assessment.

Younger, healthy individuals with mild illness do not need to be tested. They should be monitored at home for 14 days, or as determined by their health care provider. Additionally, testing is not r ecommended in persons who are asymptomatic. *A negative test result does not rule out an infection.*

SARS-CoV-2 (COVID-19) Testing Criteria for Patients

Clinical Features	Risk Factors?	SARS-CoV-2 Testing?	Outcome
Asymptomatic with exposure	No	No	Home monitor[1]
Symptomatic	High risk	Yes	Depending on RN triage disposition
Symptomatic	Low risk, high severity of symptoms[2]	No	ED
Symptomatic	Low risk, medium severity of symptoms[2]	No	Home monitor[1]
Symptomatic	Child under 5	TBD	Video visit starting 3/18
Symptomatic	Child 6-17 years that meets high risk criteria	TBD	Video visit starting 3/18

[1]*If symptoms worsen, call back for further instruction.*
[2]*Severity based on triage protocols*

RUMG Employee Call Workflow

An exposure is defined by coming in contact with someone who tested positive for COVID-19 with the following criteria:

- Within 6 feet
- No mask
- For greater than 5 minutes

COVID-19 like illness (CLI) can present in ANY ONE of the following symptoms:

- Fever
- Shortness of breath
- Cough
- Sore throat
- Myalgia (body aches)

Following any self-identified employee exposure, the employee will self-monitor for symptoms.
An employee's temperature should be taken 2x daily (a.m. and p.m.). A concerning temperature is defined as anything 100.0 F or higher. If other symptoms develop, please notify Employee Health as soon as possible to coordinate testing. If symptoms develop while working, put on surgical mask, isolate yourself from others, notify your supervisor, call Employee Health and be prepared to go home. Employees without symptoms, but confirmed exposure, are permitted to work. All Rush employees are to self-monitor their temperature 2x daily regardless of known exposure. Supervisors will screen employees involved with direct patient care at the start of their shift.

Employees with any CLI symptom will be tested. Testing is not recommended in persons who are asymptomatic. *A negative test result does not rule out an infection.*

SARS-CoV-2 (COVID-19) Testing Criteria for Employees

Clinical Features	SARS-CoV-2 Testing?	Testing Location	Outcome
Asymptomatic exposure (inside or outside of Rush)	No	NA	Monitor for symptoms; take temperature 2x daily; ok to work unless symptoms develop
Symptomatic with or without exposure	Yes	COVID clinic or drive-through	Depending on RN triage disposition

[1]*If symptoms worsen, call back for further instruction.*

Note: If RN triage feels patient should be seen by provider, schedule a video visit.

Ambulatory

COVID-19 Clinic

The COVID-19 Clinic was set up to create an alternative to seeing patients in the Emergency Department. The RUMC Infectious Disease Clinic was converted into a COVID-19 Clinic and all non-COVID-19 infectious disease traffic was shifted to an alternate location. This strategic location allowed for rapid, drive-through COVID-19 screening and testing, as well as controlled entry for high-risk patients under investigation (PUIs), including separate curb-side patient drop-off and direct escort into the clinic without entry into the main hospital or other ambulatory spaces. The COVID Clinic consisted of three (3) negative pressure rooms and three (3) regular rooms staffed with Advanced Practice Providers (APPs).

Patients were scheduled in the COVID Clinic following a virtual visit with a provider who then referred the patient to the clinic for testing. Additionally, patients were referred to the COVID Clinic via request from IDPH. The clinic offered reserved parking for patients on the street near the entry. Five minutes prior to arrival, patients were instructed to call the clinic and remain in their vehicle until a nurse came outside to meet them. If they had one available, patients were instructed to wear a mask to the appointment. In the event they did not have a mask, the nurse brought the mask to the patient at the vehicle and provided instruction for how to put it on. The nurse then escorted the patient into the clinic for the swab. The swab only took about five minutes. Patients were instructed not to touch anything and remain vertical to minimize potential spread while the swab was completed in the clinic. Following testing, patients were sent home to self-quarantine until test results became available.

Ambulatory Clinic Consolidation

In response to the COVID-19 needs, here at Rush and in the community, Rush University Medical Group (RUMG) made the decision to consolidate the ambulatory clinics. With the reduction of in-person visits, this approach will support staff and patient safety, limit access points within campus buildings, prepare for potential staffing shortages and re-deploy our critical resources to high-needs areas.

After conducting a space and staffing analysis, RUMG leadership identified 14 physical locations to take in approximately 30 additional clinics. The consolidated sites include multispecialty, subspecialty and primary care practices. RUMG identified administrative leadership within the consolidated physical locations to serve as point persons for communication and consolidation efforts. The designated point person was responsible for key tasks including IT coordination, equipment moves, and staffing plans. Clinic leadership were also responsible for performing a visit volume analysis to ensure that the new locations could accommodate for the increased number of visits.

Mobile Swab Swat Team

In addition to the COVID-19 Clinic, a Mobile Swab Swat Team consisting of nurses trained in RPP and COVID testing was created for rapid dispatch to ambulatory clinics that did not have Point of Care Flu and COVID testing available. In the event that a patient positive for Influenza Like Illness (ILI) symptoms and travel to level 2 or 3 OR contact with a COVID positive patient presented at a RUSH ambulatory clinic, the Mobile Swab Swat Team was paged. Upon arrival, the Mobile Swab Swat Team tested the patient for RPP and Reflex COVID and sent the patient home to self-quarantine. The Swat Team would then clean the room and call the lab for a runner to pick up the specimen. Infectious Disease/Infection Prevention then follows up with the patient following receipt of test results.

When POC and COVID testing is available within a RUSH ambulatory clinic, the RPP and Reflex COVID testing is performed by the nurse in the clinic and the Mobile Swab Swat Team is not contacted. The same guidelines for patient self-quarantine, room cleaning, and patient follow up are used.
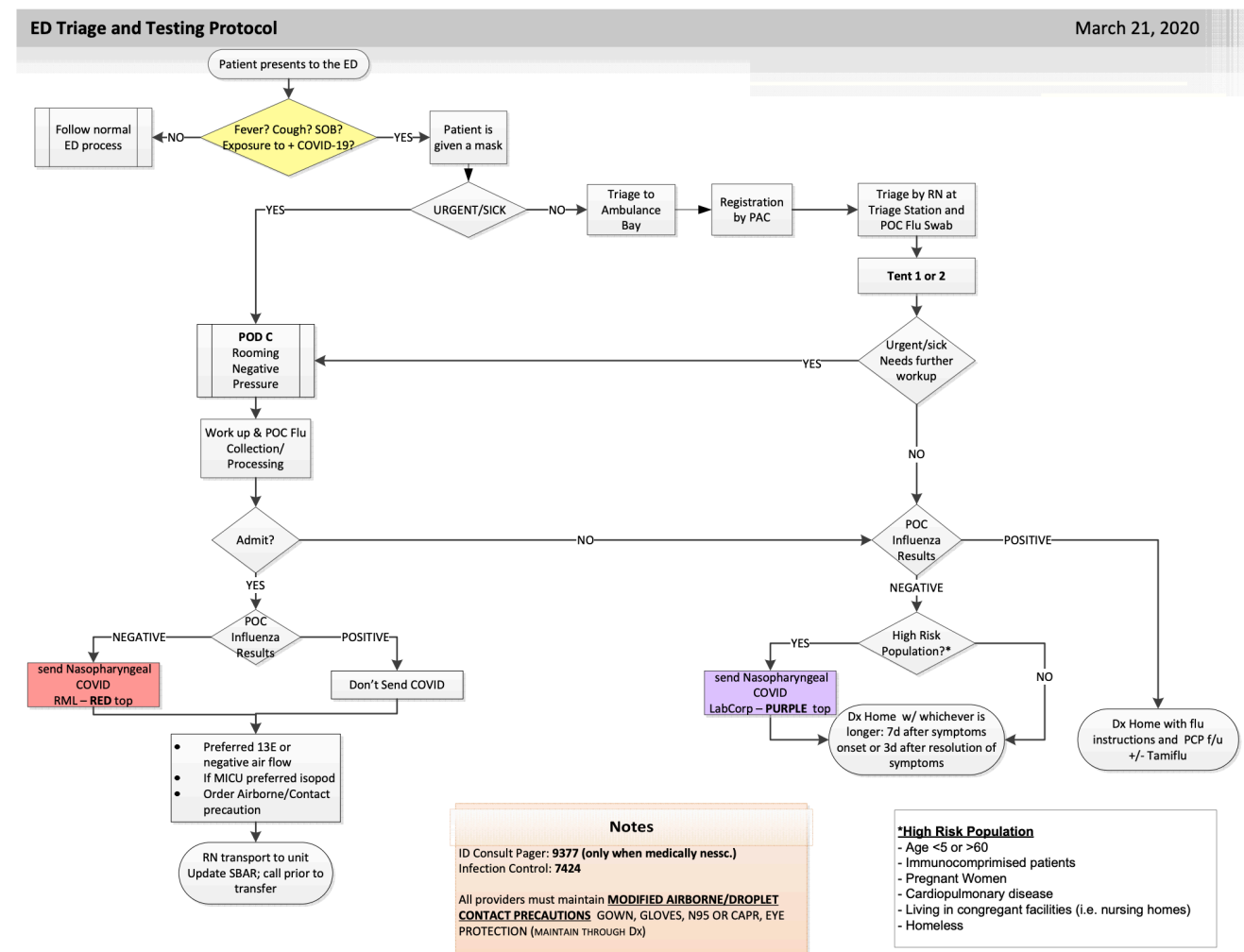
Emergency Department

Ambulance Diversion: To reduce exposure and surge up for volumes of potential COVID-19 coming in through the Emergency Department (ED), Rush University Medical Center has rerouted it's ED flow to create a forward triage for ILI. The ED closed its ambulance bay for all incoming EMS traffic and redirected them to the circle driveway to allow the enclosed bay to function as a forward triage. All patients, including EMS, utilize the main ED entrance as the entry point. This allows for quick triaging by both acuity and symptoms of interest. All patient who are stable and screen positive for COVID-19 symptoms, are triaged to the ambulance bay for MSE and testing. (See ED Triage and Testing Protocol below):

- Forward Triage Workflow (ILI Critical Patient): Patients will go directly to Rush's negative pressure rooms to rule out COVID-19.
- Forward Triage Workflow: (ILI Non- Critical Patient): Patients are directed to sit in chairs positioned 6 feet apart in the initial waiting area. If a patient is not able to sit in the chair or needs further workup after initial evaluation, patient will be taken to one of the emergency department negative pressure rooms.

ED Surge Plan: Greet and Discharge Process

Conversion to Negative Pressure Rooms: To increase Rush's capacity to treat potentially infectious patients coming through Rush University's Medical Center Emergency Department, Rush converted one of their Pods (POD C), consisting of 21 rooms, to negative pressure. The North side of POD C (12 rooms) was prioritized for patients under investigation for COVID-19, with the ability to expand into the South side if needed (9 rooms).

Tent Triage: Rush University Medical Center's Emergency Department has been rapidly converted to enable high-volume screening. Phase 1 of the preparedness plan has already been implemented by build   ing a tent triage within the ambulance bay. This rapid triage and screening of potential coronavirus patients in ambulance bays has allowed them to limit exposure to non-ILI patients and staff while increasing throughput. In the first week this triage area saw about 100 patients a day.

Rush University Medical Center's Tent Triage located in their Ambulance Bay

Tent Triage Facility Layout

ED Surge Pod C Map
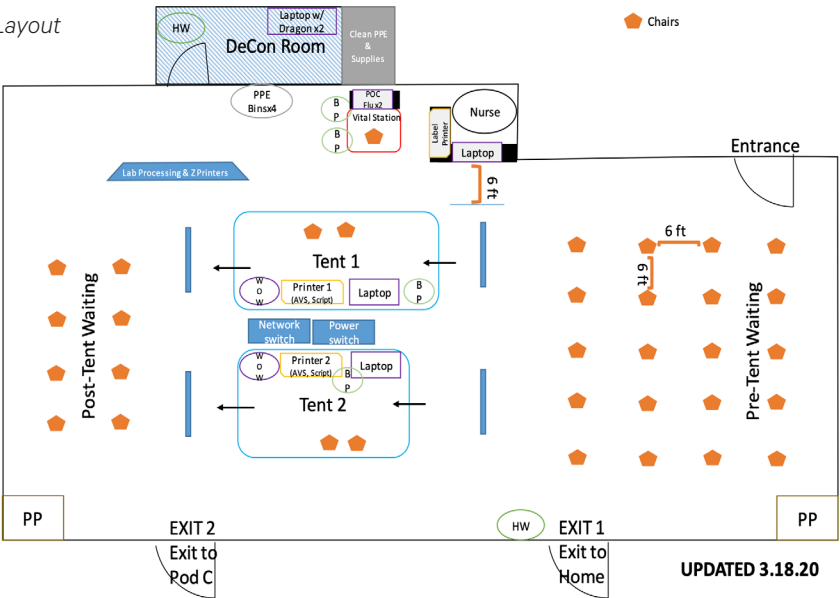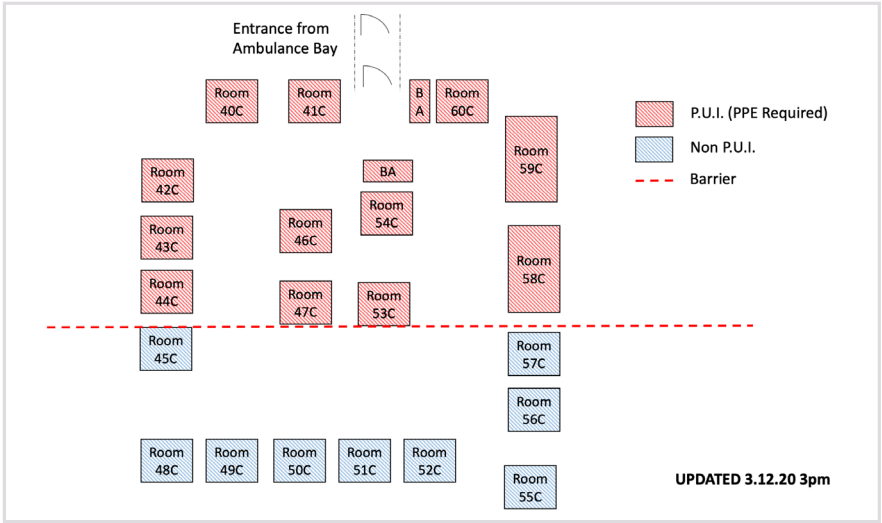
Inpatient: If the Emergency Department has all negative pressure rooms occupied, inpatient operations will be activated to triage patients into their repurposed units. Inpatient Operations at Rush University Medical Center has repurposed some of their patient wings to triage and treat PUIs and COVID-19 positive patients. Pictured below you will see how inpatient operations expanded units and extended hours of operation in three of their units. As more admissions come into play, Rush has the ability to repurpose more units into holding areas for patients.

- Opened up 4 more observation beds in their CDU Unit
- Repurposed rehab unit to a general medical wing with 22 beds
- Repurposed their 32 bed orthopedics unit. Will convert 16 patient rooms into negative pressure space to be used to group patients requiring airborne and droplet precautions, including those being ruled out for COVID-19.
- Orthopedic surgical patients will continue to use the 16 remaining rooms with overflow from other units as needed
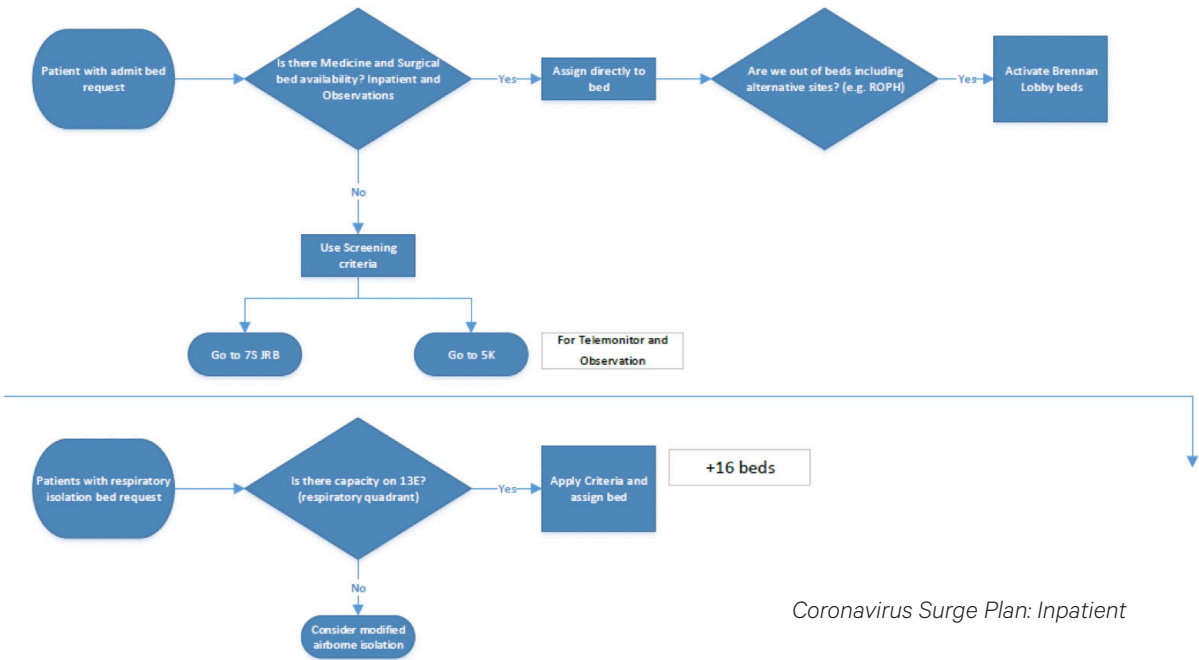
Coronavirus Surge Plan: Inpatient

Patient Discharge: Discharging previously infected patients is an integral part of the patient triage process. Rush is responsible to contain community spread and reduce patient readmissions. Rush University Medical Center's COVID-19 discharge process incorporates patient and family education to ensure appropriate steps are taken to transport the patient safely back home. Some features of the Patient Discharge Education Process include offering:

- Providing an Epic Quick Disclosure Resource Sheet
- Virtual Education and Training: Conducting education via phone of video conference with a nurse educator
- Sending discharge instructions, pictures, videos or diagrams to patient
- Consult Home Health or outpatient therapy for next day visit
- Educating families in the "Discharge Lounge" where education can occur at the bedside with a single family member
- Assigning Mytonomy education videos to patients and families in Rush MyChart

Patient Discharge Education Workflow:
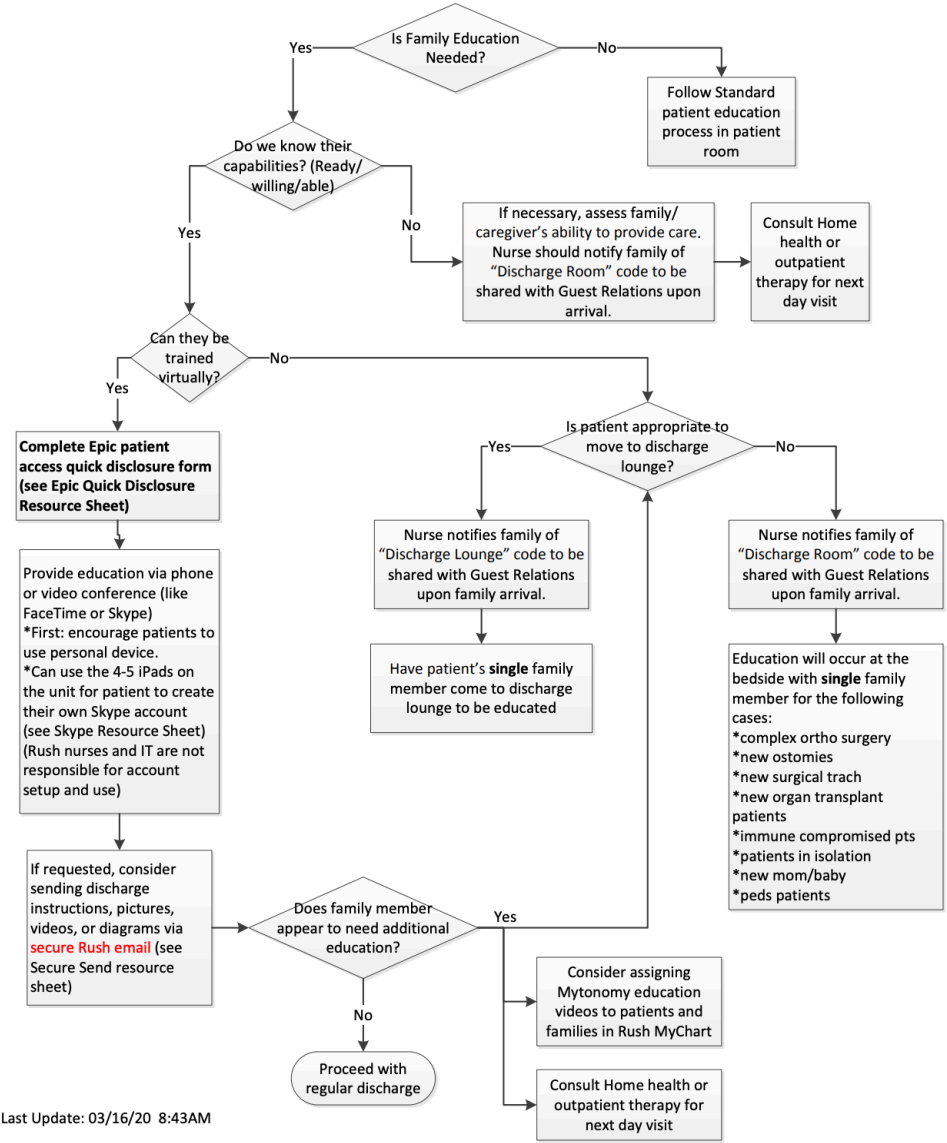
Leveling Criteria: Rush has developed three capacity levels that trigger different hospital responses. The levels are subdivided by entity (Emergency Department, Inpatient, Outpatient) with the levels having different responses for administrators, practitioners, and faculty on what to do when they see an influx in COVID-19 PUIs and confirmed cases. Rush's detailed surge plans can be found in the table below:

| Leveling Criteria	Level 1: First PUI	Level 2: >3 Concurrent PUIs	Level 3: Community Spread
Emergency Department	Use three existing negative pressure rooms in the ED	Activate Forward Triage • new location in ambulatory bay for ILI patients Flip Pod C (21 bed capacity)	Community Spread Cases are so widespread that all patients are tested and screening is no longer effective.
Inpatient	Standard operations proceed	Enable additional med/surg capacity by activating a clinical decision unit Rehab unit. • negative pressure Cohort PUIs on dedicated and Respiratory Units	Repurpose more units
Ambulatory	Send patients to COVID Clinic	Mobile Swab Swat Team engaged POC Testing	Conversion to all virtual appointments Consolidation of ambulatory sites
University	Travel screening for students/faculty	Flip classrooms to virtual Virtual match day and commencement	Close campus facilities

Surge Planning

Introduction

Rush University Medical Center ("Rush") has been preparing for the COVID-19 pandemic in Chicago, starting with activation of its Hospital Incident Command System on February 28, 2020, to protect patients and staff, as well as plan for increased volumes of critical care patients. Rush has leveraged its unique expertise in advanced treatment in tertiary and quaternary care, including ventilation in prone position as well as extracorporeal membrane oxygenation ("ECMO"). Rush's guiding principle for Surge has been (1) to serve as many patients, both COVID and non-COVID, as safely as we can and (2) to prepare for the anticipated Surge systematically and in phases. The dates for early response, Surge 1, and Surge Max were determined using advanced analytics through Rush's resource forecasting model, along with the daily situational awareness of Rush's experience. With extensive change management in a short period, multidisciplinary operational and support teams have conducted extensive testing and simulation to prepare for the Surge of the new patient population and workflows.

The Surge planning also includes preparing our specialty patient populations, both COVID and non-COVID — Women's and Children's (Labor and Delivery, Mother Baby Unit, General Pediatrics, Pediatric ICU, Neonatal ICU), Psychiatry and Rehabilitation

Resource Forecasting Model

The forecasting of COVID demand in Illinois (with both exponential and polynomial models) was used to identify the dates for Surge 1 and Surge Max activation. Rush operationalized its response two days prior to the anticipated Surge demand.
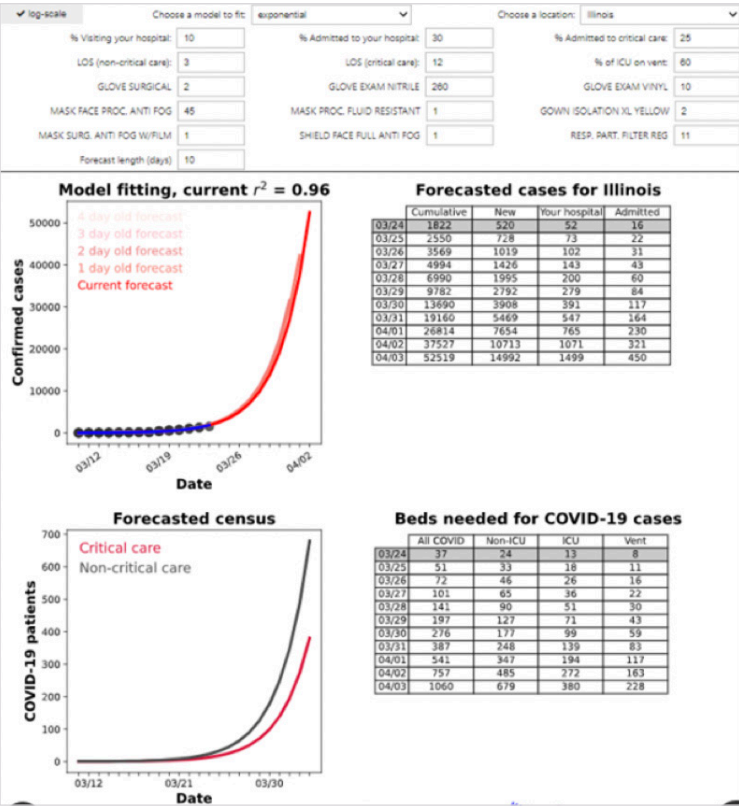
Surge Planning Overview

COVID Surge planning has been staged into three phases: (1) Early Response, including ED Forward Triage and outpatient testing; (2) Surge 1, including expanding dedicated COVID Inpatient Units; and (3) Surge Max, deploying additional COVID and non-COVID critical care and medical/surgical beds by utilizing non-traditional patient care areas.

To organize the planning for Surge, the following subgroups were developed to understand Rush's resources, define what constraints existed in Rush's growth and produce the plans listed below.

1. **Physical Capacity** — identifying, optimizing and expanding physical spaces in ED, Critical Care and Medical/Surgical units
2. **Staffing** —staffing additional units with Providers, Nursing, Respiratory Therapists and Support Services; and for anticipating staff outages with COVID
3. **Equipment and Supplies** — identifying critical resources such as Ventilators, Beds, PPE and medications
4. **Optimizing in-house capacity** — reducing elective office visits, surgeries and transfers; implementation of alternative care models, including virtual care

	Early Response (March 2)	Surge 1 (March 25)	Surge Max (March 28)
Adult ICU beds	111 (29)	111 (79)	195 (141)
Med/Surg beds	358 (96)	402 (278)	547 (460)
ED beds	61 + Forward Triage	61 + Forward Triage	93 + Forward Triage
Staffing	Redeploy Providers, RNs, RTs, Anesthesia, Support Staff (core staff plus additional clinical and on-clinical resource pools)		
Vents	85	149	170
Equipment & Supplies	PPE, beds, IV pumps/poles, monitors, computers, linen, medications, etc.		

() = dedicated to COVID

↑ **12% growth in total beds**

↑ **53% growth in total beds**

72% growth in ICU beds

(1) Early response

Starting on March 2, Rush began its Surge response to COVID-19 by setting up key infrastructure to handle screening and testing for this patient population. In the following days, the Emergency Department activated a new space in the Ambulance Bay, called Forward Triage, to cohort and triage all patients with Influenza Like Illness (ILI). Two tents were set up as patient treatment bays in the ambulance bay, with seating for up to 16 patients, maintaining the requisite social distancing. A new 24/7 call line was implemented for patients and staff to be screened and triaged by nurses for COVID testing. Two new ambulatory clinics were set up for patients and two tents were set up for employee drive-through testing. Ambulatory clinic volume was decanted, where possible, to virtual visits, with a large-scale roll out of Rush's digital platform for video visits. Elective surgeries were canceled starting March 18.

In the hospital, leveraging the physical capabilities of the Tower, dedicated COVID ICU and Medical/Surgical units, and one pod of the ED were made negative pressure. Patients were cohorted for best care and consistent PPE practices. Additionally, two new non-COVID units (30 beds) were converted to medical/surgical beds in order to ensure ED flow was maintained with the anticipated volume increase in the ED.

(2) Surge 1 Planning

As the volumes of COVID and rule-out patients grew, a sequence was developed to cohort these patients in additional dedicated units for critical care (111 total Adult ICU beds, 79 dedicated COVID) and medical/surgical (402 total Adult Medical/Surgical beds, 278 dedicated COVID) units. Inventories were developed for our space, staff and equipment, and redeployment of these resources were considered for management of this new patient population.

Additionally, due to community spread, Rush instituted universal masking of staff with extended use to reduce spread and help conserve supplies.

(3) Surge Max Planning

Since March 20, Rush's leadership team has been actively planning on maximizing the physical capacity, staffing and supplies of the organization to treat COVID-19 disease burden. The Surge "Max" model, means changing how we do business, including opening units in new areas that can support patient care and, in parallel, a more stringent look at the urgent surgeries that can be postponed in order to optimize key resources such as beds, staffing support and supplies.

The Emergency Department has readied our Brennan Lobby to triage low acuity, non-COVID patients with 32 new recliner and stretcher bays. This allows for a second internal ED pod to handle COVID patients.

Brennan Pavilion Lobby converted into Emergency Room bays for non-COVID patients

In order to handle the Surge in critical care beds and capability for COVID patients, two non-traditional, surgical Post Anesthesia Care Unit (PACU) areas were converted into ICUs. This allowed for an influx of 62 more Adult ICU beds. Additionally, there were sequential moves to build 18 more adult ICU beds that included (1) consolidation of NICU babies to two of three NICU pods, (2) transition of PICU patients to the NICU third pod, (3) transition of non-COVID Adult ICU into the PICU area. Additional equipment and configurations were needed to make these spaces operational including repurposing monitors, IV pumps, Ultrasound machines, etc., as well as the information technology infrastructure to manage patients in these new locations.

Private Surgical 12 Tower room converted to a double Adult Medical/Surgical room for COVID patients.

RUMC Patient Capacity	Sequence	Unit	Location	Total Beds	Early Response COVID/PUI beds	Early Response Non-COVID beds	Surge 1: March 25 Surge 1 COVID/PUI Beds	Surge 1: March 25 Non-COVID beds	Surge Max: March 28 Surge Max COVID/PUI Beds	Surge Max: March 28 Non-COVID beds
Adult ICU	1	Medical ICU	10E	27	23	4	23	4	23	4
	2	Cardiac ICU	10W	28	2	26	28		28	
	3	Neuroscience ICU	11W	28	2	26	28	0	28	0
	4	Surge ICU 5	5 Atrium PACU	26	0		0		26	0
	5	Surge ICU 6	7 Tower Prep	36			0		36	0
	*	PICU -Surge ICU 7 Non-COVID	8K	18					0	18
	**	Surgical ICU Non-COVID	11E	28	2	26	0	28	0	28
ICU TOTAL				191	29	82	79	32	141	50

* Created 18 additional Adult ICU beds for non-COVID patients

** Designated 28 Adult ICU beds for non-COVID and emergent post-op surgery patients. Additionally, ECMO COVID/non-COVID patients will be placed here as well.

In response to the Surge demand for medical/surgical beds and capability for COVID patients, two non-traditional, surgical PACU areas were converted into medical/surgical beds. This allowed for an influx of 59 additional adult medical/surgical beds. Additionally, Rush is doubling private patient rooms in the tower to gain 86 additional beds. Equipment and configurations were needed to make these spaces operational, including repurposing and leasing beds, monitors, IV pumps, etc., as well as the information technology infrastructure to manage patients in these new locations. Rush redeployed equipment from perioperative areas and other areas across the Medical Center.

RUMC Patient Capacity	Sequence	Unit	Location	Total Beds	Early Response COVID/PUI beds	Early Response Non-COVID beds	Surge 1: March 25 Surge 1 COVID/PUI Beds	Surge 1: March 25 Non-COVID beds	Surge Max: March 28 Surge Max COVID/PUI Beds	Surge Max: March 28 Non-COVID beds
Medical/ Surgical	1	Surgical	13E	32	32	0	32		32	
	2	Surgical	13W	32	32	0	32		32	
	3*	Surgical	12E	32	16	16	16	16	16	16
	4*	Surgical	12W	32	16	16	16	16	16	16
	5	Medical	9N	32		32	32		32	
	6	Medical	9S	32		32	32		32	
	7	Medical	7N	32		32	32		32	
	8	Medical/Surgical	7S	32		32	32		32	
	9	Surge Medical/Surgical 9	5 Atrium PACU	35					35	
	10	Surge Medical/Surgical 10	4T PACU	24					24	
	11	Surge: Surgical Double	13E	27					27	
	12	Surge: Surgical Double	13W	27					27	
	13	Surge: Surgical Double	12E	16					16	
	14	Surge: Surgical Double	12W	16					16	
	**	Medical	9K	23		23	0	23	0	23
Medical/ Surgical TOTAL				424	96	183	224	55	369	55

* Two surgical units (32 beds) maintained a cohort of non-COVID, step-down critical care patients and specialty populations such as transplant and stroke.

** Observation Unit (23 beds) are dedicated to non-COVID patients.

RUMC Patient Capacity	Sequence	Unit	Location	Total Beds	Early Response		Surge 1: March 25		Surge Max: March 28	
					COVID/PUI beds	Non-COVID beds	Surge 1 COVID/PUI Beds	Non-COVID beds	Surge Max COVID/PUI Beds	Non-COVID beds
Medical/ Surgical TOTAL				424	96	183	224	55	369	55
Special Medical/ Surgical	•	Medical	5K	15		15		15	15	
	••	Oncology	14W	32		32	32		32	
	••	Oncology - Non COVID	14E	32		32		32		32
	•••	Medical	6N JRB	22		0		22	22	
	•••	Medical	5NJRB	22		0	22		22	
Special Units TOTAL				123	0	79	54	69	91	32

*5K medical unit (15 beds) is dedicated for non-COVID ED Overflow; however, in Surge Max, it could be converted to COVID, if necessary.

**14E oncology/bone marrow transport unit (32 beds) is dedicated to non-COVID oncology population; 14W oncology unit (32 beds) is dedicated to COVID oncology population.

***2 rehabilitation units (44 beds) were converted into medical/surgical units to care for non-COVID Skilled Nursing Facility and the PUI homeless populations that are difficult to place.

Staff Redeployment

As a result of postponing our elective surgeries and consolidating our ambulatory clinics from 80 clinics to 10 open sites, Rush has been able to redeploy the staff to our clinical and non-clinical resource pools and use them to staff and support our Surge plan. Additionally, faculty and students from Rush University were identified and matched to staff these plans. We are also deploying student volunteers from our medical college to work alongside clinical teams. The students function as sub-interns on the clinical teams, assessing patients and entering orders that are co-signed by the attending on service. Prior to entering clinical service, the students are also oriented to the clinical workflows and trained in appropriate PPE use. This includes an approach to leverage and partner critical care trained providers, RNs/CRNAs and Respiratory Therapists/Anesthesiologists/CRNAs in a pyramidal patient care management approach.
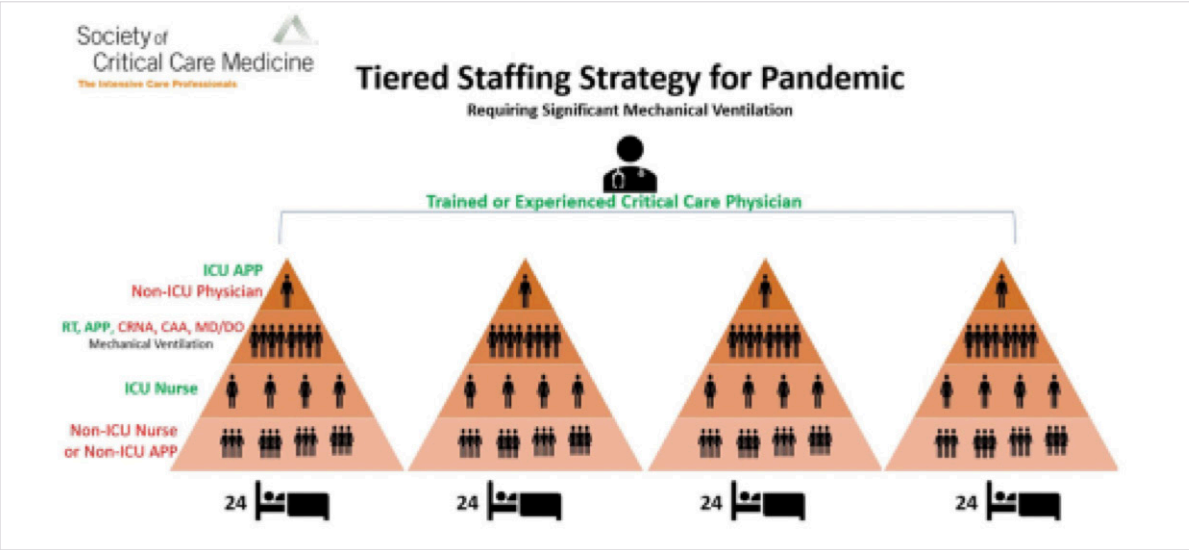
Pyramidal Staffing

RUMC Surge by Specialty

Early Response	Surge 1 Specialties	Surge Max Specialties
Emergency Medicine (59)	Anesthesia (95)	Neurology (48)
Hospital Medicine (66)	Family Medicine (43)	Neurosurgery (34)
Critical Care	General Internal Medicine (84)	Ob/Gyne (51)
• Pulmonary cc (25)	IM Subspecialties	Ophthalmology (35)
• Anesthesia cc (5)	• Cardiology (70)	Dermatology (12)
• Surgery cc (4)	• Gastroenterology (24)	Pathology (18)
	• Nephrology (8)	Pediatrics (47+)
	• Hematology/oncology (19)	Psychiatry (107 w/BS)
	• Geriatrics (9)	Plastic Surgery (16)
	• Endocrinology (16)	Urology (10)
	• Rheumatology (19)	
	General Surgery (21)	
	Orthopedics (94)	
	ENT (20)	

Ventilators

An inventory of ventilator equipment has allowed Rush to identify and secure additional ventilator supplies, including those from other organizations, travel, anesthesia and from surgicenters affiliated with Rush for a maximum of 170 ventilators. The anesthesia machine ventilators will be staffed by anesthesia providers to extend our respiratory therapy staffing. Rush is also trying to access the city and federal stockpiles of preferred standard critical care ventilators. Our team is working on an algorithm to identify highest and best use in the event that need exceeds capacity.

	Early Response	Surge 1	Surge Max
	85 Standard Critical Care	Add 2 Other organizations Add 5 Travel Vents Add 53 Anesthesia Machine Add 4 Surgicenter	Add 17 Bipap Vents (low pressure) Add 4 Oscillators (high pressure)
Total Ventilators:	85	149	170

Optimizing In-house Capacity

As part of Surge Max, urgent surgeries that can be safely postponed are no longer being scheduled; therefore, Rush will only be performing emergent surgeries and procedures. Additionally, elective transfers need to meet strict clinical criteria for admission. Also, a daily review of critical care patient status has been implemented to identify appropriate discharges or transfers to other levels of care internally or at partner institutions (e.g., Rush Oak Park Hospital, Rush Copley Medical Center).

Rush University System for Health

Rush University Medical Center is part of the Rush University System for Health ("Rush System"), a three hospital system that also includes Rush Oak Park Hospital and Rush Copley Medical Center in Aurora, Illinois. While the plan above focuses specifically on Rush University Medical Center, the System is coordinating Surge plans for capacity, staffing and ventilators/equipment/supplies across the Rush System to ensure the other hospitals can address Surge issues in their respective communities.

Chapter 4

Supply Management

Supply Change Management Overview

A key component of readiness is ensuring Rush has the appropriate supply levels. The Supply Chain Management Team is tracking Rush's inventory levels, internal utilization and the supplier's allocation rate for all medical supplies, especially Personal Protective Equipment (PPE). They are working very closely with their primary distributors to ensure they have healthy supply levels to support Rush's increased demand. The Supply Chain Team is also working with certain manufacturers, directly, to understand the allotment amount that is allocated for Rush, along with estimated times of delivery.

Supply Chain Inventory Tracking (PPE Supplies)

Link#	VENDOR	MF#	C#	Description	QTY on hand	Average Daily Usage	Days on hand	Delivery/Allocation Notes	PO	QTY	Comments
100566	CARDINAL	2072PT70X	193016	GLOVE SURGICAL 7 SYNTHETIC	12501ea	232ea	54				
100567	CARDINAL	2072PT75X	193018	GLOVE SURGICAL 7 1/2 SYNTHETIC	40624ea	329ea	123				
100568	CARDINAL	2072PT80X	193019	GLOVE SURGICAL 8 SYNTHETIC	21063ea	120ea	176				
100571	MEDLINE	TRG400S	776590	GLOVE EXAM SMALL NITRILE	3551bx	104bx	34				
100572	MEDLINE	TRG400M	776587	GLOVE EXAM MEDIUM NITRILE	3900bx	191bx	20	ETA 3/16	2369303	158cs	
100573	MEDLINE	TRG400L	776584	GLOVE EXAM LARGE NITRILE	4819bx	111bx	43				
100587	MEDLINE	MD5192074	975854	GLOVE EXAM SMALL VINYL	24bx	1bx	24	ETA 3/16	2374267	6cs	
100588	MEDLINE	MD5192075	975862	GLOVE EXAM MEDIUM VINYL	308bx	4bx	77				
100589	MEDLINE	MD5192076	975870	GLOVE EXAM LARGE VINYL	163bx	1bx	163				
101747	PRECEPT	15301	241841	MASK FACE PROCEDURE ANTI FOG	3651bx	230bx	16	Allocation 200cs (2000bx) every other week	2354211	964cs	Allocation will not keep up with demand
101749	PRECEPT	15310	105270	MASK PROCEDURE FLUID RESISTANT	488bx	20bx	24		2354211	200cs	
101861	MEDICHOICE	131444482XL	286563	GOWN ISOLATION XLARGE YELLOW	10041bg	538bg	19	Allocation 391cs (3910bg) week	2356608	2,412cs	Allocation barely meets current weekly demand
101751	HALYARD	46727	463091	N95 RESPIRATOR PARTICULATE FILTER REG	316bx	7bx	45		2357773	13cs	
101752	HALYARD	46827	464511	N95 RESPIRATOR PARTICULATE FILTER SM	24bx	4bx	6		2372191	4cs	
101741	PRECEPT	15211	129854	MASK SURGICAL ANTI FOG W/FILM	397bx	12bx	33				
101400	MAC MEDICAL	11125R-16OZ	285960	CLEANSER HAND FOAM 16OZ	193ea	97ea	2	No ETA	2374178	553cs	
132692	NORTH AMERICAN	DIA00194A	285601	SOAP BAR DEODORANT 1.5OZ WHITE	4256ea	113ea	37				
132540	MAC MEDICAL	11125R-FM4	285968	SANITIZER HAND 1000ML FOAMING	986ea	40ea	24	ETA 3/13	2374178	360cs	
101737	PDI	Q86984	327577	WIPE SUPER SANI-CLOTH XLARGE	2193tb	198tb	11	ETA 3/12	2370318	560cs	
101750	PRECEPT	15150	157508	MASK FACE PEDIATRIC HAPPY FACE	0	7bx	0	No ETA	2373596	47cs	
101753	MEDLINE	NONFS300	943308	SHIELD FACE FULL ANTI-FOG	4508ea	233ea	19	Allocation of 34cs (3264ea) released by Medline ETA 3/13	2372752	40cs	
130576	PDI	Q55172	468322	WIPES SUPER SANI-CLOTH LARGE	384tb	8tb	48				

Key
> 3 weeks of inventory
1 - 3 weeks of inventory
< 1 week of inventory

Internal Operations

Supply Chain Management has revised operational workflows to ensure appropriate par levels are adjusted to accommodate the increase in demand. The team has built PPE go-packs that consist of N95 masks, face shields, isolation gowns and sanitation wipes to support the clinical team who's responsible for treating PUIs. Supply Chain has also adjusted their work schedule for regular rounding and replenishment, focusing more on the Emergency Department and units with cohorted PUIs. They have built and enhanced supply rooms for new units that are set up to support the increased demand of COVID-19 patients.

Surge Planning: Looking at Reducing Utilization

Supply Chain has worked closely with the clinical team and Infection Control to figure out ways to reduce the utilization of PPE supplies. One approach is to limit the number of people going into the rooms during rounds. They also want to make sure all PPE items are placed in their appropriate stocking location with only one item taken at a time to drive efficiency. All PPE supplies that are used for replenishment are locked and secured in central supply with limited access and 24/7 coverage. Supply Chain has also restricted all internal purchase orders for PPE supplies so that the allocation of supplies are managed via central supply chain based on need and prioritization.

Chapter 5

Employee Safety

Employee Safety Overview

Working from Home

While Rush did not mandate that employees work from home, managers were encouraged to consider arrangements for those employees identified through an institution-wide survey as qualified and equipped to do so. Decisions were left to the manager's discretion and guided by Rush's existing Flexible Work Arrangement policy, in addition to patient care needs, operational needs, job requirements, prior individual performance, and equity within the department where the request arises.

Employees working from home were required to sign an attestation agreement. This increased use of work from home flexibility was regularly evaluated for appropriateness and based on leader input.

Rush's Information Services Department compiled a comprehensive document covering how to effectively set up and operate a remote work station to support those employees who had either never worked remotely or had questions.
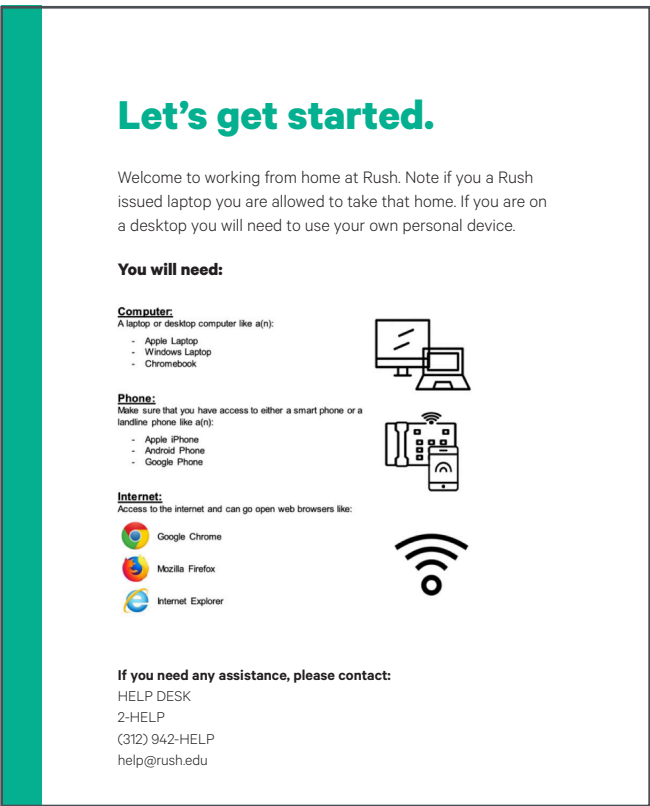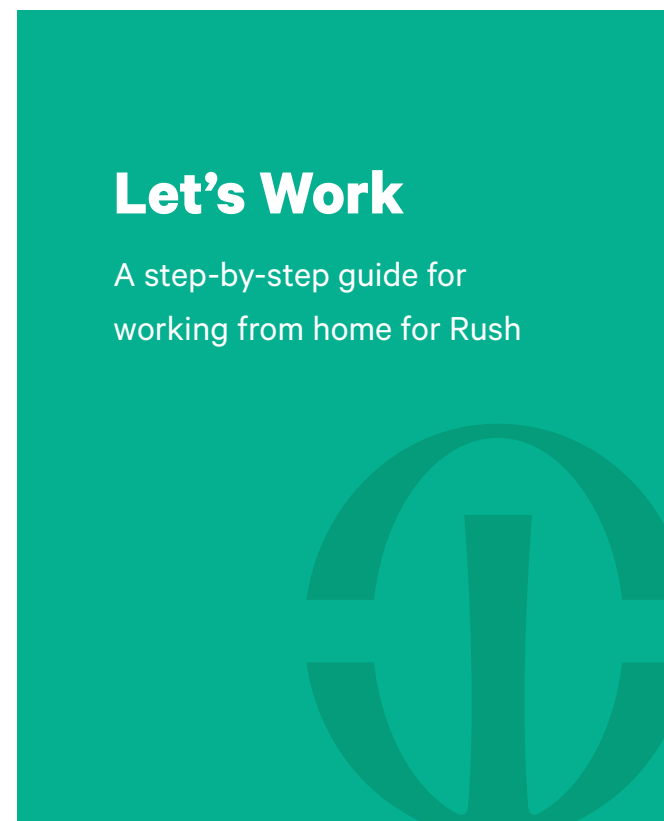
Travel Restrictions

As precautions to prevent the potential spread of COVID-19 continued to escalate, employees were asked to reschedule or cancel travel plans to heed advisories issued by the Centers for Disease Control. During the first week of the outbreak, Rush suspended all international and domestic business travel, including attendance at any local professional conferences in addition to discouraging personal travel.

At the same time and prior to the confirmation of community spread, Rush employees, faculty, providers, volunteers and students who had travelled out of the state of Illinois (or current state of residence) were asked to complete a mandatory survey prior to returning to work. Traveling outside of the state was defined as either flying or driving across state lines.

Additionally, employees, faculty, providers, volunteers and students returning from a level 2 or 3 country (as defined by the CDC) were prohibited from returning to campus and placed on a furlough for a minimum of a 14-day period from the time of re-entry into the United States by Employee and Corporate Health Services.

Large Group Gatherings

In an effort to keep the community as safe as possible, Rush also requested that all on-campus, large group gatherings of 50 people or more, particularly those involving visitors and all non-essential business, be canceled. Essential core business meetings like grand rounds continued but were evaluated for virtual options and moved online whenever possible.

Staff Exposure

As confusion and anxiety increased, it was important to provide consistent and clear information for employees about their risk of exposure. The COVID Risk Table below was developed and distributed to health care personnel to meet this need.

Epidemiologic risk factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
Prolonged close contact with a COVID-19 patient who **was** wearing a face mask (i.e., source control)			
HCP PPE: None	Medium	Active	May work with a mask and be monitored for signs and symptoms
HCP PPE: Not wearing a face mask or respirator	Medium	Active	May work with a mask and be monitored for signs and symptoms
HCP PPE: Not wearing eye protection	Low	Self with delegated supervision	None
HCP PPE: Not wearing gown or gloves	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a face mask instead of a respirator)	Low	Self with delegated supervision	None
Prolonged close contact with a COVID-19 patient who **was not** wearing a face mask (i.e., source control)			
HCP PPE: None	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing face mask or respirator	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection	Medium	Active	May work with a mask and be monitored for signs and symptoms
HCP PPE: Not wearing gown or gloves	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a face mask instead of a respirator)	Low	Self with delegated supervision	None

The risk category for these rows would be elevated by one level if health care personnel had extensive body contact with the patients (e.g., rolling the patient); or if they performed or were present for a procedure likely to generate higher concentrations of respiratory secretions or aerosols (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction). For example, personnel wearing a gown, gloves, eye protection and a face mask (instead of a respirator) during an aerosol-generating procedure would be considered to have a medium-risk exposure.

Team Wellness

As more information regarding COVID-19 became available, employees expressed a wide range of thoughts, feelings and reactions. With a sharply increased sense of anxiety, it was important to pay close attention to employees' well-being and address questions and concerns as soon as they arose. To monitor and maintain that connection, a number of tools were put in place, including:

• Distribution of a Rush Wellness newsletter immediately offering reassurance and resources for those feeling anxious

• Compilation of a wellness guide with resources, contact numbers and information sent via email, linked in the Wellness Newsletter and distributed in hard copy

• Chief Wellness Officer emphasized importance of wellness checks and daily contact with employees to assess situation in real time

• Impromptu town halls conducted virtually to address a heightened sense of anxiety evident by information collected on rounds, submitted questions and/or absenteeism

Paul Casey, MD, acting chief medical officer, and Bryant Adibe, MD, chief wellness officer, share how to stay safe and maintain your well-being during this stressful time.

Temperature Screening

Starting March 23, Employees were screened for temperature upon entry to the Medical Center.

A no-touch thermometer, which uses a laser to take temperatures, is used. Employees with temperatures greater than or equal to 100 degrees will be masked, sent home, and required to notify their manager and call Employee and Corporate Health Services. If asked to return home, employees are required to stay home from work until they are three days symptom-free.

Day Care

When the Governor of Illinois announced that all public schools would be closed for two weeks, Rush sent an institution-wide survey to gather needs and interest in day care options via multiple communications channels. As a result, Rush organized a pop-up child day camp for employees' children aged 5 to 12, at no cost to the employee. Using an existing school space on campus, the camp was established to support employees' childcare needs from the hours of 7 am to 5 pm, Monday through Friday.

Chapter 6

Rush University

University Overview

Rush University is a health sciences university comprised of four colleges: Rush Medical College, the College of Nursing, the College of Health Sciences and the Graduate College. With almost 2,700 students enrolled in the spring 2020 semester, there were 325 active classes, clinical rotations and labs in progress when the coronavirus pandemic hit Illinois.

University Command Center

On Friday, March 6, 2020, Rush University leaders formed a University Command Center (UCC) to respond quickly and specifically to the needs and concerns of students, faculty and staff while working in close collaboration with Rush's HICS. The UCC was comprised of the President, Provost, Vice Provosts, Deans, IT leaders, the online teaching center, student affairs, communications, legal, marketing, finance, facilities, environmental services, security and other essential units. The primary goal of the UCC was to develop a comprehensive plan to assure the continuation of course delivery and uncompromised quality of education, as well as critical clinical and basic research obligations during this crisis, while protecting the safety and well-being of the faculty, staff and students. University leadership was fully engaged and worked as a team to solve problems, provide change management, quell concerns and provide transparency related to the evolving situation.

Online Instruction (Assessment for readiness and flipping the switch)

On Tuesday, March 10, 2020, the UCC made the decision to migrate all in-person classes to a remote platform beginning Friday, March 13, 2020, and extending approximately 10 weeks when the situation would be re-evaluated based on community spread of the virus and the safety of students to return to campus. Several courses were already being taught online, and these continued unaltered.

Faculty readiness for migrating onsite courses to a synchronous or asynchronous platform was assessed by a "teaching remotely survey" to determine how many courses were: ready to teach remotely (green), could be taught remotely but needed more time/support to transition (yellow), or could not be taught remotely because they were clinical rotations or labs (red). Information Services (IS) initiated a support command center in the university, where faculty could work with IS support one-on-one to transition curriculum to remote instruction.

The center was designed to remain available for the duration of remote instruction.The university created a resource center within Blackboard and published it on the university webpage to assist faculty with migration of their courses. A comprehensive guide for online learning was also provided to students. The Online curriculum was designed to mirror face-to-face class curriculum to ensure continuation of course delivery and uncompromised quality of education. Where possible, synchronous teaching was encouraged to provide instruction via WebEx or Zoom to be delivered in the same timeframes as the onsite courses. Student services were all made available remotely, including mentoring, IS support, clinical skills and simulation center activities, student affairs and library services (which are always accessible remotely).

COVID-19 Response Timeline

DATE	ACTION
February 26, 2020	Externally facing coronavirus website live
March 2, 2020	Hospital Incident Command System stood up COVID-19 hotline established "Ask a Question" web page live Rush intranet coronavirus web page live
March 4, 2020	All-staff town hall
March 5, 2020	Business travel suspended Employee travel survey launched
March 6, 2020	HR Q&A distributed with updated work from home, furlough and PTO sharing policies
March 7, 2020	Travel survey updated to reflect out-of-state travel
March 9, 2020	Group gatherings restricted to less than 50 people; meetings moved online/virtual Executive leadership preparedness meeting Internal and external contact numbers distributed via flyers and posters in Medical Center Entrances and exits closed and pedestrian traffic streamlined into specific entry points All-staff employee "Daily Digest" email implemented
March 10, 2020	"Wash your hands" sign displayed on Tower building
March 11, 2020	Deadline for emergency contact system signup Work from home instructional materials distributed Forward triage erected in ambulance bay
March 12, 2020	All-staff town hall/Q&A (virtual) Work from home option encouraged Surge mode engaged
March 13, 2020	CEO letter sent to government officials No visitors policy activated
March 14, 2020	HR Q&A updated and redistributed
March 15, 2020	Deadline for updated emergency phone tree
March 16, 2020	Rush Fitness Center closes Rush University student clinical rotations canceled In-house COVID testing activated Employee drive-through testing activated Chicago public schools closed Rush pop-up onsite day camp open
March 17, 2020	All-staff town hall/Q&A (virtual)
March 18, 2020	Board of Trustees-specific Webex Elective surgeries postponed