Clinical Operations at Rush University Medical Center

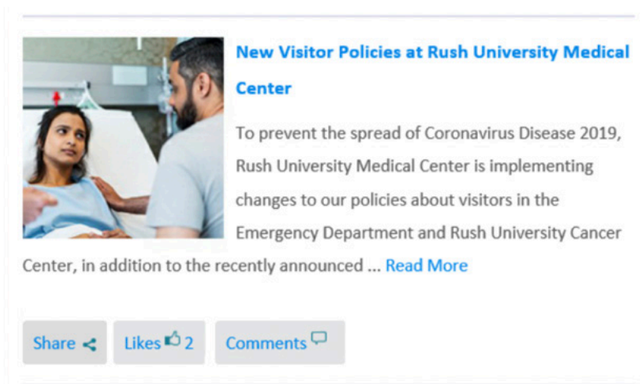
Facility Infrastructure: To accommodate for an influx of PUIs arriving at hospitals doorsteps, Rush University Medical Center has modified their unit infrastructure to safely triage and treat patients by flipping rooms to negative pressure rooms.

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 conver-tedinto 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.



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's 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

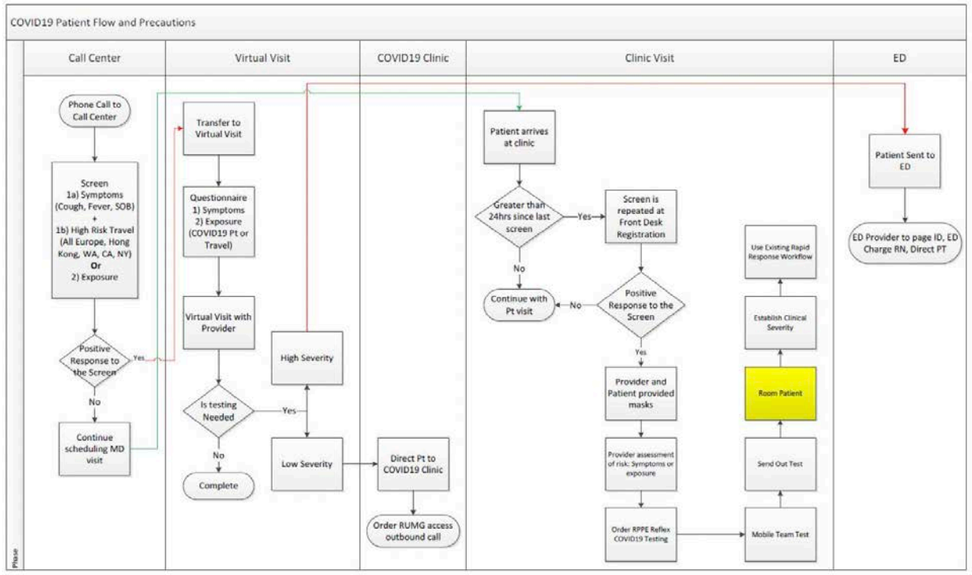
Overall Recap of Efforts

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 tolevel 2/3 countries.

Testing

TestingRush has developed a testing algorithm to rule out influenza and other respiratory viruses before outflowing negative results to the limited supply COVID test. Labs were able to quickly develop anin-house test with a six-hour turnaround. Additionally, an employee walk and drive-through-screening for symptomatic employees with test results in six hours was developed on campus.

Overall PUI Workflow



Call Center

Processes have been set up for an external line (888) xxx-xxxx, staffed 24/7, which serves as a centralized hotline for patients to call. The call staff will triage based on screening criteria for exposure and symptoms and direct PUIs to one of the following options:

1. Video visit
2. RN triage (staffed 24/7)
    a. Employees go to drive through testing
    b. Home visit testing
    c. Ambulatory COVID Clinic
    d. Home quarantine
    e. Emergency Department

Virtual Care

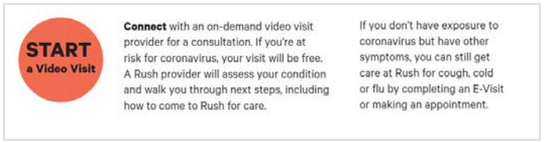
Rush fully leveraged and expanded its existing capability to conduct e-visits and on-demand video visits to drive patients to virtual care options. These virtual visits are unscheduled appointments handled by a pool of providers. The majority of visits handled during this time were people concerned about 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.

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.

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?

Verify the patient’s exposure history

a. Did the patient travel recently?

b. Did the patient have any close contact with an individual with confirmed diagnosis investigation for COVID-19?

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.

Patient, Employee and Visitor Screening Algorithm

Assess Symptoms and Exposure to determine moderate or high risk

Clinical Features (Symptoms)

Fever or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)

Fever and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization

Fever with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza)

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Epidemiologic Risk (Exposure)

Any person, including health care workers, who has had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset.

A history of travel from high-risk areas

No source of exposure has been identified

Yes.

- Young healthy patients with mild symptoms may self-quarantine until symptoms resolve.
- Patients over 60 or special population patients (immunocompromised, heart disease) should be tested
- Patients with severe symptoms should be tested.

How do I place a test?

- Use the COVID-19 Smartset. Use the "**Request for COVID Testing**" order and select COVID clinic.
- Ask patient to self-isolate and stay at home until further instructions are provided
- The patient will receive a call back from the access center with an appointment time for testing in the COVID-19 clinic. This could take a day or two.
- Patient can self-report exposure to CDPH or IDPH in meantime.
- If the patient appears ill or dyspneic?
- If more immediate in-person care is needed, instruct the patient to go to the Emergency Department (ED). For patients referred to the Rush ED, call the ED charge nurse at 312-947-0170 or 7-0250. ED providers, please also put in a greet note that a patient may be arriving.
- Place a "**Request for COVID Testing**" order and select "ED COVID"

Example: Patient has respiratory symptoms and came from a high risk region

No.

Can do $49 URI visit, or a $30 e-visit or see your provider/at-home supportive care. Counsel to stay home until fever improved. Still consider COVID-19 and assess symptoms and follow algorithm above.

- Consider influenza and Tamiflu if within window.
- Employees – If employee reports Cough PLUS fever/SOB/myalgia they should be tested and quarantined.
- If just a single symptom (eg. Cough) contact Employee Health. Probable return to work with mask after symptoms resolve with ECHS blessing.

Example: Patient has respiratory symptoms but can't recall any exposure

Yes.

Self-monitor (measure temperature twice a day and look for symptoms of respiratory illness) for 14 days since exposure.

Employees – self-isolate, ECHS should be notified (312.942.5878) for further steps. They should NOT show up to Employee Health.

Patients – continue social isolation and monitor for symptoms. Contact their own ECHS for guidelines.

If new fever or symptoms occur, patient can re-engage with Rush through video visit, call their physician, or call CDPH/IDPH public health coronavirus hotlines.

Example: Patient traveled from Italy but has no symptoms

No.

No high risk factors or symptoms; can reassure and exit patient.

Employees – do not need further clearance to return to work

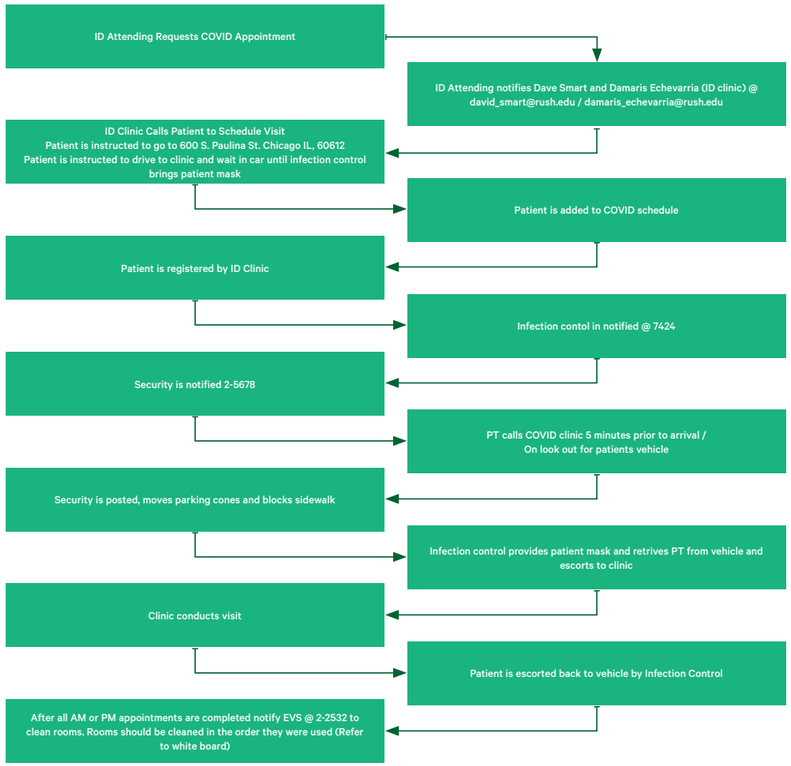
Example: Patient has no symptoms and no travel (e.g., worried well).

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-in 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.



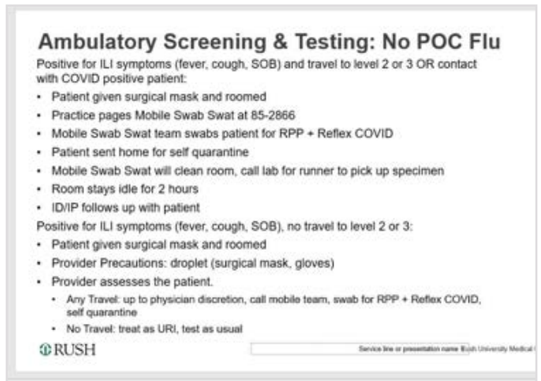
Ambulatory Clinic Consolidation

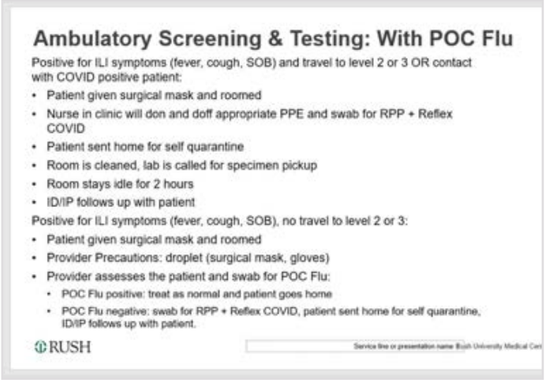
In response to the COVID-19 needs, here at Rush and in the community, Rush University Medical Group (RUMG) made the decision to consolidate the ambulatory clinics. With the reduction in in-person visits, this approach will support staff and patient safety, limit access points within campus buildings, 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.





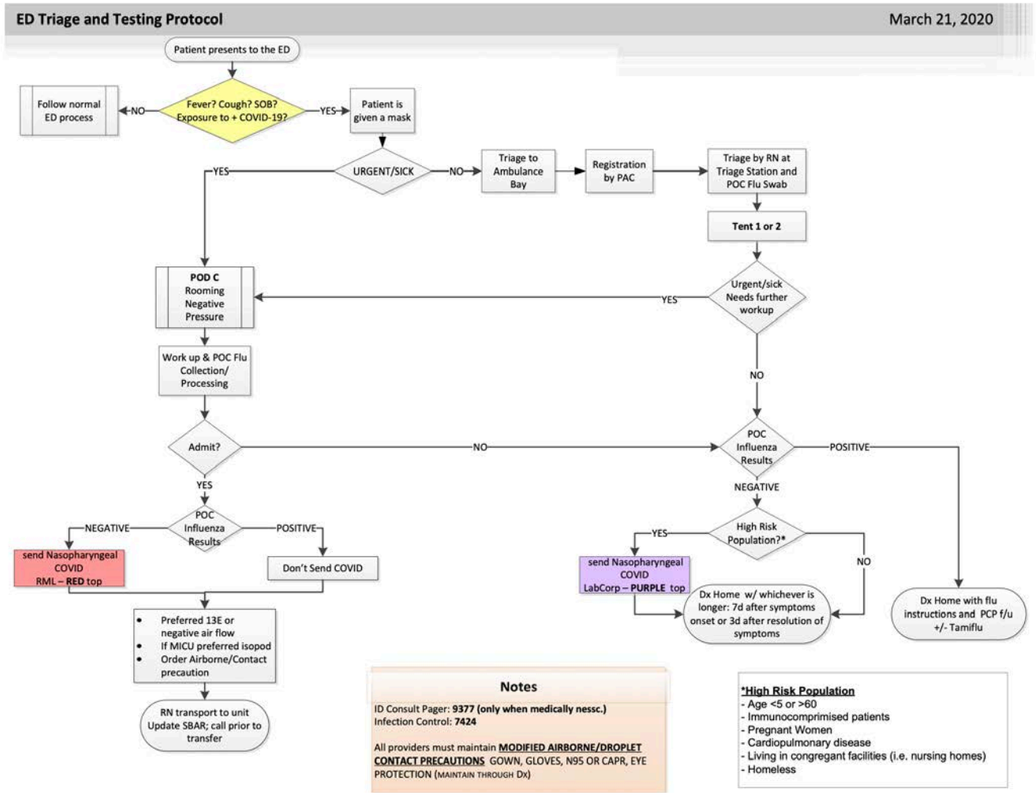
When POC and COVID testing is available within a RUSH ambulatory clinic, the RPP and Reflex COVID testing is performed by the nurse in the clinic and the Mobile Swab Swat Team is not contacted. The same guidelines for patient self-quarantine, room cleaning, and patient follow up are used.

Emergency Department

Ambulance Diversion: To reduce the spread infection of COVID-19 coming in through the Emergency Departments, Rush University Medical Center has closed its ambulance bay for all incoming EMS ambulances. They will all be redirected to our circle driveway. While EMS is in route to the front of the Emergency Department, the initial triage will begin by ruling out whether the patient is an ILI Critical/ Non-Critical Patient. That's when the two separate workflows for ILI Critical and Non-Critical begin. (See ED Surge Plan: Greet and Discharge Process below):

- EMS Ambulance Workflow (ILI Critical Patient): EMS will take patients directly to Rush's negative pressure rooms to rule out COVID-19.
- EMS Ambulance Workflow: (ILI Non- Critical Patient): If the patient is able to sit in the chair in the initial staging area, EMS will place the patient in the chair. If a patient is not able to sit in the chair, the EMS crew will be directed to one of their emergency department negative pressure rooms.

ED Surge Plan: Greet and Discharge Process

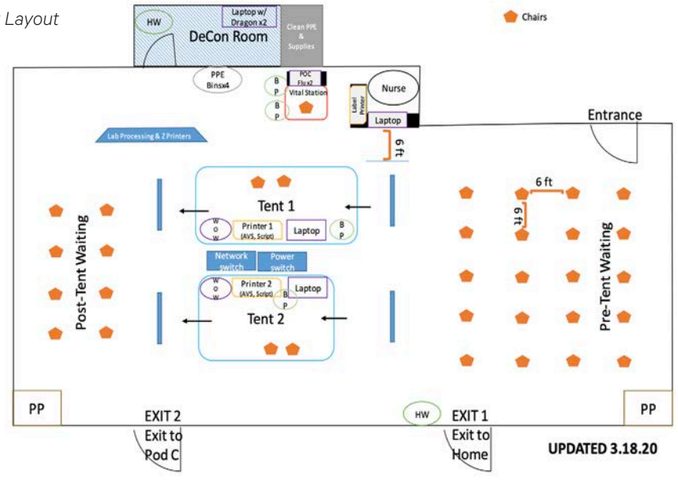


Conversion to Negative Pressure Rooms: To increase Rush's capacity to triage incoming patients through Rush University's Medical Center Emergency Department, Rush converted one of their Pods into a negative pressure room to treat critical ILI critical patients.

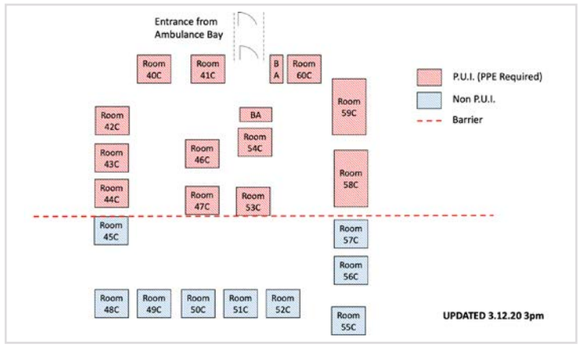
Tent Triage: Rush University Medical Center's Emergency Department has been rapidly converted to enable high-volume screening. Phase 1 of the preparedness plan has already been implemented by building a tent triage right within the ambulance bay. This rapid triage and screening of potential coronavirus patients in ambulance bays has allowed them to increase throughput to see an additional 100 patients a day (in addition to their usual volume).

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

Tent Triage Facility Layout

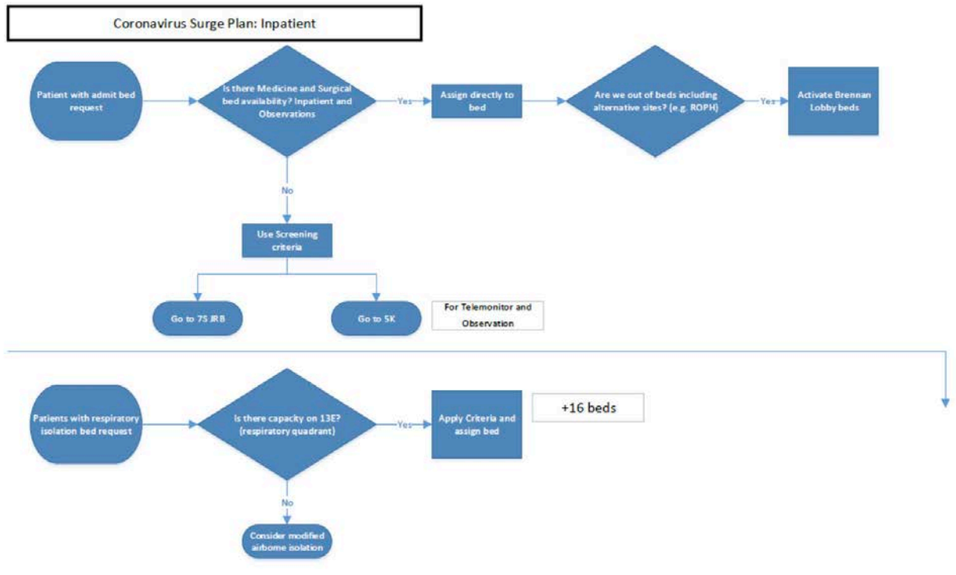


ED Surge Pod C Map



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



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: