



AT THE FOREFRONT

UChicago
Medicine

Seeing Patients with ILI or patients with COVID-19 and Other Medical Problems

Objective

- To prepare you to care for patients with ILI/COVID-19 in outpatient settings (urgent care, specialty care for COVID+ pts)
 - Safely → review PPE
 - Efficiently → review EPIC tools, AgileMD
 - In accordance with best practices based on current knowledge → clinical overview of disease

Limit Face to Face Visits

- Use EVisits when possible
- These can be done (and billed for) using smart sets in epic
- Tip sheet available on intranet and Department of Medicine site
- Patients seeking COVID testing (drive through) can access via MyChart triage or call [702-2800](tel:702-2800)

PPE: Definitions of Usage

- Extended use: wearing same gear for repeated contact with different pts without removing
- Universal masking: wearing mask continuously
- Re-use: removing, cleaning, and storing for future use

Eye Protection Usage Guides

3.21.2020: RE-USE

- If visibly soiled or hard to see through, remove and disinfect immediately
- Use purple or orange wipe to disinfect
- Then store for future use
- Discard if damaged or visibility cannot be restored by cleaning
- PAPRs (including lens cuff) should be disinfected and re-used

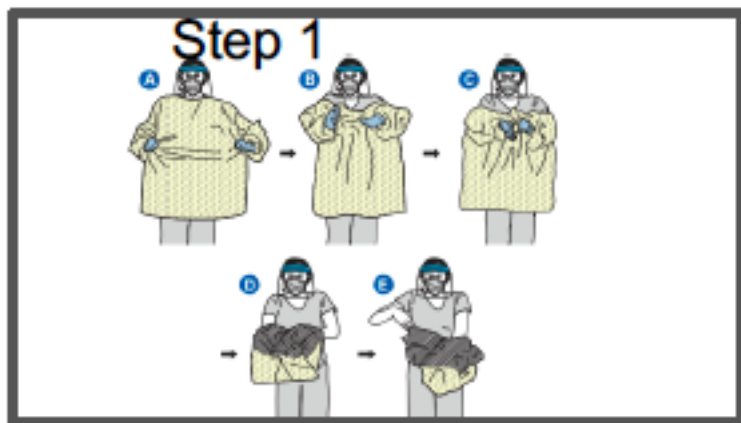
Mask Usage Guides 3.26.2020: Universal Masking

- Wear a mask ALL OF THE TIME
- Cloth masks:
 - Take home and wash every night
 - These are to protect patients and staff from us
- Change to a surgical mask before entering room of ILI patient, and then keep surgical mask on
- Discard surgical mask after
 - Displacing to eat or drink
 - Damaged or soaked through
- Wash/sanitize hands after discarding
- Put cloth mask back on

Put on PPE Outside Room

- **Step 1:** Wash/sanitize hands
- **Step 2:** Place eye protection (*goggles or face shield*)
- **Step 3:** Place face mask (if loose ties, secure at middle of head and neck)
- **Step 4:** Gown (Cover torso from neck to knees, arms to end of wrists and wrap around the back. Fasten in back of neck and waist)
- **Step 5:** Gloves to wrist
- **Step 6:** Check PPE and enter patient room

Remove Gown and Gloves In Room



1. Tear belt to untie
2. Cross arms over chest
3. Pull gown forward to remove from body
4. Remove gloves as sleeves pulled down
5. Discard in room
6. Wash/sanitize hands

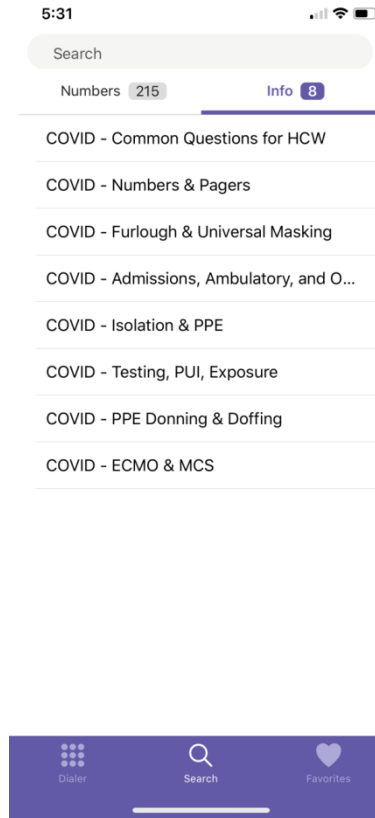
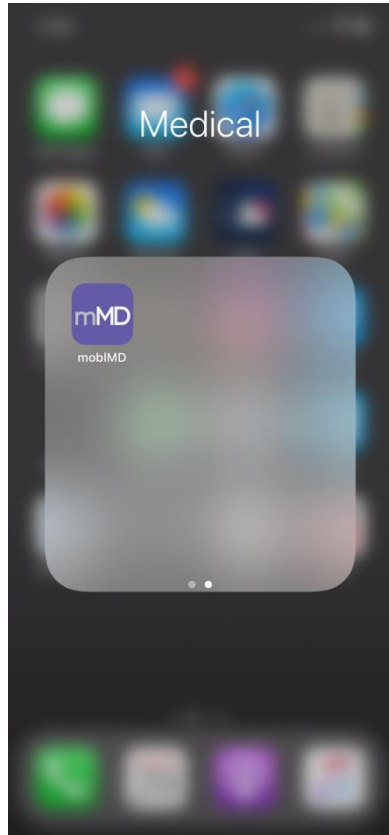
After Exiting Room

- Sanitize hands
- IF removing mask, discard and then sanitize hands
- IF removing eye protection, wipe down, store in designated place, and sanitize hands

Video Demo of Donning + Doffing PPE

- https://players.brightcove.net/719220616001/default_default/index.html?videoId=6127820282001

MobLMD



EPIC Tools

- AgileMD: up-to-date algorithms for clinical decision making (this is your source of truth)
- ILI Eval Express Lane: efficiently and accurately document
 - Currently one note type: Initial ILI eval note
 - Future: ILI/COVID follow-up note

Code: Assume Full (no ACP docs)

Attending: None

Search

Pcp No PCP

Primary Cvg: BLUE CROSS/B...

Allergies: No Known Allergies

Research: None

Pathway: None

3/25 MYCHART E-VISIT for Covid-19 Screening

Weight: 67.4 kg (148 lb 11.2 oz) >7 days

CARE GAPS

- HEPATITIS C SCREENING
- Pneumococcal Vaccine:...

Start Review

Snapshot Express Chart Revi... E-Visit Immun... Problems FYI

E-Visit

Images Questionnaires Benefits Inquiry References Scans Open Orders Care Teams More

Allergies Current Meds Problem List Questionnaires Visit Media Care Everywhere

Meds & Orders Verify Rx Benefits SmartSets MyChart Msg Progress Notes

Visit Diagnoses LOS Routing

member ID: 0212000001 02111000 1

[Redacted]

SmartSets

Search for new SmartSet + Add

Suggestions

Flu Like Symptoms / COVID-19 Screening Express Lane

Express Lane

Favorites

Ambulatory Virtual Visit - Routine Follow Up

Express Lane

Administered in Clinic (PCG) Health Maintenance (PCG)

Bariatric Routine Lab Panel Screening Colonoscopy

+ ADD ORDER

This Visit Notes

Risk Profile

Current as of: Wed 3/25 5

Adult General

0 - 2 Point
N/A 3 - 4 Point
5 - 14 Point

This score indicates an... based on Chronic dise... hospital admissions. This score is not appli... not calculated.

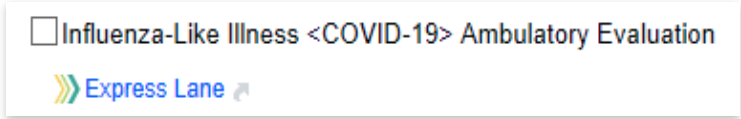
COPD Readmi

0 - 4 Point
N/A 5 - 6 Point
7 - 13 Point

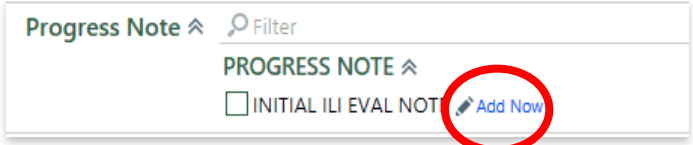
This score indicates an... and is used for patient... registry. This score is not appli... not calculated.

ASCVD Risk (%)

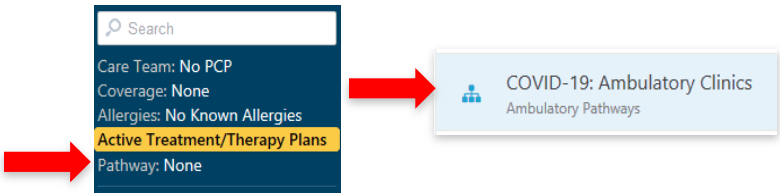
1 Open the ILI Eval Express Lane in Smartsets.



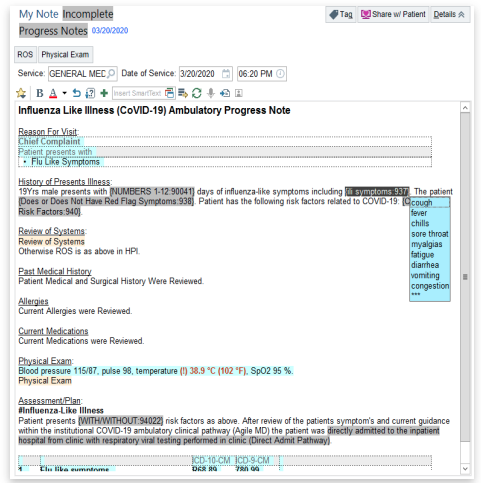
2 Click "Add Now" Next To Progress Note



3 Open CoVID Ambulatory AgileMD Pathway from Storyboard



4 Write Note
- Reference AgileMD for clinical decision making.
- Suggest making ROS and PE macros
- Use F2 or Arrow to move through smartlists.





COVID-19: Ambulatory Clinics

Ambulatory Pathways

Resources & Updates

[UCM Coronavirus \(COVID-19\) Resource Center](#)

For clinical questions regarding the care of COVID PUIs or COVID patients, [page the COVID Resource Team](#) (p30028)

[Video: How to Don and Doff Personal Protective Equipment \(PPE\)](#)

Recent Updates:

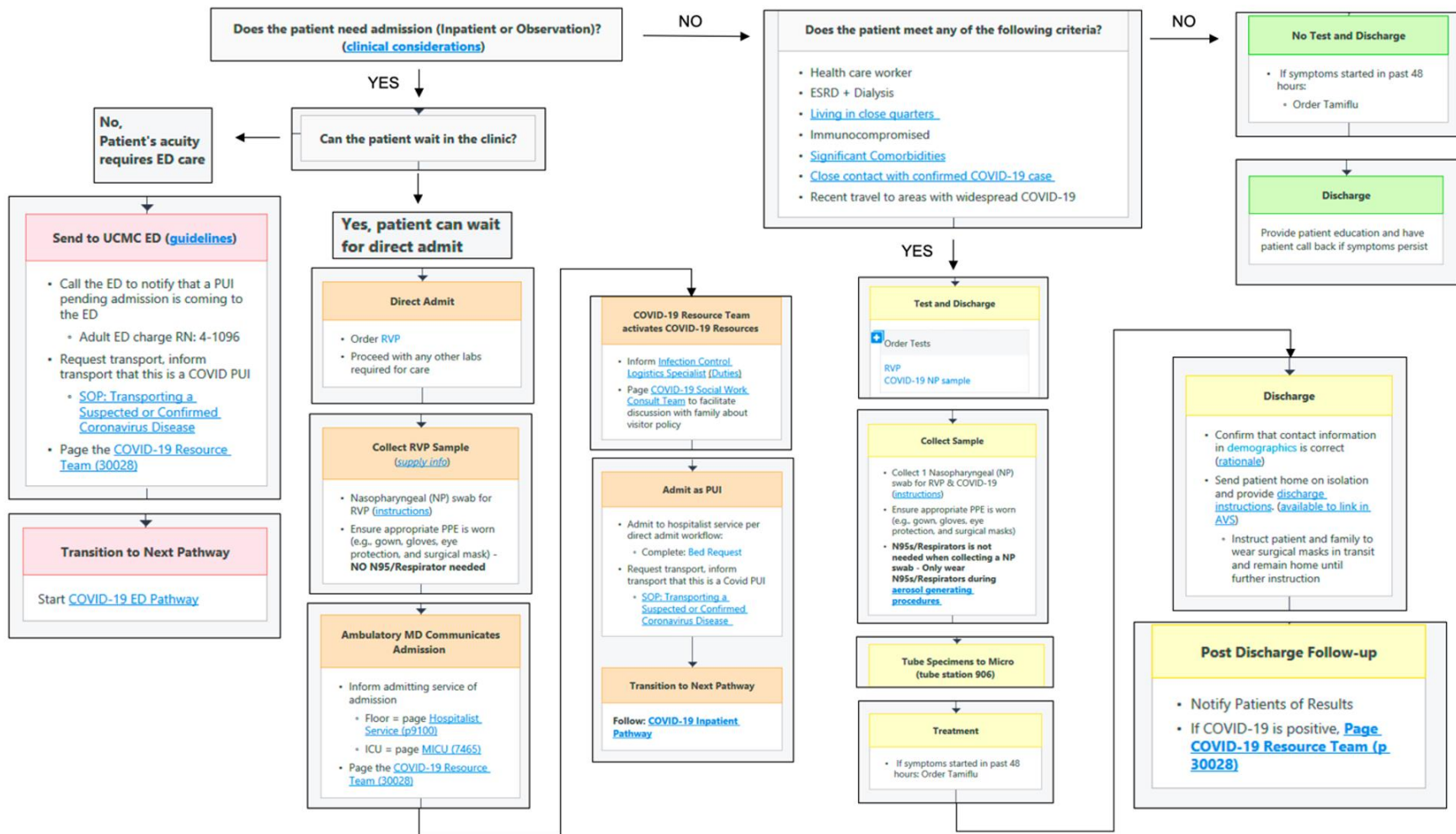
- **3/22/20:**
 - **Due to critical shortages patients being discharged from the clinic will only receive COVID-19 testing if they are either a UCM or BSD employee**
 - **Updated ILI symptoms to include Rhinorrhea and Sinusitis**
- **3/20/20:**
 - Changed RVP test to IRP test for patients going home
 - For Direct Admit flow, combined RVP and COVID-19 testing to occur at the same time

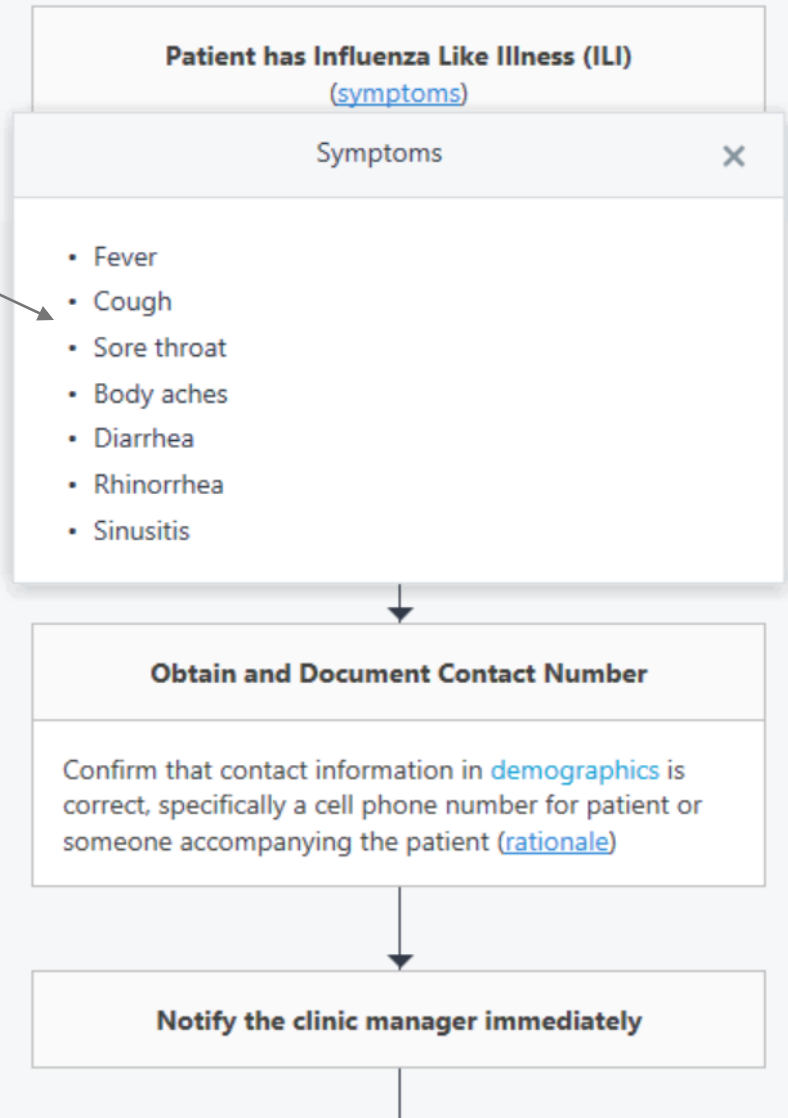
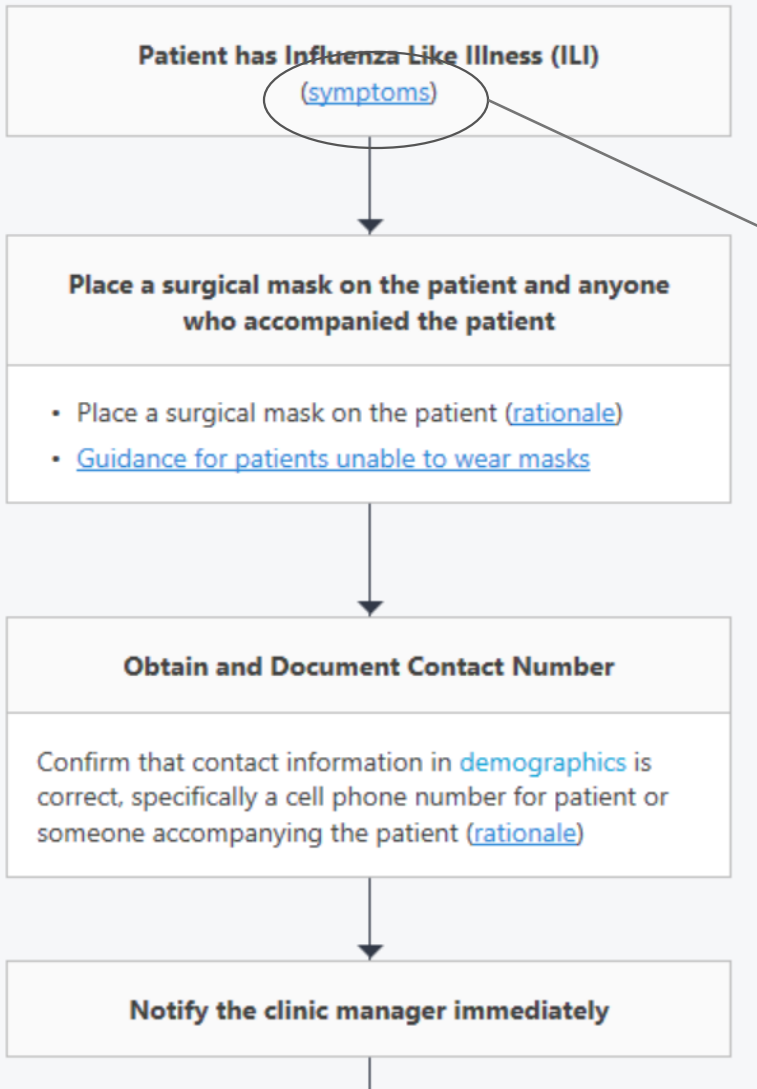
[\(archived updates\)](#)

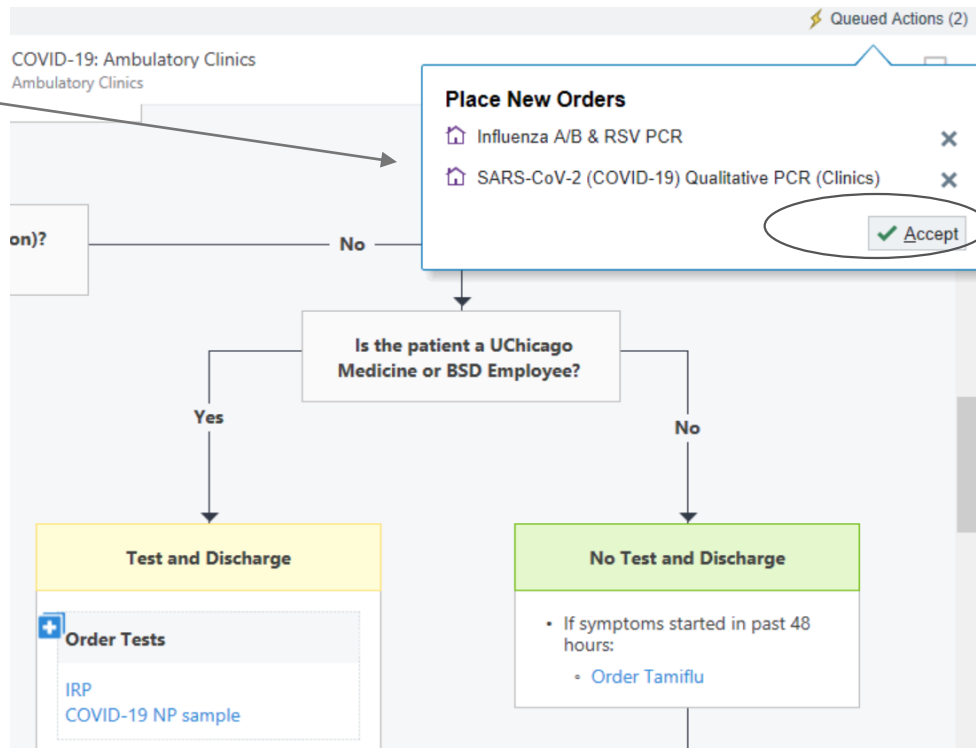
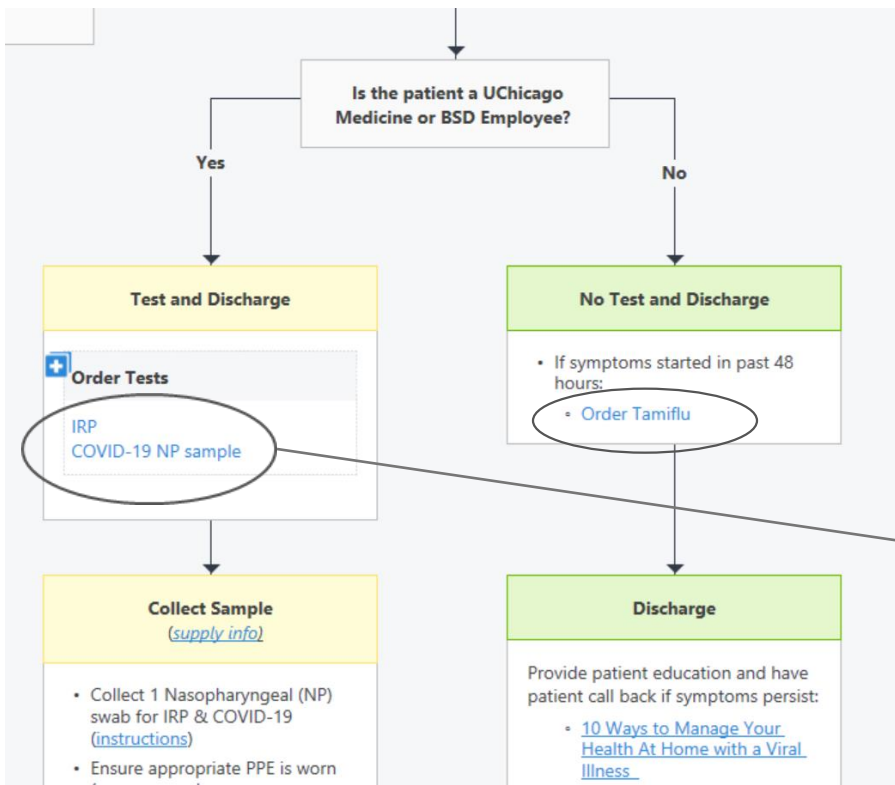


AT THE FOREFRONT

**UChicago
Medicine**







ROS Physical Exam

Service: GENERAL MED Date of Service: 3/20/2020 06:20 PM

Insert SmartText

Influenza Like Illness (CoVID-19) Ambulatory Progress Note

Reason For Visit:

Chief Complaint

Patient presents with
• Flu Like Symptoms

History of Presents Illness:

19Yrs male presents with {NUMBERS 1-12:90041} days of influenza-like symptoms including {flu symptoms:937}. The patient {Does or Does Not Have Red Flag Symptoms:938}. Patient has the following risk factors related to COVID-19: {Risk Factors:940}.

Cough
fever
chills
sore throat
myalgias
fatigue
diarrhea
vomiting
congestion

Review of Systems:

Review of Systems
Otherwise ROS is as above in HPI.

Past Medical History

Patient Medical and Surgical History Were Reviewed.

Allergies

Current Allergies were Reviewed.

Current Medications

Current Medications were Reviewed.

Physical Exam:

Blood pressure 115/87, pulse 98, temperature (!) 38.9 °C (102 °F), SpO2 95 %
Physical Exam

Assessment/Plan:

#Influenza-Like Illness

Patient presents {WITH/WITHOUT:94022} risk factors as above. After review of the patients symptom's and current guidance within the institutional COVID-19 ambulatory clinical pathway (Agile MD) the patient was directly admitted to the inpatient hospital from clinic with respiratory viral testing performed in clinic (Direct Admit Pathway).

Flu like symptoms ICD-10-CM 068 89 ICD-9-CM 780 99

Write Note
- Reference AgileMD for clinical decision making.
- Use F2 or Arrow to move through smartlists.

5

Complete Remaining Smartset Fields and AgileMD Orders

Ambulatory providers are directed to review the "COVID-19: Ambulatory Clinics" management pathway available in AgileMD which can be accessed via the patient storyboard. Lab test orders are available within Agile.

Chief Complaint Filter Collapse
 COVID-19 Eval Reason for Visit
 Influenza Like Illness

Visit Diagnosis Search Collapse
 COVID-19 Eval Diagnosis
 Flu-like symptoms [R68.89]

Progress Note Filter Collapse
 PROGRESS NOTE
 INITIAL IUI EVAL NOTE

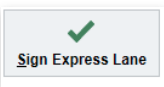
LOS Filter Collapse
 COVID-19 Eval LOS
 PR OFFICE OUTPATIENT VISIT 5 MINUTES [99211]
 PR OFFICE OUTPATIENT VISIT 10 MINUTES [99212]
 PR OFFICE OUTPATIENT VISIT 15 MINUTES [99213]
 PR OFFICE OUTPATIENT VISIT 25 MINUTES [99214]
 PR OFFICE OUTPATIENT VISIT 40 MINUTES [99215]
 NO FEE [900]

Patient Instructions Filter Collapse
 COVID-19 PATIENT INSTRUCTIONS
 UCM MYC AT HOME CARE WITH POSSIBLE VIRAL ILLNESS OR COVID-19
 UCM MYC 10 WAYS TO MANAGE YOUR HEALTH AT HOME WITH A VIRAL ILLNESS
 UCM MYC SELF-ISOLATION FOR POSSIBLE OR CONFIRMED COVID-19
 UCM MYCH FLU LIKE SYMPTOMS / COVID-19 SCREENING WORK/SCHOOL EXCUSE

Ad-hoc Orders Search Collapse
 You can search for an order by typing in the header of this section.

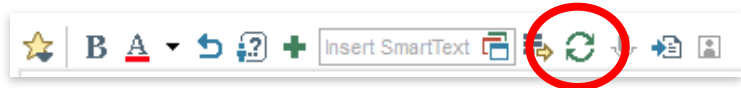
6

Sign Express Lane



7

Refresh The Note















8

Sign the Encounter



Ambulatory providers are directed to review the "COVID-19: Ambulatory Clinics" management pathway available in AgileMD which can be accessed via the patient storyboard. Lab test orders are available within Agile.

Chief Complaint  Filter Collapse	
COVID-19 Eval Reason for Visit  <input checked="" type="checkbox"/> Influenza Like Illness	
Visit Diagnosis  Search Collapse	
COVID-19 Eval Diagnosis  <input checked="" type="checkbox"/> Flu-like symptoms [R68.89]	
Progress Note  Filter Collapse	
PROGRESS NOTE  <input checked="" type="checkbox"/> INITIAL ILI EVAL NOTE	
LOS  Filter Collapse	
COVID-19 Eval LOS  <input type="checkbox"/> PR OFFICE OUTPATIENT VISIT 5 MINUTES [99211] <input type="checkbox"/> PR OFFICE OUTPATIENT VISIT 10 MINUTES [99212] <input checked="" type="checkbox"/> PR OFFICE OUTPATIENT VISIT 15 MINUTES [99213] <input type="checkbox"/> PR OFFICE OUTPATIENT VISIT 25 MINUTES [99214] <input type="checkbox"/> PR OFFICE OUTPATIENT VISIT 40 MINUTES [99215] <input type="checkbox"/> NO FEE [900]	
Patient  Filter Collapse	
Instructions  COVID-19 PATIENT INSTRUCTIONS  <input checked="" type="checkbox"/> UCM MYC AT HOME CARE WITH POSSILBE VIRAL ILLNESS OR COVID-19 <input checked="" type="checkbox"/> UCM MYC 10 WAYS TO MANAGE YOUR HEALTH AT HOME WITH A VIRAL ILLNESS <input checked="" type="checkbox"/> UCM MYC SELF-ISOLATION FOR POSSIBLE OR CONFIRMED COVID-19 <input checked="" type="checkbox"/> UCM MYCH FLU LIKE SYMPTOMS / COVID-19 SCREENING WORK/SCHOOL EXCUSE	
Ad-hoc Orders  Search Collapse	
<i>You can search for an order by typing in the header of this section.</i>	

Coronavirus

- Enveloped, single-stranded RNA viruses
- Endemic coronaviruses are frequent causes of respiratory infections globally
- New human coronaviruses included Middle East Respiratory Syndrome (MERS) and severe acute respiratory syndrome (SARS)
- Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the most recently identified human coronavirus

SARS-CoV-2

- Presentation is an Influenza like illness (ILI)
- Most common symptoms (Wuhan, hospitalized patients)
 - Fever 99%
 - Dry Cough 59%
 - Myalgia 35%
 - Dyspnea 31%
 - Sore Throat 17%
 - Diarrhea 10%
 - Anosmia
- Congestion initially seemed to be a negative predictor but is now considered common

Suggested Patient Assessment: Before Entering the Room

- Review VS (temperature, pulse ox)
- Call ALL patients' cell phones to take history and assess for ILI (questions on next slide)
- Triage ILI pts using Agile ambulatory pathway

History

- Do you work in a healthcare setting at UCM in a role with direct patient contact?
- When did you first starting having flu like symptoms?
- Which of the following do you have: fever, cough, sore throat, body aches, diarrhea?
- Are you experiencing: shortness of breath, chest pain, wheezing, abdominal pain, confusion, seizures, LOC, severe reduction in urine output, vomiting liquids?
(probably will need admission)
- Have you been in close contact (within 6 feet for at least 5 minutes) with anyone who has tested positive for COVID-19?

History (chronic conditions)

- Chronic lung disease (asthma, COPD, CF)
- Cardiovascular disease (HTN, CHF, CAD, CHD), CKD, Cancer
- Blood disorder (example: sickle cell anemia)
- Diabetes or other endocrine/metabolic disorder
- Neurologic disorder (epilepsy, stroke, cerebral palsy, muscular dystrophy, spinal cord injury)
- Liver disease
- Pregnant or given birth within 2 weeks

History (continued)

- Have you received recent chemotherapy, do you have an illness (HIV), or are you taking any medications (prednisone, immunosuppressants) that may reduce your ability to fight infections?
- Do you live in close quarters with others (nursing home or long term care facility, shelter, barracks)?

Testing Options

- Routine batched testing; results < 12 hrs
- Rapid one test at a time; results < 45 min
 - For pts being admitted from ED
 - For pts being discharged from ED awaiting placement or on dialysis
 - Labor and delivery
- Use COVID order within pathway and lab will determine appropriate platform

What Kind of Sample?

- NP swab in Universal Viral Transport Medium: single sample for both COVID-19 and RVP/IRP
- Nasal swab in eSwab liquid Amies transport: COVID-19 only

How to Collect a NP Sample

↓

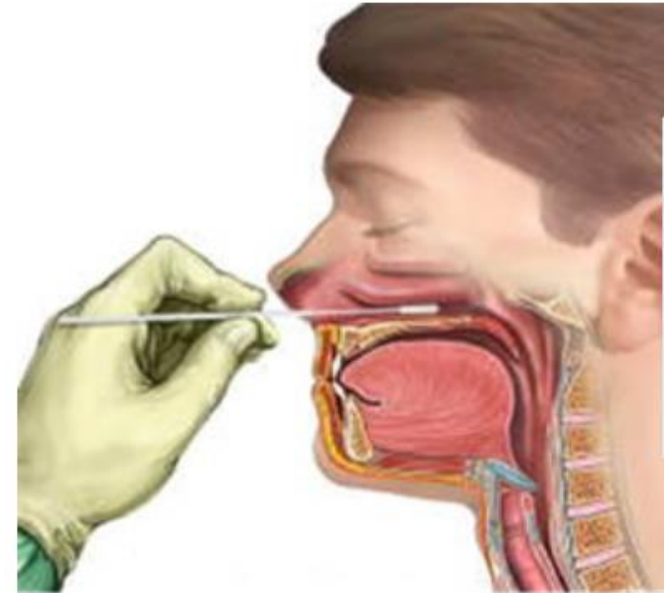
Collect Sample
(supply info)

- Collect 1 Nasopharyngeal (NP) swab for IRP & COVID-19
(instructions)

RVP + COVID-19 NP Combined Sample X

- Insert a flocked nasal swab into the nostril parallel to the palate, until a slight resistance is met.
- Rotate the swab 2-3 times and then leave the swab in place for 5-10 seconds to absorb secretions.
- Swab one nasopharyngeal area with the swab.
- Place swab in viral transport media.
- Place both lab stickers on the same transport media
- Write on the sendout specimen label: "COVID-19 NP sample".

(tube station 906)



How to Collect a Nasal Sample

- Insert into nostril until slight resistance met
- Rotate swab 2-3 times and hold in place for 5-10 seconds
- Repeat in other nostril with same swab
- Place in transport media

In the room if patient has ILI sx

- One provider only, with full PPE
 - BP if fever, tachycardia, or hypoxia
 - Lung exam if abnormal VS or patient appears ill (use yellow stethoscope or clean your own)
 - Sample collection if indicated
- For patients being discharged, appropriate handouts (supportive care, isolation guidelines depending on test positive/negative/no test, f/u instructions)

Supportive Care for Discharged Home

- Agile Pathway
- Analgesia/Antipyretics - Acetaminophen preferred over Ibuprofen
 - Acetaminophen 1000mg q6h PRN, 500mg tabs #56
- Cough
 - Tessalon 100mg TID PRN, 100 mg capsules #21
 - Codeine-Guaifenasin 10-100mg/5mL 5-10 mL q4h PRN, dispense 120mL

Supportive Care for Discharged Home

- Nausea/Vomiting
 - Ondansetron 4mg q6h PRN, 4mg ODT #16
 - Metoclopramide 10mg q6h PRN, 10mg tabs #16
 - Prochlorperazine 10mg q6h PRN, 10mg tabs #16
- Diarrhea
 - Loperamide 2mg PRN after each loose stool, maximum 16mg daily, 2mg tabs #20

Supportive Care for Discharged Home

- Asthma/COPD
 - Use prednisone with caution
 - Albuterol inhaler 1-2 puffs q4h PRN, #1 inhaler
 - Spacer: use PRN with inhaler
 - Prednisone 40mg daily x5 days, 20mg tabs #10
- Consider Tamiflu if symptoms within 48 hours
 - 75 mg bid for 5 days

Strong Considerations for Admission

- Inadequate oxygenation at rest or with ambulation (90-92% with consideration of respiratory status)
- Age > 65 or comorbidities placing the patient at high risk for poor outcome
- Other clinician concern, including typical reasons for admission such as respiratory distress or end organ damage

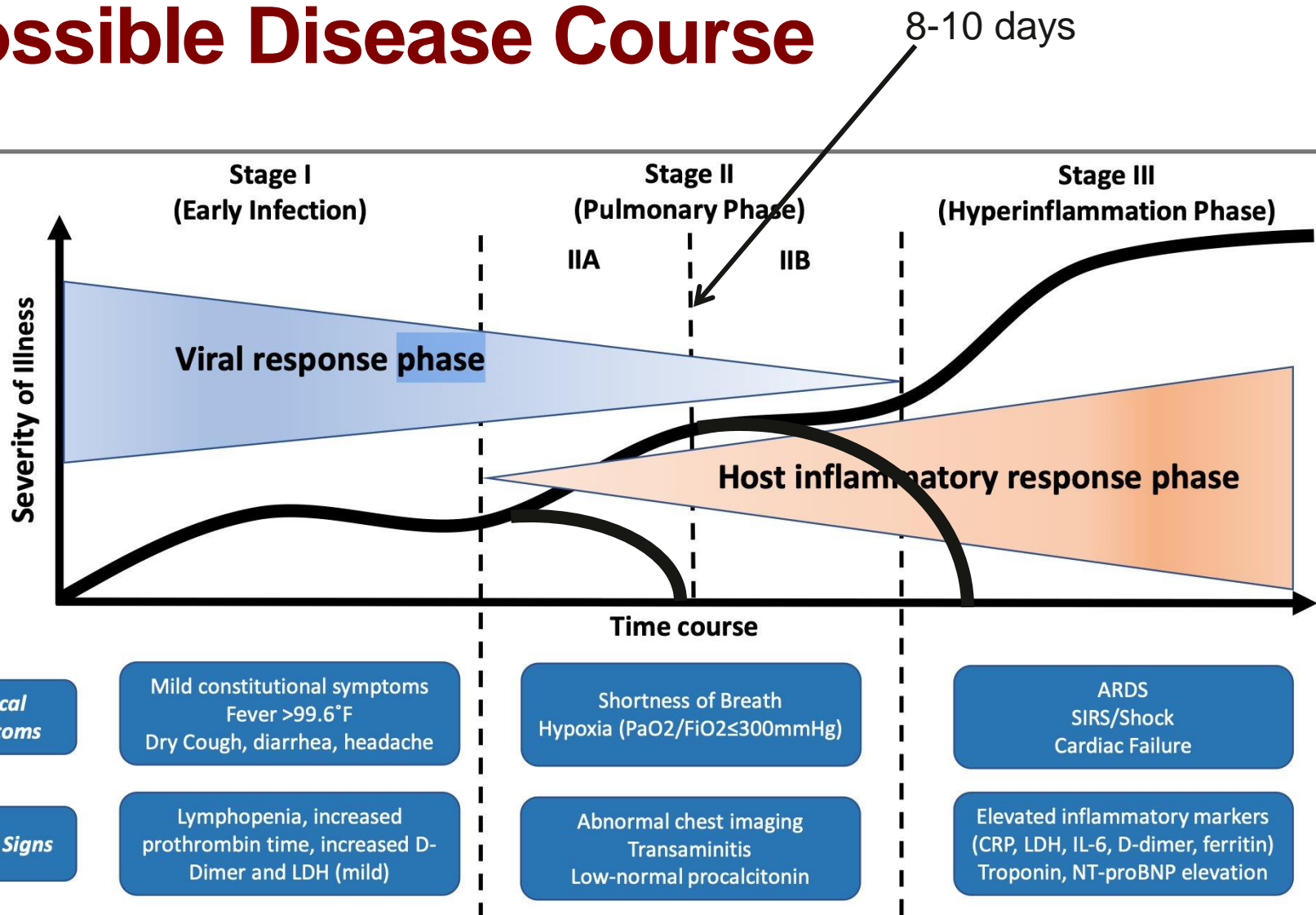
Other disposition considerations

- High risk for transmitting infection due to social circumstances (eg, homeless, communal living, SNF) and unable to secure safe alternative
- Consult outpatient social worker for help
- Social Work COVID-19-Homeless Liaison p30066

Testing in Patients Being Admitted (or considered for admission)

- CT (probably preferred to CXR) for patient with abnormal lung exam or hypoxia
- CBC, CMP
- Labs that indicate severe disease:
Ddimer > 1000, CPK > 2XULN, Elevated LDH > 254, CRP > 100, elevated troponin, abs lymph < 0.8, ferritin > 300

Possible Disease Course



ICU Criteria (transfers to main ER)

- Need for resuscitation
- Hypoxemic respiratory failure is the most common indication for ICU
- Progression to intubation can be rapid (12-24h)
- Shock seems uncommon (until late in course)
- Median time from symptom onset to ICU transfer is ~10 days

Additional Resources

- COVID-19 Resource Center on the intranet
- 24/7 staff resources:
1-800-683-5704
Pager 30028
- Come to another zoom session

COVID Zoom Faculty Training | P x University of Chicago - Departm x

Not secure | medicine.uchicago.edu

Apps Email Epic Twitter Instagram Box NYT Pandora Paging Canvas Journals U of C Pritzker Watches Dropbox WBEZ Citibank Anne Other bookmarks


THE UNIVERSITY OF CHICAGO Department of Medicine UChicago Medicine

COVID-19 Resource Center

Below is a current list of resources available relating to COVID-19. Outpatient COVID Training 3 26 RESOURCE HOW...
[View the whole story](#)

About Administration Faculty Sections & Centers Clinical Research Training

Message from the Chair



Everett E. Vokes, MD
Chair, Department of Medicine

Welcome to the Department of Medicine at the University of Chicago. Our department was the first department created when the medical school began over 110 years ago. It has evolved into the largest department not only in the medical school with over 345 full time faculty and research faculty but is the largest department in the University. The main missions of the Department of Medicine, scholarship, discovery, education and outstanding patient care, occur in a setting of multicultural and ethnic diversity. These missions are supported by exceptional faculty and trainees in the Department. We believe you will quickly agree that the DOM's faculty, fellows and trainees very much represent the forefront of academic medicine – extraordinary people doing things to support the

- Intranet
- Web Mail
- ePayments
- Med-Chiefs
- Paging Directory
- UOC Directory
- Admin Phone List
- Workday
- Grand Rounds



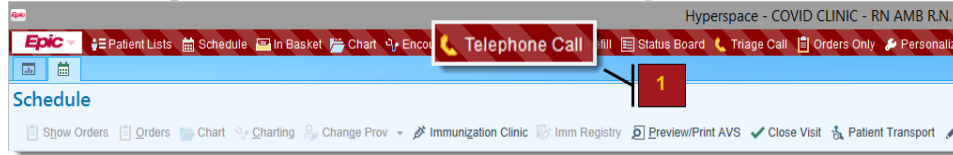
AT THE FOREFRONT

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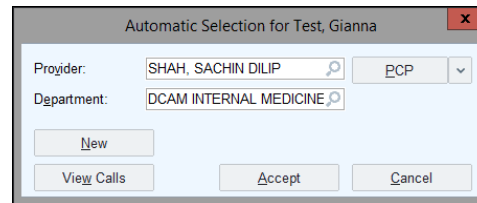
Questions?

Telephone visits

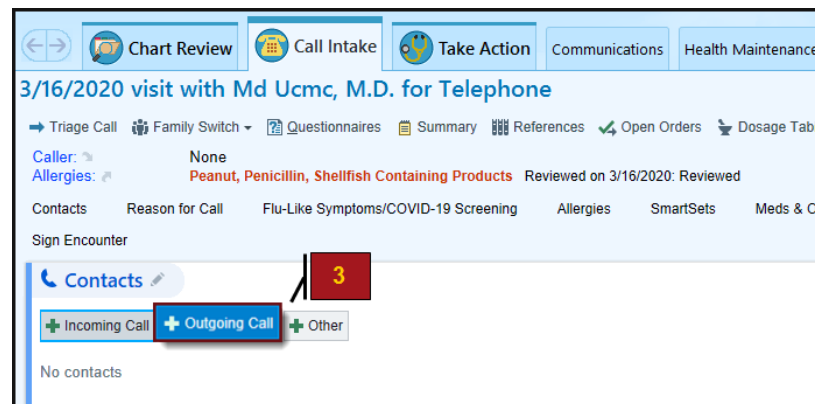
1. Click the **Telephone Call** button. Search and find your patient.



2. Select the **Provider** and the **Non-PVD Department**.

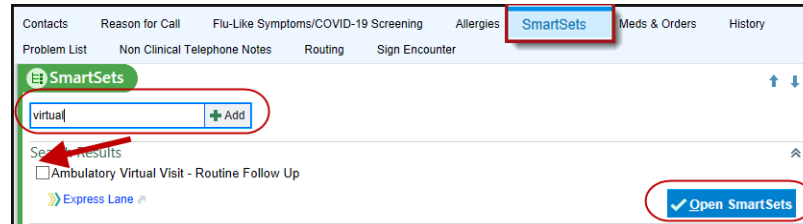


3. Indicate the call as **Outgoing**, if appropriate.

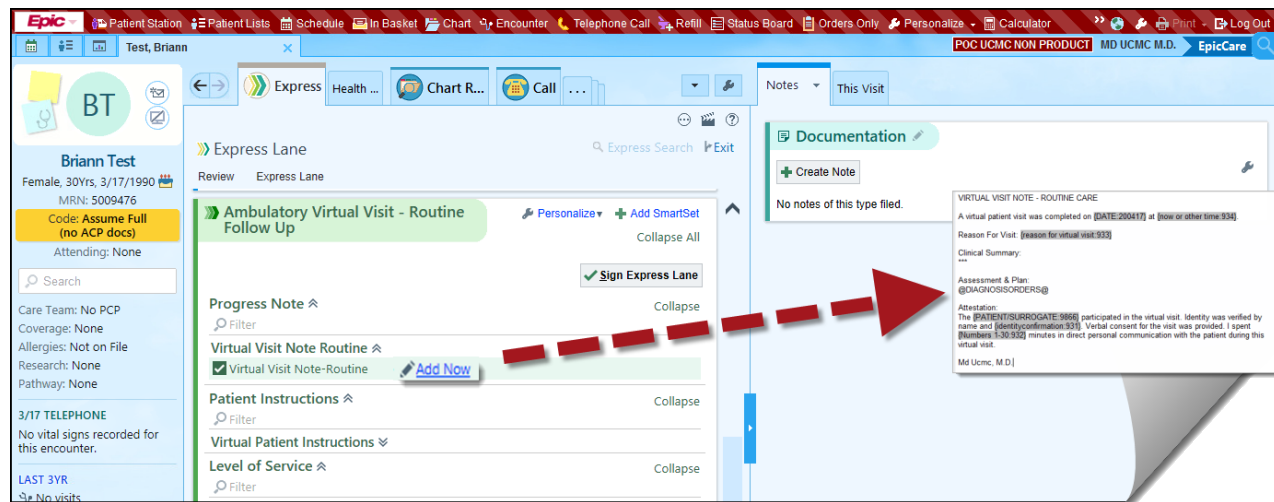


Virtual Visit Express Lane Documentation

1. Open the **SmartSets** section of your Navigator and search for the **Ambulatory Virtual Visit SmartSet**. Select the checkbox in front of the SmartSet and Click **Open SmartSet**.



2. Hover over the **Virtual Visit Note-Routine** and Click **Add Now** to apply the note template.

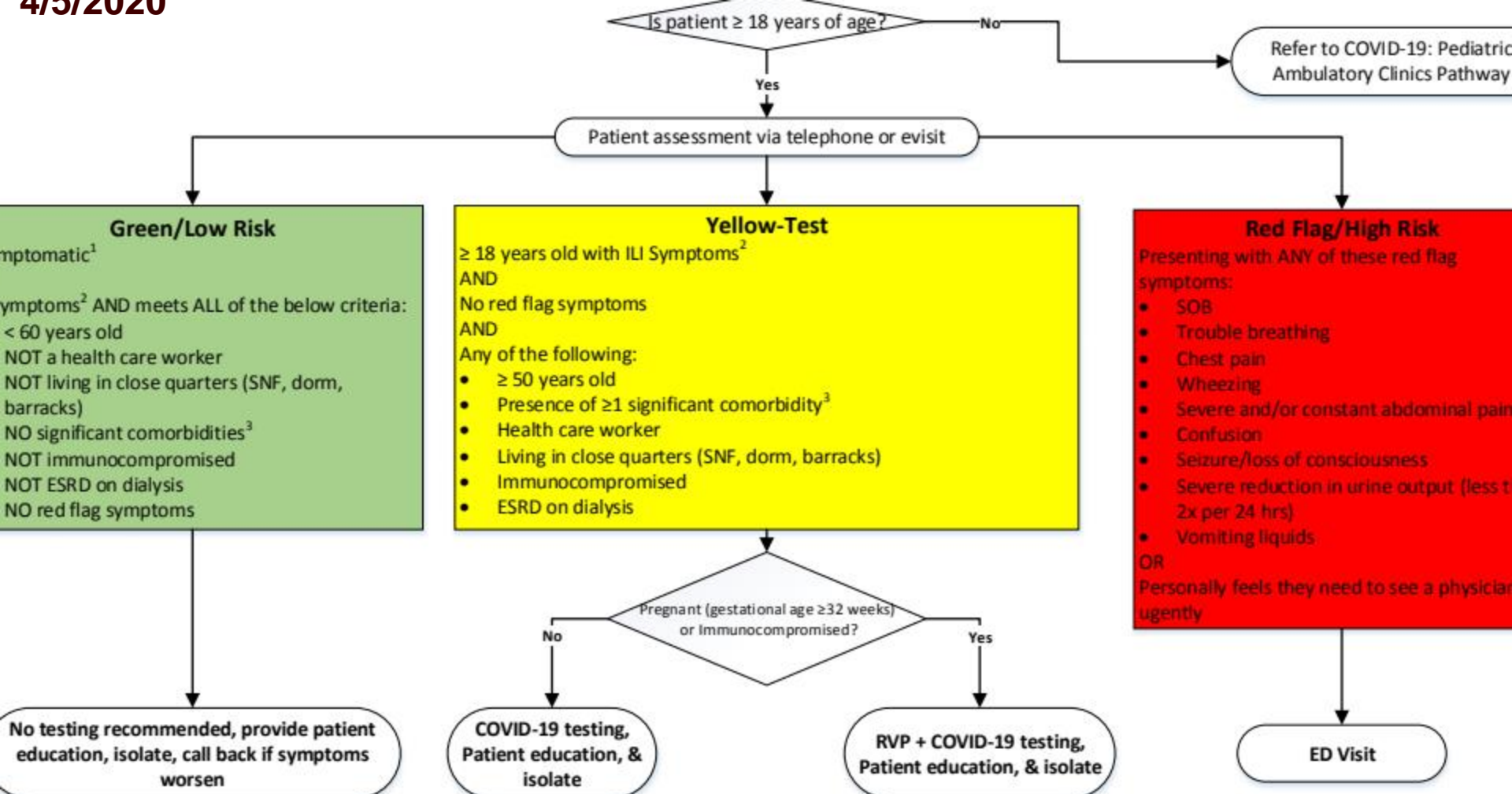


Virtual Visit Wrap-up

3. Proceed with applying the support suggestions: add Patient Instructions, enter LOS, appropriate time based encounter, etc.

Ambulatory Virtual Visit - Routine Follow Up [Personalize](#) ⌵ ⌶

- ▼ Progress Note
 - ▼ Virtual Visit Note Routine
 - Virtual Visit Note-Routine
- ▼ Patient Instructions
 - ▼ Virtual Patient Instructions
 - Questions about Coronavirus
- ▼ Level of Service
 - ▼ Telephone Encounter
 - PR BRIEF CHECK IN BY MD/QHP [G2012]
 - No charge
 - ▼ MyChart Encounter
 - (5-10 Minutes) Provider only [Details](#)
 - (11-20 Minutes) Provider only
 - (21+ Minutes) Provider only



Green/Low Risk
 Asymptomatic¹
 OR
 Symptoms² AND meets ALL of the below criteria:
 < 60 years old
 NOT a health care worker
 NOT living in close quarters (SNF, dorm, barracks)
 NO significant comorbidities³
 NOT immunocompromised
 NOT ESRD on dialysis
 NO red flag symptoms

Yellow-Test
 ≥ 18 years old with ILI Symptoms²
 AND
 No red flag symptoms
 AND
 Any of the following:
 • ≥ 50 years old
 • Presence of ≥1 significant comorbidity³
 • Health care worker
 • Living in close quarters (SNF, dorm, barracks)
 • Immunocompromised
 • ESRD on dialysis

Red Flag/High Risk
 Presenting with ANY of these red flag symptoms:
 • SOB
 • Trouble breathing
 • Chest pain
 • Wheezing
 • Severe and/or constant abdominal pain
 • Confusion
 • Seizure/loss of consciousness
 • Severe reduction in urine output (less than 2x per 24 hrs)
 • Vomiting liquids
 OR
 Personally feels they need to see a physician urgently

No testing recommended, provide patient education, isolate, call back if symptoms worsen

COVID-19 testing, Patient education, & isolate

RVP + COVID-19 testing, Patient education, & isolate

ED Visit

Asymptomatic AND close contact with a person who tested positive for COVID-19 (within 6 feet of the person for 15 or more minutes without wearing appropriate PPE) instruct the patient to quarantine for 14 days.
 Asymptomatic UCM/BSO health care workers may continue to work with a mask per UCM policy

- ²Influenza-like Illness(ILI) Symptoms**
- Fever
 - Cough
 - Sore throat
 - Body aches
 - Diarrhea
 - Rhinorrhea
 - Sinusitis

- ³Significant Comorbidities**
- Chronic lung disease (asthma, COPD, CF)
 - Cardiovascular disease (HTN, CHF, CAD, CHD)
 - CKD
 - Cancer
 - Blood disorder (example: sickle cell anemia)
 - Diabetes or other endocrine/metabolic disorder
 - Neurologic disorder (epilepsy, stroke, cerebral palsy, muscular dystrophy, spinal cord injury)
 - Liver disease
 - Pregnancy (gestational age ≥32 weeks)
 - HIV/AIDS or immunosuppressed