These are interim treatment recommendations based on best available evidence at this time. Recommendations may be modified based on resource availability, testing recommendations, and future published data.

Clinical symptoms:
Range from uncomplicated upper respiratory tract viral infection to pneumonia, acute respiratory distress syndrome (ARDS), sepsis, and septic shock

Testing:
See current COVID-19 testing recommendations.

Treatment:
Supportive care
Supportive care is the mainstay of treatment in outpatients. For Inpatients, institute appropriate treatment of respiratory failure, ARDS, sepsis, septic shock.

The data is not strong enough to recommend routine use of hydroxychloroquine:
The current body of literature and local experience does not support the routine use hydroxychloroquine for patients with suspected or confirmed COVID-19 infection. Michigan Medicine is committed to participation in randomized controlled clinical trials to facilitate the generation of robust evidence concerning the effectiveness of products in treating COVID-19 and to appropriately delineate risk-vs-benefit assessments for various treatment strategies.

Please see Appendix A for review of existing data.

For admitted patients:
Infectious Diseases will review each case within 24 hours of admission and screen COVID-19 infected patients for eligibility in trials and continue to make decisions that are most optimal for each individual patient.

For patients discharged from the ED:
Patients who test positive for SARS-CoV2 within 4 days of symptom onset, there is an open label pragmatic, randomized trial run out of University of Minnesota. The two arms are hydroxychloroquine versus a vitamin, and if eligible the study will ship your patient the drug. If you want to enroll your patient, you or the patient’s PCP can start the process through their website: http://trialcovid.com/

Secondary bacterial pneumonia
Bacterial pneumonia appears to be rare in patients with early COVID-19 infection, and no unique association with resistant pathogens, including MRSA or Pseudomonas, has been made. Standard diagnostics, such as leukocytosis and/or hemodynamic instability can be useful to identify concomitant bacterial pneumonia. The literature and experience to date suggests that patients with COVID-19 infection can be managed as per our institutional guidelines regarding antibiotic use in patients with suspected pneumonia

Concomitant use of NSAIDs and/or ACE-i/ARBs:
There are conflicting theories regarding the risk and benefit of non-steroidal anti-inflammatory drugs (NSAIDs) or angiotensin converting enzyme inhibitors/ angiotensin II receptor blockers (ACE-i/ARBs) in patients with COVID-19 infection. Currently, there are no robust data demonstrating beneficial or adverse outcomes with use of these drugs in COVID-19 infections or specifically in COVID-19 infected patients taking these medications for cardiovascular disease. The American Heart Association, American College of Cardiology, and Heart Failure Society of America do not recommend stopping ACE-i or ARBs in COVID-19 infected patients. In addition, a clinical trial (NCT04312009) is investigating whether adjunctive ARB therapy can improve outcomes in COVID-19 patients. Pending this data, we do not endorse stopping or starting such therapies solely because of COVID-19 infection.
The recommendations in this guide are meant to serve as treatment guidelines for use at Michigan Medicine facilities. If you are an individual experiencing a medical emergency, call 911 immediately. These guidelines should not replace a provider's professional medical advice based on clinical judgment, or be used in lieu of an Infectious Diseases consultation when necessary. As a result of ongoing research, practice guidelines may from time to time change. The authors of these guidelines have made all attempts to ensure the accuracy based on current information, however, due to ongoing research, users of these guidelines are strongly encouraged to confirm the information contained within them through an independent source.

If obtained from a source other than med.umich.edu/asp, please visit the webpage for the most up-to-date document.

References:
9. https://www.cdc.gov/mmwr/volumes/69/wr/mm6913e2.htm