1. Symptoms of COVID-19
   a. Initial symptoms of illness may appear 2-14 days after exposure
   b. The most common symptoms include fever, cough and shortness of breath
   c. Other symptoms include myalgias (muscle aches), fatigue, malaise (feeling unwell)
   d. Complications of more severe illness may include pneumonia, multi-organ failure, death

2. Epidemiologic/ exposure risk factors
   a. Recent close contact with someone known to have COVID-19 in the 14 days before symptom onset
   b. Recent travel to an area with widespread ongoing transmission of COVID-19 (see below, “Travel”) in the 14 days before symptom onset
      i. See CDC for an updated list of areas with widespread ongoing transmission

3. How it is spread
   a. The virus is thought to spread mainly from person-to-person via respiratory droplets and contact with infected surfaces or objects
   b. The virus may spread through asymptomatic person-to-person transmission; however, this is not thought to be the primary way the virus spreads.

4. Preventing illness
   a. The following are recommendations are endorsed by the CDC:
      i. Wash hands frequently with soap and water for at least 20 seconds or use hand sanitizer that contains at least 60% alcohol especially after visiting a public space or after blowing the nose, coughing or sneezing
      ii. Avoid touching the eyes, nose, and mouth
      iii. Avoid close contact with sick people including those diagnosed with COVID-19
      iv. Place distance between yourself and other people
   b. Should a facemask be used in public places to prevent illness?
      i. CDC recommends that healthy individuals wear a facemask in public
5. **High risk and special populations**
   a. Certain populations are at higher risk for developing more severe illness
   b. Risk factors include the following:
      i. Age > 60 years, heart and/or lung disease, diabetes, immunosuppressed status due to medical condition, use of steroids, transplantation
   c. High risk populations should receive the following guidance (in addition to above, “Preventing illness“):
      i. Ensure adequate supplies on hand at home (including medications)
      ii. Maintain distance from others especially those who are sick
      iii. Avoid crowds as much as possible
      iv. Avoid cruise ship travel and non-essential air travel
      v. Stay home as much as possible during a community outbreak
   d. High risk populations should receive instructions for close monitoring of potential COVID-19 symptoms including severe symptoms that warrant immediate attention

6. **Evaluation of a person with respiratory illness or suspected of having COVID-19**
   a. See workflow for patient calls, outpatient visits
   b. **What to do if a patient calls to report a respiratory illness that may be compatible with COVID-19**
      i. The clinical provider should take the following steps:
         ii. Perform an assessment of the patient over the telephone
            1. Assess clinical symptoms (including severity), co-morbid medical conditions, and epidemiologic risk factors for COVID-19
         iii. Determine the need for COVID-19 testing (See “Testing”)
         iv. Determine disposition & management based on severity of illness
            (See “Disposition and management”)
            1. If the patient does not have a high-risk condition AND if the reported symptoms are mild
               a. Testing is not recommended
               b. Supportive management at home is recommended
               c. Self-isolation is recommended for 7 days or until 72 hours after the fever has resolved
            2. If the patient is urged to seek medical attention (for evaluation/management of illness or COVID-19 testing), the provider should contact the clinic and/or ED in advance (to ensure appropriate preventive actions are employed to minimize exposure of potential illness to others)
               a. See separate workflow diagram for outpatient visits
      v. Provide the patient with CDC guidance for “Preventing the spread of coronavirus disease 2019 in homes and residential communities” (See below under “Disposition and management”)
c. What to do if a patient calls to report potential exposure to COVID-19/ high-risk travel

i. The provider should take the following steps:
ii. Perform an assessment of the patient over the telephone
   1. Assess exposure to COVID-19 including place of contact, type of contact (or how much contact), date of contact, duration of contact
   2. Assess clinical symptoms (including severity), epidemiologic risk factors (including travel or exposure to known case), co-morbid medical conditions, pregnancy status
iii. Determine the need for COVID-19 testing (See “Testing”)
iv. Determine disposition and management (See “Disposition”)
   1. If the patient reports high risk exposure and NO symptoms
      a. Provide instructions for close monitoring of symptoms and self-isolation for 14 days
   2. If the patient reports high risk exposure and mild symptoms, COVID-19 is possible
      a. Provide instructions for close monitoring of symptoms
      b. Continue self-isolation until at least 3 days have passed since recovery (defined as resolution of fever without use of antipyretics AND improvement in respiratory symptoms) AND at least 7 days have passed since symptoms first appeared
      c. For those with high-risk conditions, closer monitoring and testing for COVID-19 may be indicated
v. Provide the patient with CDC guidance for “Preventing the spread of coronavirus disease 2019 in homes...” (See below, “Disposition”)

d. What to do if a patient presents to an office visit and reports a respiratory illness that may be compatible with COVID-19?

i. See separate workflow diagram for outpatient visits
ii. The clinic staff should take the following steps:
   1. ALL patients should be screened at initial intake for the following: fever, respiratory symptoms, travel to areas with high prevalence/ongoing transmission of COVID-19 (See “Travel” below), or contact with known COVID-19 case
   2. Patients with respiratory symptoms should be provided a mask
   3. Patients suspected of having COVID-19 (with symptoms + exposure risk factors) should be immediately placed into an exam room (door closed)
      a. If an exam room is unavailable, patients should be moved to a separate area at least six feet away from others
   4. Staff providing direct care to any patient suspected of having COVID-19 should don appropriate PPE
      a. Recommended PPE includes gowns and gloves, surgical/isolation mask, and eye protection with goggles or face shield
iii. The provider should perform an assessment for COVID-19, determine the need for testing, and determine disposition and management (as discussed above)
7. **Testing for COVID-19**
   a. **Should testing for COVID-19 be performed?**
      i. Testing should be considered if the patient has compatible clinical symptoms (See “Symptoms of COVID-19”) AND compatible epidemiologic risk factors (See “Exposure risk factors for COVID-19”)  
      ii. Testing should be considered if the provider has high clinical suspicion for COVID-19 and alternative diagnoses such as influenza and other common respiratory viruses are unlikely or have been ruled out  
         1. *Note that above testing recommendations may change in the future based on local epidemiology and availability of testing*
   b. **How is reporting, testing and specimen collection performed?**
      i. Patients should NOT be told to come to clinic for COVID-19 testing  
      ii. Outpatient testing for COVID-19 can be performed at an off-site collection tent (currently in beta mode) in the CWE  
         1. Patients should be instructed to call the BJC COVID-19 Call center to discuss whether they meet testing  
            a. The Call Center can currently be reached through the BJH hospital operator  
            b. Testing will utilize an algorithm based as discussed above  
         2. Patients who meet testing criteria will be provided with instructions to go to the specimen collection tent to have swabs obtained  
            a. Patients will be provided with home isolation instructions pending results  
            b. Patients who do not meet testing criteria or have not called the Call Center to discuss testing cannot be tested  
         3. Lab specimens will be sent to a commercial company for now  
            a. Expected turn-around time for test results is 4-5 days  
   c. **What happens if testing for COVID-19 returns positive?**
      i. Providers should notify the patient, local health department, local Infection Prevention, and Infectious Diseases of positive test results  
      ii. See below for management of COVID-19

8. **Disposition and management of suspected (test pending) or confirmed COVID-19**
   a. Outpatient management  
      i. In consultation with state or local health department, a provider should assess whether a patient is suitable for home care. In general, patients with mild symptoms can be managed at home with supportive care.  
      ii. Additional considerations include:  
         1. The patient is stable enough to receive care at home  
         2. Appropriate caregivers are available at home  
         3. There is a separate bedroom where the patient can recover without sharing immediate space with others  
         4. Resources for access to food and other necessities are available  
         5. Appropriate PPE are available to the patient and caregivers

1. Stay at home except to get medical care
   a. Avoid public areas (work, school, public areas)
   b. Avoid public transportation
2. Separate yourself from other people in your home if possible (i.e. recommend the use of separate bathrooms and bathrooms)
3. Call ahead before visiting your doctor
4. Wear a facemask only if you are sick or caring for anyone who is sick
5. Cover your coughs and sneezes
6. Clean your hands often
7. Avoid sharing personal items, food/drink, utensils

iv. Patients should receive BJC instructions on home quarantine (separate handout)

1. Patients should remain in isolation per local health department guidance

b. Inpatient management

i. Patients with more severe illness may require admission for management

1. The provider should discuss plans for admitting a suspected COVID-19 patient with Infection Prevention and the accepting clinical service to coordinate infection prevention practices and ensure safe transport
2. The patient should be admitted to a negative pressure room if available or a neutral pressure room with the door closed in pre-designated areas of the hospital
3. The number of providers caring for the patient should be limited to essential staff to minimize exposures. All providers will need to wear appropriate PPE.

c. There are no approved treatment options or available vaccine to protect against COVID-19 at this time.
9. Non-urgent clinic appointments
   a. It is safe for patients to attend their scheduled clinic appointments if a visit is needed.
   b. Clinic staff should take measures to reduce potential exposure of care teams and patients to illness.
      i. **BEFORE THE VISIT:**
         Clinic staff should call patients ahead of time to screen for fever, respiratory symptoms, high risk travel, potential exposure to COVID-19:
         1. Patients who report high risk travel or potential exposures should be told NOT to come to clinic.
         2. Patients who report fever or respiratory symptoms should be assessed by a clinical provider over the telephone (See above, “Evaluation of a person with respiratory illness...”)
      ii. **AT THE VISIT:**
         Clinic staff should screen patients at initial intake for fever, respiratory symptoms, high risk travel and potential exposure to COVID-19:
         1. If the patient answers yes, see above - “What to do if a patient who presents to an office visit is suspected of having COVID-19?”
   c. Providers should consider postponing or rescheduling non-urgent clinic visits, especially for high risk populations (see above, “High risk populations”)

10. Dialysis/Infusion center visits
    a. Refer to CDC Dialysis Guidance if applicable.
    b. Patients with fevers or respiratory symptoms should be instructed to call their dialysis center/infusion center prior to their scheduled session.
    c. Patients who are clinically stable with mild respiratory symptoms can safely attend their dialysis center/infusion center visits; however, see the above guidance: “What to do if a patient presents to an office visit and reports a respiratory illness”
    d. For patients with suspected or confirmed COVID-19 (CDC Dialysis Recommendations):
       i. Health department, infection prevention should be notified.
       ii. Patient should be separated from other patients by at least 6 feet.
       iii. HCP should follow appropriate infection prevention precautions (PPE).
       iv. Facilities should follow appropriate disinfection practices.

11. Travel
    a. Travel outside of the United States:
       i. For BJH/WU employees, please check with your respective departments for information on travel restrictions.
       ii. For the general public, refer to the following resources for up to date information prior to planning or travelling outside of the US:
          1. US Department of State - Travel Advisories for up to date information prior to planning or travelling outside of the US.
          2. CDC website for COVID-19 related travel information.
          3. Non-essential travel outside of the United States is not recommended, especially older adults or those with chronic medical conditions.
iii. For individuals returning from an area of widespread transmission, the following guidance from CDC should also be provided:
   1. Stay at home and avoid contact with others. Do not go to work or school. Discuss your work situation with your employer and the health department prior to returning.
   2. Avoid crowded public places and public transportation.
   3. Monitor for fever, cough or trouble breathing.
   4. If symptoms or illness develops, seek medical care and call ahead before going to doctor’s office or emergency room.

b. Travel within the United States
   i. Individuals should be referred to reliable sources such as CDC for updated COVID-19 related travel information (see above)
   ii. Individuals should consider the following things before traveling:
       1. The risk of exposure to COVID-19 may be higher at certain destinations and in crowded setting such as conferences, public events, religious gatherings, public spaces and public transportation
       2. The risk of more serious illness is increased in older adults and those with chronic underlying medical conditions
       3. If illness occurs, an individual may be asked to stay home and avoid going to work or school until considered noninfectious
   iii. Individual at higher risk for complications due to age (> 60) or medical conditions should consider delaying or canceling plans
   iv. Individuals who plan to travel should be counselled to practice infection prevention precautions and social distancing to prevent getting or spreading illness

  c. Attendance at concerts/meetings/religious gatherings
      i. Individuals should refer to local and federal guidelines if available (see CDC site)
      ii. Individuals should exercise caution or avoid attending a crowded event in order to reduce the risk of exposure to COVID-19 and reduce the spread of COVID-19 through mitigations strategies such as social distancing
      iii. Individual at higher risk for complications due to age (> 60) or medical conditions should stay home as much as possible and avoid crowds, cruise travel and nonessential air travel

12. Does the Biofire Respiratory Panel detect COVID-19?
   a. No. The Respiratory Pathogen Panel detects other Coronaviruses but does not detect COVID-19 (SARS-CoV-2).

13. Examples of activities that do not cause or increase the risk of COVID-19
   a. Close contact with an asymptomatic person who was exposed to COVID-19
   b. Walking by a person who was later diagnosed with coronavirus
   c. Eating at a Chinese restaurant

14. Can COVID-19 be spread by pets?
   a. There is no evidence available to suggest that pets can spread COVID-19
   b. Individuals should be advised to wash hands after being around animals
15. Other useful resources:
   c. Department of Labs and Washington University Depart of Pathology FAQ: https://wustl.box.com/v/CoronavirusCOVID19
   e. BJC COVID-19 Information: http://covid19.carenet.org/