

Emerging Practices to Combat Coronavirus Disease (COVID-19)

COVID-19 Clinical Knowledge Transfer from Vizient members and industry resources

Updated: April 2, 2020

Vizient is committed to ongoing research of Vizient members' emerging practices and other related updates to federal and regulatory guidelines in support of efforts to combat the COVID-19 pandemic. The purpose of this document is to assist our members with critical information to supplement this work. As new information surfaces, updates will be provided.

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DISCLAIMER: Vizient is compiling information and emerging practices from members to aid in knowledge transfer during the COVID-19 response. PLEASE NOTE THAT THE PRACTICES DESCRIBED HEREIN ARE IN MANY CASES EMERGING, INNOVATIVE AND AT TIMES UNTESTED METHODS TO ATTEMPT TO ADDRESS NEW AND UNPRECEDENTED SITUATIONS. VIZIENT MAKES NO REPRESENTATION OR WARRANTY REGARDING THE SAFETY OR EFFICACY OF THE PRACTICES. DECISIONS REGARDING WHETHER AND HOW TO UTILIZE ANY OF THESE PRACTICES SHOULD BE MADE BY HEALTH CARE PROVIDERS, AT THEIR OWN RISK, WITH CONSIDERATION OF INDIVIDUAL CIRCUMSTANCES. As information is changing rapidly, Vizient encourages you to always refer to the CDC, your state's department of health, and your local public health authority for guidance. Vizient does not provide legal, regulatory, or medical advice and disclaims liability or responsibility for the accuracy, completeness, and/or clinical efficacy and safety for the products or processes contained herein. Members should seek their legal counsel's advice on local, state, and federal legal/regulatory matters. The links to information referenced in this document are the products of the named organizations and they are solely responsible for their content. For the most up-to-date information, please visit Vizient's [Disaster Preparedness](#) page. To submit practices your organization is using to prepare for COVID-19, please e-mail disasterresponse@vizientinc.com.

Category	Emerging practice
Managing Clinical Supplies	Facial protection (N95, face shields, procedure and surgical masks)
	<p>4/2/20 FDA has issued guidance to help expand the availability and capability of sterilizers, disinfectant devices and air purifiers Resources for the sterilization of PPE:</p> <ul style="list-style-type: none"> • University of Nebraska provider resources • Guidelines from Journal of Patient Safety • ClordiSys decontamination • 3M statement • JAMA Call for Ideas for Conserving PPE • UMass researchers find medical-grade masks can be sterilized, reused • COVID-19 Surge Demand Calculator and Resource Kit (log-in required)
	<p>4/2/20 Many hospitals are adapting protocols for conserving PPE in “tent” spaces outside the ED. Common protocol components include:</p> <ul style="list-style-type: none"> • Patients who are directed to tents receive a mask at triage • General staff wear surgical masks consistent with droplet precautions and face shields
	<p>4/2/20 Some hospitals are using 3D printers to make face masks or laser cutting techniques to produce face shields. FDA has issued guidance and an FAQ related to these practices.</p>
	<p>3/30/20 Based on available evidence, the FDA concludes that certain imported disposable FFRs that are not NIOSH-approved are appropriate to protect the public health or safety.</p>
	<p>3/30/20 Several provider organizations are accepting homemade masks, while others are still restricting sourcing of such supplies through their standard manufacturing channels. Some organizations are making their own, working with local manufacturers or accepting donated homemade masks.</p> <ul style="list-style-type: none"> • CDC: Updated Guidelines for Crisis Alternate Strategies for N95 Respirators • Kaiser NCAL Covid-19 Playbook • The Joint Commission Statement on Shortage of PPE
	<p>3/30/20 The USP Statement discourages the reuse of disposal PPE outside of their best practice standards (i.e. the reuse of a disposable gown for one shift/day) due to the contamination risk; however, USP is not an enforcement agency.</p> <ul style="list-style-type: none"> • Due to COVID-19 pandemic shortages, sterile compounding personnel are faced with the option of reused PPE for product protection or none. • Some state boards of Pharmacy (one of the enforcers of USP standard/related state laws) have provided guidance regarding sterile compounding compliance under conditions related to COVID-19 and resultant shortages that allow for USP non-compliant PPE conservation strategies during this pandemic. • Prior to the USP statement, Vizient’s USP compliance expert, Katrina Harper provided this information: The Effect of COVID-19 PPE Supply Shortages on USP Compliance: Recommendations for Management for member pharmacy teams. (Requires log-in)
<p>3/23/20 Per the CDC, Review any memorandum of understanding (MOU) information between hospital and local stores/community businesses for emergency supplies. Also consider establishing an infrastructure for local product donations to your organization.</p>	

Category	Emerging practice
Managing Clinical Supplies	<p>Critical capital and ventilators</p>
	<p>3/30/20 Ventilator sharing: Many organizations are discussing and/or already sharing ventilators to mitigate shortages and improve access to this necessary equipment. Statements from the American Association for Respiratory Care (AARC), Society of Critical Care Medicine (SCCM), American Society of Anesthesiologists (ASA), Anesthesia Patient Safety Foundation (APSF), American Association of Critical-Care Nurses (AACN) and American College of Chest Physicians (CHEST) were released March 27, 2020 against the use of ventilator sharing. They argue that this should only be done in a “last-ditch effort” after careful consideration and in consultation with the Ethics committee/Institutional Review Board. They recommend options for mitigating the ventilator shortage such as using SNS ventilators LTV-1200, the Impact 754, and the LP-10. The LTV-1200 and Impact 754 and/or using bi-level devices for invasive ventilation. The AARC has provided a full statement and a guidance document.. The FDA recommendations for mitigation strategies were released on 3/22/2020. HHS released guidance on March 31 for optimizing ventilator use.</p>
	<p>3/30/20 ECMO: ECMO may be offered for patients with refractory hypoxemic respiratory failure/acute respiratory distress syndrome (ARDS) due to COVID-19. The WHO has established guidelines for utilizing ECMO when COVID-19 is suspected. Organizations should consider:</p> <ul style="list-style-type: none"> • how to prioritize and allocate ECMO resources • when the organization’s response strategy should include use of ECMO • what personnel and equipment will be needed • how to mitigate shortages of ECMO since alternatives are more limited <p>Newly published literature includes from The Lancet on “Planning and provision of ECMO services for severe ARDS during the COVID-19 pandemic and other outbreaks of emerging infectious diseases” and JAMA Network on “Preparing for the Most Critically Ill Patients With COVID-19: The Potential Role of Extracorporeal Membrane Oxygenation”.</p>
	<p>3/30/20 Ethical issues arise when allocating scarce critical care resources during a pandemic. Excluding large populations of patients from access must be avoided. Establishing a resource allocation framework can address these ethical concerns as noted in this article and in this framework example from University of Pittsburgh.</p>
	<p>3/23/20 Supplies to monitor and prepare for shortages:</p> <ul style="list-style-type: none"> • Portable critical care monitors • IV Pumps • IV solutions, IV pump cassette sets, IV standard tubing, IV start kits, IV flushes • MDI (metered dose inhalers) • ET tubes • All respiratory-related consumables (nasal cannulas, tubing, O2 face masks) • Beds
	<p>Hand sanitizer</p>
<p>3/30/20 FDA Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency</p>	

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Managing Clinical Supplies	<p>Blood products</p>
	<p>3/30/20 Prepare for possible reduction in blood supply due to schools, colleges and educational facilities not having blood drives.</p> <ul style="list-style-type: none"> • Recommend that elective surgeries be cancelled. • Adhere and enforce transfusion guidelines by communicating short supply. • Remind clinicians to test pre and post transfusion to ensure the transfusion is clinically indicated. • Cell salvage is recommended except where there are contraindications.
	<p>General information</p>
	<p>3/30/20 Vet gray market suppliers claiming to have N95 masks or other PPE. Request they show the Establishment Registration Number or Firm Registration Number and a copy of the device listing along with the Regulation Number of the specific device.</p> <p>The FBI issued its White Notice LIR 200323006 “Criminals Exploiting COVID-19 Outbreak for Financial Gain through Procurement and Consumer Fraud.” The notice includes details on markings and where models #'s should be located on the mask.</p> <p>Additional information:</p> <ul style="list-style-type: none"> • Options for organizations to report fraud or scam • FBI field office information to report fraud • FBI fraud submission site
	<p>3/23/20 National Emergency Stockpile –To obtain product not available through your distributor or contracted supplier, make a request through your state and be sure to develop a “case for need” of those supplies once they arrive at the state level. Include how many cases you currently have, how many you anticipate, how many are currently under investigation and use rate.</p> <ul style="list-style-type: none"> • ASTHO Authorization Toolkit • HHS Strategic National Stockpile
	<p>PPE conservation</p>
	<p>3/30/20 Use remote interaction with patients in isolation as appropriate to conserve PPE:</p> <ul style="list-style-type: none"> • Remote tele-monitoring equipment if available • Utilize phone or two-way intercom • Video conferencing or baby monitors are options • Some organizations are considering moving IV pumps and vent screens outside the door into the hallway and running IV tube extension sets to the patients to reduce the amount of PPE used.
<p>3/30/20 Know your PPE burn rate. COVID-19 patients will significantly increase your normal rate. Template for Calculating PPE Burn Rate</p> <p>Consider patient categories and cohorts to project total daily use, for instance:</p> <ul style="list-style-type: none"> • Category 1: ICU patient or aerosolizing procedure/case: X caregivers per patient * Y PPE exchanges per day • Category 2: Non-ICU patients: X caregivers per patient * (Y-Z) PPE exchanges per day 	
<p>3/30/20 Implement N95 conservation strategies:</p>	

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Managing Clinical Supplies	<ul style="list-style-type: none"> • Create firm guidelines for N95 use and assess for appropriate use. Some members are limiting the use of N95s to caregivers for COVID+ ICU patients and aerosolizing procedures. Other alternative strategies may include having Pharmacy convert to PAPRS for USP 800 and ½ masks to reduce use of N95 masks. • Implement N95 conservation by adapting practice based on CMS guidance of March 10, 'Guidance for Use of Certain Industrial Respirators by Health Care Personnel. This document addresses acceptable temporary alternatives and practices when the supply chain of respirators cannot meet the demand. See CMS Guidance from March 10. <i>During live polling on Vizient's March 26 webinar, 75% of organizations with no COVID-19 hospitalizations have not implemented a strategy to prolong the lifespan of N95 masks.</i> • Cohort patients in a way that allows for longer use of a single N95 mask. <p>3/30/20 Conservation strategies:</p> <ul style="list-style-type: none"> • Reuse goggles, face shields and visors for the same patient when possible by disinfecting with your approved disinfectant • Consider moving IV pumps outside the door into the hallway and running IV tubing extension sets to the patients • Utilize expired respirators by reviewing the recent list from the FDA: FDA Notification of Approved Use of Expired Respirators • Some organizations are repurposing OR's as multi-bed ICU's for a "COVID-19 core" wards where staff remain garbed in PPE
<p>Additional resources</p> <ul style="list-style-type: none"> • JAMA: N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel • WHO: Rational Use of Personal Protective Equipment for Coronavirus • CDC: Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings • Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response (CDC) • OSF Healthcare is conserving masks in preparation for COVID-19 • Authorized NIOSH Approved Respirators • CDC PPE Strategy • Kaiser NCAL Covid-19 Playbook • CDC- Section "10. Implement Environmental Infection Control" • The Effect of COVID-19 PPE Supply Shortages on USP Compliance: Recommendations for Management • Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators • WHO: Rational Use of Personal Protective Equipment for Coronavirus • CDC - Section "10. Implement Environmental Infection Control" • JAMA: N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel • WHO: Rational Use of Personal Protective Equipment for Coronavirus • CDC: Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings • Authorized NIOSH Approved Respirators • Kaiser NCAL Covid-19 Playbook • OSF Healthcare is conserving masks to prepare for COVID-19 • CDC- Section "10. Implement Environmental Infection Control" • The Effect of COVID-19 PPE Supply Shortages on USP Compliance: Recommendations for Management 	
Emerging Clinical Practices and Evidence	<p>Research and treatment</p> <p>4/2/20 Emergency use authorization of anti-malaria drug for coronavirus care was issued by the FDA on March 28.</p> <p>4/2/20 Evidence in support of long duration prone-position ventilation for mortality reduction in severe Acute Respiratory Distress Syndrome (ARDS) cases are shown in the following articles:</p> <ul style="list-style-type: none"> • Prone position ventilation in ARDS: An overview of the evidence (added 4/2/2020)

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Emerging Clinical Practices and Evidence	<ul style="list-style-type: none"> • A Comprehensive Review of Prone Position in ARDS (added 4/2/2020) • Lung Recruitability in SARS-CoV-2 Associated Acute Respiratory Distress Syndrome: A Single-center, Observational Study (added 3/30/2020)
	<p>4/2/20 There is rapidly accumulating anecdotal evidence that loss of smell or taste are frequently reported symptoms associated with COVID-19.</p>
	<p>4/2/20 SARS-CoV-2, the virus that causes COVID-19, could potentially spread through the eyes according to a preliminary study in JAMA Ophthalmology. Of 38 patients in China hospitalized with clinically confirmed COVID-19, roughly a third had conjunctivitis. Some 17% of those with ocular abnormalities tested positive for the virus in both conjunctival and nasopharyngeal swabs.</p>
	<p>4/2/20 Surviving Sepsis Campaign COVID-19 panel issued several recommendations to help support healthcare workers caring for critically ill ICU patients with novel coronavirus.</p>
	<p>4/2/20 The American College of Cardiology has provided guidance on assessing Ventricular Arrhythmia Risk due to Hydroxychloroquine-Azithromycin Treatment for COVID-19 in both the acute care and ambulatory settings.</p>
	<p>4/2/20 Initial chest CT findings in patients with COVID-19 from a single hospital in Shanghai, China. Researchers reviewed key initial CT findings in 51 consecutive patients who were hospitalized with COVID-19. Nearly all patients presented with extensive multifocal involvement; abnormalities were bilateral in 86% of cases.</p>
	<p>4/2/20 Because the coronavirus pandemic is causing alternative care sites such as "field hospitals," Chinese health officials reveal a strategy how they minimized infections in these sites. This article shares practical, specific instructions for those care sites that will not be operating in traditional brick and mortar buildings.</p>
	<p>4/2/20 The virus may be detectable for as long as 8 days after a person's symptoms resolve. Half of patients in one study still tested positive via throat swab after their symptoms resolved, however it's unclear whether positive tests mean the virus is capable of transmission later in the course of the disease.</p>
	<p>4/2/20 Vizient's summary of evidence on monotherapy trials and combination trials is continuously updated here: Pharmacotherapy for COVID-19.</p>
	<p>3/30/20 One investigational treatment being explored for COVID-19 involves the use of convalescent plasma collected from recovered COVID-19 patients. To learn more, visit the FDA website on Investigational COVID-19 Convalescent Plasma - Emergency INDs.</p>
	<p>3/30/20 According to a study titled Association of Cardiac Injury with Mortality in Hospitalized Patients With COVID-19 in Wuhan, China in JAMA Cardiology, cardiac injury is a common complication among those hospitalized with COVID-19 and is associated with an unexpected high risk of mortality during hospitalization.</p>
	<p>3/30/20 SARS-CoV-2 Transmission in Patients with Cancer at a Tertiary Care Hospital in Wuhan, China</p>
	<p>Respiratory care</p>
<p>4/2/20 In a joint statement issued by professional medical organizations from across the U.S., there is no standard guidance or recommendation for sharing mechanical ventilators between patients. This statement concludes that it's better to purpose the ventilator to the patient most likely to benefit than fail to prevent, or even cause, the demise of multiple</p>	

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Emerging Clinical Practices and Evidence	<p>patients. However, the U.S. Surgeon General is suggesting a possible crisis standard of care strategy, which would include sharing ventilators without objection from the CDC and FDA.</p>
	<p>4/2/20 This short article from a Canadian Emergency Medicine publication gives practical advice on airway management regarding protecting oneself and the team from COVID-19 infection, pre-oxygenation and intubation.</p>
	<p>4/2/20 The American Association of Respiratory Care guidance document synthesizes the current experience coming from China, Italy and the US (Seattle & New York) and some common sense approaches from past lessons learned.</p>
	<p>4/2/20 Anesthesia machine use, protection and decontamination during the COVID-19 pandemic.</p>
	<p>4/2/20 World Health Organization provides up-to-date guidance on clinical management of severe acute respiratory infection when COVID-19 is suspected.</p>
	<p>3/30/20 The Anesthesia Patient Safety Foundation provides a summary of Recommendations for Airway Management in a Patient with Suspected Coronavirus (2019 nCoV) Infection.</p>
	<p>End of life care</p>
	<p>4/2/20 Allocating Ventilators in a Pandemic. Establish an ethics panel to make decisions about utilization of end-of-life resources (ICU, Ventilators) to buffer the care team from making those decisions or removing life support.</p>
	<p>4/2/20 Care of the imminently dying patient should not differ significantly from standard best palliative care practices, but there are some pertinent modifications in COVID-19 to consider with respect to:</p> <ul style="list-style-type: none"> • Non-pharmacological management • Pharmacological management • Withdrawal of life sustaining treatments (WLST) • Support for staff who are providing end-of-life care
	<p>4/2/20 Council for Advancing Palliative Care's toolkit to address end of life care contains resources and online courses including scripting for difficult conversations, guidelines for symptom management, patient and family support resources, etc.</p>
	<p>4/2/20 Addressing advance care planning and decisions about Do-Not-Resuscitate orders during novel coronavirus is key.</p>
	<p>4/2/20 Resources to facilitate communication during COVID-19:</p> <ul style="list-style-type: none"> • COVID Ready Communication Playbook • Respecting Choices COVID-19 tools and resources • Sample videos regarding communicating virtually with families at the end of life • PREPARE for your care COVID-19
	<p>Specialty care</p>
	<p>4/2/20 Coronavirus information for Anesthesiologists from the American Society for Anesthesiologists.</p>
<p>Updated 4/2/20 As the number of critically ill patients surges in hospitals, non-ICU clinicians may be needed to care for critically ill patients. The Society of Critical Care Medicine provides online education to healthcare professionals who may benefit from critical care training as well as other emergency resources and updates.</p> <ul style="list-style-type: none"> • Critical Care for the Non-ICU Clinician. 	

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Emerging Clinical Practices and Evidence	<ul style="list-style-type: none"> • Resources (includes checklist and videos) • COVID-19 updates
	<p>3/30/20 The American Association of Neuromuscular and Electrodiagnostic Medicine provides COVID-19: Guidance for AANEM Members on caring for their neuromuscular patients, many of whom may be immunocompromised.</p>
	<p>3/30/20 CDC website has information on Interim Considerations for Infection Prevention and Control of Coronavirus Disease 2019 (COVID-19) in Inpatient Obstetric Healthcare Settings.</p>
	<p>Ambulatory care</p>
	<p>3/30/20 Based on a framework mirrored after the federal Incident Command System, Seeking Evidence-Based Covid-19 Preparedness: A FEMA Framework for Clinic Management discusses triaging appointments, screening, telehealth visits, internal and external communications, and comprehensive resource management.</p>
	<p>3/30/20 For guidance on the postponement of elective, non-essential surgery, below are links to resources:</p> <ul style="list-style-type: none"> • Joint Statement Recommending a Surgical Review Committee for COVID-19-Related Surgical Triage Decision Making • COVID-19: Guidance for Triage of Non-Emergent Surgical Procedures
	<p>Long term care</p>
	<p>3/23/20 Preparing for COVID-19: Long-term Care Facilities, Nursing Homes.</p>
	<p>Home health care</p>
	<p>3/30/20 Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for COVID-19.</p>
	<p>Ethical considerations</p>
	<p>4/2/20 One NEJM article describes how to operationalize four ethical values for rationing health resources in a pandemic.</p>
	<p>3/30/20 The Hastings Center has assembled ethics resources for responding to novel Coronavirus (COVID-19).</p> <ul style="list-style-type: none"> • Ethical Framework for Health Care Institutions & Guidelines for Institutional Ethics Services Responding to the Coronavirus Pandemic • COVID-19: Supporting Ethical Care and Responding to Moral Distress in a Public Health Emergency
	<p>Environmental services</p>
	<p>4/2/20 Disinfectants for use against COVID-19.</p>
	<p>4/2/20 UW Medicine's room cleaning policy.</p>
<p>4/2/20 Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1 on various surfaces and estimated rates of decay.</p>	
<p>4/2/20 CDC Environmental Infection Control Guidelines</p>	

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	<p>Coding</p> <p>4/2/20 Emergency use of ICD codes for COVID-19 disease outbreak.</p>
<p>Additional resources</p> <ul style="list-style-type: none"> University of Washington resources UCSF resources Nebraska Medicine resources Lifespan, The Miriam Hospital resources The University of Chicago Medicine resources 	
Testing	<p>4/2/20 Some hospitals have reported screening for fever using non-contact infrared thermometers at hospital entrances.</p>
	<p>4/2/20 Implement rapid antibody tests to screen patients for current or past exposure to SARS-CoV-2. The first rapid qualitative IgG/IgM antibody test kits are passing through the FDA EUA process and one from Cellex is the first to receive EUA authorization as of April 1. These antibody tests provide a testing option that is fast, simple to conduct, uses a readily obtained sample and requires no specialized lab instrumentation. Antibody testing, however, differs from RT-PCR diagnostic tests that detect viral RNA. For example, product labeling for antibody testing states that a negative result does not rule out COVID-19 and should not be used as the sole basis for treatment, patient management decisions or to rule out active infection. A positive test indicates previous exposure to the virus but may not mean that a patient's current symptoms are due to COVID-19 infection.</p>
	<p>Updated 4/2/20 Monitor the FDA EUA approved listing to check for the availability of rapid serology antibody test kits. These tests are in development from many manufacturers. Some manufacturers/laboratories have notified FDA that they have validated and are offering serology tests as set forth in Section IV.D of the FDA's Policy for Diagnostic Tests for Coronavirus Disease-2019. However, the accuracy of unapproved serology tests is not yet known.</p>
	<p>4/2/20 The CDC has provided interim guidance on: Collection and Submission of Postmortem Specimens from Deceased Persons with Known or Suspected COVID-19</p>
	<p>4/2/20 Standardize triage and testing algorithm throughout the organization utilizing a priority methodology. See updated CDC Guidance for Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)</p>
	<p>4/2/20 Consider using rapid POC testing from Abbott, which provides results in <15 minutes, in hospitalized patients in cases where it would improve patient management. Note that this test requires availability of the ID NOW benchtop instrument.</p>
	<p>4/2/20 Attempt to repurpose underutilized primary care clinicians from other departments that may have less volume now due to canceled appointments. These staff have been used for triage and test follow-up activities by some hospitals.</p>
	<p>4/2/20 Utilize the CDC coronavirus self-checker to help patients self-guide through appropriate testing considerations.</p>
	<p>Updated 3/30/20 Check for new FDA EUA approved SARS-CoV-2 PCR tests for possible sourcing to improve the availability of testing. Investigate using an alternative off-site lab who may be using a different instrument platform with current test availability.</p>
<p>3/30/20 Consider using rapid POC testing, e.g. from Cepheid or BioFire, which provide results in about 45 minutes, in hospitalized patients in cases where it would improve patient management. These tests require availability of specific instrumentation.</p>	

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Testing	3/30/20 Consider anterior nares round foam swabs for specimen acquisition when nasopharyngeal flock swabs are not available. These may be more comfortable for patients, allow self-testing and could reduce the consumption of PPE. See FDA recommendations for specimen collection alternatives here .
	Updated 3/30/20 Create your own viral transport media or use sterile saline to cope with shortages of conventional transport media. These transport media may stabilize the SARS-CoV-2 RNA without meaningful degradation. See FDA recommendations for viral transport media alternatives here .
	3/30/20 In a rural hospital setting, consider home-based testing for patients with respiratory illness. In one model, the hospital will send a staff member out to the home to test patients. The patient will remain at home until the test results are available, unless their condition changes.
	3/23/20 Develop alternate sites to conduct testing to reduce exposure to patients and staff in facilities.
	3/23/20 Create patient segregation/cohorting plan for locations where patients will be tested: ED, ICU and medical/surgical areas.
	3/16/20 Establish or utilize telemedicine services for persons under investigation for COVID-19 patients and/or meeting criteria for testing (as well as drive through).
	3/16/20 Develop drive-through testing. See the Drive-Through Medicine template posted by the American College of Emergency Physicians.
	3/16/20 Provide publicly available education on testing (how, when and where to seek care) and the process to expect (include alternative testing sites). Use the hospital web site, COVID phone hotlines and hospital PR capabilities.
Additional resources <ul style="list-style-type: none"> • CDC Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19) Webpage • CDC Information for Laboratories • FDA Emergency Use Authorizations • FDA FAQs on Diagnostic Testing for SARS-CoV-2 • FDA Policy for Diagnostic Tests for Coronavirus Disease-2019 during the Public Health Emergency • FDA Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons with COVID-19 	
Surge Capacity	Emergency department/outpatient surge planning
	4/2/20 <ul style="list-style-type: none"> • Counsel patients to go to private practice who might otherwise go to the emergency department <ul style="list-style-type: none"> • Example: A patient falls, and they might have a fracture, contact orthopedics and have them seen in private practice • Some facilities use public messaging advising patients not to present unless completely necessary • Some split ED into two distinct physical spaces including the respiratory illness space and then everything else <ul style="list-style-type: none"> • Refer to separate areas as “clean” and “dirty” • Staff are dedicated to their specific area • Consider specific areas for COVID screening • CMS will allow hospital emergency departments to test and screen patients for COVID-19 at drive-through and off-campus test sites 3/30/20 <ul style="list-style-type: none"> • Create surge space in the ED for triage using cool and hot zones

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Surge Capacity	<ul style="list-style-type: none"> Investigate implementing a 100% telemedicine process for patients versus a focused inpatient assessment as part of EMTALA medical screening exam Use phone triage and telemedicine as an alternative to the ED (quarantined providers can assist) Have two on-call physicians ready and available every day in case of emergency
	Ambulatory/outpatient surge planning
	<p>4/2/20</p> <ul style="list-style-type: none"> CMS's waivers and flexibilities permit hospitals and healthcare systems to expand capacity by triaging patients to a variety of community-based locales including: ambulatory surgery centers, inpatient rehabilitation hospitals, hotels, and dormitories, nursing homes Some hospital staffs transfer uninfected patients to focus on caring for the most critical COVID-19 patients, maintain infection control protocols, and conserve personal protective equipment (PPE)
	<p>3/30/20</p> <ul style="list-style-type: none"> Evaluate outpatient settings such as clinics, urgent care centers, etc. For evaluation and testing to avoid ED usage Some organizations have created COVID clinics for providers to evaluate patients with flu-like symptoms, upper respiratory illness, fever and cough Recommend urgent care centers use a staff greeter to meet patients Greeters assess all patients and guests prior to entering the building to ensure health and safety of everyone Restrict number of visitors for urgent care patients Give urgent care patient masks and utilize specific exam rooms Cohort any patients that present with illness or injuries other than fever, upper respiratory illness including cough or shortness of breath into specific areas Some organizations created an online COVID-19 screening tool for patients with symptoms of fever and upper respiratory illness, including dry cough or shortness of breath Providers review symptoms are reviewed by a provider, WHO recommends additional treatment if appropriate and addresses where to go for this care Leverage phone triage and virtual health platforms as much as possible Creatively isolate using lobby space or evaluate stable patients in cars
	<p>3/23/20 Develop plans to cohort positive and PUI patients. See the Kaiser Permanente Coronavirus Mitigation Playbook for more specific information.</p>
	<p>3/16/20 Cancel elective surgery/procedures Vizient Polling 3/18/20: Vizient members were asked, "Are you currently canceling/postponing elective surgeries?" Of the 559 respondents – 399 (71%) answered yes and 160 (29%) answered no ACS Statement Regarding Non-Emergent Surgical Procedures</p>
	<p>3/16/20 Identify alternate sites of care in the event of a surge such as warehouses, empty malls, convention centers, empty dorm rooms)</p>
	<p>3/16/20 Consult with hospital biomedical engineering to understand options for alternate negative flow rooms, ventilation exchange rates, optional areas for cohort COVID-19 patients</p>
	<p>Triage</p>
	<p>4/2/20</p> <ul style="list-style-type: none"> Vizient Polling 3/25/20: A majority of Vizient respondents (86%) are triaging patients in a setting outside of the ED From NEJM Catalyst Article: Develop and coordinate emergency response by reviewing evidence-based guidelines for clinical management with common processes and resource management from FEMA Incident Command System.

Category	Emerging practice
Surge Capacity	<ul style="list-style-type: none"> • Review Triage Flow Sheet for managing and rescheduling patient appointments • Develop a template for providers to document Covid-19 screening, including instructions on next steps depending on the screen results • Telehealth visit documentation and billing per CMS guidelines (from UW medicine public resource page) • Develop “trigger” symptoms for patient triage escalation <ul style="list-style-type: none"> ○ Have nurse practitioners complete triage calls to assess the need for an in-person clinic visit as well as provide additional guidance on Covid-19 screening and testing • Create an incident action plan for business and patient care that defines objectives and lists tactics to manage an incident such as staff exposure to Covid-19 • Create ‘fast-track’ or other methods for rapid evaluation and prescribing for minor illness. • CMS temporarily permits non-hospital buildings and spaces to be used for patient care and quarantine sites, provided that the location is approved by the State and ensures the safety and comfort of patients and staff • This will expand the capacity of communities to develop a system of care that safely treats patients without COVID-19, and isolate and treat patients with COVID-19 • New guidance from CMS allows hospitals, laboratories, and other entities to perform tests for COVID-19 on people at home and in other community-based settings outside of the hospital increasing access to testing and reducing risks of exposure • The new guidance allows healthcare systems, hospitals, and communities to set up testing sites exclusively for the purpose of identifying COVID-19-positive patients in a safe environment • Full information from the Secretary of the Department of Health and Human Services (HHS) section 1135 of the Social Security Act (SSA) 1135 waivers for certain Medicare, Medicaid, CHIP, or HIPAA requirements
	<p>3/30/20 Triage patients in the ED by influenza-like illness (ILI) and non-ILI areas.</p> <ul style="list-style-type: none"> • Triage patients in the ED by influenza-like illness (ILI) and non-ILI areas. Use the University of Chicago Shared Pathway as a guide • Send triage patients not needing hospitalization home and: <ul style="list-style-type: none"> ○ Provide remote monitoring if possible (e.g., thermometer, pulse oximeter) ○ Provide education, a monitoring schedule and/or virtual check-ups • Use reverse triage to assess inpatients for discharge or movement to a step-down facility, if allowed
	<p>3/23/20 Develop alternate sites to conduct triage to reduce exposure to patients and staff</p> <ul style="list-style-type: none"> • RN-based telephone triage protocols • Unused hospital space, dedicated repurposed space (one hospital within a system) • Drive through triage template • Enhance telemedicine/virtual capabilities • Repurpose urgent care/ambulatory facilities into screening and testing locations • Limit points of entry to the facility
	<p>3/23/20 Limit companions during triage in accordance with newer restrictive visitor policies</p> <ul style="list-style-type: none"> • Place a mask on companions as they could be the source of infection or have been infected by the patient
	<p>3/23/20 Limit healthcare worker and patient contact episodes</p> <ul style="list-style-type: none"> • Utilize apps, phones and telemedicine for in-hospital triage whenever possible
	<p>3/23/20 Triage patients not needing hospitalization to home</p> <ul style="list-style-type: none"> • Provide remote monitoring if possible (e.g., thermometer, pulse oximeter) • Provide education, a monitoring schedule and/or virtual check-ups
	<p>3/16/20 Forward triage by moving triage sites outside of the tradition ED triage area (tents, parking lots, adjacent empty building spaces, etc.)</p>

Category	Emerging practice
Surge Capacity	3/30/30 Identify alternate sites of care to serve as isolation and testing areas to limit exposure to staff and patients in facilities. Consider surge tents, convention centers, warehouses, local dorms, etc. Vizient Polling 3/18: Vizient members were asked, “Are you currently leveraging alternative sites of care for triage?” Of the 565 respondents - 317 (56%) answered yes and 248 (44%) answered no
	3/16/20 Triage patients and segregate to influenza-like illness (ILI) and non-ILI areas of the ED. See the University of Chicago Shared Pathway
	3/16/20 Reverse triage: assess inpatients for discharge or movement to a step-down facility, if allowed.
	Telemedicine strategies
	4/2/20 <ul style="list-style-type: none"> • Vizient Polling 3/25/20: A majority of Vizient respondents (56%) have increased telemedicine visits by 25% or more • It is necessary to use technology to safely reach patients with non-urgent needs. The General Provider Telehealth and Telemedicine Tool Kit contains electronic links to reliable sources of information regarding telehealth and telemedicine • AMA guide to support physicians and practices in expediting the implementation of telemedicine • CMS has expanded access to telemedicine services for patients with Medicare, covering more than 80 additional services that will be billed at the same rate as in-person visits, including emergency care. • CMS said remote monitoring can be used for acute and chronic patients and those with only one disease • Consider use of telehealth to support physicians providing ICU care, expand capability and limit highly trained intensivists exposure to COVID-19
	3/30/20 <i>During Vizient’s March 25 webinar, most respondents (56%) said they had increased telemedicine visits by 25% or more.</i> Download General Provider Telehealth and Telemedicine Tool Kit (PDF) from CMS that is specific to general practitioners as well as providers treating patients with End-Stage Renal Disease (ESRD) <ul style="list-style-type: none"> • View Medicare Telemedicine Healthcare Provider Fact Sheet that reviews Medicare coverage and payment of virtual services • Develop a far-reaching plan to screen and treat ED patients as well as outpatients in every specialty via videoconferencing. (China made 50% of their care virtual) • Convert regular ambulatory visits to telehealth visits • Create a COVID hotline for RN to manage, triage and screen patients. • Patients who screen positive schedule a telemedicine visit and are evaluated by ED physician who has been quarantined • Isolate those patients in a video-equipped room to be evaluated via HIPAA-compliant videoconferencing platforms (Zoom, Laptops, iPads. Commercial companies: Amwell and Teledoc) • PPE equipped RN takes vital signs and draws blood • Patient is either admitted to hospital or discharged for COVID-19 testing or isolation. • Consider deploying sophisticated telehealth technologies to monitor the sickest intensive care unit patients • UW Medicine is purchasing InTouch robots to help staff ICUs to help handle critical shortage of PPE • Develop training modules for providers on the use of videoconferencing platforms • Use online training modules developed by University of Arkansas for Medical Sciences • Certify providers for virtual visit care with Emory University developed e-learning training module • Develop a plan to handle broadband and cellular service barriers (i.e. inconsistent access to cellphones and other technologies) • Create a virtual war room from UAMS model where 15-20 tech people work around the clock to ensure systems stay online and not strained by the surge in demand.

Category	Emerging practice
Surge Capacity	<p data-bbox="196 216 318 247">Inpatient</p> <p data-bbox="196 264 272 296">4/2/20</p> <ul style="list-style-type: none"> <li data-bbox="196 300 1560 359">• CMS permitting wider use of verbal orders rather than written orders by hospital doctors so they can focus more of their time on taking care of patients <li data-bbox="196 363 1511 422">• Some hospitals define standard work for consistently screening patients and identifying patients that require inpatient and/or ICU care based on mortality risk <li data-bbox="196 426 1560 968">• Consider using scoring methodology designed to predict mortality and determine (with deference to medical judgement) patients who can safely be sent home and those who require ICU care to support clinicians: <ul style="list-style-type: none"> <li data-bbox="293 485 1560 632">○ PSI/PORT(no differentiation between viral and bacterial pneumonia) is considered a more accurate tool in disposition decision making for COVID-19 than other tools such as CURB-65 Score because of its considerations for age and underlying disease which seem to be the major contributors to adverse patient-oriented outcomes and it appears more sensitive than CURB-65 in identifying patients that require ICU <li data-bbox="293 636 1560 968">○ The MuLBSTA score examines a patient population with similar characteristics to those with COVID-19 PNA <ul style="list-style-type: none"> <li data-bbox="391 699 1471 758">▪ Limitation: single-center, retrospective study limits its applicability and reliability and was recommended for use as adjunct to clinical suspicion, not in isolation <li data-bbox="391 762 1544 821">▪ SMART-COP is used to determine floor vs. ICU and is thought to be the best at predicting ICU admissions for CAP, but unclear applicability in COVID/viral pneumonias/ARDS <li data-bbox="391 825 1511 884">▪ If patient is determined not to meet criteria for ICU, he should still be evaluated for inpatient admission and other treatment <li data-bbox="391 888 1528 947">▪ If the patient has a high SMART-COP score there are recommendations for specific antibiotic coverage <li data-bbox="391 951 1560 968">▪ This calculator can be used to estimate the importance of advanced age and of low lymphocytes <li data-bbox="196 972 1560 1178">• Understand and respect frail patient's goals for treatment <ul style="list-style-type: none"> <li data-bbox="245 1003 1560 1062">○ Discuss goals of care with patients and families before the patient's has COVID-19 symptoms <ul style="list-style-type: none"> <li data-bbox="391 1035 1179 1062">▪ These discussions can occur during scheduled telehealth visits. <li data-bbox="293 1066 1560 1178">○ Create processes to ensure everyone understand the frail patient's goals for care and there is a consistent way to communicate the information across the continuum of care -See IMPACT Study <ul style="list-style-type: none"> <li data-bbox="391 1129 1560 1178">▪ The goal is to deliver care consistent with patients' wishes and having conversations, upfront, to understand the patient's wishes <li data-bbox="196 1182 1560 1388">• Resources to facilitate communication about goals of care: <ul style="list-style-type: none"> <li data-bbox="293 1224 440 1251">○ Vital talk <li data-bbox="293 1255 570 1283">○ Respecting choices <li data-bbox="293 1287 570 1314">○ Covid goals of care <li data-bbox="293 1318 1560 1377">○ The Importance of Addressing Advance Care Planning and Decisions About Do-Not-Resuscitate Orders During Novel Coronavirus 2019 (COVID-19) <li data-bbox="293 1381 586 1409">○ Prepare for your care <li data-bbox="196 1392 992 1419">• End-of-Life Care when there is lack of bed or ventilator capacity <li data-bbox="196 1423 1560 1524">• Establish an Ethics panel to make decisions about utilization of end-of-life resources e.g., ICU and Ventilators <ul style="list-style-type: none"> <li data-bbox="293 1472 1528 1524">• Consider the ethics panel approach described in the NEJM to buffer the care team from making those decisions or removing life support <li data-bbox="196 1528 1560 1587">• Some organizations cohorting plans include patients who are COVID+ and they are admitted to dedicated units (designated 2-3 units per hospitals) <li data-bbox="196 1591 1357 1619">• PUI can be admitted to almost any unit. If they turn positive, they are transferred to COVID unit <li data-bbox="196 1623 1122 1650">• MICU and SICU has been converted to care for critically ill COVID patients <li data-bbox="196 1654 740 1682">• Other critically ill patients are also in MICU <li data-bbox="196 1686 1560 1713">• Specific patient flow and bed placement algorithms have been developed for these high-risk patient populations <li data-bbox="196 1717 1560 1745">• Essentially have their own space for COVID+; and their own space for COVID- but with those existing conditions <li data-bbox="196 1749 1560 1808">• Establishing dedicated COVID teams (hospitalists mostly, attending only service, ICU teams and floor teams) <ul style="list-style-type: none"> <li data-bbox="293 1791 967 1818">○ ICU Covid team will be staffed attendings and fellows <li data-bbox="196 1812 1560 1871">• Consider tools that can help coordinate care and simplify the monitoring process e.g., software that tracks data for individual patients and provides an overview of the next steps needed for all patients in the ICU

Category	Emerging practice
Surge Capacity	<ul style="list-style-type: none"> This can help hospitals treat the surge in patients more quickly and can better support medical staff who might normally work outside the ICU Initiate discharge planning during the admission process and schedule post-discharge calls within 24 - 48 hours of discharge and telehealth visit within 7 days for all patients <ul style="list-style-type: none"> High risk patients will require additional bundled interventions
	<p>3/30/20</p> <ul style="list-style-type: none"> Assess inpatient/ICU capacity Develop plans to cohort Patients Under Investigation (PUI) and patients testing positive. <ul style="list-style-type: none"> Check the Kaiser Permanente Coronavirus Mitigation Playbook for more specific information Plan for case cancellation in the event of surge, supply and/or personnel capacity shortages <ul style="list-style-type: none"> Reschedule elective surgeries and non-essential procedures (routine and non-urgent clinic visits) as necessary Special accommodations may be made for bone marrow transplant, oncology, solid organ transplant and pregnant patients where special units are created if they become COVID-19 positive Shift elective urgent inpatient diagnostic and surgical procedures to outpatient settings, when feasible View American Academy of Surgeons acuity scale Review Ambulatory Surgery Center Association state guidance on elective surgeries Examine CMS tiered framework on elective surgeries as guidance on decisions whether to provide elective surgeries during community spread of COVID-19. Cancel elective surgery/procedures <ul style="list-style-type: none"> Vizient Polling 3/18/20: Vizient members were asked, “Are you currently canceling/postponing elective surgeries?” Of the 559 respondents – 399 (71%) answered yes and 160 (29%) answered no ACS Statement Regarding Non-Emergent Surgical Procedures Create cohort units <ul style="list-style-type: none"> Separate known or suspected COVID-19 patients from other patients Identify additional, dedicated space to care for both COVID-19 and/or a surge of critically ill patients <ul style="list-style-type: none"> Use alternate and separate spaces in the ER, ICUs, ambulatory surgery centers, OR and other patient care areas to manage known or suspected COVID-19 patients Convert long term care facilities into COVID-19 treatment centers to cohort patients in separate facilities Consider choosing a pulmonary unit to create easy transition for care teams, including respiratory therapists and nurse, while ensuring adequate supplies Create a separate space in the ED for patients presenting with any flu-like symptoms or respiratory illness (including separate space for triaging as mentioned above) Increase bed capacity <ul style="list-style-type: none"> Utilize other patient care areas (i.e. OR, ambulatory surgery centers, non-ICU beds, closed beds/units/buildings, etc.) to increase access to ICU beds Identify alternate sites of care (such as breakrooms, conference rooms, warehouses, empty malls, convention centers, empty dorm rooms) to temporarily transform space into a hospital and increase access to beds Consult with hospital biomedical engineering to understand options for alternate negative flow rooms, ventilation exchange rates, optional areas for cohort COVID-19 patients <ul style="list-style-type: none"> Suggestion for quick construction job: install fans in windows and convert a unit to negative pressure Create physician back-up system <ul style="list-style-type: none"> Develop standard operating procedures for training non-MDs to assist in low-acuity and/or designated areas Discharge planning <ul style="list-style-type: none"> Practice patient flow best practices twice a day (rounding, discharge early or when ready) to improve hand-off communication Use the recommended 15 by 10 model by Mike Rosenblatt, Beth Israel where each service must have everything ready to discharge 1 patient by 10 am. (i.e. orders, nursing teaching, med rec, etc. If no ride, they are sent home at 10 with a medical Uber or go to discharge lounge)

Category	Emerging practice
Surge Capacity	<ul style="list-style-type: none"> ▪ For rehab and SNF discharges –one large organization purchased 5 ambulances that sit in the parking lot with their engines on ready to take patients before 10 to the next level of care ▪ Do not hold discharges for the Patients to am if they are ready for discharge the day before ▪ Measurement and display of data to create accountability is critical ○ Develop specialized post-acute care environments for patients who may be contagious <ul style="list-style-type: none"> ▪ Long-term care hospitals and hospital-based skilled nursing facilities may be able to adopt this specialized role ▪ Use rural hospitals, with less than 50% occupancy rates, as post-acute care sites as many have “swing bed” capacity ▪ Military bases and college dormitories may also be used as temporary post-acute care settings
Resource utilization (supplies, equipment, workforce, etc.)	
<p>4/2/20</p> <p>Ventilators</p> <ul style="list-style-type: none"> • CMS states people with Medicare now have broader access to respiratory devices and equipment • Create a triage committee composed of volunteers who are respected clinicians and leaders among peers and the medical committees to buffer clinicians from potential harm <ul style="list-style-type: none"> ○ Considerations when allocating ventilators in a pandemic from the New England Journal of Medicine • Ventilator allocation guidelines from New York State Task Force on Life and the Law New York State Department of Health 2015 • Ventilator supply mitigation strategies from the FDA • Ventilator sharing: Many organizations are discussing, considering, already using ventilator sharing as a means to mitigate ventilator shortages and improve access to this necessary equipment. Several professional organizations have released a statement (March 27, 2020) against the use of ventilator sharing for several reasons and argue that this should only be done in a “last-ditch effort” after careful consideration with the Ethics committee/Institutional Review Board weighing in. They do offer options for mitigating the ventilator shortage such as using SNS ventilators LTV-1200, the Impact 754, and the LP-10. The LTV-1200 and Impact 754 and/or using bilevel devices for invasive ventilation • Some organizations have developed ventilatory triage processes <ul style="list-style-type: none"> ○ For an example, review State of Alabama Ventilator Triage process following a Mass-Casualty Respiratory Emergency. • The US Food and Drug Administration (FDA) guidance that allows for the use of anesthesia delivery systems for continuous ventilation <p>Equipment</p> <ul style="list-style-type: none"> • Source personal protective equipment to have adequate supply, and while waiting for adequate resupply implement CDC guidance to reuse and extend the use of N95 respirators and other personal protective equipment to cover the potential shortfall before resupply <ul style="list-style-type: none"> ○ Hospitals are requesting donations of masks and gloves from construction companies, nail salons and tattoo parlors, dry cleaners, hardware stores, hair and nail salons, etc. ○ Medical students are holding “mask drivers” at University’s to collect equipment for local hospitals. <p>Pharmacy</p> <ul style="list-style-type: none"> • Check on state actions effecting pharmacy from National Alliance of State Pharmacy Associations • Review Pharmacy Readiness for Coronavirus Disease 2019 (COVID-19) from ASHP governs <p>Workforce</p> <ul style="list-style-type: none"> • CMS is making it easier for providers to enroll in Medicare <ul style="list-style-type: none"> ○ Local private practice clinicians and their trained staff may be available for temporary employment since nonessential planned medical and surgical services are postponed during the pandemic • Surge plans are being activated at regional levels and organizations are collaborating with governors and state departments of public health and all health systems in an entire state to identify workforce (that is licensed and asking retirees to volunteer) can repurpose their skills and/or provide additional training or specialty backup via telehealth to expand the ability to provide care 	

Category	Emerging practice
Surge Capacity	<ul style="list-style-type: none"> ○ This includes physicians, nursing, respiratory therapy, anesthesiologists, anesthesiologists' nurses, cardiologists, oncologists, cardiac/orthopedic/general surgeons and intensivists and the other ancillary staff ● CMS's Conditions of Participation require hospitals to have plans in place that guide the use of volunteers in an emergency staffing situation. This requires state-level flexibility to overcome current regulatory gridlock to flex to a surge standard of care. Some organizations have cross trained non inpatient nurses MA and technical staff to the inpatient enterprise and plan to implement pandemic tiered staffing plans ● Define comprehensive strategy to expand the workforce to care for this large influx of patients, from keeping current providers healthy to recruiting recently retired physicians and nurses (possibly to take care of non-COVID patients to free up currently practicing clinicians to care for COVID patients) ● Some organizations are standing up a resource management center with an online tracking system for excess staffing that can be redeployed with a tiered skill levels and excess surgical/procedural and ambulatory teams identify appropriate tiers and bridge any clinical education ● Develop medical staff structure that utilizes all providers across specialties across different areas: emergency department, urgent care (assist with triaging), critical care, acute med/surg; adhere to GME requirements and regulations to appropriately allocate workforce ● The decision on whether to deploy medical students to the front lines is up to each school, depending on the local situation. CMS is making the decision on whether to deploy medical students to the front lines is up to each school, depending on the local situation, wavering requirements for nurses https://www.cms.gov/newsroom/fact-sheets/additional-backgroundsweeping-regulatory-changes-help-us-healthcare-system-address-covid-19-patient ● State Medical Board resources from the Federation of State Medical Boards ● Up-to-date state by state expansion scope of practice from American Association of Nurse Practitioners ● Refer to UW Medicine's considerations for department preparation (Ed and ICU COVID-19 Web Based Guide) organized around categories: Staff, Space, Stuff, Systems. https://em.uw.edu/faculty/uw-department-emergency-medicine-edicu-covid-19-preparedness ● Refer to UW Medicine Critical Care Management of COVID-19 (ICU care guidelines: operational and clinical evaluation considerations) and that summarizes evidence and recommendations for caring of patients with potential, suspected, or confirmed COVID-19 expected to evolve rapidly ● Clinicians treating patients with COVID-19 should regularly review CDC's updated recommendations and consult with ICU leadership and/or infectious disease specialists

Category	Emerging practice
Surge Capacity	<p>3/30/20</p> <ul style="list-style-type: none"> • Develop and implement a crisis standard of care plan through your state’s Department of Health (DOH) that addresses legal, ethical, palliative care and mental health issues <ul style="list-style-type: none"> ◦ Review Minnesota DOH Crisis Standards of Care • Develop protocols to ration ventilators, if necessary • Model the ventilator triage process at Oregon Health and Science University <ul style="list-style-type: none"> ◦ Utilize critical care ventilators until exhausted <ul style="list-style-type: none"> ▪ Reroute G-5, AVEA, LTV 1200 and Trilogy patients to other facilities with equipment/beds ▪ Use PACU for overflow/surge, anesthesia will support their ventilators ▪ Request disbursement from Strategic National Stockpile ▪ Use V60s in invasive mode ▪ Disperse single use Vortran vents ▪ Activate ventilator triage protocols as a united system prioritizing for younger patients and those with better odds of survival ◦ Review State of Alabama Ventilator Triage process following a Mass-Casualty Respiratory Emergency • Assess ECMO capabilities/options • Develop staff surge plan to involve bedside staff as needed (include nursing and non-clinical staff) to help manage patients <ul style="list-style-type: none"> ◦ Check University of Washington Medical Center website for template of a staff surge plan (currently under development) • Develop medical staff structure that utilizes all providers across specialties across different areas: emergency department, urgent care (assist with triaging), critical care, acute med/surg <ul style="list-style-type: none"> ◦ Adhere to GME requirements and regulations to appropriately allocate workforce • Follow example from Medical University of South Carolina Health (MUSC) to deploy staff in Endoscopy, Procedure areas and OR/Periop to other areas. They did an inventory of staff, background, when they moved positions (if in last year just do skills checklist, but if over a year then attend skills labs). Of those who just relocated, will be reallocating those into their prior or similar unit.
	<p>Tools</p> <p>4/2/20</p> <ul style="list-style-type: none"> • National Healthcare Safety Network (NHSN) is supporting the nation’s COVID-19 response by introducing a new COVID-19 Patient Impact and Hospital Capacity Module within NHSN’s Patient Safety Component • Rothman Index optimizes discharge planning to increase capacity for COVID-19 cases <ul style="list-style-type: none"> ◦ This includes Global Clinical Surveillance, Sepsis Risk Alerting, Early Warning to monitor suspected or confirmed cases of COVID-19 and ICU optimization ◦ After March 23 PeraHealth will have a COVID-19 capacity management feature on its platform. This feature will allow hospitals to use the Rothman Index to more quickly identify patients who may be safely discharged from the acute care setting
	<p>3/30/20</p> <ul style="list-style-type: none"> • Register to access Sg2 COVID-19 Surge Demand Calculator and Resource Kit <ul style="list-style-type: none"> ◦ Sg2 experts developed the insights and resources you need to inject data-driven planning for inpatient bed and ICU capacity to inform your surge response • Access the Penn Medicine Hospital Impact Model for Epidemics, an open-source tool to help hospitals plan for patient increases and intake during COVID-19 spread in the Philly area • Rothman Index optimizes discharge planning to increase capacity for COVID-19 cases <ul style="list-style-type: none"> ◦ This includes Global Clinical Surveillance, Sepsis Risk Alerting, Early Warning to monitor suspected or confirmed cases of COVID-19 and ICU optimization • Review Johns Hopkins developed isolation bed algorithm tool to help design cohort plan • Use University of Washington and Institute for Health Metrics and Evaluation partnership resources and tools to help identify COVID-19 projections and help prepare for surges <ul style="list-style-type: none"> ◦ Additional details will become public on ongoing basis

Category	Emerging practice
Surge Capacity	<p>Communication/command centers</p> <p>4/2/20</p> <ul style="list-style-type: none"> • Access HHS Public Health Emergency Planning Handbook • Your incident command system should include communication early and often between Emergency Departments, hospitalist services, Intensive Care Units, local and state Departments of Health (DOH), Emergency Medicine Services (EMS), leads and outreach leads to vulnerable populations (e.g. local SNF, jail, homeless) <ul style="list-style-type: none"> ◦ Email can be effective for communicating initial plans ◦ Some may use a uniformed communication and collaboration platform to provide real-time communication and integration (i.e. Microsoft teams, Zoom, Slack, etc.) ◦ Others Conduct daily huddle calls with key stakeholders (providers, staff, administration, leadership) • Several members have created a central website, COVID hotlines, etc. to serve as a clearing house for all coronavirus-related information (I.e. publicly available education on testing (how, when and where to seek care), the process to expect (include alternative testing sites)
	<p>3/30/20</p> <ul style="list-style-type: none"> • Provide publicly available education on testing (how, when and where to seek care), the process to expect (include alternative testing sites) through web site, COVID hotlines and PR capabilities • Create a coalition as a part of a health system to develop a coordinated, united response and communication plan to expand hospital bed capacity, align criteria for testing and expand the health care workforce <ul style="list-style-type: none"> ◦ The state of Oregon is expanding the health care workforce by automatically renewing the license of any medical professional whose license had recently expired • Access materials from FEMA's Incident Command System (ICS) Resources to assist with implementation of ICS's • Review Rush University Medical Center Command Center Structure <ul style="list-style-type: none"> ◦ Developed to navigate preparing for a disaster, emergency or event and impacts on daily operations
<p>Additional resources</p> <ul style="list-style-type: none"> • Santa Clara County drive-through triage template • University of Chicago Shared Pathway • CMS tiered framework on elective surgeries • Medicare Telemedicine Healthcare Provider Fact Sheet • Kaiser Permanente Coronavirus Mitigation Playbook for more specific information • American Academy of Surgeons acuity scale • Ambulatory Surgery Center Association state guidance • CMS tiered framework on elective surgeries • ACS Statement Regarding Non-Emergent Surgical Procedures • Minnesota DOH Crisis Standards of Care • State of Alabama Ventilator Triage • Penn Medicine Hospital Impact Model for Epidemics • Johns Hopkins developed isolation bed algorithm tool • University of Washington and Institute for Health Metrics and Evaluation partnership resources and tools • FEMA's Incident Command System (ICS) • Rush University Medical Center Command Center Structure • AAMC: https://www.aamc.org/news-insights/covid-19-races-through-communities-hospitals-ramp-telehealth-protect-patients-and-providers • CDC Interim Guidance for Health Care Facilities: Preparing for Community Transmission of COVID-19 in the United States webpage • CDC: Interim Guidance for Healthcare Facilities: https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/guidance-hcf.html • CMS: https://www.cms.gov/About-CMS/Agency-Information/Emergency/EPRO/Current-Emergencies/Current-Emergencies-page 	

Category Emerging practice

- Duty to Plan: Health Care, Crisis Standards of Care and Novel Coronavirus SARS-CoV-2_(National Academy of Medicine, March 5)
- COVID-19 National Strategic Plan for Emergency Departments (ACEP)
- COVID-19: Guidance for Triage of Non-Emergent Surgical Procedures from American College of Physicians: <https://www.facs.org/about-acsc/covid-19/information-for-surgeons/triage>
- HHS: Crisis Standards of Care Guidelines <https://asprtracie.hhs.gov/technical-resources/63/crisis-standards-of-care/0>
- HHS: New telehealth guidance: <https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html>
- IDSA: COVID-19 Prioritization of Diagnostic Testing: <https://www.idsociety.org/globalassets/idsa/public-health/covid-19-prioritization-of-dx-testing.pdf>
- JAMA: Critical Care Utilization for the COVID-19 Outbreak in Lombardy, Italy
- HHS: Topic Collection—Hospital Surge Capacity and Immediate Bed Availability
- HHS: Topic Collection—Coronavirus (e.g., SARS, MERS and COVID-19)
- Medpage: Post-Acute Care: Brace for Influx of COVID-19 Patients

Staff Impact

4/2/20

Paid Time Off, furlough and other payment strategies of some organizations:

- Furlough:
 - Some organizations are furloughing staff including non-essential physicians
- Paid Time Off (PTO):
 - Allow PTO donations where staff can donate their PTO for others
 - Advance 40, 80 or 120 PTO hours for quarantine, isolation or family care related to COVID-19
 - Pay PTO at 25% of salary to offset the rapid reduction of PTO
- Alternate payment methods:
 - Pay employees for 40 hours of non-productive time now, and, when the crisis is over, the employee works 40 hours without pay to make the organization whole
 - Some members are considering reducing work hours by 25-33% for overhead departments
 - Most organizations are providing paid administrative leave for two weeks to employees who are quarantined due to work-related exposure to COVID-19
 - Many organizations are not providing premium pay for ICU coverage

4/2/20

CMS: Sweeping regulatory changes to help U.S. healthcare address COVID-19 patient surge

- Allow hospitals and other entities including laboratory technicians to test patients at home or in community-based settings
- Private practice clinicians and their trained staff are allowed to temporarily enroll as Medicare provider
- Allow medical residents to provide services with supervision of teaching physicians on-site or virtually
- Allow wider use of verbal orders from physicians
- Waive requirement for bi-monthly on-site visits of home health and hospice nurses
- Hospice providers and home health agencies may offer telehealth when appropriate
- Telehealth expands by more than 80 new services including:
 - Use of phone
 - New and existing patients in nursing homes, assisted living, inpatient rehab and at home
- Accelerated payment subsidy options: Providers receive payment for services before rendered
- CMS email: COVID-19@cms.hhs.gov

4/2/20

Some Vizient members allow options for nurses who are pregnant, immunocompromised or over a certain age:

- Pregnant nurses:
 - Many are given a choice to opt-out of providing direct care to COVID-19+ or (Patients Under Investigation) PUI
 - Follow HR accommodation processes if nurse chooses to opt-out
 - Some organizations exempt all pregnant staff from providing direct care of COVID-19+ or PUIs
- Re-deploy pregnant nurses to other clinical or non-clinical areas as appropriate

Category	Emerging practice
Staff Impact	<ul style="list-style-type: none"> Immunocompromised nurses: <ul style="list-style-type: none"> Allow HR accommodations to avoid direct care of COVID+ or PUI patients Review and approve each case individually Other restrictions: <ul style="list-style-type: none"> Evaluate whether other restrictions should be implemented for care of COVID-19 positive patients. Some organizations restrict nurses 65+ years from direct care
	<p>4/2/20 CDC recommends pregnant health care providers follow risk assessment and infection control guidelines to limit their exposure. CDC: Information for healthcare providers: COVID-19 and pregnant women</p>
	<p>4/2/20 Staff housing solutions used by many Vizient member organizations:</p> <ul style="list-style-type: none"> Partner with hotels, college dorms and temporary housing <ul style="list-style-type: none"> For employees to sleep or shower prior to going home For staff that do not want to go home and compromise elder parent, immunocompromised spouse, etc. For staff that are COVID+ or awaiting diagnosis results Prioritize room assignments for staff providing COVID+/PUI care, essential staff, etc. Cost: Many organizations cover the cost of hotels, others split the cost 50/50 with staff <ul style="list-style-type: none"> Some organizations provide temporary housing at a reduced rate Other organizations request hotels to donate a block of rooms
	<p>4/2/20 Some organizations are delaying performance management reviews, one organization has extended their nurse performance evaluations to the end of July.</p>
	<p>4/2/20 Some Vizient members establish early, frequent and transparent communication with staff by:</p> <ul style="list-style-type: none"> Providing updates on the number of COVID+ and Patients Under Investigation (PUI) with health care leaders and staff <ul style="list-style-type: none"> Many organizations (>95%) provide daily updates Information shared: Number of tests administered, number of positive versus negative results, number of inpatients and number of health care workers testing positive, policy updates, clinical guidelines Using multiple means of communications: Daily briefing/email from CEO, leadership calls, COVID-19 Emergency Response Team calls, website postings, employee portal/intranet, electronic dashboard, town hall meetings, bulletins, YouTube channel
	<p>Review regulations for clinical license portability, scope of practice and transition 3/30/20</p> <ul style="list-style-type: none"> National Conference of State Legislatures (NCSL) Occupational Licensing During Public Emergencies (includes state-by-state tracking of actions) <ul style="list-style-type: none"> National Conference of State Legislatures (NCSL) - COVID-19 American Association of Colleges of Nursing (AACN) releases Policy brief supporting practices/academic partnerships to assist the nursing workforce during COVID-19 American Association of Colleges of Nursing: COVID-19 NCLEX exams resuming in limited capacity March 25, 2020 National Council of State Boards of Nursing Some organizations are seeking approval for early graduation for 4th year medical students, to allow residencies to start in April instead of July Some organizations have created Graduate Medical Education (GME) policies and workflows for residents and fellows to participate in telemedicine services, provided the right staffing models are in place Evaluate emergency licensing and privileging waivers, suspended requirements and internal requests (Some States have suspended or lifted licensing requirements to provide flexibility during the pandemic Federation of State Medical Boards: License and regulatory guidance)
	<p>3/23/20 Identify staffing and labor pools:</p>

Category	Emerging practice
Staff Impact	<ul style="list-style-type: none"> • Clinical: Create a centralized, master list of all clinical provider/leader availability to assign coverage and meet staffing needs • Under-utilized: Establish non-clinical labor pool to support: patient and employee screening, calls to patients, scheduling, scanning, data entry/spreadsheet management, moving supplies and hospitality support • Determine training plan and assess competencies
	<p>3/30/20</p> <p>Human Resources considerations:</p> <ul style="list-style-type: none"> • Develop policy around staff seeking exceptions to caring for COVID-19 patients • Some organizations are adjusting compensation plans to keep productivity-based providers whole • Conduct virtual staff interviews and orientation to keep the process going American Society for Health Care Human Resources Administration (ASHHRA) COVID-19
	<p>3/30/20</p> <p>Assess workforce roles, skills and personal stressors:</p> <ul style="list-style-type: none"> • Assess each role's ability to: work remotely, technological knowledge, training needs, etc. • Determine childcare needs: some organizations utilize medical students or nursing school staff to assist with childcare services • Establish financial support for staff: <ul style="list-style-type: none"> ○ Allocate funds, use grants, interest free loans (use 3rd party administrator to process claims) ○ Some organizations set up: <ul style="list-style-type: none"> ▪ Hardship/Employee Disaster funds ▪ Craigslist type of site where people could volunteer for staff needs ▪ Paid Time Off (PTO) donation policies (staff donate PTO to other individuals) ▪ Advance 40, 80 or 120 PTO hours for quarantine, isolation or family care needs related to COVID-19 ▪ Some organizations are paying PTO at 25% of salary to offset the rapid reduction of PTO • Provide internal psychiatry and psychology team resources and support for staff • Provide close parking for front line care givers <p>CDC: Information for Healthcare Professionals CDC: Manage anxiety and stress</p>
	<p>3/23/20</p> <p>Re-assign ambulatory, surgical, non-clinical or underutilized staff to assist with:</p> <ul style="list-style-type: none"> • Intake, triage, testing, and staff monitoring (temperatures, symptom screening) • Coverage in ED, drive-through clinics, home health, occupational health, telehealth, transportation services and ICU areas, etc.
	<p>3/23/20</p> <p>Establish early, frequent and transparent communication with staff, outlining:</p> <ul style="list-style-type: none"> • Pay practices for quarantined and considerations of furlough, etc. • Operating procedures/guidelines for COVID-19 response • Utilize all communication channels (YouTube, email, intranet, bulletin, etc.) • Establish a central intranet page for all updates, policy updates and clinical guidelines • Distribute daily staff communication with 3-5 areas of focus and ensure review
	<p>3/23/20</p> <p>Reduce staff exposure and adhere to social distancing:</p> <ul style="list-style-type: none"> • Institute a work-from-home policy for non-patient facing staff: Finance, billing, scheduling, revenue cycle, quality, analytics, administrative staff, etc. • Establish drive-thru testing sites and telephone triage hotlines for employees • Consider allowing staff with negative COVID-19 to return to work 24-hours later (wearing mask) • Suspend all non-essential reporting, meetings and initiatives • Restrict large staff meetings and gatherings. The CDC recommends no gatherings larger than 10 people. • Limit entry into patient rooms (use phones, videoconferencing)

Category	Emerging practice
Staff Impact	<ul style="list-style-type: none"> Restrict staff travel
	3/23/20 Advise frontline staff to bring clean change of clothes for after shift, and to bag and launder clothing at home. Consider hospital issued/laundered scrubs for high-risk staff in areas such as ICU.
	3/16/20 Utilize quarantined licensed providers (who are not ill) to conduct tele-visits, phone screening, etc.
	3/16/20 Assess IT capability and capacity now. As more staff are quarantined or experience school closures, the need for remote workers will rise. This will have significant bandwidth and security considerations. Staff may need to use their personal computers if an organization exhausts the lap top supply because new stock from China has been constrained.
	3/16/20 Implement social distancing (non-essential staff working from home)
	3/16/20 Restrict large staff meetings and gatherings. The CDC recommends that groups be no larger than 10 people.
	3/16/20 Provide internal psychiatry and psychology team resources and support for staff
Behavioral Health	
	4/2/20 CMS issues a blanket waiver to allow hospitals to provide staff benefits: <ul style="list-style-type: none"> Multiple daily meals Laundry service for personal clothing Childcare services
	4/2/20 Assess workforce roles, skills and personal stressors: <ul style="list-style-type: none"> Assess each role's ability to: work remotely, technological knowledge, training needs, etc. Determine childcare needs: some organizations utilize medical students or nursing school staff to assist with childcare services Set up Hardship/Employee Disaster funds Establish financial support to allocate funds, use grants or interest free loans for staff <ul style="list-style-type: none"> Use 3rd party administrator to process claims Provide psychiatric and psychological support for staff Through the dietary department offer ready-made meals for the staff to bring home to their families Establish a website where people can volunteer to provide staff needs <p>CDC: Information for Healthcare Professionals CDC: Manage anxiety and stress</p>
	4/2/20 Some Vizient members establish early, frequent and transparent communication with staff by: <ul style="list-style-type: none"> Providing updates on the number of COVID+ and Patients Under Investigation (PUI) with health care leaders and staff <ul style="list-style-type: none"> Many organizations provide updates daily or more frequently Information shared: Number of tests administered, number of positive versus negative results, number of inpatients and number of health care workers testing positive, policy updates, clinical guidelines, PPE Using multiple means of communications: Daily briefing/email from CEO, leadership calls, COVID-19 Emergency Response Team calls, website postings, employee portal/intranet, electronic dashboard, town hall meetings, bulletins, YouTube channel

Category	Emerging practice
Staff Impact	<p>3/30/20 Reduce COVID-19 stigma:</p> <ul style="list-style-type: none"> • Use official terms: Novel coronavirus, COVID-19 • Do not attach locations or ethnicities to the disease to avoid stigmatization • Use “people first language” <ul style="list-style-type: none"> ◦ Talk about “people who have or are recovering from COVID-19” ◦ Refrain from referring to people with COVID-19 as “cases” or “victims” <p>Talk about people “acquiring” or “contracting” COVID-19, not “transmitting, infecting or spreading the virus” which implies intention and assigns blame</p>
<p>Additional resources</p> <ul style="list-style-type: none"> • AAMC Statement: Medical Students and Patients with COVID-19: Education and Safety Considerations • National Center for Post-Traumatic Stress Disorder for Health Care Workers • CDC: Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel • American Association of Colleges of Nursing: COVID-19 • National Council of State Boards of Nursing • CDC: Reducing Stigma • Federation of State Medical Boards: License and regulatory guidance • USA.GOV: Coronavirus • CDC: Information for Healthcare Professionals • CDC: Manage anxiety and stress • American Society for Health Care Human Resources Administration (ASHHRA) COVID-19 	
Visitation	<p>4/2/20 Planetree Person-Centered Care Perspectives: Family Presence and Visitation Guidelines During a Pandemic Goals:</p> <ul style="list-style-type: none"> • To responsibly maximize the therapeutic benefits of family presence while limiting the risk to patients, family caregivers and staff. • To ensure restrictions to family presence are appropriate to the current situation, which is rapidly evolving and expected to continue changing over time. • To minimize the unintended emotional trauma that could result from family separation during special circumstances, including hospitalization of a child, childbirth and end-of-life situations. <p>4/2/20 Restrict visitation policies to persons accompanying minors or patients in end-of-life situations. To reduce facility-based transmission, no visitors should be allowed in rooms of Persons Under Investigation (PUIs) or COVID-19 positive patients.</p> <p>The following visitors should not be allowed:</p> <ul style="list-style-type: none"> • Persons with a fever or other cold/flu-like symptoms • Minors under the age of 16 • People over the age of 70 who have chronic conditions and may meet one of the exceptions below are strongly encouraged not to visit <p>Common exceptions include*:</p> <ul style="list-style-type: none"> • Emergency department patients– one visitor (at least until stable) • Surgery patients–one visitor (at least until stable) • Obstetric patients–one partner or one birth support person • Nursery and Neonatal Intensive Care Unit (NICU) patients–birth parent or support person • Patients who are at the end-of-life–up to two visitors • Patients with disruptive behavior, altered mental status or developmental delays–one family member or support person who is key to their care and safety • Minors under the age of 18–one parent or support

Category	Emerging practice
Visitation	<p>*Visitor should remain the same for the course of admission; no rotating in/out</p> <p>Ambulatory facilities and clinics should follow the same visitation precautions as inpatient facilities.</p> <p>Check out Vizient's dynamic dashboard to see visitation policies across the U.S.</p>
	<p>Updated 4/2/20</p> <p>An executive order has been issued in New York that requires all hospitals, both public and private, to allow women to have a partner in the labor and delivery room.</p> <ul style="list-style-type: none"> • New York-Presbyterian visitation policy update • Mount Sinai Health visitation policy update • New York Times article re: executive order reversing restrictions for obstetric patients
	<p>3/23/20</p> <p>Long-term care facilities should apply more restrictive policies regarding visitation. The CDC Guidelines for Long-term Care Facilities, Nursing Homes are as follows:</p> <ul style="list-style-type: none"> • Restrict all visitation except for certain compassionate care situations, such as end of life situations • Restrict all volunteers, including non-essential healthcare personnel (e.g., barbers) • Cancel all group activities and communal dining • Implement active screening of residents and healthcare personnel for fever and respiratory symptoms
	<p>3/23/20</p> <p>Communicate restricted visitation policy clearly, using plain language on facility website main page*.</p> <ul style="list-style-type: none"> • Provide phone number for more information. • Use live chat features available on web sites. • Communicate updated visitor policy to community members via public service announcements, social media, email, newsletters, etc. • Place signage outside of all facility entrances. <p>*In keeping with patient centered care principles, explain that although patient care depends greatly on engaging families to be part of the healing process, “routine” visitation must be suspended until the transmission of COVID-19 is no longer a threat.</p>
	<p>3/23/20</p> <p>Reduce access into facilities.</p> <ul style="list-style-type: none"> • Limit entryways into facility so visitors, staff, and vendors with deliveries can be screened. • Suspend the use of community and conference spaces by the public.
	<p>3/23/20</p> <p>Screen all visitors and staff and vendors before entrance.</p> <p>Ask screening questions such as:</p> <ul style="list-style-type: none"> • Have you had a fever, shortness of breath, sore throat, runny nose, or a new cough in the last 14 days? • Have you traveled internationally or to any US cities with high levels of ongoing transmission of COVID-19 (mainland China, South Korea, Iran, Italy, New York City, Seattle, etc.) in the last 14 days? • Have you been near someone who is currently sick with COVID-19 or any other respiratory illness within the past 14 days? • Conduct temperature checks where possible.
<p>Additional resources</p> <ul style="list-style-type: none"> • Coronavirus Disease 2019 (COVID-19) Hospital Preparedness Tool • UW Medicine Visitor Policy • Institute for Patient and Family-Centered Care 	

COVID-19 Studies and resources

- [China CDC study](#)
- [Johns Hopkins Clinicians Biosecurity News: What US Hospitals Should Do Now to Prepare for a COVID-19 Pandemic](#)
- [Johns Hopkins University COVID-19 Global Cases Dashboard](#)

- [Lancet COVID-19 Resource Center](#)
- [Nebraska Medicine COVID-19 Provider Resources \(including PPE training, protocols and checklists\)](#)
- [The Joint Commission Statement 3-16-2020](#)
- [UCSF provider resources](#)
- [CMS press release: CMS announces relief for clinicians, providers, hospitals and facilities participating in quality reporting programs in response to COVID-19](#)