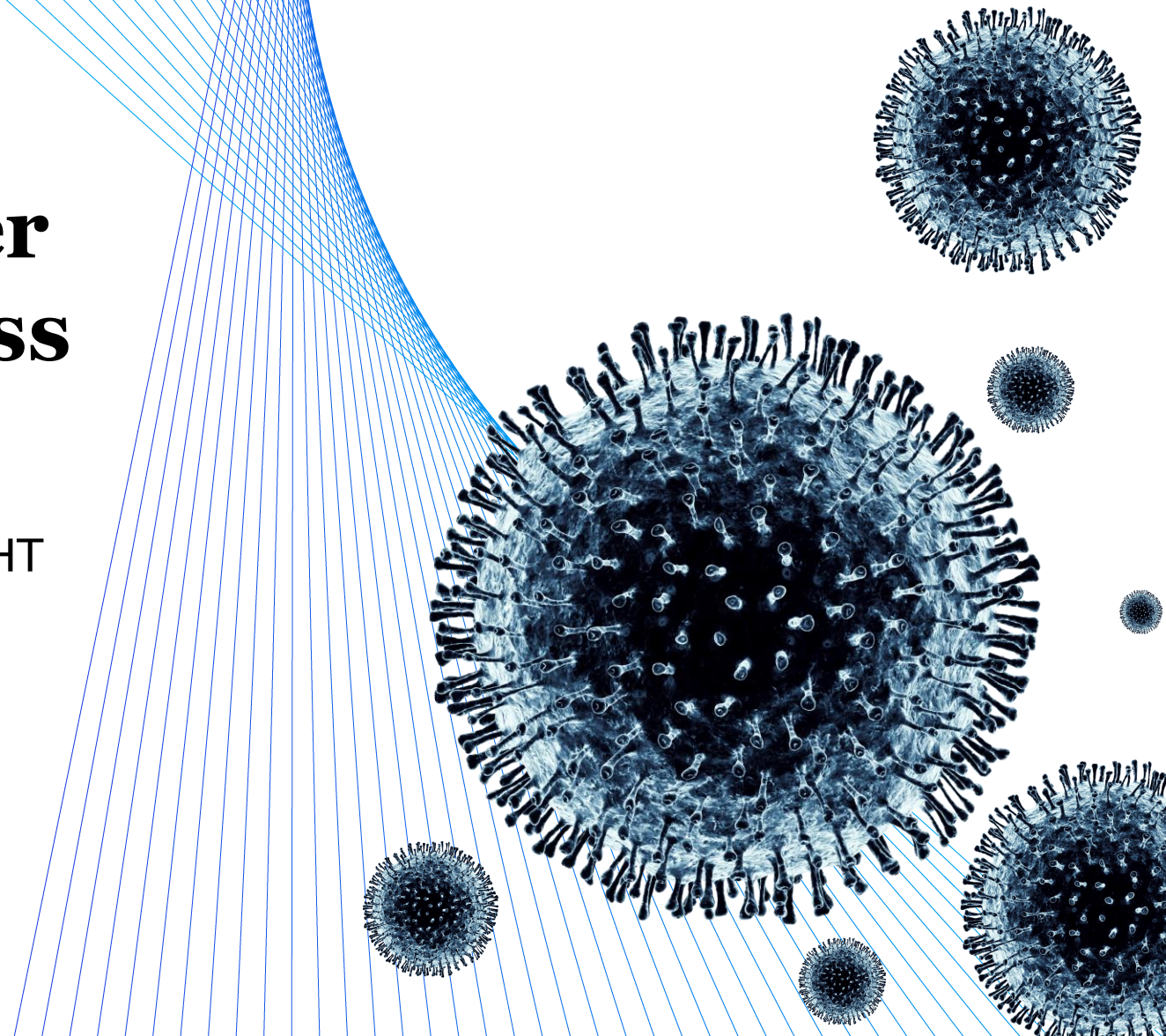
McKinsey & Company

COVID-19 Crisis: US Healthcare Provider and Payer Preparedness

Chapter 2 – Provider Implications

DOCUMENT INTENDED TO PROVIDE INSIGHT AND BEST PRACTICES RATHER THAN SPECIFIC CLIENT ADVICE

Updated: March 17, 2020



Solving the humanitarian challenge is the top priority. Much remains to be done globally to prepare, respond, and recover, from protecting populations at risk, to supporting affected patients/ families/ communities, to developing a vaccine. To address this crisis, countries including the US will need to respond in an evidence-informed manner, leveraging public health infrastructure and proactive leadership.

This document is meant to help with a goal: provide a summarized fact base on the disease to date, insights on potential scenarios, and potential actions US healthcare providers and payers may consider.

In addition, we have developed a broader perspective on implications for businesses across sectors that can be found here: https://www.mckinsey.com/business-functions/risk/our-insights/covid-19-implications-for-business**.** This supplemental material discusses implications for the wider economy, businesses, and employment; and sets out some of those challenges and how organizations can respond in order to protect their people and navigate through an uncertain situation.

For all formal guidance, you can find **up-to-date information at CDC's COVID-19 website**, with a section specific to healthcare professionals: https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/index.html

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In this document

There are 10 major considerations for the US delivery system in response to the COVID-19 outbreak

Detail in appendix

Workforce readiness

1. Establish a multi-level, workforce-wide communication strategy utilizing CDC healthcare guidelines, including identifying who is eligible to treat COVID-19 patients and targeted, culturally sensitive communication for those at different levels of probable patient contact
2. Develop action / contingency plan for increased staffing demand (e.g., uptraining / cross-training personnel, recruiting, contract labor)
3. Establish protocol to monitor workforce health in the context of COVID-19 (e.g., burnout and other behavioral health, PPE-related pressure ulcers, staff infection) and establish systems to address needs, including childcare and designating safe quarantine areas for workers who may be exposed but live in high-density environments

Supply availability

4. Identify at risk supplies and understand current inventory and near-term ability to procure vs. projected demand
5. Implement detailed conservation protocols for critical supplies, identify acceptable alternatives in conjunction with infection control, and rigorously track inventory between sites for potential internal re-balancing

Surge capacity

6. Assess bed availability for infected and at-risk patients
7. Identify alternate sites for diagnosis/ triage (e.g., tents, parking lots/ vehicles, non-clinical space) and alternative diagnostic processes (e.g., diagnosis prior to waiting room entry, remote communication with patients requesting diagnostics/ exhibiting early symptoms)
8. Similarly, identify alternative treatment areas in case of surge (e.g., locations that can be converted into treatment wards - unstaffed floors, physical therapy space, outpatient health and non-healthcare facilities), options for patient transfer to regional referral centers
9. Establish systems/protocols to shift care of non-critical patients (e.g., patients primarily in need of social support) and establish proactive communication strategy for patients and staff about alternative options for treatment in non-acute scenarios (e.g., telehealth, home care), including access to telehealth outside of normal business hours

Governance

Critical enabler

10. Prepare for a “medium-term” COVID-19 management strategy - establish a Emergency Operations Center
    - People: Designated COVID-19/ emergency response program lead (with back ups identified in case of burnout/clinical need)
    - Performance: Dashboard for continuous monitoring of key operational (e.g., beds, volumes), financial (e.g., supply cost variability/ advance purchasing, elective volume declines) indicators
    - Top management: clarify key new responsibilities for top teams in context of potential epidemic

Key questions to ask leaders in your organization

Detailed checklist of actions in appendix

Chief Operations Officer (or equivalent)

Do we have an up-to-date understanding of **facility and workforce capacity,** and daily ability to monitor/ adjust?

Do we have **relevant supplies in stock** and an approach to rapidly sourcing **and distributing** in the case of shortages?

Do we have effective **plans for managing patient volume (e.g., delaying elective volume; addressing increased behavioral health demand, including via telehealth) if required**?

Have we established inpatient / ED clinical **operational workflows** to handle the specialized needs of COVID19 patients?

Chief Administrative Officer (or equivalent)

Do we have the right **safeguards and policies for employees**, including right frequency and rigor of updates?

Have we established a best in class **communication cadence** with our employees, both caregivers and non-caregivers?

Do we have a strategy for **hiring or temporarily contracting** staff to support expanded telemedicine, telephonic and other capabilities?

Chief Financial Officer (or equivalent)

Have we **pressured tested our financials** (including P&L and working capital) given potential scenarios, identified **strategies if required to mitigate risk (e.g., credit)**, and prepared appropriate **investor messaging** on biggest areas of exposure (e.g., softening elective volume)?

Have we evaluated the potential **financial implications** of increased patient utilization of telemedicine?

Have we thought about the potential financial implications associated with **reduced elective volume**, and strategies to mitigate that?

Chief Information Officer (or equivalent)

Have we established systems for the real-time **collection and analysis of data** to rapidly capture and integrate learnings?

Have we established **data sharing agreements** with local, state and / or national public health agencies?

Chief Nursing Officer (or equivalent)

Do we have a clear plan to address **to address workforce shortages and increased care demand**, including sourcing from other network providers, contracting and cross-training?

Chief Medical Officer (or equivalent)

Have we considered **dedicated clinical workforce teams** for COVID-19 patients as a potential strategy to handle increased demands?

Are all providers aware of the **latest CDC guidelines** for treatment of potential COVID-19 patients?

Have we developed **protocol and processes for reducing elective volume to help address and mitigate capacity concerns** (e.g., elective PCI, orthopedic surgeries, gastroenterological procedures)?

Are we actively planning for **remote/virtual care** protocols?

Chief Patient Safety Officer (or equivalent)

Do we have clear **protocol and systems to assess adherence to clinical safety** and quality guidelines (e.g., appropriateness of COVID-19 diagnostic testing)?

Chief Executive Officer (or equivalent)

Do we have the right **communication strategies with patients and providers** and, as necessary, external constituents (e.g., public health authorities, employers)?

Do we have the **right systems and dashboard setup** to continuously monitor key operational, administrative and epidemiological indicators?

Given **potential reductions in outpatient elective volume** as well as selective inpatient service line volume increases, have you developed **strategic initiatives to mitigate these forces in real-time or downstream** when COVID-19 burden drops?

Have we developed **partnerships with payers, vendors and local businesses and community agencies** to effectively execute on latest clinical and operational recommendations?

Source: Expert interviews

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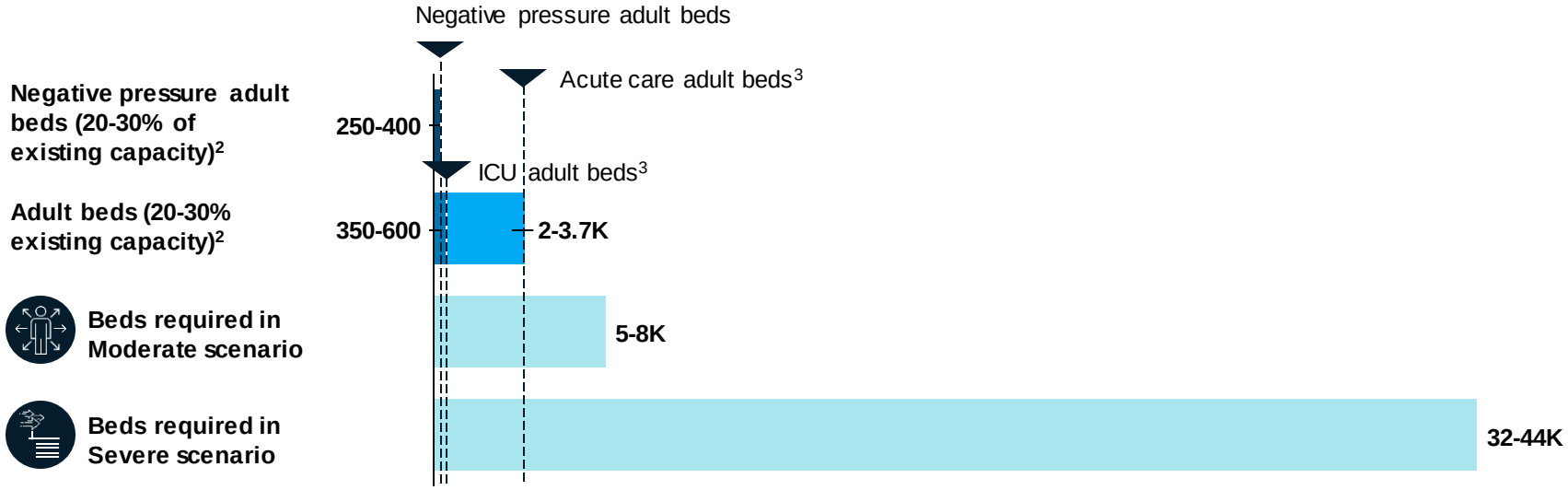
Representative major metropolitan area: Given disease burden and CDC recommendations, providers could experience capacity constraints

US representative major metropolitan area bed availability and requirement given each COVID-19 potential scenario[1]



Given this, implications on workforce, supply chain, and facility (bed) capacity should be considered and proactively planned for

Key assumptions:

1. Evaluates peak infection period only where the most patients will need to be cared for at the same time
2. 20-30% of bed capacity in each category of beds can be freed up to care for COVID patients

1.Calculated based on approximate peak time/number of hospitalized patients across 66 day period of COVID-19 outbreak in a representative major area in the US, this approximation provides a slight underestimate because it takes an average patient volume over 10 days and does not factor for patient overlap between 10 day periods (i.e., patients that stay in the hospital for more than 10 days)
2.In representative major area in the US - Assumes hospitals can free up 20-30% capacity of all bed types
3.Calculated as per AHA 2018 reported bed counts: ICU beds = medical/surgical intensive care beds + cardiac intensive care beds + other intensive care beds | acute care beds = general medical/surgical adult beds + burn care beds + other special care beds

Source: CDC; AHA 2018 bed data; JAMA - Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China; JAMA - Positive RT-PCR Test Results in Patients Recovered From COVID-19 - https://jamanetwork.com/journals/jama/fullarticle/2762452;

With an impending shortage of hospital beds accompanying the COVID-19 pandemic, hospitals must consider options to expand capacity

Current as of March 17, 2020

Levers to increase hospital capacity	Deploy mobile hospitals	Bring in unlicensed beds	Explore additional areas in hospitals	Utilize attached specialty hospitals	Convert existing post-acute care facilities	Partner with outpatient clinics	Use non-health care facilities	Partner with a local VA or military hospital
Examples	Temporary mobile solutions (i.e., vans, trailers, etc.) serve as sites of care Vanguard Health Solutions (UK) offers mobile hospital wards with 6 bed-capacity and overhead oxygen[1] and Aspen Medical (AU) offers 100 bed units assembled onsite in 72 hours[2]	Place additional beds in hallways or other free areas to extend capacity NYP employed this strategy during Hurricane Sandy[3]	UCLA has placed tents in the parking lot to increase ED capacity[4] NYP converted space in an open atrium to an interim ED during Hurricane Sandy[3]	Cancel elective surgical cases at specialty hospitals (i.e., ophthalmologic institutes and orthopedic surgery centers) and convert to hospitals for COVID-19 patients	Utilize capacity of post-acute care facilities such as SNFs, LTACs and rehabs for extra bed space	Cancel non-essential office visits and convert to hospital space for COVID-19 patients	Warehouses, exhibition halls and stadiums were converted to interim hospitals during the COVID-19 response in Wuhan[2] New York Governor Anthony Cuomo has recommended converting facilities such as military bases and college dorms into temporary medical centers[5]	The Department of Veterans Affairs is preparing to absorb COVID-19 patients The department has surplus beds in many of its 172 hospital centers and a robust number of rooms equipped to support patients with breathing disorders[6]

1. Vanguard Health Solutions, https://www.vanguardhealthcare.co.uk/fleet/hospital-ward/
2. Aspen Medical, https://www.aspenmedical.com/health-services/deployable-mobile-hospitals
3. McKinsey expert interview
4. NBC's Meet the Press
5. New York Times, https://www.nytimes.com/2020/03/15/opinion/andrew-cuomo-coronavirus-trump.html
6. New York Times, https://www.nytimes.com/2020/03/15/us/politics/veterans-affairs-coronavirus.html

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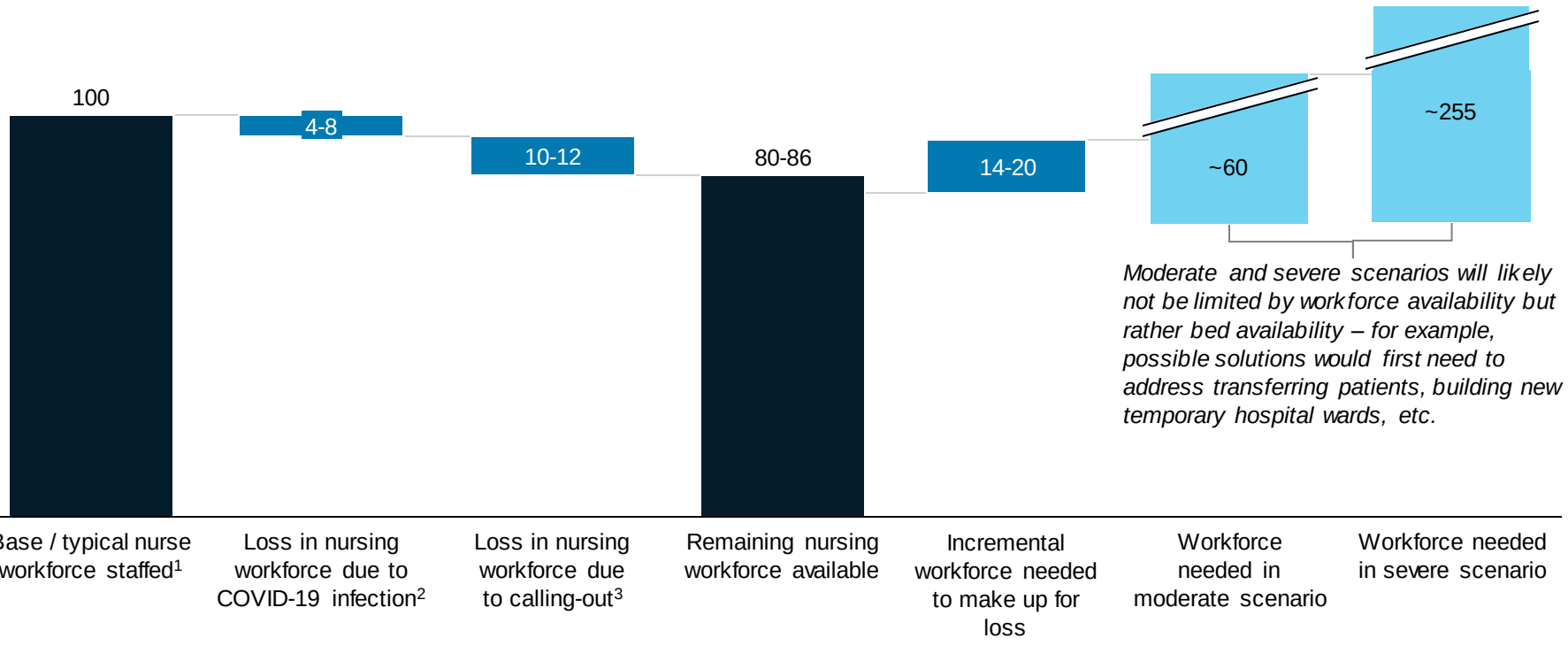
Hospitals will likely need to plan for increased staff based on reduced nursing workforce and increased patient burden

Scenario of representative medium sized hospital (300-500 beds) during peak period of COVID-19 epidemic

Nurse FTE reduction due to factors related to the COVID-19 epidemic (per 100 productive[4] FTE nurses)

Workforce needed to care for patients during the peak of the epidemic[5]
(per 100 productive[4] FTE nurses)



Moderate and severe scenarios will likely not be limited by workforce availability but rather bed availability – for example, possible solutions would first need to address transferring patients, building new temporary hospital wards, etc.

Potential methods for increasing workforce to meet new demand include (non-exhaustive):

- Request overtime shifts
- Hire additional agency workforce
- Collaborate with surrounding hospitals to share workforce in high/lower effected geographies areas and/or transfer patients
- Reschedule elective procedures / admissions

Additional mitigating factors detailed on next page

1. Assuming a hospitals full workforce is staffed at 80% bed capacity, all workforce measured in full time equivalents (even if the workforce includes some part time employees)
2. Assuming a 3.8% health care personnel infection rate - same rate as China as of 2/24/2020; Assuming an additional ~4% health care personnel quarantine rate due to unprotected exposure
3. Assuming a call-out rate of 10-12% (give that a normal call-out rate is ~5%) due to inability to care for COVID-19 patients due to caregiver or childcare needs, immunocompromised status, etc
4. Productive workforce (e.g., not including training, sick days, etc.)
5. Given mild scenario is no longer viable, these numbers assume all hospitals in a health system will serve COVID-19 patients (i.e., even distribution of COVID-19 patients)

Healthcare workforce is complex and different groups of employees will have different needs during this time

The impact of disruption and potential strategies to mitigate will differ by group

Group	Description	Key considerations
Group 1: COVID Caregivers	Workers who are fulfilling the need for current health system **demand related to COVID-19** (e.g., hospitalists, critical care physicians, ICU RNs, security at the hospital, lab technicians, care managers)	**Demand is high**: Creating additional capacity is critical, through flexing up, contract labor, activating cross-trained personnel **Supply is strained**: Large increase in strain on workforce with childcare, quarantine and other factors Must ensure there are strategies in place to **avoid burnout**
Group 2: Other Caregivers	Workers who are caring for patients / other populations **not related to COVID-19** (e.g., speech language pathology techs, orthopedic surgeons, clinic receptionists)	Many patients will still require life-saving and critical maintenance care, requiring **healthcare workers to continue working but potentially in creative ways** (e.g., more telehealth, sanitization efforts in care sites, home care support) Physician and others' **productivity will be impacted** which may raise questions and concerns around areas such as **compensation** Some caregivers' skills may be **useful in COVID-19 support** and all hands on deck approach may be needed with some **flexing / re-skilling**
Group 3: Workers with likely reduced demand	Workers who are potentially **under-employed or unable to work their usual jobs** because of COVID-19 (e.g., researchers in closed labs, food workers at closed site, home health workers)	**High anxiety over job security**, ability to make living wages (especially among hourly employees); **clear messaging will be needed** to manage panic and show support Need to be creative in thinking through **how to mobilize some of these employees in a productive way** (e.g., supporting community programs, trainings etc.)
Group 4: Workers who must work differently	Workers **who are less impacted** by COVID-19 directly (i.e. can do same work done from home) (e.g., administrators, coders etc.)	**Tools to complete work and new ways to stay connected** will be needed; likely reduction in productivity can be expected in several areas Considerations around **how to flex staff** and ensure some of "business as usual" continues so support functions can continue to operate

Preparedness to address a set of unique challenges in workforce readiness is critical during the COVID-19 crisis

Across a spectrum of healthcare workers

Non-exhaustive

	Workforce shortages	Workforce readiness / flexing	Workforce morale / "burnout"
Challenges	**Increasing capacity: unsuitability of traditional methods** such as travelers (e.g., travel restriction, global demand); **difficulty in rapidly engaging non-traditional sources** (medical students, IMGs, retired HCPs) due to regulatory, legal, patient safety issues **Reducing losses: expected COVID-19 infection** of HCPs (~10-20%); **burnout / fatigue** of frontline workers; **non-clinical imperatives** for workers (childcare, elderly care etc.)	**Guidance and communication:** rapidly **evolving evidence-base** for COVID-19 with new information daily; non-centralized, **disparate communication on roles** **Flexing and re-skilling: shift restrictions** (hourly and weekly restrictions); **licensure ceilings** (e.g., who can work in ICUs**); time and resources for re-skilling** (needed to train in ventilator mgt.); **lack of readiness for using tech** in pandemic situations (e.g., e-ICUs, management of moderate symptoms by phone etc.)	**Work-related: over work and fatigue** (e.g., staying in-hospital for extended periods); **anxiety** from infection risk for self and others; **resource constraints** / difficult work environment (e.g., re-using of PPE); **patient losses** and "war-like" decision-making needs (e.g., which patients to triage for limited ICUs) **Systemic: Increase in other duties** (child care, sick care etc.); **lack of community support** (e.g., in prevention of infection, reducing burdens etc.); **loss of productivity** from change in structure (e.g., WFH)
Solutions	**Policy changes** to increase pool of providers (e.g., rapid license issuing) **Prioritizing of infection control** (e.g., PPEs, public education etc.) Working with **FEMA / support organization** for systemic response **Structure support systems** for childcare, eldercare etc.	Centralized information from **nerve center** **Re-structuring shifts** to improve efficiency Identifying and flexing providers **who can move to group 1** (e.g., double boarded physicians, nurses with ICU experience etc.) Creating **rapid re-skilling materials** (e.g., e-learning for vent mgt.) **Optimizing virtual health** Identify senior medical and surgical **residents who can be transitioned to independent practice**	**Support for HCPs in-house** (e.g., food, childcare, online resources on working in this environment etc.) **Community support for HCPs** – for childcare, grocery pick-up, etc. **Proactive mental health support** for HCPs
Workforce focus	**Group 1**	**Group 2, Group 3**	**All Groups**

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There are implications for clinical operations along 3 phases of the patient journey

Patient population

Pre-diagnosis (prior to seeking care)

Patient population that providers should be **proactively engaging remotely** to educate, assess risk if relevant, and provide guidance / precautions on visiting sites of care

Diagnosis

Patients initially screened (remotely or in person) and **identified for need to undergo COVID-19 diagnostic testing**

Includes patients undergoing diagnostic testing in ED and outpatient setting (e.g., primary and urgent care)

Confirmed positive

Patients with confirmed positive test results via local and/ or CDC lab testing

Includes patients whose **symptoms are sufficiently severe to warrant hospitalization and concerning history to warrant isolation** (excludes home quarantine patients)

Across each phase, providers should also consider developing standardized protocols for proactively engaging patients' families, caretakers and employers throughout their care journey

These perspectives are intended to build from CDC and other guidance based on operations and management experience. Please continue to consult CDC, state health department, and medical societies for the most up-to-date guidance. These perspectives are not intended as a substitute for professional medical advice, diagnosis or treatment. Any actions impacting clinical decisioning should be vetted by the appropriate quality committees within your organization.

For patients not diagnosed, providers can establish a number of offerings to minimize unnecessary exposure to sites of care

Five elements to establishing a strategy to prevent overcrowding sites of care

Pre-diagnosis > Diagnosis > Confirmed

Establish COVID-19 telephonic support / care navigation	Designate a dedicated **COVID-19 patient advice line** Establish proactive **multi-channel communication options** for patients to express concerning symptoms Via phone and text communications, push **patient portal registration** to access updates and tools Develop protocol to **screen** scheduled patients before they arrive to a care site for a visit Develop and implement protocol to identify and route patients who need **behavioral health support**, in addition to or in lieu of medical services
Develop COVID-19 web- and app-based resources/ care navigation	Develop a library of CDC-aligned COVID-19 **educational resources** Design a COVID-19 patient **self-assessment tool**[1] based on the latest local and CDC public health guidelines Establish a process to alert providers if patients have positive self assessment results; engage in **proactive outreach**
Strengthen telemedicine services where appropriate	Offer **telemedicine options** to patients who do not need to be seen at sites of care Leverage existing **remote patient monitoring capabilities** for patients suspected positive, quarantined at home and not needing hospitalization Increase access to **behavioral health telemedicine** options to address increased demand due to crisis and social isolation
Prepare and leverage home health services	**Uptrain home health vendors** on CDC guidelines and how best to engage with patients Establish protocol with home health vendors / services to **proactively screen patients for COVID-19 prior to visits** Consider ability to **develop program to provide supportive care** to suspected and confirmed COVID-19 patients in-home Partner to enable **in-home specimen collection**, when it becomes available
Engage local agencies and payers	**Establish relationships with local employers, businesses, community agencies, and primary care provider networks** (e.g., retail clinics) to enable scaled access your services Work with payers to **cover telehealth services** at parity in the short term, where currently not covered

Given urgency, providers should prioritize strengthening existing offerings and deploying them as quickly as possible and limit investments in new capabilities

1. Continuously monitor whether the CDC or other third party vendors have developed app- or web-based screening assessment tools

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Source: CDC, Expert interviews, Press search

For suspected COVID-19 patients, providers can establish a series of operational systems and controls

Ambulatory and emergency service operations can be enhanced to control spread of suspected COVID-19

Pre-diagnosis **Diagnosis** Confirmed

Outpatient / ambulatory services	Consider designation of separate COVID-19 **ambulatory testing sites** Develop protocol based on pre-diagnostic criteria to **route patients** to designated diagnostic testing sites Consider establishing **dedicated staff** to operate testing sites; train staff on appropriate collection and handling of specimen, per CDC / public health guidelines • Establish a combination of **engineering and administrative controls** to minimize patient and workforce exposure to suspected cases Establish protocol to route patients to the nearest available **emergency room or other designated clinical sites** based on clinical guidelines as set by the CDC Develop protocol and partnerships with **out-of-network providers** (e.g., retail clinics, urgent care) to address the needs of patients who have concerning symptoms and require hospitalization Reschedule non-urgent OP visits as necessary
Emergency room / pre-triage services	Consider establishing a separate **diagnostic area outside core facilities** (e.g., tent outside ED) to perform screening and clinical assessments; also consider ways to rapidly triage and discharge patients that do not require emergency care but remain practicing within EMTALA guidelines Consider **redesigning the ED to establish a separate section for COVID-19 triage / assessment,** including designated entrance, triage area, staff, lavatory, supplies and color-coded bedding/linen/scrubs – all to be separate from rest of patients Establish protocol with **emergency medical services** (EMS) to ensure drivers contact receiving EDs or facilities to flag at-risk incoming patients Develop and train staff on protocol for **appropriate handling** of suspected COVID-19 patients; consider assigning **dedicated staff** to support at-risk patients **Isolate suspected** COVID-19 cases Discharge suspected COVID-19 patients not requiring hospitalization **home** (in consultation with state / local public health authorities) as appropriate

Providers should aggressively monitor the availability of the latest COVID-19 diagnostic tools to help improve diagnostic cycling

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Source: American Academy of Emergency Medicine, American Board of Internal Medicine, American College of Physicians, American College of Surgeons, American Medical Association, American Nurses Association, Anesthesia Patient Safety Foundation, CDC, Infectious Disease Society of America, Society for Academic Emergency Medicine, Society for Healthcare Epidemiology for America, Society of Critical Care Medicine,, Society of Hospital Medicine

Current as of March 17, 2020

For confirmed COVID-19 patients, providers should adhere to a series of medical society recommendations

Pre-diagnosis › Diagnosis › **Confirmed**

General inpatient medical care	Per CDC / society recommendations: Maintain **patient isolation** with strict adherence to CDC / public health guidelines for infection prevention and control; consider **color-coded bedding and linen for patients** Given current guidelines that suggest maximizing in-room / portable testing, plan for likely **operational bandwidth constraints** across likely impacted departments / supplies (e.g., radiology technicians, x-ray machines etc.) Establish protocol for **discharging patients** according to the latest CDC guidelines Reschedule non-urgent IP procedures as necessary
Surgical / procedural / anesthesia inpatient care	**Minimize, postpone, or cancel elective surgeries** as per ACS guidelines Per CDC / society recommendations: Develop a **contingency plan** in anticipation of **likely reductions in block utilization** due to need for COVID-19 patients to recover in operating rooms (ORs) Develop a plan to address likely need for **increased post-anesthesia care unit** (PACU) **nurse coverage** to support COVID-19 patient recovery in ORs Establish processes for **transport of COVID-19 patients** from the OR to floors/ICUs Consider establishing **designated ORs / procedure rooms** to treat patients; train staff / procedural / OR teams accordingly
Workforce and environmental considerations	Consider identifying **dedicated staff (e.g., hospitalist team)** to care for COVID-19 patients; ensure dedicated staff are easily identifiable by other workforce (e.g., color-coded attire) Deliver **education / training** to clinical and nursing workforce to prevent transmission of COVID-19, including refresher training on latest CDC / public health guidelines Regularly **clean and disinfect environmental surfaces**, as well as non-dedicated, non-disposable medical equipment, with EPA-registered hospital-grade disinfectant, per CDC recommendations Establish a **contingency plan for low-supply specialties** (e.g., pediatric neurosurgery) in the case of reduced capacity

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Health officials are urging providers to use digital and telehealth to triage, and some providers/ payers are responding

The use of virtual channels will be a particularly valuable lever to help prevent overcrowding

Not exhaustive

The Center for Disease Control and World Health Organization are urging hospitals and clinics to look at **expanding uses of virtual health services to help triage the sick and keep the worried out** of already crowded medical facilities

Blue Cross of North Carolina started to **cover telehealth services** the same as in-person provider visit (at parity) starting March 6

UnitedHealthcare **covers 24/7 telemedicine services** delivered through Teladoc, American Well and Doctor on Demand across the United States

UCSF Health's Existing flu **digital health tools** are being used to triage for coronavirus

Hospital is proactively reaching out to patients with scheduled visits for flu and cold symptoms to do **video calls** instead

One Medical established its **virtual health program** in response the Swine Flu / H1N1 in 2009, enabling 24/7 care over video chat

Vendors are **using CDC guidelines to screen users** for coronavirus

China is **moving many services online** that were once done physically, to ensure continuity of care (e.g., prescription refills)

Seeing a **spike in the use of virtual services** – vast majority are healthy people trying to stay out of the hospital

Source: Press search, CDC, WHO, https://twitter.com/RahulRajkumar11/status/1235299478657261568

To reduce risk of exposure in the healthcare setting, providers should enable a number of restrictions

Visitor restrictions

Reduce the number of visitors to all patients

Example policies:

- Adult patients: One adult visitor
- Pediatric and newborn patients: Two visitors, but only parents or guardians. No siblings or extended family
- No children under 16 will be allowed to visit, except under exceptional circumstances

Reduce visitation hours

Shorten duration of time allowed for visits

Screen all visitors and staff at entry's

Screening for fever, at risk travel, and exposure to COVID-19

Reduce the number of entry points for visitors and staff

Identify essential entry points and close others

Source: CDC, Expert interviews, Press search

https://www.uofmhealth.org/news/archive/202003/michigan-medicine-announces-visitor-restrictions-hospitals
https://www.ucsf.edu/news/2020/03/416911/ucsf-health-expands-visitor-restrictions-hospital-and-clinics-amid-covid-19
https://www.sfchronicle.com/bayarea/article/Bay-Area-keeps-shutting-down-as-coronavirus-cases-15131898.php
https://kstp.com/news/mayo-clinic-limiting-hospital-visitors-during-coronavirus-covid-19-threat/5674724/
https://boston.cbslocal.com/2020/03/14/coronavirus-boston-hospitals-childrens-brigham-womens-limit-visitors-precautions/
https://www.vumc.org/coronavirus/latest-news/covid-19-patient-and-visitor-policy-hospitals-and-clinics
https://stanfordhealthcare.org/for-patients-visitors/visiting-hours.html

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Healthcare provider supply chain preparedness

Solutions to consider as COVID-19 impacts medical and pharmaceutical supply lines

Overview

As COVID-19 cases increase, **providers will face pressure** in supplying key protective and treatment items

Protocols, visibility and collaboration are key to mitigating supply chain risk

Centralized Buying, Inventory Balancing and Distribution

Control buying at system level and ensure supplies reach greatest point of need

Prioritize at-risk supplies and pharmaceuticals for increased tracking; pursue alternative buying and maintain continual line of sight for key products and expected inflow of supply

Develop a system for proactive rebalancing and internal distribution system involving one (or more) of the following components:

- Current patient inventory days on hand against current burn rate
- Expected inflow of MedSurg and Rx supplies
- Expected epidemiological outlook, site maximum capacity and critical access hospital status

Continued open dialogue with suppliers, distributors and public agencies critical for contingency planning[2]

Clinical Conservation and Supplies Security

Promote conservation and establish clinical scenario plans

Establish clinical protocols around the use of at-risk supplies by situation:

- Develop tiers of clinical scenario planning against supply levels
- Communicate plans to clinical site leaders and ensure all care providers are aware and adopt

Ensure distribution of at-risk items is controlled (i.e. by supply chain group) and limited to clinicians and patients only

Explore alternative product use and sourcing when possible

Home Health and Alternative Points of Care

Prepare distribution plans as care delivery methods evolve

Create distribution strategy to emerging care delivery response models – these include shift to home health and new clinical sites (i.e. gyms, parking lots, community centers)

- Collaborate with clinical leaders to understand expected care delivery and alternative site plans
- Engage local supply chain operators to discuss receiving and stocking (i.e. linked to local hospital, new PARs)
- Proactively engage key distributors to ensure they adjust delivery accordingly
- With physician input, create standard supply packages for home health

Increased and constant stakeholder collaboration between providers, suppliers and public agencies will promote the success of the above

1. Recommended to begin with critical PPE supplies and subsequently scale to larger list of items listed on Supply Chain Job Aid (PXX)
2. E.g. coordinating on emergency supplies and public response

Tactical steps to consider on supply chain with COVID-19 response

Appoint a single lead to oversee all COVID-19 response and represent supply chain organization at enterprise meetings (leaving head of organization to organize business continuity)

Establish supply chain organization critical response team integrating stakeholders from sourcing, distribution, supply chain operations, communications and project management

Integrate supply chain and logistics critical response team to overall enterprise emergency response (i.e. ensure single lead above speaks as single representative for organization)

Ensure resiliency of procure-to-pay system in reduced productivity scenarios (e.g. work from home) to ensure critical supply orders received and dispatched through crisis response

Engage critical vendors to promote collaboration and visibility early and throughout situation

Connect with local, state and federal stakeholders and promote open line of communication

Prepare remote (i.e. work from home) contingency plans and inform to ensure all leaders prepared