The COVID-19 pandemic continues to challenge healthcare systems, hospitals, and the healthcare field as a whole. Every new surge of patients stresses already overworked and overstressed staff, strains resources, decreases hospital revenue, and negatively affects many other healthcare operations. The uncertain duration of the pandemic means healthcare communities need to provide stability and growth opportunities as they adapt to the ongoing situation.

Healthcare leadership is essential in ensuring continuity of operations based on effective decision making. Over the past year, leaders in healthcare innovated to address pandemic-related challenges, safeguarding infrastructure, staff, and patients while maintaining their institutions’ mission and values.

This ASPR TRACIE resource highlights some of the considerations and promising practices that healthcare executives may consider implementing in their systems during the pandemic and beyond.

Collaboration and Partnerships

Collaboration and strong partnerships during emerging and active threats and hazards can maximize the saving of lives and the protecting of communities. Strategies healthcare executives can consider include:

- Meeting and planning with partners within the local, regional, state, tribal, and federal levels should begin prior to emergency situations.

- Implementing plans into policy and/or procedure, then train and exercise those plans. This will ensure that the priorities and responsibilities of the healthcare facility and other entities (e.g., healthcare coalitions [HCCs]) are clearly understood.

- Ensuring trusted relationships with key partners exist at both the emergency manager and C-Suite level (e.g., chief executive officer, chief medical officer, and chief nursing officer) to ensure clear preparedness and response steps are agreed upon before an incident occurs.
• Prioritizing resilience and business continuity planning. Doing so strengthens the infrastructure needed to respond to the COVID-19 pandemic. It also ensures a stronger response to future patient surges (due to COVID-19 or other threats) while providing continued service to the community.

In a recent report, hospital leaders described opportunities for support from the federal government related to emergency planning, preparedness, and response to COVID-19 and future public health emergencies. Proposed areas for support include:¹

• Promote regional response coordination.

• Assist with management of interhospital transfers and discharge of patients to places where they will receive best follow up care.
  » For example, work with the entire healthcare delivery spectrum—from HCCs to long-term health care providers—to coordinate patient care
  » Many jurisdictions established Medical Operations Coordination Cells (MOCCs) or similar patient load balancing coordination centers in collaboration with federal, state, regional, and local partners.

• Simplify data reporting requirements across all governmental levels and eliminate any duplicative or non-essential reporting.

• Oversee national supply chains for medical supplies (e.g., personal protective equipment [PPE]).

• Ensure the management and quality of supplies in the Strategic National Stockpile will meet future spikes in demand for PPE and other supplies.

Administrative

Recognize that the COVID-19 pandemic is an executive-level crisis. The duration of the response has taxed every resource within healthcare facilities and supporting agencies/organizations.

• During a prolonged crisis, clear distinctions need to be made between operations and decisions under their hospital-based incident command system (e.g., Hospital Incident Command System, or “HICS”) and those that are made through usual executive channels.
  » Leadership should work to determine if modifications to their hospital-based or healthcare incident command system (ICS) is necessary for a prolonged response. Dedicating an ICS branch early in the process to operational and fiscal recovery can ensure close collaboration with those that are tracking costs; planning for recovery; and managing surge, staffing, PPE/supplies, and other immediate operational concerns.

• Executives will have to determine (often dynamically over weeks or months) how best to use leaders in the facility/system.
  » Some leadership may have to go back into staff rotation to support patients due to patient surges and staffing shortages.
  » Leaders should also prioritize determining if managers of a service line are the right people to lead that domain during a disaster or if other leaders need to be appointed to enact rapid cycle changes in key areas.

• Some leadership teams came together and excelled in rapidly adapting to the situation, (e.g., establishing significant telehealth capabilities), while others expressed frustration with their team and their delayed reactions to changing business environments. Adopting “test of change” principles may assist employees with the type of rapid frame shifts required during a disaster. Leadership must have an “adapt and overcome” mindset to make it through a crisis.2

• Some facilities are changing leadership and prioritizing hiring new leaders with proven success in strengthening financial positions.

• Performance measurements have changed for leadership during the pandemic, and it is imperative to quickly incorporate those into existing processes and establish new metrics.3

• A recent consensus statement from healthcare leaders outlined the following 10 essential leadership imperatives to guide health and public health leaders during the post-emergency stage of the pandemic:
  » Acknowledge staff and celebrate successes
  » Provide support for staff well-being
  » Develop a clear understanding of the current local and global context, along with informed projections
  » Prepare for future emergencies (personnel, resources, protocols, contingency plans, coalitions, and training)
  » Reassess priorities explicitly and regularly and provide purpose, meaning, and direction
  » Maximize team, organizational, and system performance and discuss enhancements
  » Manage the backlog of paused services and consider improvements while avoiding burnout and moral distress
  » Sustain learning, innovations, and collaborations, and imagine future possibilities
  » Provide regular communication and engender trust
  » In consultation with public health and fellow leaders, provide safety information and recommendations to government, other organizations, staff, and the community to improve equitable and integrated care and emergency preparedness system wide4

Maintaining the Healthcare Workforce

Retaining the healthcare workforce during the COVID-19 pandemic continues to challenge leadership for several reasons.

• Many healthcare personnel were underutilized during COVID-19 as a result of fewer elective procedures and patients avoiding regular check-ups, screening procedures, and healthcare facilities even when necessary. This significant loss of revenue resulted in layoffs and furloughs which is seemingly at odds with the critical need for healthcare personnel during a worldwide pandemic.5

• Some personnel left the workforce to care for family members, including children who were out of in-person school or daycare, while some left due to concerns about their own exposure.

As the demand for healthcare surges again, many healthcare facilities are struggling to bolster their workforces. Many employees who were furloughed relocated in order to keep working and are no longer available for rehire or they are working as travel staff due to higher hourly pay. Some healthcare personnel have decreased their hours or retired. For example, in Joplin (MO), 100 nurses were needed/requested immediately to support the COVID surge, but after two weeks only 2 nurses were available.

Executives will have to make discussions on hiring practices to include additional pay incentives with regards to some positions that are extremely difficult to fill (e.g., nursing, RTs, etc.).

Healthcare personnel have been working under unprecedented, ongoing, and cumulative stressful conditions since early 2020. Many report suffering negative mental health effects due to this high level of stress (e.g., compassion fatigue, grief, moral injury, languishing burnout). This level of performance is unsustainable, particularly given the rising cases in many areas.

Leadership often contract with firms for additional nursing support but traveling staff often require greater attention/assistance from facility staff and these contract employees adversely affect profit margin. HHS marked $103 million from the American Recovery Act to support mental health and help manage burnout.

Some facilities, including the University of Kansas Health System, offered bonuses to staff to reward their extraordinary performance through 2020 into 2021.

Many rural and frontier areas lost healthcare staff to competing travel staffing agencies and urban areas offering large sign-on bonuses and salary increases that those areas could not compete with. For example, entire shifts of nurses in Nebraska walked off the job after discovering how much travel nurse counterparts were making; some returned to the same facility as travel nurses making double what they were earning before. Other nurses moved to urban areas with larger salaries and bonuses.

Healthcare Personnel Safety

PPE recommendations changed often during the early phase of the COVID-19 pandemic response. Guidance has now stabilized and the supply chain is beginning to recover. The Centers for Disease Prevention and Control (CDC) and the Occupational Safety and Health Administration (OSHA) have provided clear guidance for PPE, but it is still up to each facility to control the implementation and policy for visitors and staff.

According to the American Hospital Association, hospitals and healthcare facilities are doubling their on-hand quantities of key personal protective supplies like isolation gowns and exam gloves and show a moderate increase in surgical masks. N95 respirator supplies have increased more than ten-fold bringing the average supply on hand to 200 days, well exceeding the 23-day supply that was normal in 2019 and 2020 prior to COVID.

As COVID-19 variants gain ground, the need for treatment and hospitalization surges, which also leads to increases in the demand for global PPE manufacturing. Given challenges in global manufacturing, labor, and logistical issues, the PPE supply is still delicate and needs to be carefully considered by healthcare leadership when determining on-hand supply levels.

It is also imperative that leadership monitors the quality of PPE and assess legitimacy of “new” manufacturers. Many “new” manufacturers have entered the market and do not have certified or approved quality standards to meet the discerning standards of healthcare facilities, particularly if they are producing supplies outside of the U.S.

- Leadership should ensure personnel safety regarding workplace violence (from protesters, patients, and visitors).
- Now that new strains and low rates of vaccine uptake are driving new surges of COVID patients, healthcare leadership must review policies and procedures regarding mask and visitor policies and vaccination for healthcare personnel. Guidance and policies regarding vaccines for healthcare personnel is fluid and this information is current as of the date of publication.
- President Biden’s COVID-19 Action Plan requires vaccinations for over 17 million healthcare workers at Medicare and Medicaid participating hospitals and other healthcare settings.
- The U.S. Department of Veterans Affairs is the first federal agency to mandate the COVID-19 vaccine for healthcare personnel who work in VA facilities, visit the facilities, or provide direct care to those served by the federal agency.
- Nearly 60 health organizations (representing physicians, nurses, pharmacists, and other healthcare personnel) signed a joint statement calling on healthcare employers and long-term care providers to require staff COVID-19 vaccination.
- In the Policy Statement on Mandatory COVID-19 Vaccination of Health Care Personnel, AHA strongly urges the vaccination of all healthcare personnel. AHA supports hospitals and health systems that adopt mandatory COVID-19 vaccination policies for healthcare personnel, with local factors and circumstances shaping whether and how these policies are implemented.
- It is important for leadership to ensure they create COVID-19 vaccination policies to provide exemptions for medical reasons and accommodations consistent with Federal Equal Employment Opportunity Commission guidelines (e.g., a sincerely held religious belief, practice, or observance).

Financial Concerns

Many hospitals and health systems face increasing financial challenges due to the ongoing pandemic (e.g., lost revenue from canceled procedures/surgeries, expensive and long treatments of COVID-19 patients, treating an increased number of uninsured patients). The continuation of the pandemic could exacerbate these challenges.7

- COVID-19 significantly affected revenue levels,8 leaving leaders responsible for quickly determining strategies for recouping some of those resources. Many executives report being held personally accountable for achieving financial goals.9
- Safety net hospitals saw a larger financial impact due to high COVID-19 hospitalization rates in the communities they serve (primarily rural and urban areas).

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Some large healthcare systems showed a profit in 2020 by taking actions early in the pandemic such as suspending cash dividend payouts and mergers and acquisitions. They are experiencing a rebound in medical utilization in 2021. Insurers note that medical costs in 2021 could rise 10% above pre-pandemic levels due to deferred care from 2020 being delivered this year.\textsuperscript{10}

Results reported in the 2021 HHS OIG National Pulse Survey noted that the COVID-19 pandemic contributed to dramatic increases in operational costs while revenue declined threatening financial stability.\textsuperscript{11}

Increase financial needs are related to:

- Expansion capacity for additional space within facility and outside of facility (e.g., patient care area expansion, alternate care sites, warehouse/ supply chain operations)
- Resource needs for equipment, disposable medical supplies, and PPE
- Increase in pharmaceutical costs due to shortages as well as use of specific medications for treatment
- Salaries and wages
- Digital equipment

Revenue Losses

- AHA estimated that hospitals and healthcare systems lost at least $323 billion in 2020. Note that the CARES Act provided $100 billion to hospitals and other providers; an additional $75 billion in relief funds was earmarked under the Paycheck Protection Program.\textsuperscript{12}

- An independent study commissioned by the AHA found that the median hospital margin pre-pandemic was 3.5%. Without the CARES Act, median hospital operating margins would be down 4.9 percentage points; with this funding, margins may only decrease by 1.2 percentage points. It is projected that more than half of all hospitals in the U.S. will have negative margins.\textsuperscript{13}

- The same report also notes that hospitals and healthcare systems could face between $53 billion to $122 billion total revenue loss in 2021. Contributing factors to this loss include recovery volumes, vaccine progress, and sustained decline in cases or cyclical surges in cases.

- In a survey by the Healthcare Financial Management Association:\textsuperscript{14}
  - Just 11% of all executives—and only 3% of health system respondents—believed federal funding would be enough to cover COVID-19 related costs.
  - Twenty-nine percent of executives reported the pandemic has increased the likelihood of their organization participating in merger and acquisition activities (15%) or seeking new partnerships (14%).

Example strategies that hospital executives listed in 2020 for offsetting the pandemic’s financial impact include:\textsuperscript{15}

- Making reductions in capital expenditures to include new and existing construction (76%)
- Adjusting labor variables (e.g., implementing furloughs, layoffs, and hiring freezes) (76%)
- Canceling or renegotiating contracts and co-management agreements (69%)

\textsuperscript{11}HHS OIG. (2021). Hospitals Reported that the COVID-19 Pandemic Has Significantly Strained Health Care Delivery.
• Bankruptcy
  » According to the AHA, more than three dozen hospitals entered bankruptcy in 2020.16
  » Many hospitals and health systems will no doubt be threatened by similar outcomes in the near future.

• Waivers
  » The HHS Secretary can temporarily modify or waive certain Medicare, Medicaid, CHIP or HIPPA requirements under 1135 waivers. Coronavirus waivers and flexibilities for healthcare providers have been implemented to help ease the financial burdens associated with the pandemic, including:
    • Preapproval requirements for Accelerated and Advanced Payment Program, COVID 19 Government Program Reimbursement, Suspension of Medicare Sequestration, and Expansion of Telehealth Reimbursement. Tracking the status of these waivers is integral for hospitals to effectively take advantage of available programs.
    • Requirements for physicians and other healthcare professionals to be licensed in their state of practice with equivalent licensing in other states.
    • Performance deadlines and timetables (may be adjusted but not waived).
    • Payment limits permitting Medicare enrollees to use out-of-network providers in emergency situations.
    • Cost-sharing for telehealth visits.
    • Location of care waivers, including CMS Hospital Without Walls, and ability to bill inpatient services in observation and other environments on the facility campus – allowing broader reimbursement for services provided under surge conditions.
    • Additional CMS modifications include increasing access for Medicaid and Medicare beneficiaries to COVID-19 testing and vaccines. Hospitals should maintain awareness of changing coverage and equipment.

• Additional Funding Sources
  » Congress passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act stimulus bill for $2.2 trillion in response to the COVID-19 pandemic. Under this act, the Paycheck Protection Program and the Health Care Enhancement Act provided $175 billion to aid hospitals and healthcare providers as the Provider Relief Fund.
  » Under the CARES ACT, the U.S. Treasury established the Coronavirus Relief Fund with $150 billion allotted for state, local and tribal governments. Payments from the fund can only be used to cover certain expenses.
  » In October 2020, an additional $20 billion was added to the Coronavirus Relief Fund for healthcare providers. There are additional funding sources through government sponsored programs enacted or expanded to assist medical facilities in maintaining resiliency.

The Office of the Assistant Secretary for Preparedness and Response (ASPR) awarded $150 million to support patient surge preparedness and response through the Coronavirus Preparedness and Response Supplemental Appropriations Act. Funds were distributed to 62 existing state, local, and territorial Hospital Preparedness Program (HPP) cooperative agreement recipients, hospital associations, the National Emerging Special Pathogens Training and Education Center, and 10 regional Ebola and special pathogen treatment centers. ASPR awarded an additional $250 million under the CARES Act to these same entities.

Administering COVID-19 Monoclonal Antibody infusions is another revenue stream for healthcare facilities, but it also requires additional resource and staffing commitments.17

The AHA provides additional information on available funding sources for healthcare providers:18

- Sources of financial support for healthcare providers during the COVID-19 pandemic (chart developed by Jones Day)
- The Public Health and Social Services Emergency Fund
- Grants through the Federal Emergency Management Agency (FEMA)
- Accelerated and advanced Medicare payments
- Suspension of the Medicare sequestration
- Expanded coverage of telehealth and COVID-19 testing
- The Paycheck Protection Program
- The Main Street New and Expanded Loan Facilities
- Various employer tax provisions

Technology

- The COVID-19 pandemic has accelerated and transformed the use of digital technology within healthcare. A 2021 Healthcare Digital Transformation Survey found that:19
  - 70% of respondents plan to increase spending on digital investments
  - 60% plan to add new digital products
  - 42% are accelerating some of their existing digital transformation plans
  - 39% of respondents are using technology for real-time reporting
  - 24% are using advanced analytics (forecasting and predictive models)
  - 28% of state data exists in dashboard that only few can access

- The survey also listed the top three areas where healthcare organizations are investing:
  - Telemedicine (75%, up from 42% in 2019)
  - Electronic health record interoperability (64%, up from 43% in 2019)

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18AHA. Sources for Financial Support for Health Care Providers during the COVID-19 Pandemic.
Patient portals or other digital messaging systems (56%, up from 50% in 2019)

During the pandemic, telehealth platforms were utilized by many health systems; some may have been rolled out too rapidly. Healthcare executives need to review their systems’ infrastructure to identify any weak points.

Cybersecurity threats and attacks on healthcare facilities doubled in 2020 with 28% tied to ransomware, causing financial burden, lost records, and policies/procedural changes.\(^{20}\)

According to the HHS OIG National Pulse Survey, hospitals reported the following benefits and challenges associated with using technology platforms during the pandemic:\(^{21}\)

- Virtual care/acute care delivery at home is an important care delivery model
- However, virtual care cannot cover all aspects of healthcare delivery – must examine revenue generation and contribution to overall patient service carefully
- Individuals in underserved communities may not have access to devices and internet
- In the report hospitals feel telemedicine is beneficial and even with the challenges, they want to retain the program going forward.

### Conclusion

With no end in sight, the COVID-19 pandemic will continue to challenge healthcare system leaders. Patient surges stress already overworked staff. Significant drops in revenue call for some to consider declaring bankruptcy. Cyberattacks necessitate increased awareness and target hardening. With every challenge, however, healthcare leaders have stepped up, innovated, and worked with healthcare, emergency management, supply chain, and other partners in unprecedented ways. This document highlights some considerations and strategies that can help executives as they recover from surges and prepare for new waves of the virus and all other hazards.

### Acknowledgements

Contributors and reviewers of this document are listed alphabetically and include:


\(^{21}\)HHS OIG. (2021). Hospitals Reported that the COVID-19 Pandemic Has Significantly Strained Health Care Delivery.