



# **LEARNING FROM COVID:**

## **Emerging Best Practices for Healthcare Systems**

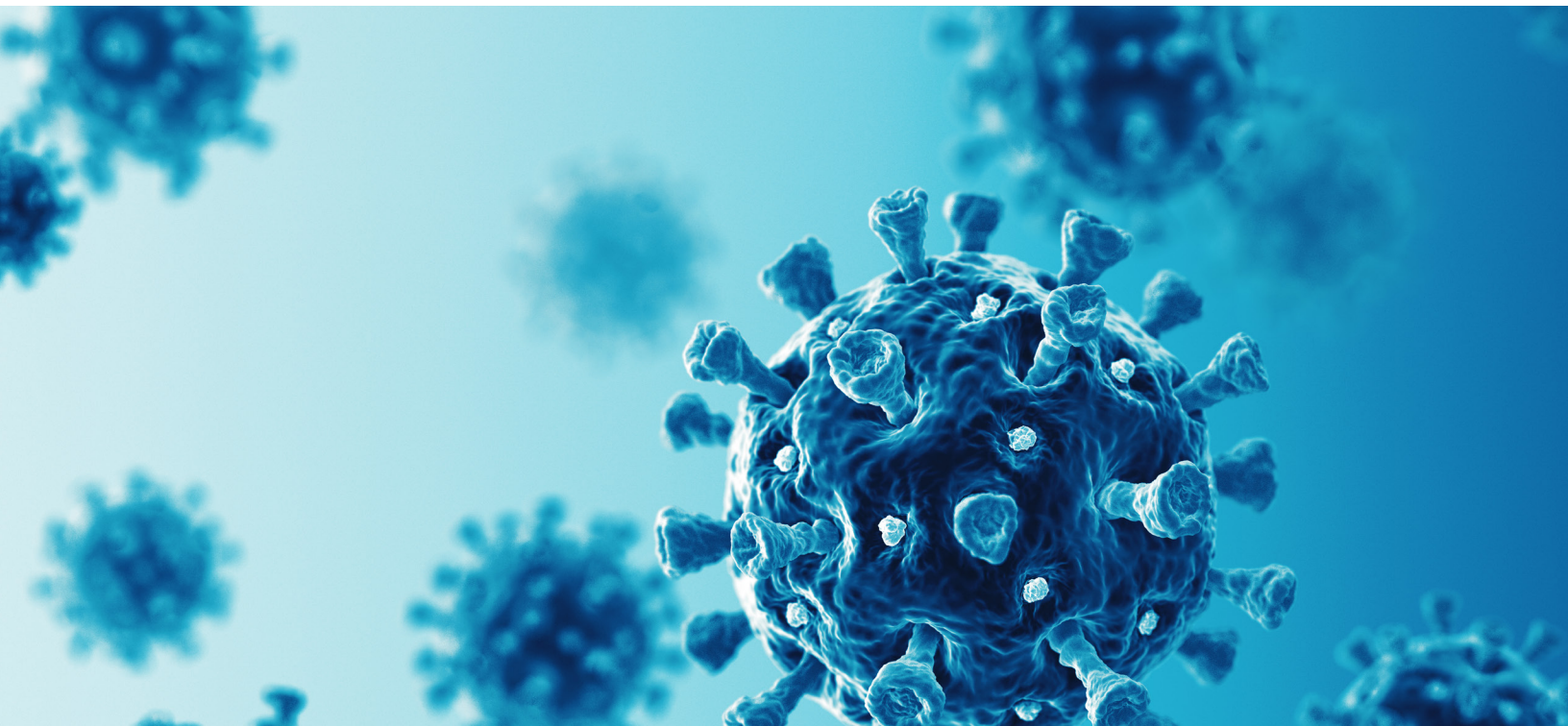
By Rhea Bachani, MHA



## INTRODUCTION

COVID-19 has forced all of us to confront a new reality. Through all the loss, it has challenged our abilities to innovate quickly and, in many ways, has created a new standard of healthcare practice. Whether looking at the way it has accelerated the advancement of telemedicine, or how it has broadened the way we perceive the scope of modern healthcare through application of artificial intelligence, this global pandemic has reinvented what is possible in the delivery of healthcare. With this new perspective comes a refined set of best practices that have emerged, as the healthcare industry turns toward a new wave of advancements.

This article will explore the evolving best practices in healthcare resulting from COVID-19 that will likely remain in place long after life returns to “normal”.





## TECHNOLOGICAL INNOVATIONS

As the first wave of the pandemic progressed in early 2020, technology tools were called upon to help plan for staffing needs and for shift scheduling, as well as managing healthcare professionals who contracted COVID-19. As time went on, telemedicine, artificial intelligence and predictive analytics accelerated their pace of adoption.

### Telemedicine

Telemedicine is a technological advancement that had begun to surface prior to the onset of the coronavirus and whose usage has increased greatly during these months of isolation. Telemedicine appointments not only helped reduce the spread of the virus, but also provided convenience and time savings for patients.

From the physician's perspective, more patients can be seen, as there is less down time in between appointments. According to a McKinsey & Co. report, physicians are able to see between 50 to 175 times more patients through telemedicine as compared to in-clinic visits.<sup>1</sup> This, in turn, increases revenue for the practice while also increasing access to care.

Changes in The Center for Medicare and Medicaid Service's (CMS) rules have also contributed to the rising popularity of telemedicine. A major limitation for U.S. physicians has been that they are only allowed to practice medicine in the state in which they are licensed. However, CMS now allows physicians to participate in telemedicine visits outside of their home state. This vastly increases the scope and quality of care, because now a specialist in one state can help a patient in need in another state. Medicare also now pays physicians the same rates for telemedicine services as they do for in-person diagnoses. Physicians are seeing a higher volume of patients and still being paid the same rate per patient, thereby increasing the incentive to provide telemedicine services.



### Artificial Intelligence

Due to the intense nature of the pandemic and the exponential rise in cases, this period has been very taxing for the healthcare professionals who are on the frontlines of the battle. In particular, physicians and nurses who are caring for COVID-19 patients are suffering from clinician burnout. Burnout often causes medical professionals to leave their practice due to the burdens and stress levels. This, in turn, reduces the number of healthcare professionals in the field and decreases the access and continuity of care for patients.

## Physicians are able to see between 50 to 175 times more patients through telemedicine as compared to in-clinic visits.

-McKinsey & Co. COVID-19 Consumer Survey

In the past, clinician burnout has been addressed through work-life balance training, mindfulness activities, limitations on work hours, and other means of preventative action. Yet, because of the pandemic, not all of these methods are feasible, as physicians and nurses do not have the liberty of time. Therefore, actions are being taken to integrate artificial intelligence (AI) into daily workflows in an effort to prevent burnout and eliminate some of the burdens that frontline workers face.

One way that AI can aid healthcare professionals is through the concept of a keyboard-free environment. By taking over the keyboard process in the physician workflow, AI will give physicians and nurses the ability to have more time with their

<sup>1</sup> <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>

patients face to face, with less time staring at a computer screen. This will improve the patient experience and reduce the workload on medical personnel. And because AI is programmed to function similarly to how the human mind operates, this technology could be integrated smoothly into workflows without healthcare professionals feeling a lack of approachability or enduring a major learning curve.

AI advancements as a result of COVID-19 are ones that can aid healthcare professionals long after the pandemic comes to an end. “It is through workflows that AI can help improve some of the most critical outcomes, reduce costs and enhance clinical accuracy,”<sup>2</sup> states Dr. Ruben Amarasingham, a former practicing physician and founder and CEO of Pieces Technologies, a healthcare artificial intelligence and technology company.

Artificial intelligence has also been useful in the management of coronavirus patients. Regional Cancer Care Associates, a cancer center based in New Jersey, took advantage of machine learning technology to improve the way they prioritized patients. Since nurses wanted to prioritize based on need, the team was able to create a program that filtered the highest risk patients into a single list, allowing staff to allocate resources according to urgency.<sup>3</sup>

**“It is through workflows that AI can help improve some of the most critical outcomes, reduce costs and enhance clinical accuracy.”**

-Dr. Ruben Amarasingham, CEO, Pieces Technologies

## Predictive Analytics

Technological advancements are again seen in the use of labor predictive analytics. Appropriate information technology systems are necessary to track and analyze historical procedural volumes. Producing data-driven scenarios based on these volumes provides the workforce planning information needed to determine contingent, full time equivalent (FTE) and float pool/flexible staffing requirements. One of the key components of quality predictive analytics is advanced scheduling software which combines demand forecasting with scheduling functionality, enterprise transparency, and business intelligence tools, all in one application.

Managing the coronavirus has also taken place through the use of electronic medical records (EMR). EMR vendors have prepared their systems to track COVID-19 vaccine administration now and into the future. The systems remind patients to return for a second dose. This automated feature will prove helpful if patients require annual COVID-19 vaccinations or boosters for new variants.

## THE SUPPLY CHAIN

One historical objective of the U.S. healthcare supply chain that negatively impacted their ability to respond to the pandemic was the emphasis on driving down costs. This was primarily accomplished by sending manufacturing offshore to countries in which labor is cheaper than in the United States. Because of this dependency on offshore producers, the U.S. was not prepared for mass production when the need arose, particularly for masks and Personal Protective Equipment (PPE). Eighty percent of face masks were being manufactured in China when COVID-19 hit, and with the export bans put into place, the U.S. was left to fend for itself.

In order to prevent weaknesses in the supply chain from causing havoc in the future, there are certain practices that manufacturers can take to strengthen their businesses. One way is by building in redundancies in the supply chain. Although cost savings are important, benefits can be seen in carrying extra inventory for medical necessities and having backup suppliers for such goods. It is important to hold manufacturers accountable for not only their cost saving measures, but also their risk

<sup>2</sup> <https://www.healthcarefinancenews.com/news/ai-can-help-make-physicians-lives-easier>

<sup>3</sup> <https://www.healthcareitnews.com/news/machine-learning-helps-cancer-center-targeted-covid-19-outreach>

management protocols. By setting up specific safeguards to ensure a steady supply of medical necessities, manufacturers will be able to provide for the U.S. population's needs in a manner that does not put a strain on their production.

Another way the healthcare supply chain can safeguard itself is by diversifying its supply base. Although it is unrealistic to transfer all production onshore due to the time and financial investment that this would require, it is reasonable to bring at least some of the production of certain essentials back to America. The beginning steps have already been seen: Clothing manufacturers have pitched in to produce PPE, and distillers have switched some capacity to produce hand sanitizer.

Technology can contribute greatly to the improvement of the supply chain through preventative measures. Cloud-based technology increases collaboration among suppliers, therefore improving visibility and discouraging price gouging. Artificial intelligence can also be integrated to continuously monitor supply, therefore ensuring that proper action can be taken before the quantity of a good is depleted.

**It is important to hold manufacturers accountable for not only their cost saving measures, but also their risk management protocols.**

## HEALTHCARE OPERATIONS

The residual effects of the pandemic present ongoing challenges for healthcare operations executives. Revenues, which declined due to the cancellation of elective procedures and other factors, are not expected to bounce all the way back to pre-COVID levels. David Wildebrandt, a member of Berkeley Research Group's healthcare performance improvement practice, told Healthleaders that revenue growth "will be 5% to 8% less when all the dust settles."<sup>4</sup> He suggested that leaders shift their focus to fixed costs in order to meet growth targets with less revenue available.

Operating spend control is deemed to be one of the key priorities upon which hospital leadership must focus. A strategic planning approach should be implemented for the months to come in order for healthcare systems to recover and improve. Processes must be tightened and operations must evolve.

## STAFFING

With the rapid increase of COVID-19 patients, the demand for healthcare staffing has been at an all-time high. Countless healthcare systems across the nation have faced staffing shortages as they struggle to accommodate high patient volumes. A study conducted by Epic Health Research Network revealed that nursing demand increased by 245% in Fall 2020.<sup>5</sup>

Implementation of a staffing contingency plan is a key component of a successful talent strategy. A set, go-to plan will help solve growing demand in times of uncertainty or when permanent staff is overwhelmed. These shortages can be addressed by reconfiguring staff schedules and by reallocating certain duties away from frontline workers.



<sup>4</sup> <https://www.healthleadersmedia.com/finance/pivoting-pandemic-hospitals-need-fix-vulnerabilities-pursue-opportunities>

<sup>5</sup> <https://ehrn.org/articles/covid-19-impact-on-nurse-staffing-and-icu-beds>

Paula Butts, MSN, Chief Nursing Officer at Piedmont Henry Hospital in Stockbridge, GA shared how her hospital has reduced the burden on their nurses. “We have added full-time phlebotomists in the [intensive care unit] and emergency department to draw labs versus the nurse drawing labs. We have expanded the hours of pharmacy in the emergency department to assist with medication reconciliation. Additionally, we have expanded the skill set of nurses to decompress the critical care department, to include management of patients receiving high-flow oxygen. Surgical services and the cardiac cath lab staff recover and discharge patients to conserve ICU and intermediate care beds”, stated Ms. Butts.<sup>6</sup> These actions allow nurses to focus primarily on patient care and will need to continue as coronavirus treatment is integrated into our society.

As processes continue to remain primarily online, the candidate experience is affected by the shift to virtual talent acquisition. This is a growing issue, as candidates seek greater interaction in a competitive market. The proper balance of core, or permanent staff, versus the use of contingent labor is an equation that healthcare system leaders need to consider carefully, in order to provide quality care efficiently.

## **The proper balance of core, or permanent staff, versus the use of contingent labor is an equation that healthcare system leaders need to consider carefully.**

As COVID-19 persists and as more surgeries and procedures are scheduled, the need for quality staff continues. Mr. Wildebrandt predicts that staffing challenges will persist and become a “new normal” as hospitals provide care for patients with coronavirus and other conditions. Non-clinical employees have needed to adapt quickly to the new work-from-home landscape, while managers are challenged to adjust policies and ensure that productivity remains intact.

## **FINANCIAL RECOVERY**

The COVID-19 pandemic has adversely affected many hospitals and health systems’ balance sheets, potentially creating financial trouble for years ahead.

In February 2021, the American Hospital Association released an analysis which found hospital and health system revenues could be down as much as \$122 billion in 2021<sup>7</sup>, in addition to an estimated loss of at least \$323 billion in 2020.<sup>8</sup> Because hospitals tend to operate on thin margins, this makes them very susceptible to economic downturns. Mike Lappin, a member of Foley & Lardner’s transactions practice group and former Chief Administrative Officer at Advocate Aurora Health, thinks that this isn’t the time for healthcare systems to grow complacent. He stated that “Even with the relief that Congress has provided, hospitals and health systems took a big hit in the past year, especially those that are rural hospitals or those serving vulnerable populations.”<sup>9</sup>

## **\$323 Billion** **estimated hospital revenue loss in 2020**

-American Hospital Association

6 <https://www.beckershospitalreview.com/hospital-management-administration/strategies-for-covid-19-staffing-shortages-from-8-hospital-execs.html>

7 [https://www.aha.org/system/files/media/file/2021/02/KH-2021-COVID-Impact-Report\\_FINAL.pdf](https://www.aha.org/system/files/media/file/2021/02/KH-2021-COVID-Impact-Report_FINAL.pdf)

8 <https://www.healthcarefinancenews.com/news/aha-calls-more-cares-act-funds-projects-323-billion-losses>

9 <https://www.healthleadersmedia.com/finance/pivoting-pandemic-hospitals-need-fix-vulnerabilities-pursue-opportunities>

Cost factors have led some hospitals to partner with larger, more financially secure organizations. In theory, consolidations allow healthcare systems to spread their costs and provide greater specialization in key areas, thereby increasing efficiencies. Other healthcare systems are trying to increase their liquidity.

The ability to adjust to this changing healthcare environment will serve hospitals and health systems well. Recommendations include prioritizing or delaying certain capital expenses, making a rolling forecast for 2021, and using a daily dashboard for volumes and utilization.

## CONCLUSION

The lasting effects of the pandemic are reflected in changes to the practice of medicine and the advancements in care of the past year. In order to ensure that the highest quality of care is provided to the patient and that the wellbeing of healthcare professionals is prioritized, it is imperative that the management of healthcare evolve with the times. As a nation, we are now better equipped for the future, with more capable technology and a better grasp on what must be done. These best practices are creating a new foundation for healthcare services to build upon in the coming years and, in time, will be the new normal.

**TO LEARN MORE ABOUT AMN HEALTHCARE** and how we can help your organization plan for the future of healthcare, contact us at **[client.services@amnhealthcare.com](mailto:client.services@amnhealthcare.com)** or give us a call at **800-887-1456**.