

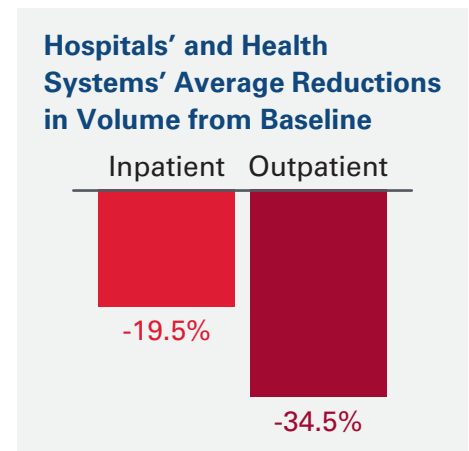
Introduction

The COVID-19 pandemic continues to take a heavy toll on America’s healthcare infrastructure. While some parts of the country have started slowly phasing out stay-at-home orders and other restrictions, hospitals and health systems remain on the frontlines of this pandemic. Experts have warned that the recovery pace for hospitals and health systems will be slow and that normal hospital volume will not come back quickly even as states lift moratoriums on non-emergent procedures. There is still grave public concern that the risk of COVID-19 infection is high and a number of states continue to maintain certain restrictions. Coupled with this is the fact that many states continue to report increasing cases of COVID-19.¹ As recently as June 24th, state departments reported the highest number of new infections since the previous record set on April 25th.² These factors have led to historic reductions in hospital inpatient and outpatient volumes, which have in turn driven drastic reductions in revenues and margins – all of which can impact hospitals’ and health systems’ abilities to serve their communities.

Driving these reductions in volume and revenue are the costs of avoided and forgone medical care and additional costs borne by hospitals related to purchasing personal protective equipment (PPE) and other supplies and equipment. The American Hospital Association (AHA) previously estimated that the financial impact of COVID-19 on hospitals and health systems totaled \$202.6 billion in losses over a four-month period between March 2020 and June 2020.³ However, the slow recovery of inpatient and outpatient volumes to baseline levels, coupled with continued and increasing COVID-19 infection rates, has exacerbated these financial losses. As noted in AHA’s prior report, as patients are hospitalized for COVID-19, hospitals’ costs to treat these patients exceed expected reimbursement, which results in further financial losses.

To understand better the continued pressure hospitals and health systems face, the AHA conducted a survey of member hospitals on their current reductions in inpatient and outpatient volumes, as well as how quickly they expect to return to baseline patient volumes similar to 2019, if ever. This report describes the results of this survey and their use in projecting the financial impact of reduced hospital inpatient and outpatient volumes in 2020, assuming that patient volumes return to baseline levels by July 2021. The financial impact also takes into account the additional costs of acquiring PPE as patient volumes grow. Based on this analysis:

Hospitals and health systems currently report average declines of **19.5% in inpatient volume and 34.5% in outpatient volume** relative to baseline levels.



The AHA estimates an additional **\$120.5 billion in total financial losses** from July 2020 through December 2020 should hospitals and health systems reach baseline patient volumes by July 2021, or an average of **\$20.1 billion per month. These estimates are in addition to the \$202.6 billion in losses the AHA estimated between March 2020 and June 2020 bringing the total projected losses to hospitals and health systems in 2020 to at least \$323.1 billion.**

While the financial impacts estimated in this report are comprehensive, they may underrepresent the full financial losses hospitals will face in 2020. Importantly, the analysis does not account for currently increasing case rates in certain states, or potential subsequent surges of the pandemic occurring later this year. If the current surge trends continue, the financial impact on hospitals and health systems could be even more significant. The AHA's estimates also do not include all expenses, such as increased acquisition costs for drugs and non-PPE supplies and equipment. The financial impacts estimated in this report are above and beyond the \$202.6 billion in financial impact the AHA estimated in its prior report, highlighting the dire financial challenges that hospitals and health systems will continue to face for the foreseeable future. Though the federal government has continued to provide relief funds to hospitals and health systems, those funds still pale in comparison to the losses that hospitals and health systems have already incurred and will continue to face through the end of 2020 and likely into 2021.



Background

Since the first case of COVID-19 was reported in the U.S. in January 2020, over 2.4 million individuals in the U.S. have been infected, with over 124,000 deaths.⁴ These grim statistics illustrate the breadth of the pandemic and its deleterious impact on communities. Despite certain local, state, and federal actions to ease restrictions, the pandemic has yet to show substantial signs of decline, and in fact is seeing increases in case rates in certain states.

As many states began reopening measures allowing for greater social contact, hospitals and health systems focused on safeguarding the health of their patients and staff, while also preparing for the uncertain future. This uncertainty has led many individuals to continue to postpone or delay their medical care, despite moratoriums on the provision of non-emergent care being lifted in most states. A May 2020 Kaiser Family Foundation (KFF) tracking poll found that 48% of respondents said they or a family member had skipped or postponed medical care in the last three months due to COVID-19 concerns.⁵ The same KFF survey found that 26% of respondents were willing to wait four months or more to seek previously forgone care.⁶

While states have begun easing restrictions on social contact, many restrictions and policies remain in place for hospitals and health systems to ensure public health. In some states, restrictions are being re-imposed after new increases in case rates. These policies include, but are not limited to:

- **Bed Capacity.** Many states are limiting hospital volume by requiring hospitals to maintain a certain number of vacant beds. For example, hospitals and health systems in Arizona cannot exceed 80% occupancy.⁷ At least 10 other states have imposed a similar policy, reserving between 20-30% of licensed or intensive care unit (ICU) beds in case the state experiences a surge in COVID-19 patients.⁸
- **PPE Reserves.** Many states are requiring hospitals and health systems to maintain a reserve of PPE. For example, Oregon is requiring large hospitals to maintain a 30-day supply of PPE, and small hospitals must maintain a 14-day supply.⁹ These requirements are intended to ensure the safety of hospital workers and patients, and limit the risk of transmission. This also means that hospitals may need to reduce the number of surgeries and procedures to maintain an adequate supply of PPE.

- **Screening for COVID-19 Among New Patients and Hospital Staff.** Many states are implementing policies that require hospitals and systems to screen incoming patients, as well as certain hospital staff for COVID-19. These requirements vary from temperature checks, to self-attestation of risk or exposure to COVID-19, and to lab tests for the virus. For example, Virginia and Colorado require that hospitals ensure staff or patients are tested prior to surgery.^{10,11}

Hospitals and health systems are committed to ensuring the safety of their patients and staff, as well as improving the health of our country. For this reason and in addition to state mandates, many hospitals and systems have moved to implement similar policies on their own.^{12,13,14} On the other hand, it's likely that these policies will extend financial recovery for hospitals and health systems, because of their effects on patient flow and hospital volumes.

Collectively, these new policies and insufficient demand for hospital services have led to sharp decreases in inpatient and outpatient volume. A recent study by Strata Decision Technology of their proprietary claims data found that inpatient volume was down 22% and outpatient volume was down 35% compared with the same time last year.¹⁵ The same study found that emergency department (ED) use fell 40% compared with the same time last year.¹⁶ This finding was reinforced by a KaufmanHall study that found a 43% decline in ED use compared with the same time last year.¹⁷ The Morbidity and Mortality Weekly Report released by the Centers for Disease Control and Prevention (CDC) also showed a 42% decrease in ED use after the U.S. declared a state of national emergency in March.¹⁸ Such drastic decreases in inpatient and outpatient volumes have resulted in declining hospital revenues and, sustained over several months, have hastened the decline of hospital margins well below normal levels. It also is important to note that COVID-19 hospitalizations have generated some level of inpatient and outpatient volume. However, as noted in AHA's prior report, the average cost of these hospitalizations exceed expected reimbursement, further exacerbating the financial challenges hospitals face.

Methodology

Surveying Hospitals on Reductions in Inpatient and Outpatient Volume

The AHA undertook a survey of hospitals to collect information regarding:

- Inpatient and outpatient volume reductions below baseline levels, as measured by the previous year's volume, and
- When hospitals expect to return to baseline inpatient and outpatient volumes.

Electronic survey results were compiled in early June. Responses representing 1,360 hospitals were received across 48 states, Washington D.C., and two U.S. territories. Approximately one-third of respondents represented hospitals and health systems in rural areas. Weighted averages were calculated for all survey data. Incomplete responses and any duplicate, inconsistent or otherwise unusable responses were excluded from the analysis.

Estimating the Financial Impact of Inpatient and Outpatient Volume Decreases

The AHA estimated the financial impact of current reductions in inpatient and outpatient volume reaching baseline levels over time by using results from the survey and applying that to historical inpatient and outpatient revenues. Since AHA's prior report projected financial impacts through June 2020, this study projects financial impacts starting in July 2020 through December 2020. However, the majority (67%) of respondents indicated that volume would not return to baseline in 2020. Experts have also suggested that the pandemic is likely to continue for at

least another 12 months.¹⁹ Therefore, the AHA assumed a return to baseline patient volume by July 2021. Although under this scenario hospitals will continue to incur losses from reduced volume into 2021, this report focuses on the estimated losses through the end of 2020 given the high level of uncertainty regarding a number of future factors, including but not limited to, potential subsequent COVID-19 surges and changing trends in insurance coverage as a result of an economic downturn.

Annual inpatient and outpatient gross revenues were taken from the 2018 AHA Annual Survey Database (ASDB) and were inflated to 2020 dollars using the increase in hospital care expenditures as reported in the National Health Expenditure Accounts²⁰, and then converted to monthly figures. The weighted average of current inpatient and outpatient volume decreases from baseline, taken from the survey, were then applied to the monthly inpatient and outpatient gross revenues. To account for the expected month-to-month increase in inpatient and outpatient volume until baseline was achieved in July 2021, the AHA applied a negative compound annual growth rate (CAGR) to each of the inpatient and outpatient gross revenue losses on a monthly basis until baseline was achieved. Monthly inpatient and outpatient gross revenue losses were summed to yield a total monthly gross revenue loss. This number was then converted to a net patient revenue loss based on 2018 ASDB data. The monthly net revenue losses were then summed from July 2020 through December 2020 resulting in a cumulative financial impact figure.

Estimating the Additional Cost of Acquiring Sufficient PPE

Data from the Society of Healthcare Organization Procurement Professionals (SHOPP) were used to determine the relative increase in total PPE acquisition cost per bed per day due to COVID-19.²¹ These increases in costs took into account both increases in unit cost of PPE and increases in volume of PPE required to meet new guidelines established by the CDC. This increase in cost per bed per day was scaled to all U.S. hospitals by the total number of U.S. hospital beds. To project increases in PPE costs as inpatient and outpatient volume reach baseline in July 2021, the AHA applied the same monthly CAGRs used to estimate increases in inpatient and outpatient volume over time. These monthly CAGRs yielded estimates of the increased PPE cost per bed per month and those were summed from July 2020 through December 2020 to generate a cumulative financial impact figure.

Results

The AHA estimates **\$120.5 billion** in total financial impact from July 2020 through December 2020, or an average **\$20.1 billion per month**, should hospitals and health systems reach baseline patient volumes by July 2021. **These estimates are in addition to the \$202.6 billion in losses the AHA estimated between March 2020 and June 2020, bringing total financial losses for hospitals and health systems in 2020 to at least \$323.1 billion**, not including the impact of currently increasing COVID-19 case rates. If the current surge trends continue, the financial impact on hospitals and health systems could be even more significant. These figures were derived based on the following findings:

Survey Results on Inpatient and Outpatient Volume Reductions

Hospitals reported significant reductions in current inpatient and outpatient volume relative to their baseline. The weighted averages of current inpatient and outpatient volume reductions were 19.5% and 34.5%, respectively.

Hospitals also were asked when they expected to achieve baseline. Overall, 67% indicated that they did not think they would achieve baseline by the end of this year. However, nearly 30% of hospitals reported that this timeframe was “unknown” or that they “never” expected to return to baseline volumes.

Financial Impact of Inpatient and Outpatient Volume Reductions

Based on projections using these survey data, the AHA estimates \$116.7 billion in financial impact from July 2020 through December 2020 should hospitals and health systems reach baseline patient volumes by July 2021. This figure does not include the PPE costs that are described separately below. The figure also does not include the impact of currently increasing COVID-19 case rates or any subsequent waves of the pandemic.

Financial Impact of Acquiring Additional PPE

The AHA estimates that the cost of acquiring additional PPE would be \$3.8 billion from July 2020 through December 2020 should hospitals and health systems reach baseline patient volumes by July 2021. As the COVID-19 pandemic continues, the demand for PPE remains high relative to normal operations. This high demand is further heightened as inpatient and outpatient volumes return to baseline levels over time and additional PPE is needed. In addition, some states are requiring hospitals to maintain two weeks or more of PPE reserves in the event of a surge in COVID-19 hospitalizations. Collectively, these factors are increasing the need for and expense on PPE for hospitals.

Discussion

The nation's hospitals and health systems, which remain on the frontlines as the COVID-19 pandemic continues, are increasingly financially vulnerable and in need of additional support. The AHA estimates that hospitals and health systems will experience at least \$120.5 billion in total financial losses from July 2020 through December 2020 due to current reductions in patient volumes and additional expenses associated with acquiring PPE. These financial impacts are in addition to the \$202.6 billion in losses the AHA estimated between March 2020 and June 2020. In total, the AHA estimates that hospitals will incur at least \$323.1 billion in losses through the end of this year. Though these analyses already indicate the immense financial challenges hospitals and health systems face, they likely under-represent the total financial impact. This is because some cost factors contributing to the total financial impact are not included in the analyses due to limited available data. In addition to the impact of currently increasing COVID-19 case rates in many states, other costs not included in this analysis include:

- **Drug Acquisition and Shortage Costs.** As hospitals continue to treat COVID-19 patients in addition to patients with other conditions, the demand for certain drugs has increased (e.g., antibiotic agents, sedatives, etc.), while supply for these drugs has decreased due to fractured pharmaceutical supply chains. This has led to significant shortages for many drugs and created upward pressure on prices, resulting in hospitals acquiring these drugs at higher prices.²² These higher drug prices have increased overall costs for hospitals, with one study showing a 62% year-over-year increase in drug costs per adjusted discharge.²³
- **Wage and Labor Costs.** With COVID-19 cases continuing to rise across the nation, hospital and health systems continue to experience staff shortages and increased hours for some hospital workers. This has led hospitals to implement bonus pay and other similar measures to compensate workers, increasing overall wage costs. In addition, staff shortages have forced hospitals to hire staff from professional staffing firms, many of whom have raised their rates due to increased demand. With no sign of the pandemic subsiding soon, the AHA expects that hospitals will continue to experience increased wage and labor costs.
- **Uncompensated Care Costs.** One of the unfortunate consequences of this pandemic has been the sharp rise in unemployment in this country, which has led to an increase in the number of uninsured and underinsured. One study has suggested that there could be an increase of over 15 million uninsured Americans due to

COVID-19 alone.²⁴ As the number of uninsured and underinsured grow and many are forced to seek hospital care due to COVID-19 infections or other conditions, hospitals and health systems will need to incur higher uncompensated care costs to treat these individuals. In addition, these costs are likely to increase the longer the pandemic endures and as more patients return to hospitals for non-COVID-19-related care.

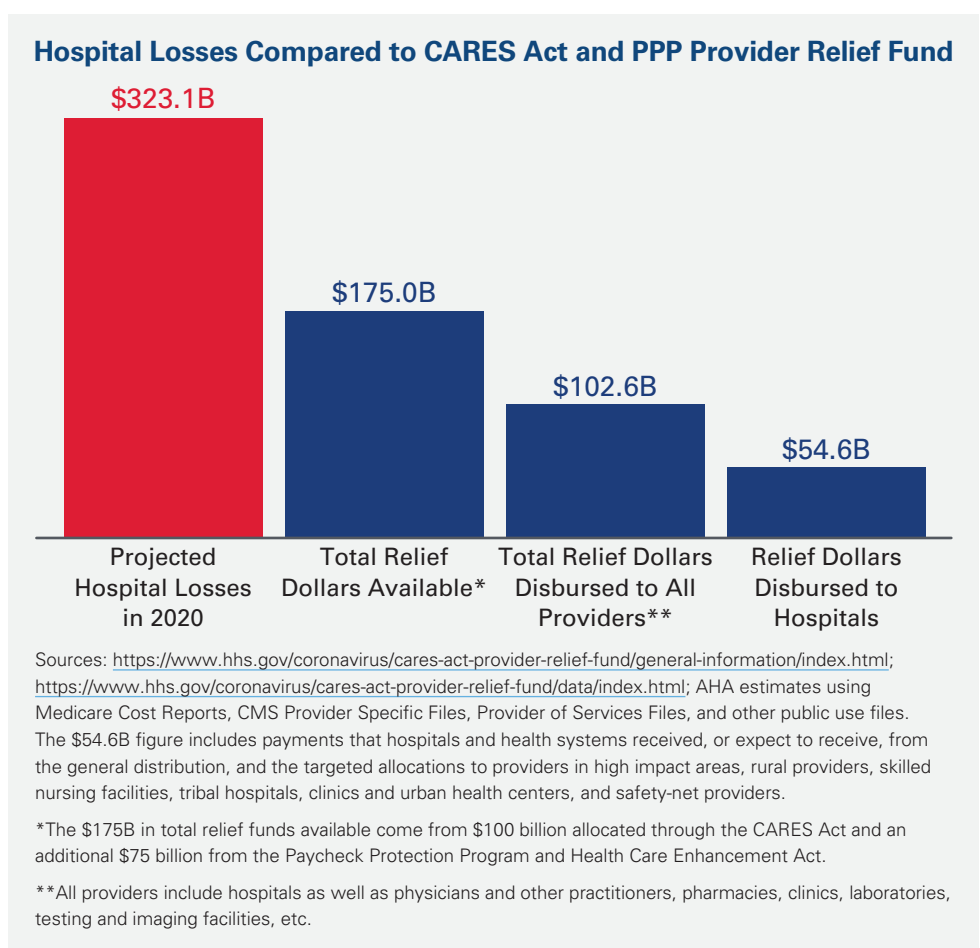
- **Non-PPE Medical Supplies and Equipment Costs.** As current reductions in inpatient and outpatient volume subside over time and COVID-19 patients continue to be seen, hospitals will need to incur more costs to acquire the necessary medical supplies and equipment (e.g., ventilators, surgical tools, syringes, medical scopes, etc.) to meet increased patient demand.
- **Capital Costs.** Many hospitals and health systems have already invested heavily in expanding bed capacity and providing additional space for testing and triaging of COVID-19 cases. As COVID-19 surges continue in different parts of the country, hospitals will need to expend further resources to address the need for additional treatment capacity.

The totality of these expenses in combination with the financial impacts estimated by the AHA in this report and its prior report, illustrate the significant financial burden being shouldered by our nation’s hospitals and health systems. In addition, this report does not attempt to quantify additional losses from currently increasing COVID-19 case rates, subsequent COVID-19 surges or changing trends in insurance coverage as a result of an economic downturn this year or beyond 2020.

While Congress and the Trump Administration have worked to deliver funds to hospitals and health systems with the goal of mitigating these financial impacts, the efforts have been inadequate to address the crisis.

The Coronavirus Aid, Relief, and Economic Security (CARES)

Act allocated \$100 billion and the Paycheck Protection Program and Health Care Enhancement Act allocated an additional \$75 billion. However, these funds were intended for all healthcare providers and suppliers, not just hospitals. As of June 2020, the AHA has estimated that hospitals have received approximately \$54.6 billion of the \$102.6 billion in CARES Act relief funds that have been disbursed by the U.S. Department of Health and Human Services (HHS) based on the information HHS has released regarding the methodologies they have used. Though significant, this amount represents just a fraction of the total financial losses already experienced by hospitals, and



these losses are likely to continue to grow. **Therefore, more financial support is urgently needed to safeguard America's hospitals and health systems.**

The AHA urges policymakers and other stakeholders to carefully consider the unprecedented financial pressure faced by our nation's hospitals and health systems. **These losses put hospitals' survival at serious risk.** As the country continues to confront the unique and perilous challenges of COVID-19, communities across America cannot see hospitals close and access to life-saving treatment be restricted – action is needed urgently to support our nation's hospitals and health systems and their front-line staff.

Sources

1. <https://www.npr.org/sections/health-shots/2020/03/16/816707182/map-tracking-the-spread-of-the-coronavirus-in-the-u-s>
2. <https://www.washingtonpost.com/nation/2020/06/24/coronavirus-live-updates-us/>
3. <https://www.aha.org/system/files/media/file/2020/05/aha-covid19-financial-impact-0520-FINAL.pdf>
4. <https://coronavirus.jhu.edu/map.html>
5. Kaiser Family Foundation (2020). KFF Health Tracking Poll – May 2020. Available at <https://www.kff.org/coronavirus-covid-19/report/kff-health-tracking-poll-may-2020/>.
6. Ibid.
7. <https://azdhs.gov/documents/preparedness/epidemiology-disease-control/infectious-disease-epidemiology/novel-coronavirus/healthcare-providers/waiver-faq.pdf>
8. The following states require hospitals and health systems to maintain 20% bed capacity: Colorado, Illinois, Massachusetts, Oregon, and Washington. Virginia requires 25% capacity. Iowa, Kentucky, and New York require 30%.
9. Oregon Health Authority (2020). Guidance on resumption of non-emergent and elective procedures. Available at <https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le2322u.pdf>.
10. Virginia Department of Health (2020). FAQ: Non-urgent procedures and surgeries. Available at <https://www.vdh.virginia.gov/coronavirus/coronavirus/faq-non-urgent-procedures-and-surgeries/>.
11. Department of Public Health & Environment, Colorado (2020). Second amended public health order 20-29: Limited commencement of voluntary or elective surgeries and procedures in Colorado. Available at <https://drive.google.com/file/d/1DZAp5qpiFBzRYa7TD18JA9n2qel-raW6/view>.
12. New York-Presbyterian (2020). General visitation guidelines. Available at <https://www.nyp.org/coronavirus-information/coronavirus-visitor-policy-change>.
13. Stanford Health Care (2020). Safely resuming patient care. Available at <https://stanfordhealthcare.org/stanford-health-care-now/2020/novel-coronavirus/shc-clinical-care-and-services.html>.
14. Ascension (2020). Coronavirus disease (COVID-19). Available at <https://healthcare.ascension.org/COVID-19>.
15. Strata Decision Technology (2020). National Patient and Procedure Volume Tracker: Analysis of 2 Million Patient Encounters Reveals U.S. Hospitals are Losing \$60 Billion per Month. Available at https://www.stratadecision.com/wp-content/uploads/2020/06/National-Patient-and-Procedure-Volume-Tracker-and-Report_Weekly-Update_June1_2020.pdf.
16. Ibid.
17. KaufmanHall (2020). National Hospital Flash Report. Available at <https://flashreports.kaufmanhall.com/national-hospital-report-may-2020>.
18. https://www.cdc.gov/mmwr/volumes/69/wr/mm6925e2.htm?s_cid=mm6925e2_w
19. <https://www.nytimes.com/2020/06/21/health/coronavirus-pandemic-spread-trump.html>
20. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData>. We used the growth in actual and projected expenditures between 2018 and 2019, respectively, as well as the growth rate between the 2019 and 2020 projected values.
21. The Society for Healthcare Organization Procurement Professionals (2020). White paper re: Marginal PPE costs incurred by skilled nursing facilities and assisted living centers treating COVID-19 patients. Available at: http://cdn.cnn.com/cnn/2020/images/04/16/shopp.covid.ppd.costs.analysis_.pdf.
22. <https://www.premierinc.com/newsroom/press-releases/premier-inc-data-shows-drugs-essential-to-providing-care-for-covid-19-patients-quickly-slipping-into-shortage>
23. KaufmanHall (2020). National Hospital Flash Report. Available at <https://flashreports.kaufmanhall.com/national-hospital-report-may-2020>.
24. <https://www.rwjf.org/en/library/research/2020/05/how-the-covid-19-recession-could-affect-health-insurance-coverage.html>