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COVID-19 in 2021: The Potential Effect on Hospital Revenues

KaufmanHall

How could COVID-19 affect the financial health of hospitals in 2021?

In 2020, COVID-19 undermined our nation's health and severely tested our hospitals and health systems. At the same time that a series of spikes in COVID-19 cases and hospitalizations put intense pressure on hospital staff and resources, steep declines in non-COVID-19 volume led to sharply lower revenues.

As hospital executives, policymakers, and other stakeholders seek to understand hospitals' financial state in 2021, a new set of interconnected factors must be considered:

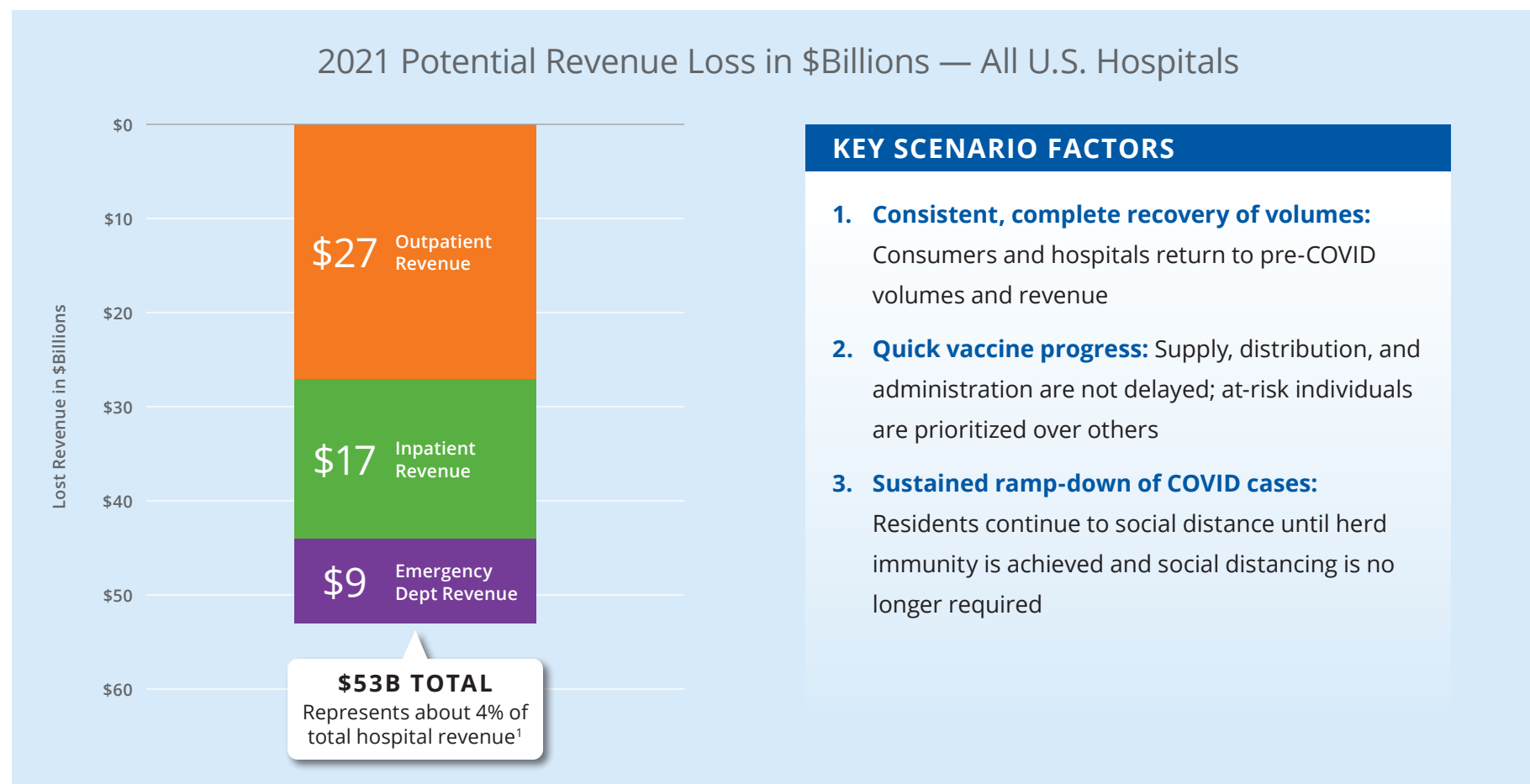
- **Recovery of hospital volumes:** The degree and pace at which inpatient, outpatient, and emergency department volumes return
- **COVID-19 vaccine progress:** The availability of vaccines, the speed of distribution, and the prioritization of different populations for vaccination
- **Decline in COVID-19 cases:** The degree and pace at which COVID-19 cases decline, based on public use of social distancing and achievement of herd immunity

In this report, Kaufman Hall used historical hospital revenues and different possible paths for these three recovery factors to **forecast 2021 hospital revenue**, a critical criterion in determining the financial health of America's hospitals. The report presents two scenarios related to the three recovery factors—one more optimistic and one more pessimistic. Both scenarios are realistic, and both show a significant revenue loss compared with what would be expected absent the effect of COVID-19. The report also shows expense factors associated with COVID-19 likely to continue to pressure hospital finances as the pandemic continues.

This report was prepared at the request of the American Hospital Association.

Key Findings

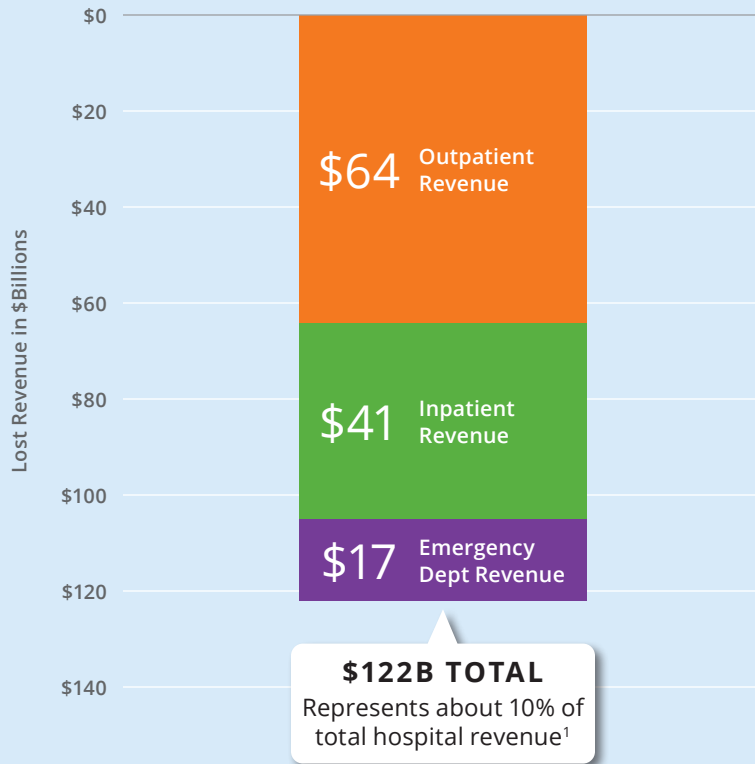
Under an optimistic scenario, hospitals could face a *\$53 billion total revenue loss in 2021*



1. Calculated as total potential revenue loss divided by All Hospital Revenue from Q3 2019 through Q2 2020 from St. Louis Federal Reserve FRED Database
Note: Revenues do not include potential additional government support.

Under a pessimistic scenario, hospitals could face a *\$122 billion total revenue loss in 2021*

2021 Potential Revenue Loss in \$Billions — All U.S. Hospitals



KEY SCENARIO FACTORS

- 1. Slow, partial recovery of volumes:** Consumers and hospitals adapt to a “new normal” for volumes and revenue post-pandemic
- 2. Slow vaccine progress:** Vaccine supply and distribution are delayed, with continued administration challenges
- 3. Cyclical COVID surges:** Residents stop social distancing before herd immunity is achieved, which contributes to a cyclical rise in COVID-19 cases and hospitalizations

1. Calculated as total potential revenue loss divided by All Hospital Revenue from Q3 2019 through Q2 2020 from St. Louis Federal Reserve FRED Database
Note: Revenues do not include potential additional government support.

The pandemic will stress hospitals' expenses in addition to revenue

In 2020, hospitals experienced increases in certain expenses due to COVID-19; these expense pressures could continue into 2021 as the pandemic continues. On a volume-adjusted basis, the following expense categories had the greatest increases over non-pandemic timeframes.

Expense Metric per Adjusted Discharge	2020 Increase Over 2019	Additional COVID-19 Context
Drug Expense	17%	Hospitals saw their volume-adjusted drug expenses increase, as the patients being admitted to the hospitals increased in severity and required more therapeutics, including COVID-19 patients.
Purchased Service Expense	16%	Hospitals saw an increase in purchased services as a number of areas required specialized functions to be brought in, such as environmental services and sterilization for maintaining safe spaces with COVID-19 patients.
Labor Expense	14%	Labor expenses increased despite many hospitals furloughing portions of their workforce. Contract labor, hazard pay, and other elements contributed to the expense in order for hospitals to maintain a safe and effective process for patients and employees alike.
Supply Expense	13%	Supply expenses also dramatically increased as hospitals scaled up their purchasing of personal protective equipment and other equipment to safely treat patients. Shortages throughout the year of various types led to higher prices of some items.

Source: Kaufman Hall National Hospital Flash Reports, January through December 2020

Observations

In 2021, COVID-19 will continue to undermine the financial health of America's hospitals

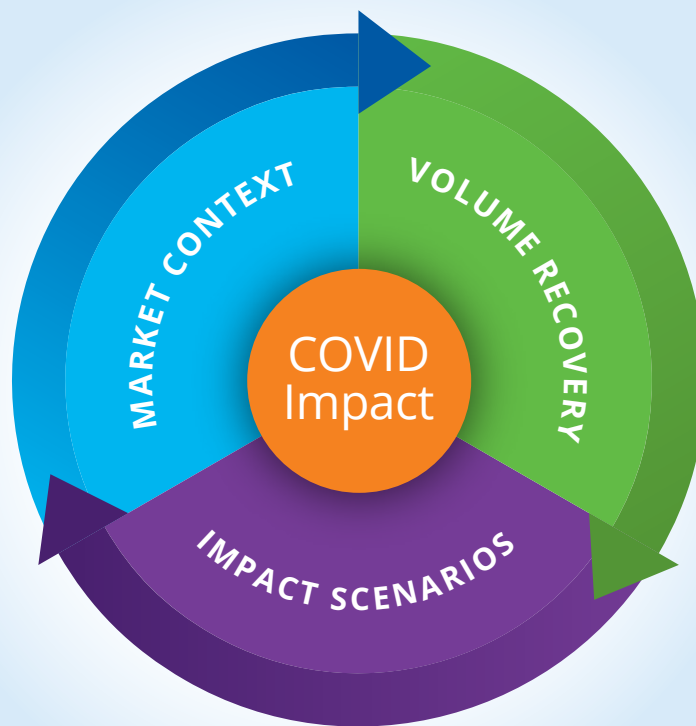
Before COVID-19, America's hospitals were experiencing downward revenue pressure from both government and commercial payers, resulting in a very thin 2.5 percent median margin in 2019, according to the Kaufman Hall Operating Margin Index. At the same time, hospitals have been challenged to invest heavily in digital health and other forward-looking capabilities, which emerged as critical when COVID-19 struck.

Our forecast that total hospital revenues in 2021 could be down between \$53 billion and \$122 billion (4 percent to 10 percent of total revenue) is bad news, indeed.

Whether recovery from COVID-19 in 2021 is relatively rapid or relatively slow, America's hospitals will face another year of struggle to regain their financial health while providing necessary care and services to a nation that is continuing to experience the effects of an unprecedented pandemic.

Methodology

Kaufman Hall's approach to modeling potential COVID-19 effects focused on three key questions



- 1 What market forces will affect volume and financial recovery?**
 - Unemployment and payer mix shifts
 - Consumer price sensitivity and delays in care due to cost
 - Patients' willingness to return
 - Reduced travel and tourism
- 2 What are the anticipated volume recovery trends across forecast groups?**
 - Lag in return to hospital vs. ambulatory
 - Required capacity and resource constraints
 - COVID-19 hospitalization scenarios
- 3 How do we anticipate impact across the healthcare provider landscape?**
 - Link model outputs to global drivers
 - Develop potential scenarios and sensitivity analyses

COVID-19 scenario projections were a fundamental input

Given high levels of uncertainty in COVID-19 predictions, our methodology included identification of the key drivers to inform the shape of COVID-19 “curves” across U.S. markets, and illustration of these COVID-19 “curves” to highlight potential scenarios.

Key drivers of COVID-19 spread are informed by market, social behavior, and policy factors (e.g., testing) that can indicate whether an increase or decrease in COVID volume is likely.

Historical COVID-19 archetypes across U.S. markets highlight the interplay between the case load spread and attempts to limit the spread of the virus over time.

The analysis also considered the potential effects of vaccination efforts.

Our approach focused on understanding the COVID-19 drivers and the historical market “archetypes” to inform scenarios

The intensity and speed of impact of vaccine rollout could vary greatly

RAPID IMPACT

- Accelerated decline in hospitalizations due to vaccine rollout to at-risk populations
- Readily available vaccine supply with no delays in distribution and administration

DELAYED IMPACT

- Delayed decline in hospitalizations due to vaccine rollout to at-risk populations
- Delays in distribution and administration due to limited vaccine supply

Our two scenarios incorporate variables for vaccine distribution, consumer return to care, and volume recovery

OPTIMISTIC

Ramp-down in COVID-19 cases/hospitalizations; rapid vaccination progress

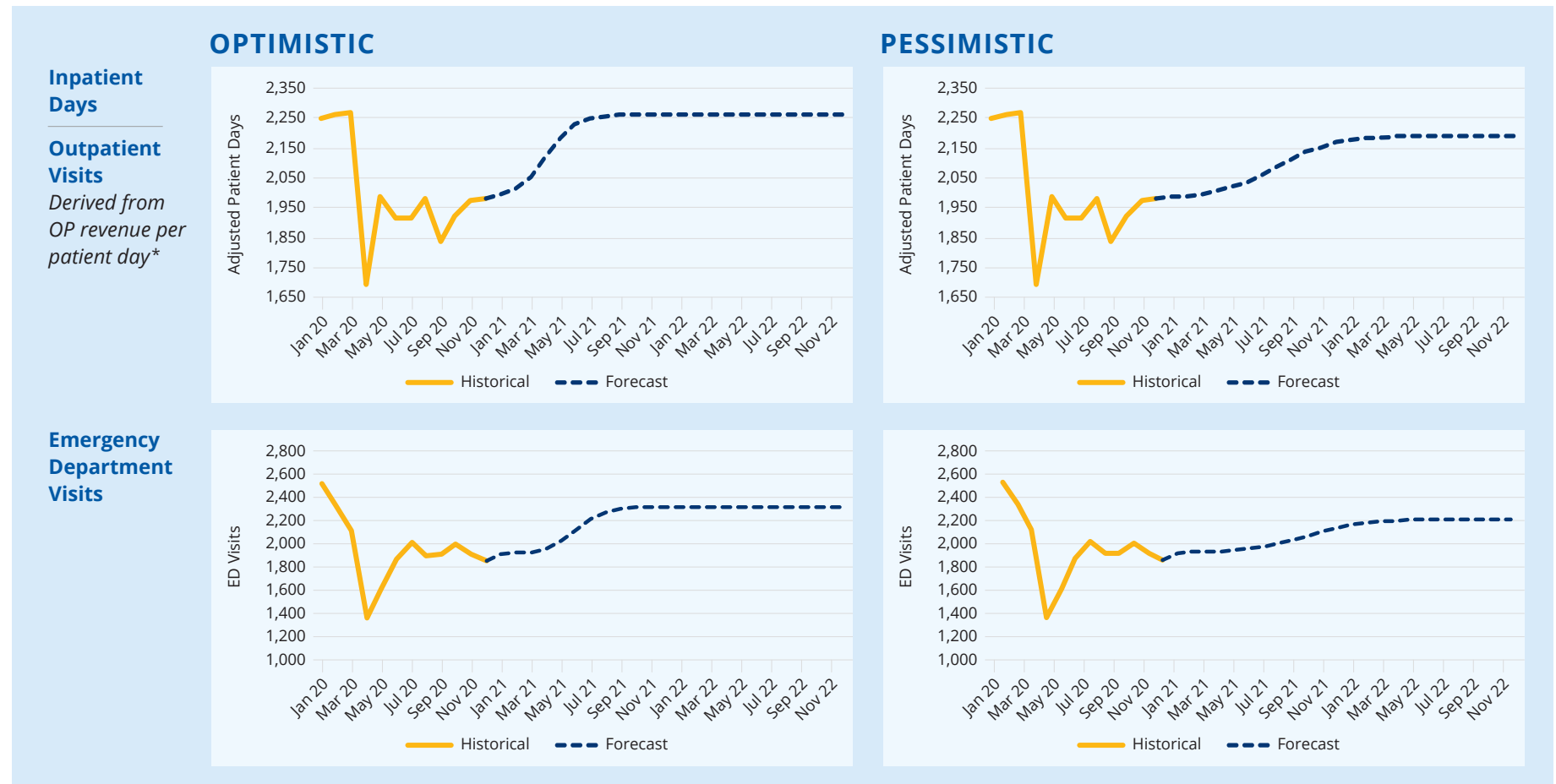
- **Vaccine:** Supply, distribution, and administration are not delayed; at-risk individuals are prioritized over others
- **Social Distancing:** Residents continue to social distance until herd immunity is achieved and social distancing is no longer required

PESSIMISTIC

Cyclical surges in COVID-19 cases/hospitalizations; delayed vaccination progress

- **Vaccine:** Vaccine supply and distribution are delayed with continued administration challenges
- **Social Distancing:** Residents stop social distancing before herd immunity is achieved, which contributes to cyclical rise in COVID Cases / Hospitalizations

COVID-19 scenarios were applied to major hospital revenue drivers



* Outpatient revenue effects were partly derived from the inpatient volume, by using IP/OP adjustment factor trends, share of visit revenue from total outpatient revenue, and other factors in which inpatient volume is linked to outpatient revenue.

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