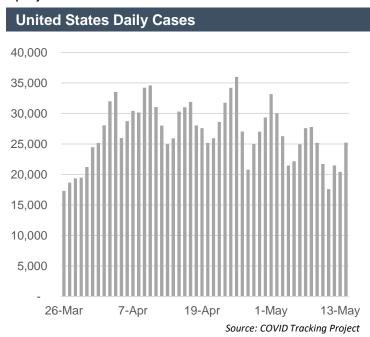
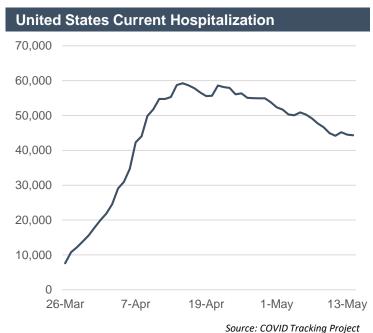


The Curve Is Flat and We Still May Have A Healthcare Crisis

The stay-at-home orders were not meant to stop the virus, but to slow it down. Shutdowns and quarantines were initiated to delay and reduce peak cases – to flatten the curve. The primary concerns were hospitalizations exceeding healthcare resources (beds, ventilators, doctors, nurses, etc.) and creating a healthcare crisis. We have flattened the curve, and except for a few hospitals in hotspots, there was no shortage of resources and there was no healthcare crisis. U.S. new cases have peaked and are trending down. Current hospitalizations are down. According to the often-cited University of Washington model, hospital resource use peaked on April 19th, and projected use is down.





Decline in Projected Hospital Resource Usage in the U.S. 70,000 Apr 19: Peak Hospital Resource Use 60,000 50,000 40,000 30,000 20,000 10,000 0 21-May 21-Jun 21-Apr 21-Aug – All Beds needed (projected) — — ICU Beds needed (projected) Invasive Ventilators needed (projected)

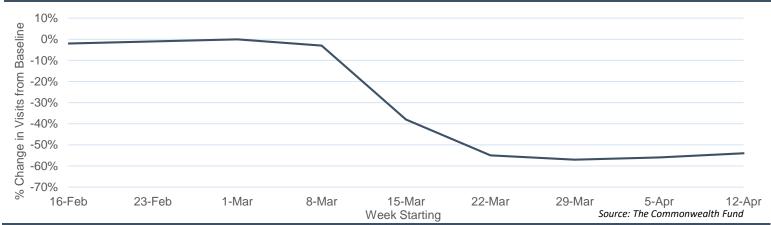




"Cytokine Storm"

The immune system will sometimes overreact to an infection causing greater complications in the body - a "cytokine storm." This over-active immune response is believed to be behind some fatal cases of COVID-19. Parallel the body's immune response with the policy response to the virus. While trying to avert a healthcare crisis, the response created a crisis of a different sort. A report released by the American Hospital Association noted unprecedented financial pressures on hospitals due to COVID-19. The report estimates the economic loss for hospitals and health systems to be \$202.6 billion for the four-month period from March 1st to June 30th. This comes when even prior to the pandemic the Congressional Budget Office projected that as many of 50% of hospitals would have negative margins by 2025. Physician practices have also taken a major hit, with a 60% average decrease in patient volume and a 55% average decrease in revenue, according to a Medical Group Management Association survey. The lack of patient visits and declining revenue has resulted in 1.4 million healthcare job losses so far in April, with 500,000 jobs cut from dentists' offices and 250,000 from physicians' offices. Another unintended consequence is delayed healthcare diagnosis and treatment, which doctors fear may lead to more serious future health issues for some. Epic Health Research Network says EHR data is showing an 86-94% drop in preventive cancer screenings, and emergency room visits are down ~50%, including a nearly 40% drop in the number of severe heart attacks being treated in U.S. hospitals in March alone. The CDC says heart disease is the leading cause of death in the U.S., and about 647,000 Americans die from heart disease every year, or about 1,800 a day.





Total Number of Heart Attacks In 9 High Volume Cardiac Cath Labs



