

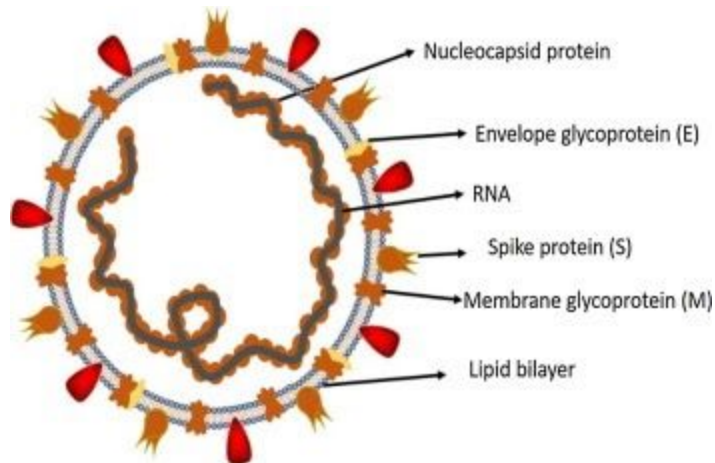
DISCOVERING THE HEALTHCARE SYSTEM

Jaquelin Adler

****New information on this disease is accumulating every day and is subject to change. Inevitably, some of it will no longer be up to date while reading this. To mitigate this, I have linked the websites where information is being updated closer to real-time.**

My senior project encounters and takes on a huge aspect of the novel coronavirus pandemic. For my senior project, I was in hope to answer: How are various healthcare facilities around the world dealing with COVID-19, and how can understanding this help make the healthcare system more fair and equitable for all?

COVID-19 Biology



What is Coronavirus?

1

COVID-19 is the actual name of the disease caused by the new coronavirus, rather than the actual virus itself - the virus has been named SARS-CoV-2. Coronavirus gets its name from the spikes around the virus. These viruses developed virions (virus particles) which are “club-shaped glycoprotein spikes in the envelope giving the virus a crownlike or coronal appearance. The nucleocapsid is made up of a protein shell known as a capsid that contains the viral nucleic acids.”² The genome consists of a single strand of positive-sense RNA (ribonucleic acid) and is made up of around 29,000 nucleotides. We have had coronavirus outbreaks before such as SARS and MERS,

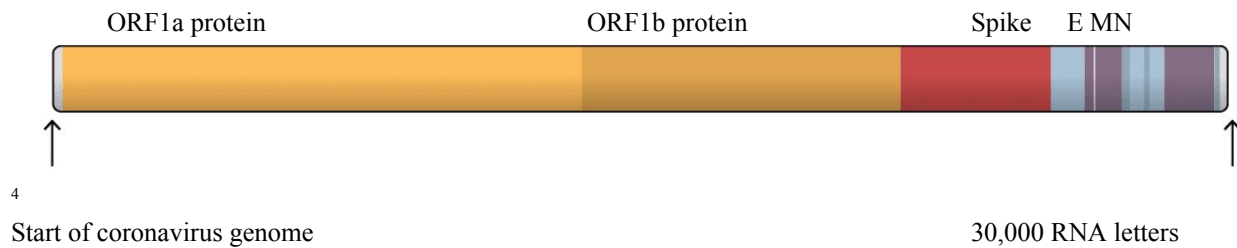
those CFR Case Fatalities were a lot higher than COVID-19 per capita, however, we were able to control it more and stop the spread of the disease. COVID-19 droplets can travel and enter the T-zone on someone's body and infect them. It is still questionable as to whether the virus can be transmitted through certain animals, food, and different surfaces. What we do know as of March 2nd, 2020 is that transmission can happen during the incubation period but is still somewhat unclear as to when people are infectious towards others. It is said that “81% of COVID-19 cases are mild or asymptomatic, while 14% of cases lead to serious illness and 5% require critical care, most countries are prioritizing testing those who are critically or severely ill.”³ This zoonotic virus hijacks other cells so it can stay alive, so once the virus enters your system, they go into the cells and they begin to multiply and invade healthy cells and start taking over the body.

Mutations of COVID-19 (As of April 30th, 2020):

¹ Shereen, Muhammad Adnan, et al. “COVID-19 Infection: Origin, Transmission, and Characteristics of Human Coronaviruses.” *Journal of Advanced Research*, Elsevier, 16 Mar. 2020, www.sciencedirect.com/science/article/pii/S2090123220300540#b0270.

² “Access Britannica School.” *Britannica School*, school.eb.com/levels/high/article/coronavirus/487680.

³ COVID-19: DIAGNOSTICS AND TESTING FOUNDATION FOR INNOVATIVE NEW DIAGNOSTICS



“A cell infected by a coronavirus releases millions of new viruses, all carrying copies of the original genome.” Which is the mutation and then it accumulates more mutations.⁴ The first genome of COVID-19 (Wuhan-Hu-1) was collected on December 26th from an early patient in Wuhan. Another genome (WH-09) was collected from another patient in Wuhan on January 8th, however, the genome was the same but for the mutation on the 186th letter of the RNA- U instead of C. This same mutation was seen 7 weeks later in a different patient 600 miles South of Wuhan. A third sample was collected (GNMU0030) on February 27th in Guangzhou, China with three mutations- two of them changing an amino acid.

When the first case of COVID-19 came to Seattle after a man who had visited his family in Wuhan tested positive, the genome of his virus contained three single-letter mutations also found in viruses in China. “Five weeks later, a high school student in Snohomish County, Wash., developed flu-like symptoms. A nose swab revealed he had Covid-19. Scientists sequenced the genome of his coronavirus sample and found it shared the same distinctive mutations found in the first case in Washington, but also bore three additional mutations...That combination of old and new mutations suggested that the student did not acquire the coronavirus from someone who had recently arrived from another country. Instead, the coronavirus was probably circulating undetected in the Seattle area for about five weeks, since mid-January.” “A different version of the coronavirus was also secretly circulating in California. On Feb. 26, the C.D.C. announced that a patient in Solano County with no known ties to any previous case or overseas travel had tested positive. A sample taken the next day revealed that the virus did not have the distinctive mutations found in Washington State. Instead, it only had a single mutation distinguishing it from the original Wuhan genome. That indicates that it got to California through a separate introduction from China.”⁴ “Some viruses carried mutations indicating they had arrived from China or other parts of Asia. But in New York City, the majority of viruses researchers isolated from patients were genetic matches to viruses that had been circulating in Europe.”⁴ However, like many other viruses, this coronavirus undergoes many mutations from which it can sometimes evolve into new strains. Fortunately, these mutations haven’t had a significant change in how the virus affects us.

Timeline:

LIVE SCIENCE COVID-19

December 31st 2019

- There was a cluster of cases of pneumonia of unknown etiology detected in Wuhan, China.
 - Huanan Seafood Wholesale Market was identified as being associated with the cases

January 1st 2020

- The Central Committee of the Communist Party of China and the State Council launched a national emergency response. Internationally, on 2nd January 2020, the incident management system (IMS) of the WHO was activated.

January 7th 2020

- Chinese authorities identified as a type of Coronavirus (SARS coV-2)

January 13th 2020

- Covid-19 was seen out of China and was found in Thailand (Within days, Japan and the Republic of Korea reported imported cases.)

January 20th 2020

- The USA reported its first case in Washington state after someone returned to Washington State after visiting family in Wuhan, China.

January 22nd/23rd 2020

- The WHO declared A public Health Emergency of International Concern (PHEIC)
 - PHEIC: Public Health Emergency International Concern

⁴ Corum, Jonathan, and Carl Zimmer. “How Coronavirus Mutates and Spreads.” The New York Times, The New York Times, 30 Apr. 2020, www.nytimes.com/interactive/2020/04/30/science/coronavirus-mutations.html.

- Today, a healthy volunteer in Seattle became the first person to receive an experimental coronavirus vaccine as part of a new clinical trial, but it will still be a while before it's ready for the public to use, according to a Live Science report.

March 17th 2020

- The Los Angeles area is facing a blood shortage after 160 major blood drives were canceled in the last couple of weeks, according to CNN.
- The Trump administration is planning to turn back asylum seekers and foreigners trying to enter the U.S. from Mexico illegally out of coronavirus concerns, according to the New York Times.
- "While we are confident that stores will remain open and supply will continue to meet demand nationwide, we ask all Americans to only purchase enough food and essentials for the week ahead," Dr. Stephen Hahn, the Food and Drug Administration (FDA) Commissioner said in a statement today
- The coronavirus has now spread to all 50 states and D.C. West Virginia, the last state to report infections, confirmed its first case on Tuesday, according to the Washington Post

March 18th 2020

- Canada and the U.S. will be closing the border between them to non-essential traffic, according to a tweet from Donald Trump.
- The White House is proposing an emergency stimulus package that would send two rounds of \$1,000 directly to Americans and would allocate \$300 billion for helping small businesses, according to The Washington Post
- President Donald Trump announced he is invoking a law passed in 1950 to increase the production of critical medical supplies to fight the coronavirus, according to NBC News. The law, known as the Defense Production Act, allows the president to require U.S. businesses to make materials for national defense, which in this case, could be ventilators or protective equipment for health care workers, such as face masks.
- A naval ship with 1,000 hospital beds is headed to New York Harbor in light of the growing number of coronavirus cases in the state, according to The New York Times. The nearly 900-foot ship, called the USNS Comfort, has previously deployed to areas hit by natural disasters, including Puerto Rico after Hurricane Maria in 2017, the Times reported.
- University of Oxford scientists developed a test for the new coronavirus which they claim can deliver results in 30 minutes, according to a press release.
- The U.S. Senate has passed a measure to provide paid sick leave, unemployment benefits and free coronavirus testing as well as food and health aid to people affected by the pandemic, according to The New York Times. The bill will now be sent to President Donald Trump, who is expected to sign it.
- Italian volunteers 3D printed unofficial valves, which were in short supply at Italian hospitals, to help with coronavirus treatments, according to The Verge.

March 19th 2020

- President Trump said in a news conference that he had cut bureaucratic barriers so that effective treatments for COVID-19 could be developed as fast as possible. FDA Commissioner Stephen Hahn said the President had directed the agency to take a closer look at whether hydroxychloroquine, a treatment for malaria, might benefit patients with COVID-19, according to CNN.
- Senate Republicans introduced an economic relief bill that would provide \$1,200 to Americans making up to \$75,000 a year, along with an extra \$500 per child, according to The Washington Post. The bill, known as the Coronavirus Aid, Relief, and Economic Security Act, would also provide loans to small businesses as well as tax cuts to larger corporations.

March 20th 2020

- New York Governor Andrew Cuomo said all non-essential businesses must close in the state and people should stay indoors except to go outside for "solitary" exercise. Cases in the state are nearing 6,000, according to the Johns Hopkins Dashboard.
- Tax day, or the day by which people need to file their income tax returns, was postponed to July 15, Treasury Secretary Steven Mnuchin said on Friday.
- The World Health Organization (WHO) distributed 1.5 million coronavirus tests around the world, Dr. Mike Ryan, executive director of the WHO health emergency program said at a briefing on Friday. But that's not enough: the world will need at least 80 times the amount of tests, he added.

March 21st 2020

- In an undercover mission, Israel's spy agency Mossad has purchased COVID-19 testing kits from abroad and will deploy them across the nation for drive-through testing, the Wall Street Journal reported. The prime minister Benjamin Netanyahu said he hopes to carry out thousands of tests a day.
- "We're doing better with ventilators, nowhere near where we need to be with ventilators, we need 30,000 ventilators, we're at 6,000," he said. "But at least we got to 6,000." They have also been making progress on finding more masks, he added. New York state is sending 1 million N95 masks to NYC, Cuomo said.
- Thousands of the country's 450,000 National Guard members in at least 27 states have been called up to help in the fight against the coronavirus pandemic, according to The New York Times.

March 22nd 2020

- Russia is sending equipment and 100 doctors and virologists to Italy, a country that is still facing the worst of the new coronavirus, according to CNN. Italy now has over 53,500 cases and 4,825 deaths, according to the Johns Hopkins Dashboard.
- Warmer weather might slow down the coronavirus spread, according to a new early analysis from the Massachusetts Institute of Technology. The scientists found that the most coronavirus transmissions around the world occurred in places with low temperatures, The New York Times reported.
- Senate Democrats blocked an economic rescue plan that was over \$1.8 trillion, claiming it didn't protect workers like it should during the coronavirus outbreak and didn't impose strict-enough restrictions on businesses getting help from the government, according to the New York Times.
- Harvey Weinstein, who is serving a 23-year sentence for rape and sexual assault in a New York prison, has reportedly tested positive for the coronavirus

March 23rd 2020

- A loss of smell and taste could be signs of COVID-19, the New York Times reported.
- Social distancing measures might already be helping to flatten the curve for the first time in Germany, according to Reuters. "We see the trend that the exponential growth curve is somewhat flattening" in Germany, said Lothar Wieler, head of the Robert Koch Institute, a German federal government agency. "But I will only be able to confirm this trend definitively on Wednesday."
- As of Friday (March 20), there are 86 clinical trials of COVID-19 treatments or vaccines ongoing or recruiting patients, according to a new Live Science report.
- The Food and Drug Administration approved self-collected swabs for coronavirus testing, Vice President Mike Pence said today. People can now self-swab in clinics and drive-through tests, he said.
- Public transport will start up again within 24 hours in Wuhan, China, where the coronavirus outbreak began, and people will be allowed to leave the city starting on April 8, the Hubei provincial government announced Tuesday.

March 24th 2020

- New York will begin to collect plasma from recovered COVID-19 patients to give a treatment to those still infected with the disease, Governor Andrew Cuomo announced on Monday. This treatment, known as convalescent plasma, was used for centuries, such as during the flu epidemic of 1918, according to NBC News.

- Elon Musk plans to distribute over 1,200 ventilators made by both SpaceX and Tesla this week, according to Space.com.

March 25th, 2020

- Within days, 15-minute home test kits for COVID-19 will be available to the British public, a Public Health England director said, according to The Independent.
- The coronavirus isn't mutating quickly, according to experts who are closely monitoring its genetic code for changes, according to the Washington Post. This means that the virus is unlikely to become more or less dangerous as time goes by and that potential vaccines could be more long-lasting, according to the report.
- Medical students will be allowed to graduate from New York University earlier than scheduled in May so that they can help combat the coronavirus outbreak, according to a statement from the school.
- Americans with incomes below \$100,000 will likely receive checks or direct deposits of \$1,200 each within the next three weeks under a rescue package deal, Treasury Secretary Steven Mnuchin said at a news briefing on Wednesday, The New York Times reported

March 26th 2020

- There were 3.3 million unemployment claims filed in the U.S. last week, the highest number of unemployment claims filed since the Department of Labor started tracking in 1967, according to CNN.
- As the coronavirus sweeps through the U.S., the country faces a shortage of ventilators. It's possible to use a single ventilator between 4 patients as a temporary fix, but it could be disastrous, according to a Live Science report

March 27th 2020

- Crime rates have recently increased across Europe amid the coronavirus outbreak, Europol, the European Union's law enforcement agency said in a report. "Criminals have been quick to seize opportunities to exploit the crisis by adapting their modi operandi or engaging in new criminal activities," they wrote. Crimes such as cyberattacks, fraud schemes, scams, sale of counterfeit healthcare and sanitary products and organized property theft are likely to increase even more, they wrote and CNN reported.
- COVID-19 cases likely won't peak in New York for another 21 days, Governor Andrew Cuomo said today. At the outbreak's peak, the state will need about 140,000 beds, or about 87,000 more than it has right now.
- States aren't testing uniformly for the coronavirus, creating a distorted picture of the outbreak in the U.S., according to a Live Science report.
- The first patients have been enrolled in a drug trial by the World Health Organization testing four drugs to fight COVID-19, according to CNBC. The drugs include antimalarial drugs chloroquine and hydroxychloroquine, an antiviral known as Remdesivir and HIV drugs Lopinavir and Ritonavir and a combination of drugs along with interferon-beta.
- On Friday, Apple released a website and an app that allows users to screen themselves for coronavirus symptoms, according to CNN Business.
- Over the next 100 days the United States expects to either make or acquire over 100,000 additional ventilators, President Trump said in a White House news briefing. The U.S. typically makes about 29,000 ventilators a year.

March 28th 2020

- Domestic violence is likely to increase during these lockdowns amid the coronavirus pandemic, the United Nations said, according to CNN.

March 29th 2020

- The U.S. health department's civil rights office is opening up investigations to make sure states aren't allowing medical providers to discriminate against people based on disabilities, race, age or other factors when treating them for the coronavirus, according to The New York Times

March 30th 2020

- Nearly 12,300 health workers in Spain have tested positive for COVID-19, deputy health emergency chief Maria Jose Sierra said at a news conference on Monday (March 30), according to Reuters. That means health care workers make up 14% of the country's over 85,000 cases.

March 31st 2020

- According to The Hill, "As of Monday morning, 569 active-duty service members have contracted the illness, as had 220 civilian personnel, 190 family members and 64 contractors."
- The Centers for Disease Control and Prevention (CDC) is currently reconsidering its guidance that people don't need to wear masks when they're out of their homes, according to NPR.
- Six feet may not be enough space for social distancing, according to a Live Science report. The best way to ensure safety is to stay indoors and away from other people as much as possible, according to the report.
- Around 500 additional emergency medical technicians and paramedics will begin working in NYC in response to the record number of 911 calls that are being reported, Mayor Bill de Blasio said today. In addition, thousands of nurses will be coming to the city to help.
- Russia is sending medical equipment and protective gear to the U.S. on a plane that will take off today, the Kremlin said, according to The Washington Post. Russia's president Vladimir Putin, agreed to send supplies to the U.S. if the U.S. reciprocates with its own supplies should Russia need it one day.

April 1st 2020

- While other European countries have enforced lockdowns on people to curb the spread of the coronavirus, Sweden has not (though public gatherings of over 50 people are prohibited). The Swedish government left it up to the residents to act responsibly — social distance, work from home and self-isolate if you're over the age of 70 — without putting many restrictions in place, according to NBC News.
- The world economy has entered a recession that it likely won't recover from until 2021, the International Monetary Fund declared, according to The New York Times.
- Up to 25 % of people with COVID-19 may not show any symptoms, according to a Live Science report. "That's important, because now you have individuals that may not have any symptoms that can contribute to transmission," Dr. Robert Redfield, director of the Centers for Disease Control and Prevention, told NPR this week
- California schools will remain closed for the rest of the school year, Governor Gavin Newsom said today during a briefing.

April 2nd 2020

- New York will run out of ventilators in six days, if the rate of ventilator-use continues as it has been, Governor Andrew Cuomo said today (April 2). "If a person comes in and needs a ventilator and you don't have a ventilator, the person dies," Cuomo said during a news briefing. "That's the blunt equation here."

- The Food and Drug Administration (FDA) authorized the first antibody test to detect COVID-19, according to a statement. This test, produced by the biotech company Cellex, could be used to detect people who have already had COVID-19.
- There are now over 1 million COVID-19 cases worldwide, according to a Live Science report. That's 10 times more cases than the world reported a month ago.
- FDA authorized the first antibody test for COVID-19

April 3rd 2020

- Austria will randomly test people for the coronavirus to get a better overview of how many people are infected in the country, according to CNN. The country currently has over 11,000 cases and 168 deaths, according to the Johns Hopkins dashboard.
- The White House has recommended people wear cloth face masks while out in public even if they aren't sick, according to The New York Times.
- Governor Cuomo said he will sign an executive order that will allow New York to redistribute medical equipment from hospitals and companies that aren't using them to hospitals that need them right now, according to The New York Times.
- Asymptomatic people may be fueling the coronavirus spread, according to another Live Science report. For every person who tested positive for the coronavirus in China, there were likely another five to eight asymptomatic people who didn't know they had the infection, according to a new study.

April 4th 2020

- Nearly 4 billion people on the planet are under lockdown measures, according to The New York Times.
- At least three 5G-type phone towers have been set on fire in the United Kingdom, after conspiracy theorists suggested the higher-frequency radio waves somehow accelerate the spread of the novel coronavirus, the BBC News reported.

April 5th 2020

- A 4-year-old tiger at the Bronx Zoo tested positive for the coronavirus, according to a statement. The Tiger, Nadia and her sister Azul, two Amur tigers and three African lions all developed dry coughs, but are all expected to recover, according to a Live Science report.

April 6th 2020

- The coronavirus seems to mutate much slower than the seasonal flu, according to a bioinformatician. SARS-CoV-2 seems to have a mutation rate of fewer than 25 mutations a year, he wrote on The Conversation. The seasonal flu, in contrast, has a mutation rate of nearly 50 mutations a year.

April 7th 2020

- China reported no new deaths from COVID-19 for the first time since January, according to The New York Times. Over 3,300 people in China have died from the virus and over 77,400 have recovered, according to the Johns Hopkins dashboard.
- Today, China lifted its lockdown on Wuhan, the city where the coronavirus outbreak first began, according to a Live Science report. The city and its 11 million people had been under a strict lockdown for over 10 weeks.
- Tuesday morning, the polls opened in Wisconsin and long lines formed at the handful of available polling sites around the state, according to Live Science.

April 8th 2020

- New York state now has more cases of COVID-19 than Italy, according to the New York Times.
- Newly published data shows that Hispanic/Latinos and Black/African Americans are dying at higher rates from COVID-19 in New York City. Around 22.8% of deaths are among Hispanic/Latinos, 19.8% among Black/African Americans, 10.2% among Whites and 8.4% among Asians, according to the data.
- More people have died in the U.S. from the coronavirus (13,829 people so far) than the 2009 H1N1 pandemic, which killed 12,469, according to the Centers for Disease Control and Prevention, CNN reported.

April 9th 2020

- President Trump is reportedly preparing to announce a second coronavirus task force that will focus on reopening the economy, according to The Washington Post.
- While the novel coronavirus mainly attacks the lungs, cardiologists are finding that a number of patients with severe illness are also developing heart damage, according to a Live Science report. Cardiologists say several scenarios could be unfolding: The heart may struggle to pump blood in the absence of enough oxygen; the virus may directly invade heart cells; or the body, in its attempt to eradicate the virus, may mobilize a storm of immune cells that attack the heart.

April 10th 2020

- The number of COVID-19 patients on ventilators in New York has dropped for the first time, according to The New York Times.
- The coronavirus is now the leading cause of death in the U.S., according to The Hill.
- New York hospitals have stopped sharing ventilators among multiple patients, an experimental practice that was being tried to solve the issue of not having enough ventilators, according to the New York Times. Doctors found that the patients didn't respond well, the practice took too much staff time and that sharing the machines could have been dangerous, according to the Times.

April 11th 2020

- NYC public schools won't reopen until September, Mayor Bill de Blasio said this morning. The New York City school system is the largest in the country, with more than 1,800 schools and more than 1.1 million students, according to the Department of Education.

April 12th 2020

- A New York Times investigation has found that U.S. President Trump, instead of acting to slow the spread of the novel coronavirus, focused on controlling the public message and protecting the economy. Dozens of interviews and inside records reveal that throughout January Trump was downplaying the seriousness of the coronavirus while individuals inside the White House "from top White House advisers to experts deep in the cabinet departments and intelligence agencies — identified the threat, sounded alarms and made clear the need for aggressive action," the Times reported.
- In early January, the National Security Council, tasked with monitoring pandemics, had intelligence reports in hand showing the future spread of the virus. Within weeks of receiving those reports, the NSC outlined proposals for shutting down schools and entire cities. Trump didn't do any of this until March.

April 13th 2020

- "The worst is over," New York Governor Andrew Cuomo Says
- President Trump tweeted on Monday that it was up to him and not the governors, to decide when to reopen states, according to The New York Times. Hours later, governors both on the East Coast and on the West Coast announced they were forming groups to help plan when to reopen their states, according to the Times.

April 14th 2020

- South Korea is sending 750,000 coronavirus testing kits to the U.S., according to NBC News. Around 150,000 of those kits were shipped last week and the rest of them will be sent on Wednesday, according to a public health official in South Korea.

- President Trump announced today during a press briefing that he will stop U.S. funding to the World Health Organization while the administration reviews their handling of the coronavirus pandemic.

April 16th 2020

- New York's Governor Andrew Cuomo extended the state's lockdown until May 15.
- The bodies of COVID-19 victims may be contagious, according to a Live Science report. A forensic practitioner working in Thailand, most likely caught the virus from a deceased patient, according to a report published as a preprint for the Journal of Forensic and Legal Medicine. The forensic practitioner later died from COVID-19. It's unclear how long the virus remains infectious in a dead body.
- As COVID-19 cases slow, Switzerland will ease some restrictions imposed over a month ago, according to CNN. On April 27, hospitals, health centers, dentists physiotherapy and massage salons will be allowed to start non-urgent treatments and hairdressers, beauty salons, tattoo shops and gardening shops will open. On May 11, shops and markets will be allowed to reopen and schools will reopen for students in preschool through ninth grades. On June 8, professional schools and universities, museums, libraries, botanic gardens and zoos will reopen, according to CNN. Throughout this period, social distancing must continue to be followed, the government said.

April 17th 2020

- Given the current pressure, a COVID-19 vaccine could be ready within 12 to 18 months, as long as scientists and regulatory agencies prove willing to take a few shortcuts, according to a Live Science report.
- A new model for COVID-19 deaths in the United States projects that many states, and the country as a whole, likely will not see a peak in deaths until after May 1. The model, from The University of Texas at Austin (UT), is similar to a highly-cited model from the University of Washington's Institute for Health Metrics and Evaluation, but the UT model corrects some statistical flaws that made the IHME model "too optimistic," according to a UT statement. The model finds that only two states, New York and Louisiana, will see their peak by April 19; and only seven more will have a peak by the end of April.

April 18th 2020

- Beaches and parks in Jacksonville, Florida, reopened Friday (April 17). According to CNN reporters in Jacksonville, the scene was unlike anything you'd expect during a pandemic: "Crowds cheered and flooded the beach when police took the barriers down. People were seen swimming, biking, surfing, running and fishing."
- Contamination at the central lab of the Centers for Disease Control and Prevention in Atlanta caused the botched COVID-19 tests at the start of the U.S. outbreak
- "Around 60% of Haitians live below the poverty line and many face a stark choice: either go about your daily business and run the risk of contracting COVID-19, or stay indoors, as the government advises, and be unable to put food on the table," BBC News reported.

April 19th 2020

- Coronavirus antibody tests, which are supposed to show if a person has already been exposed and might now be immune to the virus, are failing in the U.S., The New York Times reported. The FDA has allowed about 90 companies, many from China, to sell these tests without government vetting, the Times said. In Laredo, Arizona, for instance, the antibody tests have about a 20% reliability. And most of them do flag people as having antibodies when they really don't, which would give them a false sense of protection, the Times said
- New York will begin coronavirus antibody testing today, according to the New York Times. Antibody testing will be important in understanding who has already had COVID-19 and will help guide decisions to eventually reopen the state.

April 20th, 2020

- With the world under lockdown, demand for oil has decreased, according to the New York Times. On Monday, oil prices plummeted, some to below \$0 a barrel, according to CNN

April 21st 2020

- Georgia Governor Brian Kemp said businesses in the state, including barber shops and gyms can reopen later this week, according to NBC News. He also said theaters, restaurants and social clubs can reopen next Monday. Public health experts are voicing their concerns over reopening too soon, amid a lack of rigorous testing and contact tracing. South Carolina Governor Henry McMaster said beaches and retail stores can open today. Tennessee Governor Bill Lee said his state's stay-at-home measure won't extend beyond April 30 and parks can reopen on Friday. Nebraska Governor Pete Ricketts said elective surgery can start up again on May 4, according to NBC News.
- Maryland bought 500,000 coronavirus test kits from South Korea for \$9 million, in part due to efforts of the state's first lady, Yumi Hogan, according to The Baltimore Sun.
- Calls to poison control centers regarding exposure to household cleaners and disinfectants have spiked amid the coronavirus pandemic, according to a Live Science report. From January to March this year, poison control centers received 45,550 calls related to cleaner and disinfectant exposure

April 22nd 2020

- The earliest deaths in the country were thought to be on Feb. 29, but upon investigation, a medical-coroner found the first deaths to actually be on Feb. 6 and Feb. 17 in Santa Clara County in California, according to a Live Science report.
- The director of a key federal vaccine agency was suddenly dismissed

April 23rd, 2020

- New York state collected around 3,000 antibody samples from 40 locations in 19 counties so far. Preliminary estimates show that about 13.9% of random people who gave samples were infected by the coronavirus, Governor Andrew Cuomo announced today. More than 21% of people tested in New York City specifically had antibodies from the coronavirus.

April 24th, 2020

- The new coronavirus might be using part of the body's own immune response against us, according to a new study. SARS-CoV-2 uses a receptor called ACE2 to invade human cells, according to a Live Science report. Now, researchers have discovered that the ACE2 receptor might be stimulated by interferons, proteins that the immune system releases to alert other cells that there's a pathogen in the body. But when interferons rush to alert the body to the coronavirus, they're actually stimulating the gene that ramps up expression of ACE2 receptors, which may lead to more ACE2 production and allow SARS-CoV-2 to infect even more cells
- Trump said that he was being sarcastic when he asked about "disinfectant injections" and getting UV light into the body.

April 25th 2020

- Some 3,277 inmates tested positive for COVID-19 in state prisons in Arkansas, North Carolina, Ohio and Virginia. Of those, 96% of the inmates were asymptomatic at the time of testing, Reuters reported.

April 26th 2020

- The epicenter of the COVID-19 pandemic, Wuhan, China, has announced the city has no COVID-19 patients currently hospitalized, The New York Times reported.
- With its lowest daily death toll in more than a month (288 COVID-19 fatalities), Spain is allowing kids under 14 to get outdoors, The Washington Post reported.

April 20th, 2020

- Coronavirus testing was reported delayed and that the CDC played a part in it. Atlanta, GA broke standards and that people were entering places with COVID-19 material and that people were not changing their lab coats and gloves before entering different rooms.
- Hospitals are cancelling other surgeries but they are trying to come up with alternatives.

April 27th, 2020

- Of 7,500 people tested in New York for coronavirus antibodies, 14.9% have tested positive, governor Andrew Cuomo announced today. Last week, the first tests — conducted on 3,000 people — found that 13.9% of New Yorkers tested positive, according to a previous Live Science report.
- New Zealand has "won the battle," against the coronavirus, according to NPR. New Zealand's Prime Minister Jacinda Ardern says that the country has no widespread undetected community transmission of the coronavirus and she announced the lifting of most restrictions in the country put in place to curb the transmission of the virus.
- Doctors are testing whether estrogen could help men combat COVID-19, according to a Live Science report. More men than women have developed severe COVID-19 or died from it, according to The New York Times. It's not clear why men seem to be fairing worse than women during this outbreak, but one idea is that the sex hormones estrogen and progesterone could be helping to regulate the female immune system and protect against infections and harmful immune system responses.

April 28th 2020

- Scientists at Oxford's Jenner Institute are saying that with emergency approval, the first few million doses of their new coronavirus vaccine could be available by September if it proves to be effective, according to The New York Times.
- It's not impossible that you could have had coronavirus in late January or February, but it's not necessarily likely either, according to a Live Science report.

April 29th 2020

- The antiviral drug remdesivir significantly reduces the time it takes for COVID-19 patients to recover, as compared with a placebo treatment, according to a large, international study. Patients treated with the drug took about 11 days to recover as compared with 15 days for patients who took the placebo, Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID)

April 30th 2020

- New York subway service will stop between 1 a.m. and 5 a.m. each night so that the subways can be disinfected -starting May 7th
- NASA developed a new ventilator, a high-pressure device called VITAL, that recently received emergency approval from the U.S. Food and Drug Administration to treat coronavirus patients, according to Space.com.

May 3rd 2020

- In patients with COVID-19, doctors are reporting a number of different skin rashes that take on a variety of forms from tiny red dots to larger flat or raised lesions, according to a Live Science report. However, it's too early to tell whether these rashes are caused by the new coronavirus or they're related to other factors

May 4th 2020

- The Trump administration is projecting that by early June, there will be about 3,000 COVID-19 related deaths each day, nearly double the current daily death rate of about 1,750, according to an internal document that was obtained by The New York Times.
- Cuomo also presented a list of seven requirements that the state's regions would need to meet in order to ease restrictions. New York City currently only meets three of the seven requirements

May 5th 2020

- Pfizer and BioNTech have started testing an experimental coronavirus vaccine on people in the U.S., and last week in Germany, according to CNN. The mRNA vaccine could teach the cells to make the spike protein of the virus, but not make the person sick, according to The New York Times. This kind of vaccine is faster to produce and can be more stable than traditional vaccines, but no vaccines made from this technology have ever become available worldwide, according to the Times. If this vaccine proves safe and effective, the companies say they hope to have several million doses by September.

May 6th 2020

- Nearly 1 in 5 young children in the U.S. aren't getting enough food to eat amid the coronavirus crisis, according to new research released today based on surveys conducted by the Brookings Institute, The New York Times reported. This rate, as families skip meals and decrease portions, is three times higher than the rate in 2008 during the worst of the Great Recession, according to The Times. Part of the problem could be disruption to school meal programs, the Times reported

May 8th 2020

- The FDA has also given approval to the first at-home saliva collection test for COVID-19, developed by RUCDR Infinite Biologics, which people could use to sample their own saliva and send it to a lab for analysis, according to another Live Science report.
- Experts fear that tens of millions of students in poor countries who are out of school now due to the coronavirus pandemic, may never go back to school, according to The Washington Post. The coronavirus crisis, worsening economy and unrest in some areas could affect millions of students, many who will probably not go back to school because of the costs and pressure to work, Alice Albright, chief executive of the Global Partnership for Education, told the Post.

May 12th 2020

- A video released by the Los Angeles County sheriff Alex Villanueva, shows inmates at the North County Correctional Facility in Los Angeles County drinking from the same bottle of hot water and breathing into the same mask, trying to infect themselves with the coronavirus or trying to raise their oral temperatures in the hopes they would be released if they got sick or faked sick, according to a statement.

May 18th 2020

- President Donald Trump said today that he's taking hydroxychloroquine — an anti-malarial drug he's been promoting for some time now despite warnings from medical experts that it wasn't helpful and could cause severe side effects — to prevent the coronavirus, according to Reuters. "I've been taking it for the last week and a half. A pill every day," Trump told reporters during a meeting with restaurant executives.

May 19th 2020

- A person who had severe acute respiratory syndrome (SARS) 17 years ago had antibodies in their blood that appeared to inhibit SARS-CoV-2, according to a Live Science report. This antibody, so-called S309, could bind and disable the coronavirus' spike protein, which it uses to enter human cells, according to a statement from the University of Washington School of Medicine, which was involved in the research.
- Carbon emissions dropped by 17% across the globe during the pandemic, according to NBC News. Under quarantines and lockdowns, with limited economic activities and travel, daily global carbon dioxide emissions decreased by 18.7 million tons compared to the average daily emissions last year, according to a new study published in the journal Nature Climate Change.

May 20th 2020

- Religious gatherings of up to 10 people will now be allowed in New York State starting Thursday, if people wear masks and practice social distancing, Governor Andrew Cuomo said today.

May 22nd 2020

- The Centers for Disease Control and Prevention (CDC) now says that the virus "does not spread easily" from touching surfaces or objects. This worries some public health experts that it could encourage people not to wash their hands so often, according to The Washington Post
- An early trial in more than 100 people found that a candidate coronavirus vaccine developed in China appeared safe and able to generate an immune response, according to a Live Science report. The vaccine, called Ad5-nCoV, is being developed by the Chinese company CanSino Biologics, and was one of the first coronavirus vaccines to enter early human trials back in March.

May 28th 2020

- Amid the pandemic, a third of Americans are showing signs of clinical anxiety or depression, according to a new nationwide survey, as reported by The Washington Post.

Sources:

TACKLING THE NOVEL CORONAVIRUS - LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE AND UK PUBLIC HEALTH RAPID SUPPORT TEAM

Saplakoglu, Yasemin. "Coronavirus Outbreak: Live Updates." LiveScience, Purch, 9 May 2020, www.livescience.com/topics/live/coronavirus-live-updates.
 "Donald Trump's Coronavirus Timeline: How the President's Message Has Changed." Youtube, 17 Mar. 2020, www.youtube.com/watch?v=HvE9hCZ-jaU.

Prevention:

To prevent COVID-19 there has been:

- ❖ Surveillance = rapidly detect and isolate suspect cases
- ❖ Point of entry screening = cases on arrival and provision of information to people from affected areas
- ❖ Contact Tracing = monitoring of close contacts, self isolation for 2 weeks
- ❖ Social Distancing = Limiting mass gatherings, quarantining
- ❖ Public Communication and Health Education = Communicating with everyone
- ❖ Healthcare Facilities
 - Clinical management
 - Infection prevention and control
 - A few cases or small clusters → Focus on containment and breaking the transmission chains (Contact Tracing)
- ❖ Widespread community transmission → focus, delay, and mitigation. Reduce community transmission

In China, there is a group of people that go into caves and flag bats that hold viruses that could easily leap to humans. They found 100's of coronavirus in them, in fact they found, "Bat Coronavirus RatG13.. a couple of years ago and it was for a low risk" however they "compared it to COVID-19 and the genome is 96% identical."⁵

Testing/Antibodies/vaccines:

Testing for COVID-19 looks differently throughout the world so here is a list of the general facts and information about them. It starts with The World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention (CDC) that recommend specimens from the lower respiratory tract, including sputum, bronchoalveolar lavage and tracheal aspirate for the diagnosis of COVID-19 using the approved molecular test methods.³ They would use a nasopharyngeal swab (preferred), oropharyngeal swab, nasal middle-turbinate (NMT) swab, or an anterior nares specimen. Most tests for SARS-CoV-2 work by detecting the virus's RNA genome in samples. Different tests look for different parts of the viral genome, but they all use a technique called RT-PCR (or reverse transcriptase polymerase chain reaction). Basically, during RT-PCR: "If SARS-CoV-2 is present in the sample, an enzyme called reverse transcriptase converts the viral genome from RNA (a chemical cousin of DNA)

⁵ "Coronavirus, Explained." *Netflix Official Site*, 26 Apr. 2020, www.netflix.com/watch/81273421?trackId=13752289&tctx=0%2C1%2Cb8b79eb86c96a650ae1c6a03ffc5663fa8f3518%3Ace5ef1e683c62279de0e76be199a14d368c55364%2C%2C.

into DNA.” Or if there is “A different enzyme — called polymerase — makes millions of copies of that DNA and, in the process, generates a fluorescent signal. If the reaction becomes fluorescent, that means SARS-CoV-2 was present in the original sample.”⁶

Antibodies are immunoglobulin proteins that help protect people against microscopic invaders (viruses, bacteria, chemicals, or toxins). Serology looks into the types of assays that look at the immunity and antibodies. These tests can determine the presence or absence of infection or detect evidence of a previously had infection. There are about 20 different molecular tests that have become available, the ELISA (Enzyme-linked immunosorbent assay) “detects and measures antibodies in your blood. Antibodies are proteins that your body produces in response to harmful substances called antigens. Antigens are foreign proteins.”⁷ “Antibodies attach to the antigens, creating antigen-antibody complexes (immune complexes) that serve as signals for the rest of the immune system to destroy the cell or particle.”⁷ The first time someone is exposed to a foreign substance, like a virus or bacterium, it may take the immune system up to two weeks to make an antibody blueprint and to produce enough of a specific antibody to fight the infection.

- ❖ Antibodies start to appear in response to infections
 - High levels show active infection
 - IgG antibodies start to rise as IgM antibodies go down.
- ❖ Pathogen detection
 - Molecular (detection of DNA, RNA, protein)
 - Antigen detection assays (detection of protein)
- ❖ Immunoglobulin:
 - IgM (Immune System) are the first antibodies to be detected
 - IgG can show up for years (after the immediate threat has passed and the infection has resolved)
 - IgE (primarily associated with allergies)
 - IgA
 - IgD
- ❖ Why there can be a false-negative:
 - “Antibody cross-reactivity occurs when an antibody that binds to one antigen also binds to a completely different antigen. This can happen when the antigen looks very similar to each other. Because of this, antibody cross-reactivity is important in developing immunoassays for COVID-19, as it can result in false-positive test results if a person has cross-reacting antibodies from infection with a different coronavirus.”³

Vaccines are one of the most important ways to prevent people from developing diseases, it gives immunity, usually over 90% of protection - no vaccine gives you 100% immunity. “Vaccines use either a weakened version of the microorganism (one that cannot cause infection) or an isolated protein that mimics an antigen structure on the surface of the microorganism.”⁷ However for it to be used, the reproduction number has to be less than one and it will die out, however, if it is not, then it might not work.

Cures:

As of right now, May 12th, 2020, there is no cure or vaccine, however there has been talk about a possible vaccine that could come out as early as September. They have been conducting lots of tests; one test tried an HIV drug, another tested a drug that wasn't approved but was thought to get rid of Ebola, “Nafamostat, Nitazoxanide, Ribavirin, Penciclovir, Favipiravir, Ritonavir, AAK1, Baricitinib, and Arbidol [which] exhibited moderate results when tested against infection in patients and in-vitro clinical isolates.”¹ Researchers have seen improvement in patients who have had plasma from healthy people who've had COVID-19. “Convalescent plasma has one major upside: it's available as soon as someone survives a new illness.”⁸ You may have heard of red blood cells, white

⁶ “COVID-19 Information Center.” *23andMe*, you.23andme.com/covid19/.

⁷ “Antibody Identification.” *Lab Tests Online - Explaining Pathology*, www.labtestsonline.org.au/learning/test-index/antibody-tests.

⁸ Wetsman, Nicole. “Genetic Analysis of the Coronavirus Gives Scientists Clues about How It's Spreading.” *The Verge*, The Verge, 31 Mar. 2020,

blood cells, and platelets. But there's something else in your blood: plasma; it is the liquid part of your blood and keeps your blood pressure in a healthy range, along with it, it carries important proteins, minerals, nutrients, and hormones to the right places in the body. It also gets rid of the chemical waste from cells by dissolving the substances cells don't need and carrying them away. "Plasma makes up the biggest part of your blood: about 55%. Even though blood appears red when you see it outside the body, plasma itself is a pale yellow color."⁹ It is made up of about 90% water and contains salts and enzymes and holds antibodies that help fight infection, plus proteins called albumin and fibrinogen. However to donate plasma, you have to be at least 18 years old and weigh at least 110 pounds. You'll need to get a physical examination and get tested for certain viruses like HIV and hepatitis (not sure how long this takes because of everything going on -- but seems quite easy). Donating plasma is a little different than donating whole blood. When you donate whole blood, it goes straight into a collection bag and is later separated in a lab. When you donate plasma, the blood that's drawn from your arm goes through a special machine to separate the different parts of your blood. The parts that are leftover, including your red blood cells, go back in your body, along with some saline (saltwater) solution. The process usually takes about 1 hour and 15 minutes.

Unknowns:

There are still so many unknowns to this virus, such as who, if anyone, has immunity, when is this going to be over, what can we and can't we do to reduce the spread, it is all up in the air. However, in this section, I discovered something that could be useful for everyone that no one talks about. Genetics could be playing a role in the severity of COVID-19. I found this article on April 8th 2020 so the information below is not up to date, however I went on the website today, May 12th 2020, and found that they have percentages of the deaths/ICU/no help within people's pre existing conditions.

23 and Me conducted research that compares genetic variants in people who get very sick with variants in people who had milder symptoms or haven't gotten sick. By identifying genetic variants that are more common in people who experienced severe disease scientists may be able to better understand who's more at risk (this could include whether they are infected and how severe their disease becomes). In other diseases such as malaria and HIV the genetic disposition of a patient has had a significant impact on the severity of their illness. "HBB can make people less susceptible to infection by the parasite that causes malaria. HBB contains instructions for making the hemoglobin protein that carries oxygen inside our red blood cells. CR5 can protect people from HIV infection by preventing the virus from being able to enter certain T cells in our immune system. CCR5 codes for a protein that sits on the surface of those T cells. [And the] FUT2 gene is much less likely to be infected by norovirus. FUT2 codes for an enzyme that helps determine whether certain molecules are present on the surface of our gut cells."¹⁰ "Genetic variants in HLA genes may explain the differences in response to several different conditions. This group of genes helps the immune system distinguish the body's proteins from proteins made by foreign invaders like viruses and bacteria."¹⁰ In 2017, scientists at 23andMe published a genetic study that identified almost 60 genetic variants associated with susceptibility to one of 17 different infectious diseases, and many of those variants were in HLA genes. The hope is that researchers will find certain genes and proteins that reduce the severity of COVID 19 for some patients. This may explain the ongoing mystery of why some people get the disease much more severely than others and why so many are asymptomatic. However it is still too early to tell if genetics play a part, but to get inside our cells, the virus that causes COVID-19 latches onto a human protein called ACE2. Scientists identified genetic variants in and near the ACE2 gene that could impact how much ACE2 protein is made, or how the protein functions. In the end this could make it easier or tougher for the virus to slip inside a person's cells and make them sick.

In another study, scientists reported that a person's blood type, which is determined by the ABO gene, might influence their likelihood of being infected by the virus.

www.theverge.com/2020/3/31/21199782/coronavirus-samples-genetic-analysis-covid-spread-biotech-pan-demic.

⁹ "Plasma: Basic Facts and Donation Information." *WebMD*, WebMD, 24 Feb. 2020, www.webmd.com/a-to-z-guides/what-is-plasma#1.

¹⁰ 23andMe. "Could Genetics Play a Role in the Severity of COVID-19?" *23andMe Blog*, 21 Apr. 2020, blog.23andme.com/23andme-research/genetics-and-covid-19-severity/.

The United States Healthcare System

The American Healthcare System seems to be corrupt, before and now. But the Coronavirus pandemic has made it far worse than it's ever been. Going into the hospital was seen as going to die whereas doctors' offices were where you were supposed to get treatment. Now, "The US has the trifecta of high cost, unequal access, and often below average outcomes compared to other highly developed nations."¹¹ It is by far one of the wealthiest nations in the world, but it is far from the healthiest. Additionally, many poor and minority people who had symptoms of Covid 19 were afraid to seek treatment because they could not afford to pay their hospital bills and died at home. Certain European countries like Germany and Denmark made it clear that treatments for the virus would be free for all of their citizens. This goes to the heart of the ongoing controversy in the US as to whether medicine should be socialized or not.

History:

Everything was going well at first. When medical insurance came into play in the US in the 1940s, it was categorized and made Americans split up into different categories. The equality that the Blue Cross Blue Shield Association provided was probably the best- it helped all. But "between 1940 and 1955, the number of Americans with health insurance skyrocketed from 1- percent to over 60 percent" (p 17).¹² During World War II many American workers signed on for health insurance as a benefit instead of increased pay, "Then the National War Labor Board froze salaries during and after World War II, companies facing severe labor shortages discovered that they could attract workers by offering health insurance instead" (p 16).¹² "Until the 1960's, most hospitals and doctors had to do charitable work. Laws and codes of ethics said sick people should be treated even if they couldn't pay. By 1969 most Americans were insured, so the IRS defined a new standard for hospitals that wanted to keep their tax-exempt status: these institutions had to provide, 'charity care and community benefit'" (p 49).¹² Soon after, "From 1997 to 2012, the cost of hospital services grew 149%, while the cost of physician services grew 55%. The average hospital cost per day in the United States was \$4,300 in 2013, more than three times the cost in Australia and about ten times the cost in Spain" (p 23).¹² It seems that once insurance companies began to pay the cost of America's medical needs the prices for these services skyrocketed and hospitals greatly reduced the amount of charity care they gave.

Now:

"In the past quarter century, the American medical system has stopped focusing on health or even science. Instead it attends more or less single-mindedly to its own profits" (p 1).¹² In 2016 the US was ranked 43rd in life expectancy and is predicted in 2040 we are going to drop to 64.¹³ "America has one of the worst gaps between the health outcomes of rich and poor people, which have served as a key marker of a nation's well being" (p XXI).¹³ Even now, 1 in 5 Americans put off going to the hospital/doctor to save money.¹³

¹⁴	2016	2018
Total national health Expenditures	3.35 Million	3.65 Million

¹¹ "Introduction." *Overview of the American Healthcare System*, sphweb.bumc.bu.edu/otlt/MPH-Modules/HPM/AmericanHealthCare_Overview/AmericanHealthCare_Overview_print.html.

¹² Rosenthal, Elisabeth. *An American Sickness: How Healthcare Became Big Business and How You Can Take It Back*. Penguin Books, 2018.

¹³ Harding, Kelli. *The Rabbit Effect: Live Longer, Happier, and Healthier with the Groundbreaking Science of Kindness*. Thorndike Press, a Part of Gale, a Cengage Company, 2020.

¹⁴ "NHE Fact Sheet." *CMS*, www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.

Health Insurance	2.488 Million Private = 1.120m Medicare = 676,772	2.729 Million Private = 1.240m Medicare = 750,182
Other 3rd party payers + programs	257,340	276,940
Out of pocket	357,217	375,610
Total hospital expenditures	1,090m	2.192m
Out of pocket	32,100	34,829
Health insurance	958,984 Private = 430,908 Medicare = 272,433	1.047m Private = 481,088 Medicare = 296,980

If you look at his chart you can see the numbers are increasing, although there is a higher population, costs are still increasing and we are not taking care of our citizens as we should be. For example, New York, like many other states, recently cut its budget for Medicaid, the health insurance that assists poor and unemployed people who cannot afford their insurance. Dr. Anthony Felici said the state budget cut on Medicaid hurt everyone. “Cuts are not felt equal, public hospitals and voluntary hospitals that are safety-net facilities disproportionately will be hurt.”¹⁵ He also noted that “Cuomo had the choice to fix a budget deficit by increasing revenues by taking the rich and ensuring Medicaid budget was protected” and that he has more executive power and authority to enact cuts in the name of a “balanced budget”.¹⁵

Over the last 20 years, more than 40 community hospitals closed in low-income communities in New York. Dr. Claudia Fegan talks about deaths in the country of people being uninsured. Here is the graph that was presented:

38,882 Deaths During 2019 Due to Uninsurance		
State	% Uninsured	Excess Deaths
Texas	18.1	6,731
California	8.1	4,143
Florida	14.5	3,999
Georgia	14.6	1,989
North Carolina	10.7	1,447
New York	5.5	1,397
USA	9.1%	38,882

What Trump has done/for the economy during this pandemic:

Donald Trump enacted bills and acts during this pandemic. One of these was the \$750 billion CARE agreement for an economic relief package to replenish small businesses for emergency funds as well as to expand coronavirus testing around the country. “The agreement would include \$300 billion to replenish the emergency fund, called the Paycheck Protection Program; \$50 billion for the Small Business Administration’s disaster relief fund; \$75 billion for hospitals and \$25 billion for testing.”¹⁶ However, after nearly two weeks, the \$350 billion small business fund “ran dry” and there were still applicants in line and moved to a risk of more bankruptcies.

The week of April 12-18th 5.2 million people filed for unemployment bringing the total from the past four weeks to 22 million and people are struggling because the \$349 billion program ran out of money. “Consumer spending online, in brick-and-mortar stores, and at bars and restaurants fell 8.7 percent from February, by far the

¹⁵ Lederer, Bob. “PNHP-NY Metro April 2020 Forum - ‘The Roles of Racism & For-Profit Healthcare in Pandemic Response Failures.’” *Physicians for a National Health Program - NY Metro Chapter*, www.pnhpnymetro.org/pnhp-ny_metro_april_2020_forum.

¹⁶ Stolberg, Sheryl Gay, and Alan Rappeport. “White House and Democrats Near Deal on Aid for Small Businesses.” *The New York Times*, The New York Times, 19 Apr. 2020, www.nytimes.com/2020/04/19/us/politics/coronavirus-small-business-aid-congress.html?referringSource=articleShare.

biggest and fastest drop in the nearly three decades that sales data has been recorded.”¹⁷ After this article came out, we found out that bigger companies who most likely didn’t need the aid were receiving the money and creating a bigger risk for smaller companies and family-owned businesses to go bankrupt. For example, Ruth’s Chris Steakhouse, an upscale chain, was qualified for \$20 million under a provision that allowed it to seek loans for each of two subsidiaries.¹⁸ However, “Mr. McGowan said the chain has furloughed 90% of its staff since the crisis, and would use the money to hire some people back. He said all restaurants deserve to tap the loans, even big ones, as they are major employers in their local economies.”¹⁸ It is usually companies with 500 or few employees who qualify for loans up to \$10 million but two other huge companies received \$15.1-\$20 million loans. Then there are also companies like Shake Shack who are giving back their \$10 million stimulus loan because they don’t need it and are trying to help actual small businesses.

The U.S Department of the Treasury enacted The CARES Act Works for All Americans which is “The Coronavirus Aid, Relief, and Economic Security (CARES) Act was passed by Congress with overwhelming, bipartisan support and signed into law by President Trump on March 27th, 2020.”¹⁹ “The CARES Act provides for Economic Impact Payments to American households of up to \$1,200 per adult for individuals whose income was less than \$99,000 (or \$198,000 for joint filers) and \$500 per child under 17 years old – or up to \$3,400 for a family of four.”¹⁹

- ❖ “Direct payments: Americans who pay taxes will receive a one-time direct deposit of up to \$1,200, and married couples will receive \$2,400, plus an additional \$500 per child. The payments will be available for incomes up to \$75,000 for individuals and \$150,000 for married couples.”²⁰
- ❖ “Unemployment: The program provides \$250 billion for an extended unemployment insurance program and expands eligibility and offers workers an additional \$600 per week for four months, on top of what state programs pay. It also extends UI benefits through Dec. 31 for eligible workers. The deal applies to the self-employed, independent contractors and gig economy workers.”²⁰
- ❖ “Payroll taxes: The measure allows employers to delay the payment of their portion of 2020 payroll taxes until 2021 and 2022.”²⁰
- ❖ “Use of retirement funds: The bill waives the 10% early withdrawal penalty for distributions up to \$100,000 for coronavirus-related purposes, retroactive to Jan. 1. Withdrawals are still taxed, but taxes are spread over three years, or the taxpayer has the three-year period to roll it back over.”²⁰
- ❖ “401(k) Loans: The loan limit is increased from \$50,000 to \$100,000”²⁰
- ❖ “Small business relief: \$350 billion is being dedicated to preventing layoffs and business closures while workers have to stay home during the outbreak. Companies with 500 employees or fewer that maintain their payroll during coronavirus can receive up to 8 weeks of cash-flow assistance. If employers maintain payroll, the portion of the loans used for covered payroll costs, interest on mortgage obligations, rent, and utilities would be forgiven.”²⁰

Due to newspapers exposing the unfairness of the initial round of PPP loans going to large businesses, a second round of funding was enacted. Currently, Congress is preparing further bills to aid states and cities so that they can continue to pay their first responders like nurses, transit workers, police, and fire departments despite the

¹⁷ Cowles, Charlotte. “The Week in Business: Everyone's Broke, and Relief Runs Dry.” *The New York Times*, The New York Times, 19 Apr. 2020, www.nytimes.com/2020/04/19/business/the-week-in-business-coronavirus-economy-retail.html?referringSource=articleShare.

¹⁸ “How Ruth's Chris Got an Extra Helping of Small-Business Aid Money.” *The Wall Street Journal*, Dow Jones & Company, 19 Apr. 2020, www.wsj.com/livecoverage/coronavirus-2020-04-17/card/w9584hTPUjdQMgNyNvBF.

¹⁹ “U.S. Department of the Treasury.” *The CARES Act Works for All Americans*, 7 May 2020, home.treasury.gov/policy-issues/cares.

²⁰ LaBrecque, Leon. “The CARES Act Has Passed: Here Are The Highlights.” *Forbes*, Forbes Magazine, 29 Mar. 2020, www.forbes.com/sites/leonlabrecque/2020/03/29/the-cares-act-has-passed-here-are-the-highlights/#1cc7a34b68cd.

lower tax revenue they are receiving due to the economic shutdown. As of today May 13, the bill is still being discussed and there is some opposition to the idea of states being “bailed out” by the Federal government.

GDP:

Our Gross Domestic Product for the healthcare system reached 17% this past year. This is higher than most places where some countries range from 9%-11% (Shown later). Healthcare costs are increasing faster than wages, which means that an increasing proportion of household income is spent on health care. “US health care spending increased 4.6 percent to reach \$3.6 trillion in 2018, a faster growth rate than the rate of 4.2 percent in 2017 but the same rate as in 2016. The share of the economy devoted to health care spending declined to 17.7 percent in 2018, compared to 17.9 percent in 2017. The 0.4-percentage-point acceleration in overall growth in 2018 was driven by faster growth in both private health insurance and Medicare, which were influenced by the reinstatement of the health insurance tax. For personal health care spending (which accounted for 84 percent of national health care spending), growth in 2018 remained unchanged from 2017 at 4.1 percent. The total number of uninsured people increased by 1.0 million for the second year in a row, to reach 30.7 million in 2018.”²¹

Response to COVID-19 in Other Countries

Overview in Top 10 countries/Restriction (not ranked due to changing measures):

United Kingdom (As of March 14th 2020)²²

- ❖ The Department of State has issued a Global Level 4 Health Advisory advising U.S. citizens to avoid all international travel due to the global impact of COVID-19.
- ❖ People will only be allowed to leave their home for the following very limited purposes:
 - Shopping for necessities, as infrequently as possible
 - One form of exercise a day – for example a run, walk, or cycle – alone or with members of your household
 - Any medical need, to provide care or to help a vulnerable person
 - Traveling to and from work, but only when it is absolutely necessary and cannot be done from home.
- ❖ All shops and non essential goods - clothing and electronic stores, libraries, playgrounds, and gyms are closed
- ❖ All gatherings of more than two people in public – excluding people you live with is prohibited
- ❖ Stop all social events, including weddings, baptisms and other ceremonies, but excluding funerals.

Spain (As of March 14th 2020)²³

- ❖ They were told to stay indoors with limited exceptions - to buy food, to go to work if they cannot work remotely, to seek health care, or to assist the elderly and others in need.
- ❖ The government also ordered all schools, restaurants, bars and non-essential stores to close, extending measures that various regional authorities
- ❖ Mr. Sánchez said the government would take steps to oversee and maintain the nationwide supply of food, energy and other basic services during the 15-day lockdown

²¹ Hartman, Micah, et al. “National Health Care Spending In 2018: Growth Driven By Accelerations In Medicare And Private Insurance Spending.” *Health Affairs*, 5 Dec. 2019, www.healthaffairs.org/doi/abs/10.1377/hlthaff.2019.01451.

²² U.S. Citizens. “Information for U.S. Citizens in the UK (Coronavirus - COVID-19).” *U.S. Embassy & Consulates in the United Kingdom*, 13 May 2020, uk.usembassy.gov/covid-19-coronavirus-information/.

²³ Minder, Raphael, and Elian Peltier. “Spain Imposes Nationwide Lockdown to Fight Coronavirus.” *The New York Times*, The New York Times, 14 Mar. 2020, www.nytimes.com/2020/03/14/world/europe/spain-coronavirus.html.

- ❖ The Spanish government has only once before declared a state of emergency, in 2010, when the military was ordered to break up a wildcat strike by air traffic controllers that had paralyzed the country's airports.

Italy (As of March 14th 2020)²⁴

- ❖ The Department of State has issued a Global Level 4 Health Advisory advising U.S. citizens to avoid all international travel due to the global impact of COVID-19.
- ❖ On March 14, 2020, the Department of State authorized the departure from any diplomatic or consular post in the world of U.S. personnel and family members who have been medically determined to be at higher risk of a poor outcome if exposed to COVID-19.
- ❖ The Italian government has strict movement restrictions and law enforcement authorities are collecting self-declaration forms from travelers specifying the purpose of their movement and destination.
- ❖ Public transportation including airlines, trains, and buses continue to operate, but with reduced frequency.
- ❖ Effective on March 11, 2020, only emergency American Citizens Services and emergency visa services are available in the U.S. Embassy in Rome and Consulates General Milan, Naples, and Florence.
- ❖ Travelers are also required to inform the competent Local Health Authority (Azienda Sanitaria Locale – ASL) of their entry immediately, and that they are returning to their domicile, residence or home, or entering Italy due to justifiable work reasons, special needs or health emergencies.
- ❖ On March 22, 2020, the Italian government released a decree closing non-essential industries from March 25 – April 3, later extended to May 3
 - Supermarkets, banks, pharmacies, post offices, and other essential services remain open.

France (As of March 12th 2020)²⁵

- ❖ The Department of State has issued a Global Level 4 Health Advisory advising U.S. citizens to avoid all international travel due to the global impact of COVID-19.
- ❖ Flights to the U.S. are available through Air France. Daily direct flights to the United States are scheduled this week from Paris Charles de Gaulle airport. -as of April 16th 2020
- ❖ All non-essential public services in France remain closed, including open-air markets
- ❖ Travel is permitted in these cases:
 - Between home and work when telework is not possible
 - To make essential purchases in authorized local shops
 - For health reasons
 - To care for children or help vulnerable people
 - Brief movements near or around the home for individual exercise or pet care and without public gathering. All exercise is limited to within one kilometer of each person's residence and can only be for one hour per day, and alone. (as of April 8th 2020, Paris has also limited sports activities to before 10 a.m. and after 7 p.m.)
 - To respond to a judicial or administrative matter
 - To participate in an activity at the request of an administrative authority
- ❖ If you must travel for one of these reasons, you must carry an attestation, available in electronic format
- ❖ For travel to work, you will need an employer certificate.
- ❖ Unnecessary travel may be fined between 135 to 375 euros, with an increase to 1,500 euros for two violations within 15 days, and 3,750 euros and imprisonment for three violations within 30 days.
- ❖ Renewed April 11, French borders will be closed until further notice. This does not apply to U.S. citizens departing France to return to the United States.
- ❖ Flights from China, Hong Kong, Macao, Singapore, South Korea, Iran, and affected regions in Italy arriving at Charles de Gaulle airport in Paris are met by medical professionals to answer questions and take into care any person presenting symptoms.

²⁴ U.S. Citizens. "COVID-19 Information." *U.S. Embassy & Consulates in Italy*, 5 May 2020, it.usembassy.gov/covid-19-information/.

²⁵ U.S. Citizens. "COVID-19 Information." *U.S. Embassy & Consulates in France*, 13 May 2020, fr.usembassy.gov/covid-19-information/.

- ❖ Only travelers returning on government-provided evacuation flights are placed in quarantine.
- ❖ The Government of France advises other travelers returning from China, Hong Kong, Macau, Singapore, South Korea or the Italian regions of Emilie-Romagne Lombardy and Veneto to monitor their temperature twice daily for 14 days, wear a surgical mask when they are with others or outside their home, stay away from individuals with compromised health, and reduce non-essential activities that would expose them to crowds, such as going to the cinema, large gatherings, or a restaurant.

Germany (As of March 14th 2020)²⁶

- ❖ The Department of State has issued a Global Level 4 Health Advisory advising U.S. citizens not to travel abroad due to the global impact of COVID-19.
- ❖ EU member states are limiting entry to EU citizens and residents. U.S. citizens who are not residents of the EU and do not fall into one of several narrow exceptions will be denied entry to Germany.
- ❖ Germany has implemented temporary border closures along its borders with Austria, Switzerland, France, Luxembourg, and Denmark. Deliveries of goods, as well as the crossing of registered commuters will be allowed to continue.
- ❖ Germany has implemented the use of passenger locator cards for all individuals entering Germany by air, rail, ship, and bus.
- ❖ The German government has banned all gatherings of more than two individuals who do not live in the same household. Most movement within the country is also restricted to the purchase of essential products, the commute back and forth from work, and medical related travel.
- ❖ Germany rolled out comprehensive testing to allow the country to stay on top of sporadic cases initially identified³

China:

- ❖ China tested as many patients as possible and hospitalized anyone who tested positive, even if they were mild cases, to interrupt transmission.³
- ❖ Total lockdown without exceptions in Wuhan and the neighboring cities²⁷
 - Cordon Sanitaire in and around the epicentre

Other Countries Response:

Peru:

- ❖ Peru only has two COVID-19 testing facilities, both in the capital, Lima. Although not as accurate as the PCR tests, the government is seeking a million rapid diagnostic tests and plans to use them to help hospitals gauge how many healthcare workers have been infected, and to be able to test and identify individuals and locate their close contacts. The Peruvian government also started constructing isolation centers before they had confirmed any COVID-19 cases.³

Singapore (As of March 9th 2020)²⁷

- ❖ Singapore used the traditional method of doing isolation and social distance and identifying the cases and the links to them → run symptom test and treat the individual cases
 - Contact tracing -- police had to be involved to trace the cases back
 - Having trustworthy platforms to get new information
 - There were three reminders and speakers a day to keep everyone updated
 - Had really good communication
 - The government gave face masks to the public from their stockpile
 - People felt like they were left out if they didn't have access to face masks so to make sure citizens feel safe and protected, each house was given face masks.

²⁶ U.S. Mission Germany | 7 May, 2020 | Topics: Alert. "COVID-19 Information." *U.S. Embassy & Consulates in Germany*, 7 May 2020, de.usembassy.gov/covid-19-information/.

²⁷ TACKLING THE NOVEL CORONAVIRUS - LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE AND UK PUBLIC HEALTH RAPID SUPPORT TEAM

- There was a statement that was attached to it saying that people should only use this face mask if they aren't feeling well or think they have symptoms
 - Hygiene strategic measures were put into place
- ❖ Singapore tested all visitors and returning nationals with symptoms and did aggressive contact tracing and testing, including asymptomatic cases.

Republic of Korea:³

- ❖ They organized over 100 testing locations, including public facilities, 81 healthcare facilities, and five commercial laboratories, to provide testing and diagnosis services
- ❖ Implementation of drive-through and walk-through screening centers allowing for rapid sample collection and referral for testing
- ❖ Rapid development and manufacturing of diagnostics within the country's biotechnology industry, including fast-tracking five COVID-19 diagnostic tests through regulatory approval, which allowed for rapid availability of tests and used the use of data (e.g. from mobile phones) to monitor COVID-19-positive individuals and close contacts, facilitating self-isolation and contact tracing.

Africa:³

- ❖ African Task Force for Coronavirus (AFCOR)
 - Continental approach -6 different working areas
 - Laboratory
 - Subtyping
 - Surveillance
 - Enchanted port of entry
 - Infection control and prevention
 - A competency based training of trainers in Nigeria
 - 1,200 community practice happened
 - Clinical management
 - Commodities
 - Risk communication
 - African CDC and the WHO decides and discuss and prioritize certain areas
- ❖ They prepared and trained the workers of what to do and just within four weeks they had appropriate testing

Other low, middle-income countries:

- ❖ Realizing their constraints in funding, capacity and infrastructure, aggressively ramped up measures to keep COVID-19 from spreading as early as possible. These measures included a willingness to deploy rapid, easy-to-use tests, even if they were not as accurate as the conventional PCR tests, which require relatively expensive laboratory equipment and supplies and greater laboratory capacity.³
- ❖ Hospitals and clinics in developing countries are likely to be overrun and under resources, further risking the spread of the COVID-19 virus. Up to 75% of people in least-developed countries lack access to soap and water.²⁸
- ❖ "Communities do not have water and soap. They are unable to sit home and wait. There is no food, they earn their income on a daily basis."²⁸
- ❖ The World Bank and the International Monetary Fund (IMF) needed to provide debt relief to developing countries.²⁸
- ❖ "Poorer countries will take the hardest hit, especially ones that were already heavily indebted before the crisis."²⁸

²⁸ Suleymanova, Radmilla. "Developing Countries Face Economic Collapse in COVID-19 Fight: UN." *News | Al Jazeera*, Al Jazeera, 30 Mar. 2020, www.aljazeera.com/ajimpact/developing-countries-face-economic-collapse-covid-19-fight-200330003332689.html.

- ❖ “Without support from the international community, we risk massive reversal of gains made over the last two decades and an entire generation lost.”²⁸
- ❖ The stranded millions of migrant workers who were forced to walk hundreds of miles to their home villages after public transport shut down in India ²⁸

Overview of the system

What is Infection Control?²⁹

The infection control system is a healthcare protocol to stop or prevent the spread of infections in a society. It is split up into two tiers of recommended precautions: the standard precautions for all patient care - based on risk assessment and making use of common sense practices and personal protective equipment, and transmission-based precautions - -precautions for patients with known or suspected infections that can be socially transmitted.

Transmission-based precautions include specific steps such as: ensuring appropriate patient placement, using personal protective equipment (PPE) appropriately, limiting transport and movement of patients, using disposable or dedicated patient-care equipment, and prioritizing cleaning and disinfection of the rooms.

Germs spread quite quickly, “Germs are a part of everyday life and are found in our air, soil, water, and in and on our bodies. Some germs are helpful, others are harmful. Many germs live in and on our bodies without causing harm and some even help us to stay healthy. Only a small portion of germs are known to cause infection.”²⁹ An infection occurs when germs enter the body, increase in number, and cause a reaction of the body. There are some necessary things to know if an infection occurs. There is a source - “A Source is an infectious agent or germ and refers to a virus, bacteria, or other microbe”, susceptible person - “A susceptible person is someone who is not vaccinated or otherwise immune, or a person with a weakened immune system who has a way for the germs to enter the body. For an infection to occur, germs must enter a susceptible person’s body and invade tissues, multiply, and cause a reaction”, as well as transmission - “Transmission refers to the way germs are moved to the susceptible person. Germs don’t move themselves. Germs depend on people, the environment, and/or medical equipment to move in healthcare settings.”²⁹

Medical Insurance policies in Top 10 Countries that got hit by COVID-19 as of (May 13th 2020)

United Kingdom³⁰

- ❖ The UK healthcare system
 - The UK has a mixed healthcare system, with most residents covered by the state-funded NHS.
 - Around 10.6% of residents use private healthcare which is available to those with private health insurance
 - Except for in cases of emergencies, you will need to be referred by your doctor or a qualified health professional for treatment at a UK hospital.
- ❖ Who can Access
 - All residents can access most NHS services free of charge and don’t need any kind of insurance plan.
 - If you are a non-resident or visiting the UK on a short stay, you are entitled to free emergency care, maternity care and treatment for infectious diseases and some serious conditions free of charge.
- ❖ Healthcare Costs
 - Spends 9.6% of annual GDP on healthcare
- ❖ Health insurance costs in the UK
 - Private health insurance costs £1,435 on average in 2017
 - Your health insurance premium will be affected by:

²⁹ “Infection Control.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 25 Mar. 2019, www.cdc.gov/infectioncontrol/index.html.

³⁰ “Healthcare in the UK - Expat Guide to the United Kingdom.” *Expatica*, www.expatica.com/uk/healthcare/.

- level of coverage
 - how many people are covered
 - age
 - lifestyle
 - medical history
- ❖ Private health insurance in the UK
 - Non-residents and short-term visitors who aren't entitled to free NHS care can pay the health surcharge which gives them access to public health services on the same basis as a resident
- ❖ The advantages of getting health insurance in the UK
 - The NHS is a world-renowned healthcare provider, but it does struggle to meet demands.
 - Greater choice in GPs and hospital facilities
 - A wider range of treatments, including some specialist treatments not available on the NHS (ex dental treatments, complementary therapies)
 - shorter waiting times, as services aren't as over-crowded
 - more exclusive treatments (e.g. private hospital rooms)

Spain³¹

- ❖ Who can access healthcare in Spain?
 - Guarantees universal coverage for all residents
 - Consists both of private and public healthcare
 - Around 90% of Spaniards use the public healthcare system which is called the National Health System and is overseen by the Spanish Ministry of health
 - A resident in Spain and work in employment or self-employment and pay social security contributions;
 - living in Spain and receiving certain state benefits
 - a resident in Spain and recently divorced or separated from a partner registered with social security
 - a child resident in Spain
 - a pregnant woman who is a resident in Spain
 - under 26 and studying in Spain
 - a state pensioner
 - staying temporarily in Spain and have an EHIC card
 - State healthcare is free of charge to anyone living and working in Spain however they are decentralized
 - Has bi-lateral agreements with some countries → allows citizens from these countries visiting Spain for short periods of time to obtain free emergency medical treatment
 - Andorra
 - Brazil
 - Chile
 - Ecuador
 - Peru
- ❖ Healthcare costs in Spain
 - Spanish health care spending accounts for around 9% of annual GDP making it the 13th biggest healthcare spender out of the EU/EFTA nations
 - Spending works out at just over 2,00 euros per person
 - Residents only need to pay a proportion of prescription charges if they are making regular public health insurance payments = they also have to pay for certain specialist medical procedures and made need additional private insurance coverage
 - Each region of Spain takes individual responsibility for a health budget which is ultimately allocated by the central government

³¹ "The Healthcare System in Spain: a Guide for Expats." *Expatica*, 10 Apr. 2019, www.expatica.com/es/healthcare/healthcare-basics/healthcare-in-spain-101467/.

- ❖ Health insurance in Spain
 - Health insurance in Spain is covered by Spanish social security payments which are made by all employees and self employed workers. Spouses and children of workers also receive coverage.
- ❖ Private healthcare in Spain
 - It runs alongside the public system with some providers offering both public and private provision
 - Anyone not eligible for state healthcare will need to take out private health insurance or pay the full amount for any medical costs
 - Many people also choose to cover themselves for private treatment to give them access to wider and quicker treatment.
 - Around 19% of the Spanish population has some form of private healthcare coverage.
 - Private health insurance in Spain usually costs between 50-200 euros a month depending on the coverage plan
- ❖ Doctors and specialists in Spain
 - Doctors in Spain work out of either private practices or health centers. They offer both private and state healthcare so be clear which type you want. You can choose your own doctor in Spain. They can be found via your local healthcare authority.
 - If you want to be seen by a medical specialist in Spain, you will need to have a referral from a family doctor.
- ❖ Children's healthcare in Spain
 - Children in Spain have free healthcare coverage under their parent or guardian's insurance. This includes free dental care and access to pediatric services until the age of 15.
 - Public services are good, although private healthcare is an option for those in regions where specific facilities may be lacking.
- ❖ Hospitals in Spain
 - In an emergency you can go straight to a hospital A&E or ER. If you want to get any other type of hospital treatment, you will need a referral from a doctor.
 - Only the public hospitals provide free treatment although some private ones do
 - When you go to a Spanish hospital you will need to show your social security card or proof of private insurance.
 - Health centers are located in every region and are staffed by multidisciplinary teams. Health centers in Spain tend to have around six GPs.
 - comprising GPs, pediatricians, nurses, gynecologists, and physiotherapists.

Italy³²

- ❖ Healthcare System
 - Healthcare in Italy is not free but the fees are usually quite reasonable and Emergency Medical Assistance is provided to anyone in need, regardless of their nationality
 - Healthcare in Italy is provided to anyone with a mixed Public and Private system. Italian law recognizes health as a fundamental right of every person and anyone present in Italy is entitled to a form of healthcare.
 - Italy has universal healthcare coverage, but only some services are completely free
 - There is also co-pay (ticket) and is applied to some emergency room visits, specialist consultations, diagnostic procedures and lab analyses
 - Availability is select
 - They are not likely going to be able to speak English
 - You can't choose your doctor
- ❖ Public Healthcare in Italy
 - The Italian National Healthcare Service is the Public, tax-funded medical assistance, organized and regulated by the Ministry of Health and administered through regional authorities
 - To access the healthcare services you need to obtain a valid Italian Health insurance card or the equivalent from another EU country (the EHIC card)

³² "Healthcare In Italy: The 2020 Guide For Expats And Travelers." *Doctors in Italy*, 2 Feb. 2020, www.doctorsinitaly.com/healthcare-in-italy/.

- Public healthcare is provided through regional health units called ASL (Azienda Sanitaria Locale → Local Health Authority)
- ❖ Private healthcare
 - Required to pay upfront for the services, installment payment options are usually available for larger sums
 - Medical fees in Italy are usually very reasonable, compared to other countries with a similar cost of living.
- ❖ What is free
 - Hospital admission is free if you are admitted for a necessary procedure. If you want to have an elective procedure (ex a preventive check up), this would not be free
 - Some specialist consultations, lab analyses, and diagnostic procedures are free, but only if prescribed by your public Primary Care Physician

France³³

- ❖ The French healthcare system
 - universal coverage for all citizens, regardless of age or economic situation
 - Public and private services
 - The ministry of social affairs and health administration public healthcare in France
 - The first line of healthcare in France is provided by family doctors or GPs
 - These doctors are mostly self-employed and work either alone or in group practices.
 - You are free to choose whichever French doctor you prefer, but you must register with them as your ‘attending doctor’ or primary doctor in order to claim a full reimbursement via the French healthcare system.
- ❖ Who can access healthcare in France
 - Public healthcare in France is accessible by all residents through health insurance contributions
 - As of 2016, a new healthcare system for foreigners, known as Protection Universelle Maladie (PUMA), allows access to state healthcare after three months of residence
 - If your household income falls below a certain threshold, you may be eligible for free commentary health insurance coverage (CMU-C)
 - There is also state medical assistance (not that much information)
 - Temporary visitors to France from the EU/EEA/Switzerland can access public healthcare if they have a European Health Insurance Card (EHIC).
 - Retirees from the EU/EEA/Switzerland relocating to France can access healthcare services by completing a social security S1 form in their home country.
- ❖ Healthcare costs in France
 - Funded partially by obligatory Social security contributions, along with the government and the patient also pays a small contribution to their healthcare costs
 - Since the end of 2017, doctors and certain medical personnel are not allowed to charge upfront payments. Instead, they receive payment directly from the government or health insurer.
 - Spends 11.5% of annual GDP on healthcare
- ❖ Health insurance in France
 - Insurance-based system
 - Foreign residents can access French health insurance through the PUMA system once they have been living in the country for three months.
 - Those earning below a certain threshold can apply for complementary coverage called CMU-C (Complementary Solidarity Health as of 1st November 2019).
- ❖ Private healthcare in France
 - In France, many private doctors and specialists receive funding through the state insurance companies

³³ “A Guide to the French Healthcare System.” *Expatica*, 2 July 2019, www.expatica.com/fr/healthcare/healthcare-basics/a-guide-to-the-french-healthcare-system-101166/.

- Although your state health insurance will cover the same percentage of costs, you will have to pay more for the part that isn't covered.
- ❖ Children's healthcare in France
 - Children in France can access free healthcare through the public health insurance of their parents/guardian. This includes free dental check-ups until the age of 18.
 - Children have 20 free compulsory screenings from birth up until the age of 6, with yearly follow-up screenings recommended after this. These screenings check for health issues such as:
 - genetic diseases such as sickle cell disease and cystic fibrosis
 - hearing disorders
 - visual disorders
 - language and learning problems
 - Diabetes
- ❖ Hospitals in France
 - State run and privately run are often state approved and work under the healthcare system
 - French healthcare reimburses around 80% of hospital charges, however the 'board and lodging' costs of a hospital stay are not; this is where top-up insurance is useful.

Germany³⁴

- ❖ The German Healthcare system
 - Has a dual public-private system that goes back to the 1880's (oldest in Europe)
 - Free healthcare for all along with private health insurance
 - The federal ministry of health is responsible for developing health policy in Germany
- ❖ Who can access healthcare in Germany?
 - All German residents can access the healthcare system in Germany through public health insurance.
 - Non-residents need to have private insurance coverage to access to healthcare
 - temporary visitors will typically need to pay for treatment and claim a reimbursement later
 - If you are from the European Union (EU), European Economic Area (EEA) or Switzerland and staying only temporarily, you may use your EHIC card.
- ❖ Healthcare system costs in Germany
 - Spends 11.1% of annual GDP on healthcare
 - Public and private insurance contributions cover the majority of costs. On top of this, everyone has to pay a fee of around €10-15 for their first medical visit every quarter. You don't pay this if you don't seek any help during that quarter. Those with private health insurance can reclaim this.
- ❖ Health insurance in Germany
 - If you are an employee and you earn less than €57,600 a year (€4,800 a month in 2017), you have to take part in the government health system – taking out health insurance as soon as you have signed your work contract.
- ❖ How to register for healthcare in Germany
 - If you live long-term or work in Germany, you must register with the German authorities at your local town hall. Once you are registered, have a social insurance number, and are making national insurance contributions, you are entitled to state-run healthcare the same as German nationals. In order to access this, you also have to register with a health insurance fund.
 - Since 2014 an electronic eHealth card with a photo of the holder (unless under 15) is proof of entitlement to medical services and benefits. The card, which contains your name, date of birth, address, and health insurance data, is scanned when you visit a medical service.
- ❖ Private healthcare in Germany
 - You can choose to opt out of the state insurance plan and take out private health insurance cover if:
 - an employee earning more than €57,600 (2017)

³⁴ "A Guide to the German Healthcare System." *Expatica*, 1 Sept. 2016, www.expatica.com/de/healthcare/healthcare-basics/german-healthcare-system-103359/.

- Self-employed
 - working part-time and earning less than €450 a month
 - a freelance professional
 - an artist
 - a civil servant or other public employees
- Companies offer different levels of coverage. Premiums depend on age at entry into the insurance plan and any pre-existing conditions and cover is usually per person; rather than per family as with the government insurance plans. Part of medical insurance premiums is tax-deductible.
- ❖ Doctors and specialists in Germany
 - You are free to choose your own doctor- some doctors only treat private patients
 - Some doctors have an ‘open door’ policy where you can just turn up at the surgery; however you may have a long wait.
 - You will need a referral from your GP to see many specialist doctors, although some specialists take direct bookings.
- ❖ Children’s healthcare in Germany
 - Public health insurance will cover your children until the age of 18.
 - Vaccinations for children in Germany are free.
- ❖ Hospitals in Germany
 - 3 Main types of Hospitals: [Krankenhäuser]
 - Public hospitals
 - Voluntary, non-profit
 - Private hospitals

Other Countries:

China³⁵

- ❖ Healthcare System
 - Though China has established a national healthcare system covering an impressive 90% of its vast population, coverage varies based on the regional interpretation of national laws.
 - People can choose between the public system, VIP wards, and private medical insurance.
 - China does have free public healthcare which is under the country’s social insurance plan.
 - It provides basic coverage for the majority however it depends on the region you reside in
 - Medical insurance can be broken down into three subcategories: basic cover for urban enterprise employees, basic cover for other urban residents, and rural cooperative medical insurance for the farming population.
 - No matter where you live and how much you’re covered, the way healthcare in China works will require you to pay for the services upfront and out of pocket
 - If you have access to public health insurance, your non-working family members may not be covered
 - Depending on which insurance and treatment you have, you may be reimbursed for some of the costs or none at all
- ❖ Private insurance
 - It is sort of a mystery, understanding of the consumers needs and cooperation between hospitals and insurers makes private healthcare services confusing and expensive
 - The average costs of health insurance in China are rarely affordable for people with average wages.
 - The public is poorly informed about their options and even the people who can afford it, rarely ever opt for private healthcare.
 - The most common types of the healthcare plans are the life insurance policies, that pay out a lump-sum for any critical illness a person is diagnosed with

³⁵ “Healthcare in China.” *Guide to Health Insurance and Healthcare System in China* | *InterNations GO!*, www.internations.org/go/moving-to-china/healthcare.

South Korea³⁶

❖ Healthcare System

- Healthcare in South Korea is universal and funded through a combination of government subsidies, outside contributions, and tobacco surcharges.
- Expats will be happy to know that healthcare for non-residents in South Korea is of the same quality as it is for Korean nationals. Foreigners are required to register for the national health insurance after living in the country for six months
- South Korea has universal healthcare, which consistently ranks in the Organization for Economic Co-operation and Development's (OECD) top percentile for healthcare access and standards
- The only problems people may encounter are lengthy wait times, even in emergency situations, even using private insurance will not make much of a difference
- As in many countries in Asia, air pollution is a significant problem. People with asthma or upper respiratory conditions should register with the national health program immediately upon arrival in the country, so that they can be prepared
- Private facilities are largely found in urban areas, as are nearly 90% of the country's physicians. Around 80% of the country's population lives in or near the cities, but this still leaves those in the countryside without the same topnotch access to healthcare that is standard throughout the country.
- The country's healthcare system is more focused on treatment rather than prevention. South Korea's medical treatment practices are effective, but they do not save patients from long-term health effects and spending.
- Hospitals and clinics are modern and efficient, and expats will find a variety of both Western and Eastern treatment options.

❖ Public healthcare cover

- Korean public healthcare covers between 50-80% of medical costs depending on the individual's needs and the treatment they receive
- South Korea does not have public healthcare
- Every resident in the country, whether you are a foreigner or a Korean national, must pay to use the public healthcare system
 - It is reasonable:
 - If you are employed, 5% of your income will go towards the NHI.
 - The amount self-employed expats pay is based on their income.
- Spend 100 USD a month (114,000 KRW)

❖ Private Health Insurance

- When it comes to comparing private and public health insurance in South Korea, the quality of care does not differ greatly. However, what differs is the cost.
- Private insurance will not reduce the cost of medical procedures, but it will subsidize the typically 20-50% out of pocket payment that is required when residents only use the NHI.

Life Insurance in response³⁷

“Life insurance is a contract between an insurance policy holder and an insurer or assurer, where the insurer promises to pay a designated beneficiary a sum of money in exchange for a premium, upon the death of an insured person.”³⁷ Life insurance is a risk management tool, so anytime you have outstanding debts or people who depend on you for income, you should have a life insurance policy in place to protect your loved ones from financial suffering if you die unexpectedly and prematurely.

During COVID-19, life insurance policies already in place likely won't see any changes due to a pandemic; “If you already have life insurance, and you die from coronavirus, your beneficiary will still receive the survivor

³⁶ “Healthcare in South Korea.” *Guide to Health Insurance and Healthcare System in South Korea* | *InterNations GO*, www.internations.org/go/moving-to-south-korea/healthcare.

³⁷ “Life Insurance and Coronavirus (COVID-19).” *Policygenius*, www.policygenius.com/life-insurance/does-life-insurance-cover-coronavirus/.

benefit.” However, the people who are applying for life insurance might have to follow some guidelines that could affect them in the end because of Covid-19. Such as, you have traveled to China within the last 30 days, you have plans to travel to China, you have recently returned from Wuhan Province, you have recently traveled to or are planning to travel to areas more recently affected by the virus, such as Hong Kong, Italy, Iran, Japan, Mongolia, South Korea, Taiwan, and Vietnam, you have plans to travel outside the U.S. or have recently returned from travel outside the U.S., or if you have a member of your household who has recently returned from travel outside the U.S. or if you have come into close contact with someone who has tested positive for COVID-19. However if you can opt-in for temporary life insurance coverage, which is the coverage you get during the life insurance application process so that if you die, your beneficiaries still get some death benefit.

Although this may seem easy, if you were to contract the coronavirus and it caused long-term impact on your overall health before you applied for life insurance, you might end up receiving a lower health classification and a costlier life insurance policy. In the end there is no escape and getting the best care- something is always going to stab you in the back. Whether it be your examination when you get life insurance and how it determines how much you pay. It is really up to the doctor to determine your health. However, there is the option of buying life insurance that doesn't require a medical exam, however, those life policies can be a lot costlier than policies that do because they require the insurer to take.

Hospitals/Healthcare Workers

Altered Lifestyles:

During this pandemic, many lives have changed drastically, whether it be from losing their job, working from home, or simply not being able to do their day to day activities. Some people have to fill out forms and go through screenings to go to certain places. Their city/town has become a ghost town and the scariest part is that there are so many unknowns about this pandemic. Not only are people trapped, but people are starting to feel lonely and are being trapped between set borders to see their family.³⁸

Here are some responses -

- ❖ Tommy Mallen, Musician, Cork, Ireland³⁹
 - “A lot of my security as a freelance performer comes from being able to draw a crowd, which means you're at the mercy of the pubs... there's no safety net or benefits for freelance ginger”
 - He was forced to move back home to Kerry on the opposite coast - he could not afford to pay rent on the \$122 the Irish government offers people who are looking for work.
- ❖ Louise Mills, Teacher, Melbourne, Australia³⁹
 - She has the flexibility to pick up different assignments, but if she doesn't work, she doesn't get paid. Before schools closed for easter, Mills was forced to choose between working and protecting the health of her roommate who suffers from respiratory issues
 - Australia is spending tens of billions of dollars on income support payments, but they do not apply to freelancers or casual workers like Mills. She will not have enough money to pay rent and she will be advised to return home
 - “It's ironic because the key workers in this country, in nursing, teaching, hospitality, are foreign”
- ❖ Lv Fan, Flight attendance, Shenzhen, China³⁹
 - “For jobs like ours, the more you fly, the more you earn. If you don't fly, you'll get paid only the local basic monthly salary.”
 - Losing customers due to the job is taking a toll
 - For nightclubs, restaurants, any type of gathering place
 - “Income is almost at zero. I've been working second and third jobs like day laboring” - Kim Eun-HEE (Seoul, South Korea)

³⁸ “How COVID-19 Affects People Around the World | Cut.” *Youtube CUT*, 29 Mar. 2020, www.youtube.com/watch?v=_YNfwHB6IkI.

³⁹ “15 Countries, 16 People. How Workers Are Coping with Coronavirus.” *CNN*, Cable News Network, www.cnn.com/interactive/2020/04/business/economic-impact-workers-coronavirus/.

- ❖ Respiratory Therapist (Oklahoma City, OK)⁴⁰
 - “We were threatened to be shot at because we were the reason why COVID was a thing.”
 - She was wearing her scrubs so they were told to come in with their regular clothes to protect the workers

Survey:

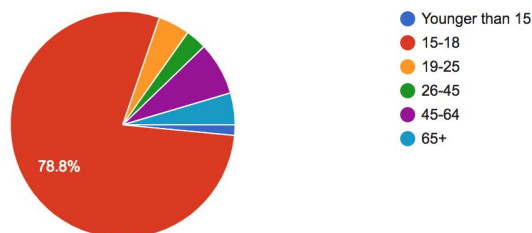
I needed to broaden my horizon as I go to a liberal independent school and live in a liberal mindset. There aren't that many differing opinions, if there are, they are barely talked about, nor do these people speak up. Therefore I decided to conduct a survey through my snapchat as well as sending it to specific people, to gain an understanding of what others were feeling and where they were coming from, rather than taking information from the news or what is emphasized in the media. All the people that answered had a connection which made this pandemic more real and devastating. I specifically targeted questions on how these people are affected, being impacted, dealing with quarantining, trying to prevent the spread, healthcare system, economic toll, healthcare coverage, and what they are scared of. I fortunately received a range of answers that helped me formulate possible solutions.

METHOD:

As stated before, I asked my snapchat story as well as friends and relatives to fill out my survey. From these people, I collected answers to the impact of COVID-19, their age, where they are from, leaving space for their name which was optional. The reason why I didn't require a name was for people to answer truthfully; I have learned in the past, that if you write your name, there is an association and attachment to how you answer whereas if you are anonymous you can speak more freely.

RESULTS & DECISION

I received 67 responses, much more than expected. I then separated and categorized them into topics that I will specially talk about as well as combining certain questions to create a generalized topic. I specifically chose to use, state, as a factor while depicting the healthcare system.



Has COVID-19 impacted your job/school? If so, how?

From the 67 responses 100% of the people state that it has affected them, whether it be work, high school, college, senior projects, or a day to day routine they are used to. I pulled a few lines that are representative of the range of answers.

“I’ve found that lectures on zoom are a lot harder and it’s hard to focus in my house.” -Student, Leesburg, VA, 19-25 y/o.

“Remote learning is easier, but less engaging.” -Student, NYC 15-18 y/o

“Yes it has impacted my school by closing it down and cancelled my PATS which I am fine with.” -Student, Canada, 15-18 y/o

“Yes. My business revenues are reduced by 60% and I may have to lay-off staff soon.” -Owner, NYC, 65+ y/o

⁴⁰ “Healthcare Workers Get Real About COVID-19 | One Word | Cut” Youtube CUT, 29 Apr. 2020, https://www.youtube.com/watch?v=eomDjn0_Dlg.

“As a freelance worker, my hours/ rates have dropped significantly and I will most likely apply for unemployment.”
-Employee, NYC, 26-45 y/o

“My industry is completely shut down. I also have my own multi family property for passive income and some of my tenants can’t afford to pay their rent.” - Owner, NYC 26-45 y/o

“I work for a public broadcast station in Germany, which is considered essential. Most employees got sent home to work from there in order not to risk the company’s ability to broadcast.” - Employee, Worms, Germany, 45-64 y/o

“Yes. I am a Pilates teacher and body/mind worker. Some of my clients have shifted to remote sessions, unfortunately some have gone because they lost their jobs or have had to rearrange their lives to care for kids and elder family members.” - Owner, NYC, 45-64 y/o

“My dad runs a food bank that went from serving 400 families a week to 830 families a week in the matter of a month since all this started.”-Student, Palm Desert CA, 15-18 y/o

“I was strongly urged to leave the uk, by American and uk governments” -Student, NYC, 15-18 y/o

“Yes. I am working from home instead of my office. I am an attorney and spend much of my time in court and they are all closed. The normal rules regarding lawsuits are not in place. So there is a need to adjust to changes such as e-filing and zoom hearings.” - Owner, Falls Church VA, 45-65 y/o

“As a realtor it is very hard to show houses and schedule inspections. Also, people are afraid to make a commitment to such a large purchase because they don’t know if they will still have a job.” - Owner, Falls Church VA, 45-65 y/o

“My business has been forced to “close” due to the virus. I am a contractor, and apartment buildings were starting to limit the amount of people they would allow in to do work...it ultimately went to just being allowed to have one person on site at a given time, which is very limiting on making progress in construction. Unfortunately that has caused financial difficulty with no work, there is no income, but the overhead expenses don’t stop” -Owner, NY, NY, 45-65 y/o

From the other responses I’ve received it is about school being cancelled and missing out on the senior life experience. For instance, missing prom and graduation and a lot of interest in what is going to happen to those events.

The next question I surveyed was: Do you know anyone personally who has been affected? How has this impacted you?

At the time of asking this, I was recovering from some sickness that might have been COVID-19, unfortunately I didn’t qualify to take the test because I was on tylenol and my fever went down. Although I had it pretty bad, I was on bed rest for 3 days and I was isolated from my family for 7 days before social distancing in the house for the next four. It felt like I had a light version of the flu and then developed a cold with a dry cough that lasted for a month. Luckily, my brother and his fiance only had body aches and a headache and were okay, as for my parents, they showed no symptoms. But at the time, I was thinking maybe I didn’t have it or maybe I did. My aunt had a fever and a cough for a couple of days and I did see her 5 days before I developed symptoms. I am still unsure of what I had, hopefully I will be able to get the antibody test and know for sure. However, going through these answers now, after a month of being moderately okay, it brought me back to the time I was sick and vulnerable. It reminded me that I wasn’t going through it alone and many people started to develop symptoms at that time with limited access to testing. Out of the 67 responses and asking if they knew anyone who had developed symptoms or was tested above was shocking. These responses were tallied in for 6 days - till April 16th. Here is a list of people who expressed were affected by COVID-19:

- | | |
|------------------------|-----------------------------|
| -Great aunt & uncle | -Grandfather |
| -Friends, parents (5x) | -Customers + Employees (2x) |
| -Uncle | -Sister |
| -God mother | -Extended family (2x) |

-Distant friends of family (4x)
-Mother (3x)
-Entire Family
-Cousins (3x)
-Responder has the virus(3x)

-Aunt and Uncle
-Great Grandma
-Friend (5x)
-Neighbor
-Brother and girlfriend (2x)

“My great aunt and uncle are infected, they’re pretty old so it has made me very worried about them.”

“Uncle in South Carolina had contracted it, went to the ER where he was for a week while using a ventilation system to breathe. I know my mom was in more of a shocked state than me, I kinda didn’t really have a big reaction like her maybe because I expected someone we know to get it because of how easy it is to get it.”

“We have been checking up on her progress everyday and I asked my church community to pray for her.”

“This majorly impacts my family because they both work in entertainment which means in order to work they need to travel and shoot and record and sing etc...contracts got canceled which is what she was counting on to pay for my college. Now they’re in a rut and have to move...in order to send me to college since we didn’t apply for a scholarship.”

“My grandfather is incredibly sick and cannot go get treatment because of the hospital canceling appointments.”

“My sister got CoVid. She is 72 with diabetes, heart condition and COPD...She was lucky - got an oxygen machine delivered at home and has slowly recovered. But emotionally she’s exhausted.”

“I’ve seen a lot of friends lose jobs/ a lot of people stressed for their health. It makes me sad for them and fearful for the future. As far as anyone being affected by covid the virus, I’ve only heard of those positive from testing through others close to me and I worry for them and think of them often.”

“I know people who have lost their lives. Their jobs. It’s very scary. I feel a tremendous amount of sadness for what they have had to go through. It has made me think about my own mortality and economic stability and grateful that I’m ok so far.”

“I’m less worried about contracting the virus than I am about my grandma getting sick.”

“Yes, my mother has to work more to cover for missing doctors”

“My cousin has it and I’m really worried about him. A lot of my parent’s friends have died and so I have spent a lot of time grieving with them.”

“Some of my friends’ grandparents have had covid which has made me worry for them and make the virus feel closer. My mom is also a doctor and is working at Bellevue hospital.”

“My next door neighbor passed away which was really upsetting”

“One of my creative writing classmate’s mom has COVID-19, and while I don’t really know him very well, it was a weird moment to realize that people I know can be directly affected by the virus.”

“Yes. My mom and her boyfriend got corona and then me and my sister got it along with two of my friends and my mom’s boyfriend’s brother who is currently in the hospital (he’s the one who got it worse)”

“I have clients who are elderly and have compromised health issues who are sitting in their new homes with all their belongings in boxes because they are afraid to let people in the house to help. They are overwhelmed, exhausted, scared, and without the essential things they need to take care of themselves. It makes me feel like I have failed them and worried that the stress may be more than they can bare.”

The next three questions I decided to place as one result, these questions specifically targeted how people are doing through quarantine and to what extent they are doing things to prevent COVID-19. Here are the highlights:

~99% of the people surveyed are doing as much as they can to prevent COVID-19, with only that one person who is not taking any precautions.

"I'm feeling a little depressed, but mostly really anxious to the point I can't sleep at night." -Student, 15-18 y/o

"I feel defeated and empty - my life revolves around a busy schedule involving a lot of sports and now i don't know what to do" -Student, 15-18 y/o

"Crying all day" -Student, 15-18 y/o

"I've been playing video games, doing workouts, working on senior project, eating and sleeping. For senior project [I go out] to take photos and for general walks with our dog and to get food for the family." -Student, 15-18 y/o

"I am keeping in touch with my friends, learning a new language, exploring my backyard, working out, spring cleaning, shopping, and creating new friendships for college!! I only go outside when I have to work (essential job) and when I workout in my backyard." -Student, 15-18 y/o

"I only go out twice a month for groceries." -Student, 15-18 y/o

"I am finding it difficult to deal with quarantine, I'm so lazy and unmotivated and I'm finding it difficult to study for exams while I'm stuck at home." -Student, 19-25 y/o

"It's frustrating seeing people still hanging out with their friends even though we're supposed to be social distancing/sheltering at home. In order to cope my family bought 2 ducklings to raise. There has also been hair dying, reading, and I've even done some journaling because I think it'll be fun to look back on, living through a global pandemic. I've been trying to limit the amount of time I spend watching TV and on social media because I know it's so easy for me to lose track of time and just spend way too much time on my phone. [As far as going out] my mom is the designated grocery store errand runner. If I get really restless and just need to get out of the house I'll drive around by myself and blast music and go sit on top of parking garages" -Student, 19-25 y/o

"I keep breaking down and stuff; it's not going well but I have focused on my art so that's good." -Student, 15-18 y/o

"I have been sleeping in more which is wonderful. I have been facetimeing with my friend and family (which I honestly didn't do before the pandemic). [As for going out] I have to be quarantined for 2 weeks then 3 days of no symptoms. I'm on day 9 of this." -Student, 15-18 y/o

"The days can be very long and at times somewhat fearful but I try to take it one day at a time and be grateful for all the comforts I have." - Retired, 65+ y/o

"As best as I can- trying to keep busy but allowing myself to relax/ reflect. I am trying to remind myself that in a way, we're lucky to have this time when the world is paused." - Employee, 26-45 y/o

"I am trying to remain creative and positive. I have been writing a lot. Cooking. Starting a new workout program. Chatting with friends and family on Zoom. Fixed my stuff up around the house. Trying to stay rested and healthy! Keeping focus on gratitude over fear." - Owner, 26-45 y/o

"Because I am an introvert, I'm finding that the pace and lack of outside activity and socializing is actually sort of ok. In the quiet of it all, I am reading more books, tackling a few organizing jobs, cooking more healthy meals, and working out a bit more. I definitely have more time to think and have found comfort in poetry, meditation, music, and art (all things I love but might've said I didn't always have time for before). Although I've been ok so far, I am definitely feeling a little 'lost' at times and can see how my lack of structure at times might get to me eventually." - Owner/Employee 45-64 y/o

"I live in NYC and although I may not be working at full capacity - I'm still working and being useful. I feel rich. I suffer some confinement stress but then I sing out the window." -Owner, 45-65 y/o

"I sleep through half the day and spend the other half doing online schoolwork" -Student, 15-18 y/o

"It's hard not being able to do normal daily routines" -Student, 15-18 y/o

"I don't know how I'm dealing with it. I feel kinda sad and I try to make the most of it and distract myself from reality." -Student, 15-18 y/o

"I leave my room only to grab food and I don't exercise and I spend 15-19 hours a day on my phone." - Student, 15-18 y/o

"Memes, humor, tiktok. Although there are those hours when everything gets real. And then it's scary." -Student, 15-18 y/o

"It's been fine. I feel lucky that I have everything I need during this time and my family has been healthy." -Student, 15-18 y/o

"Not well, lot of family arguments and I have class at 5 am so I'm bored and tired all the time" -Student, 15-18 y/o

"I'm bored sometimes and it feels like I'm just trying to pass time. My senior project was supposed to happen in a office which is why I wanted to do it in the first place but now it is online and the experience is completely different. I wish I could have more interesting things to do." -Student, 15-18 y/o

"I've been okay with quarantine, I'm using it as an opportunity to learn more in general and about myself. I have had more time to do things that give me pleasure. Still salty they took away senior year though" -Student, 15-18 y/o

"I am good, as an introvert the social distancing part isn't super difficult, but I do miss my friends. I talk to them on social media a lot though so that's fun. I have also been reading and going on walks more, so the silver linings are always nice." -Student, 15-18 y/o

"Not well. It was alright for the first few weeks because it was nice to have time to myself, but now I just am sad and thinking about my friends and how much I miss doing little everyday things" -Student, 15-18 y/o

"Closed in, just being around my family who treats me like I'm 5 years old rather than people who see me differently" -Student, 15-18 y/o

"Better than I expected. It is different from being shut in from a storm as I still have my electronics, internet and television. I have reconnected with many people and strengthened my relationship with those closest to me." -Owner, 45-65 y/o

"Living alone and being forced to stay in like this has only emphasized my dislike of zoos and how animals are taken from their habitat and their group/species/environment and placed in a jail cell in a cage. Never before have I felt more like that. It's been a bit of a rollercoaster of emotion. I am just trying to figure out where my life is headed through all of this and where I am going to end up." -Owner, 45-65 y/o

For the next three questions, I asked their opinion on the healthcare system for individual use as well as for everyone else and if our country is handling the pandemic well, I decided that I would separate the answers by states/countries. Most of my responses are from the USA, however, we have responses from Europe, Asia, and South America. Along with this, there are few responses or even one response per state or country. I cannot take that response into account for an entire country/region/town. I am including them because it wouldn't be fair and it is nice to get a different perspective from those states and countries.

*Categorized New York into Long Island and NYC

*Categorized alphabetical

California: (4 Responses)

For the California responders, they agree that the hospitals and healthcare system that's in their area are doing the best they can. They are said to be "doing everything in their power to contain corona" however some say, "I don't know much about what they are doing so I can't give examples but from what I've heard they are trying their hardest." One even said, "Yes [they are doing their best], but I can't see the daily everyday examples."

The next question that was being asked was whether the general healthcare system was good. The answers that I received were a bit mixed, some believe that the system is doing the best they can: "Yes I believe they do what they can with the supplies they have" and "I think it's because of their ability to help set up proper protection for everyone" however, there is the downside of people saying: "In terms of the type of care people get it is good but it is very flawed in the fact that almost no one can afford to pay for healthcare and I believe it should be universal" or "No because lots of people can't afford it".

The third question was about your country and if they are handling the outbreak okay and if not, how they can improve. Again there are altering answers, some believe that "the government has done all they can to keep as many people inside as possible and now it is the responsibility of the people to uphold their quarantine and try to prevent themselves and others from getting sick" others think that "the states are doing some good things such as shelter in place orders and shutting down schools but the federal government is trying to defund the world health organization which is the opposite of what I would do." Then some people believed that in the beginning of this pandemic the system was doing well but started to think, "that the quarantine needs to come to an end". That was stated April 15, 2020 where the growth rate was decreasing but still had high numbers.

Canada: (4 Responses)

For the Canadian responders on the first question that was asked about the healthcare system in their area, the responses were the following as of April 13th. Everyone that gave me feedback were quite positive and proud of their province. They said that, "there are no cases in my city, but the healthcare system is doing a great job to prevent a spread to our area." and that "the hospital in my city [sat] aside an area in the hospital for people with symptoms of Coronavirus so people who need emergency care don't have to worry about coming in contact with people that might have Coronavirus." Not only that but there were, "no problems with PPE and other materials, masks, gowns, etc." and that "it appears that they have been thinking and planning ahead for what is to come. As a result, they seem to be handling the whole crazy situation well so far."

The second question regarding their general health care system results were also positive. The responders stated that the system worked, "Especially the part where there are no hospital bills. The doctors and nurses get paid in different ways than the actual victim, and I think that that is fair." and because "it is free and we have good health care workers and doctors and nurses." "The Canadian health care system is a 'single - payer' system. Everyone gets treated, for free, for any need that is presented. No HMOs in Canada, no charges for going into the hospital, no charges for seeing a doctor. Unlike the US privatized system, no one worries about health care costs or unexpected bills that could bankrupt a person." Although their health care is free, they live in "Calgary, a larger city, has far more cases than we do and their hospitals are stressed more than usual but no shortages are reported." But for the most part they "feel lucky to be in Canada where there is healthcare support. And while it's not perfect, I feel fortunate that our government offers universal healthcare for citizens. I can't imagine what it would be like to not have this during a pandemic."

Lastly I asked them if their country is handling the pandemic well and once again, all affirmative answers. They all said that, "Our country is doing a good job, and the Federal government is doing a great job to work with individually impacted cities and provinces." and the fact that "Justin Trudeau [has] set aside money for people in need, we are helping out other countries and our own country to and are listening to health experts and we have a plan on how to handle it." Justin Trudeau and their other leaders, "have been consulting (and trusting) health care

experts and scientists to help make decisions.” and have been a “great help and has “gotten us ahead of the curve, and people are generally doing their part to help stop the spread of the virus.” “The federal government is taking a lead in offering substantial financial support (as well as creating policy/rules), while the provincial governments have taken on more of a lead health care wise. I’m sure there are some who would criticize the speed at which some of these decisions have been made, but under the circumstances, I think they’ve done well.”

Chile: (1 Response)

Although there was one response coming from Chile it was nice to add in a different perspective. As for the first question being about the hospitals and healthcare system in their area doing the best they can, she stated that she thinks they are and that she is “fortunate enough to live in an area with a nice hospital that isn’t too crowded but I can’t imagine how much of a disaster it is more into the city where the people have less money and less resources.” As for the healthcare system in general, she said that “I think it’s really slow and expensive but it does what it needs to.” As for the entire country and the way they are handling the pandemic is that they are “doing the best they can but Chile has a huge economic divide and I think that the richer people are being treated quicker and more efficiently than the poorer population who, at the end of the day, need the better attention cause they’re at higher risk due to their lack of resources.”

Florida: (1 Response)

Again, there is one response from Florida in the Fort Pierce area, but I thought it would be valuable to add. As far as his answers about the healthcare system he answered, “they are doing their best with what they have, but it can be improved with more help because they are being overrun.” He believes that the health care system in general “[isn’t] good because so many families suffer from not being able to get the necessary support they need, mainly lower income families” but thinks our country is “doing [the] best, but maybe if the public was knowledgeable a little more it would help.”

Germany: (1 Response)

The reason why I added the one German response is because it shows a different dynamic. This woman is an employee of a broadcasting station and is now working from home. She has said that although it isn't ideal to work at home, it isn't bad and she's done it before. It makes her spend more time with her husband and kids but also is doing the work she needs to. For the first response about the hospital and healthcare system in the area and how they are performing were, “Yes!!! A friend of mine is a nurse - they just switched her working times to 12 hours, 7 days in a row (!!!). Her hospital was able to take in patients from France, because the situation is much worse.” The system in general is good, “Everybody in Germany has to have health insurance. People with higher income support those with lower income. There is also a private sector, which created in some fields a two class health system over the years.” For the country “Overall I feel comfortable with the decisions made by the German government. They acted extremely conservative in the past (no surprise) and worked closely together with scientists. Polls in Germany show that 4/5 of the population trust their government in these crises.”

Hong Kong: (1 Response)

Once again there is one response, however this is coming from a student who had school off from February and was surveyed on April 15th. She said that they “low amount of deaths and cases considering we are literally a part of China.” The system in general “[has] high standards and [takes] every case seriously.” As for the general country, she said “we have done well at containing the cases.”

Maryland: (2 Responses)

There were two responses from MD, however the responses came from North and South Maryland, about two hours from one another so I thought it might be interesting to add it to the mix of the other responses. The hospitals and healthcare systems that were near them were very scarce as they both said, “Yes, with the limited supplies and information that they know, the hospitals are taking each and every step they need to help everyone with the virus get better and helping put the family of those at ease” and that they think “there could be more centers for testing.” The health care system in general had two differing opinions, one student had said, “No, our healthcare system does not protect everyone.” whereas the other student said, “For the most part yes, I haven’t personally faced any problems with it.” However the two both agreed on how our country is handling and how it could be better: “I think the country could be more strict with restrictions” and that “The country is trying to handle the pandemic but

people are taking it more as a suggestion than a demand. The lockdowns must be mandatory because I know people who are still going out to see their boyfriends because they are “essential” when they are not.”

Michigan: (1 Response)

One response from Michigan and although I don’t know the exact part, I see Michigan as a purple state although may be leaning blue. The hospitals and healthcare system in his area “are keeping everyone informed.” The general healthcare system there isn’t good because, “there is not enough access for less fortunate individuals” As for the overall country, he believes that we aren’t doing the best, “people are still going outside and acting like they are not going to get infected/spread the infection.”

New Jersey: (2 Responses)

New Jersey was a hot spot for COVID-19 recently and although there are only two responses, being able to see a perspective there is beneficial. They both think that the hospitals and healthcare systems are doing the best they can “with the resources provided by the government.” The healthcare system in general, one says it is doing well, while the other student thinks “they’re good in the sense that they’re able to treat people, but not good financially, especially to those with bad insurance or no insurance at all.” As for the entire country, “No. I think they need to improve testing and provide more financial aid to the places that need it the most.” and that “I think we will need longer than expected to recover from corona virus.”

New York: (42)

NYC: (31 Responses)

New York City contains 5 boroughs, these answers may be varying depending on where people are although it is all under NYC. For the first question regarding if the hospitals and healthcare systems in their area are doing the best they can. Although seven people opted out of answering this question from the responses I received, people said, “I hear at least 10 ambulances every hour throughout the day, even at night.” And that “A lot of them are trying very hard to help everyone.” As I have stated before, many don’t necessarily blame doctors and hospitals rather than the government and how “private doctors still have corona tests as my mom got tested when others don’t. I find this to be a little unfair because then the rich get to be tested and no one else” or that “I’ve read news articles about doctors taking ventilators off patients who’ve passed immediately to give them to patients that need them, which must be incredibly emotionally taxing” and how “the Government needs to provide more ventilators.” “The first responders are working tirelessly and thinking of everyone but themselves. Governor Cuomo and NYC have been able to flatten the curve, find ways to get extra ventilators, masks, etc.” “NYC first responders have been heroic. And Governor Cuomo was valiant in obtaining supplies and personnel”. However there is the downside: “this pandemic has seriously shined light on the neglect of health care systems in the Country. For example- NYC shouldn’t ever be running out of beds, masks, respirators, gowns, staff... there should be testing -that works- for everyone but especially for the doctors working in the hospitals. Staff shouldn’t be unknowingly working alongside sick staff.” Along with that hospitals are taking away “Hydroxloroquine a drug I use for lupus is awful so yes there are a lot of [people] doing hard work but also a lot of [people] screwed over.”

As to answer the question about the healthcare system in general people believe it needs to be fixed, revised, and that “there is always room for improvement”. That “it’s awful, everyone should have access to healthcare and not have to pay large amounts of money for it.” Three people have expressed this. Many stated that we need to “protect healthcare staff much more” and that “healthcare in the States is unequal and professionals aren’t getting the support and supplies they need.” That our system is based on “Hedge funds, personal investors, pharmaceutical corporations, and governments that profit from illness and disease are despicable. I’m of the opinion that these very individuals deliberately put peoples lives in jeopardy in order to ensure that they will profit short term and long term from their investment in patents and inventions that directly alter the human body and impact human life expectancy and quality of life in order to enrich their financial bottom line.” One person mentioned that “I believe that all people in the United States are entitled to the best medical care no matter how rich or poor. We do not have enough hospitals in rural areas. We were grossly unprepared for this pandemic. Medicine costs are out of control and people who cannot afford them cannot get them. In my opinion it is a travesty.” And how “As ‘leaders of the free world’ our healthcare should set an example for the world and It does far from that. Everyone should be entitled to affordable healthcare. I think that there’s too much partisanship and politics involved when trying to solve the issues of our healthcare system. Since it’s something that we ALL serve to benefit from it should be something that unites us rather than dividing us further.” While others are starting to notice what exactly is happening, “It has

taken such a large epidemic such as COVID-19 for me to see how our country prioritizes funding towards certain things. When needed, money gets put into stocks and other areas as an “emergency response”, when all along so many affected people lack access to simple health care.” Or that they are under their parents' healthcare so they don't know much but are “lucky enough to be on my mothers health insurance plan so I'm not as impacted.”

As for our country the common agreement is that we must fix our healthcare system. That there needs to be “better protection needed, as well as more transparency from the Government.” To focus on not just the people who are dying from this pandemic but “we should be helping people who no longer have jobs and need financial security.” Lots of people expressed that we should have looked at other countries, “everything should have been shut down in early February. Some politicians, like the senator of Georgia, actually knew what was happening, and took money out of the markets and didn't tell the people and only looked out for her own personal gain. This is something that needs to change in our lives.” That we “should take a lesson out of other nations and how they have preventative/cooperative measures” and “should have followed South Korea and what they did” and “that it is too late and we should've started taking precautions months ago.” The “biggest problem is how much they stalled. However, they need to start helping doctors and nurses get what they need instead of having states fight for resources, and they should have stricter measures to keep people social distancing.” Many people blame our Government or President: “In the beginning we knew it was coming and did not prepare and this has caused our current situation. With that said states like New York and California to name two are doing fantastic jobs now. We have a completely incapable president and governors and senators who prefer their politics over peoples lives. I have naively always believed that the United States Government would protect and care for the citizens in the best way. I no longer believe this to be true.” And to other extensions of agreement that “states are handling it better than others. However, once again I think politics need to come out of it. This isn't a time to forgo science for partisanship. We need a united front. And that starts with a strong and strategic leader- which we clearly don't have.” That the “United States is presently in crisis. Politically it is having an internal war. We are a divided country in class in color and gender. We are at a crossroads. Unfortunately on top of this terrible situation we face as a country we now have a pandemic.” “We need a new administration. We need a proper healthcare system that is not linked to corporate profit. We need proper retirement assistance. We need available and affordable education and housing. Democracy doesn't work very well with highly consolidated wealth.” “There needs to be way more testing as well as less xenophobia, this could be improved by making testing easier to get and stop calling it the “Chinese virus”.’ And that “If funding hadn't been cut for outbreak countermeasures then we likely would be more prepared for this situation. We need more testing in order to contain and prevent further spread, but under this administration, we've been extremely slow in making sure that we have enough supplies and tests (despite receiving information at the same time as South Korea, which is handling this very well).” Overall they all agree that “Trump's handling is terrible, he denies facts, doesn't listen to healthcare workers and promoted his personal agenda. I think the mayors and governors are doing a better job because they are thinking about the impact on the people and working together.”

Long Island: (11 Responses)

In Long Island people think that the healthcare system and hospitals are doing the best they can with what is provided. They believe “all healthcare workers are doing their best setting up test sites etc.” As well as “taking all the necessary precautions and making COVID-19 a top priority.” One person who got tested said, “Absolutely, when I got tested they had me in and out of the facility within an hour. I was so thankful and personally thank each nurse that helped me.” Another said, “personally because my mom is a doctor and she's been telling me that they are trying to visit people outside and swab them before going into the office to prevent spread. They are also doing telemedicine so that people who need refills on their medication can simply call instead of coming in. Hospitals are limiting visitors also.”

As for the healthcare system as a whole in general people believe that although they might be covered the system doesn't work for all. For instance, “I feel that my situation with healthcare is okay. My insurance covered all the medical bills regarding getting tested and doctor video sessions; however, I know some people who are not in the best situation. My friend wanted to get tested and was declined since she didn't have enough symptoms... then was billed \$9,000. So there is definitely a sense of corruption within the healthcare system.” But other states, “whenever I'm sick, they're persistent into getting me healthy again.” Although some people have brought attention that “if you're poor then you die” or that “it could be better not everyone is accessible to health care.” Or even that “because finances of various households are affected by the healthcare system.” Just as this person said, “My personal healthcare system is not the best but I was already affected by it so I have less of a chance to get it again even though there are different mutations of the virus.” But in all, “They are flawed but so is everything else” and that “we could have been more prepared for a pandemic”

As for the entire country handling this pandemic some are saying yes but no - mixed feelings, as everyone should have. It affects everyone differently. For instance some people, "Trump is feeding complete lies and irrational comments to the media, however, Governor Cuomo is doing a fantastic job at information and keeping the peace with New York State." And that, "Trump is an idiot who is sending broken ventilators to states and has condemned the states for not having enough." Alongside this many people were saying no, "more testing and faster treatment is needed" and in "recent news [it] started to lead people the opposite direction" and that "they could have put on a travel ban earlier. But some responses took the side of that the country "didn't know the severity of the virus when it entered the country and because of that many people have become infected. They have done a good job trying to lessen the amount of people getting the virus by encouraging them to stay indoors." And that "we're doing a pretty good job. I think the amount of positive cases are less now and shutting down restaurants/public places was a good idea. The president is also offering money to people who are jobless because of the pandemic."

Pennsylvania: (1 Response)

This PA student responded from the North East, which I don't know much about, therefore, I decided to include it. She believed that the hospitals and healthcare systems in her area "are working hard with all the materials they can give." That our healthcare system in general is good, "For now, yes, it has only just hit elk county, however, it's only a matter of time." As for the entire country, she doesn't think we are handling it right, "they need to express the importance more and ensure this is no joking matter."

United Kingdom: (1 Response)

The United Kingdom according to what I had read is pretty good, there is only one responder, and as it may not speak for the entirety of the UK, it's a perspective. This college student is "[Thankful] there are hardly any coronavirus cases in my town, however the hospitals in bigger cities near me are struggling to protect the healthcare professionals working on the frontline as there aren't enough personal protective equipment (PPE)." As for the system in general he believes "the healthcare system in my country is amazing. We are very lucky to have the NHS as it provides everyone in the country with free healthcare. The NHS was built upon certain principles where it is always free and everyone gets treated equally regardless of the wealth/social background." And that the country as a whole: "the current restrictions in place aren't enough to deter people from going outside and a lot more could be done to prevent the spread of the virus."

Virginia: (4 Responses)

For Virginia, I received a wide variety of places with different perspectives. They all answered in question if the hospitals and healthcare systems in their area were doing the best they could do. People responded with "I think so? It hasn't hit really hard here in Virginia yet but I know the normal doctors offices have switched to video calls to avoid unnecessary traffic into their offices." Along with "I think so, but I'm not really educated about the topic. My classmates mom I mentioned earlier had to be moved to Richmond in order to get put on a ventilator, because they did not have enough in the smaller local hospitals here." The third person stated, "I have no experience in this regard so I cannot answer." The last person said, "I think they are doing the best they can, but should be able to do better. I have friends who work in the ICU who have run out of ventilators. Our numbers are still manageable, but there isn't nearly enough testing."

As to answer the second question regarding the healthcare system in general, yes but there are other things that we could do. For instance, "There's a huge INOVA hospital complex in my neighborhood that's one of the best in the country. But I know even the INOVA hospitals here are struggling to get tests which is a little problematic considering how big they are and how many patients they normally see." Others agreed, "I think we were ill prepared for this pandemic. Plus, even in non-crisis times our system is poor. Insurance is terrible. Healthcare costs are outrageous. But I have had nothing but positive interactions with healthcare professionals." Then others aren't "very educated about it" but think the "healthcare around my area is good." The last person stated that "the health care system is not equal for all who seek it. People with money and resources have more options than those without and the elderly poor and undocumented are often overlooked and ignored."

The last question concerning the country is covering the pandemic, while some think that "everyone is doing the best they can considering the circumstances. So many things have been negatively affected, but I don't think pointing fingers and demanding an immediate change is what needs to be occurring during a pandemic that so many people are working at to combat." And that "I think we could be doing a better job, I'm not super political but I think there needs to be a better way of enforcing the whole social distancing thing. A lot of people in the suburbs

don't really seem to be following the rules as strictly as my family is lol." Some agree that it is "Horrible. We need to show the discipline necessary to prevent a huge second wave." And that "the pandemic has shined a light on all the deficiencies on the local, state and federal levels. Many hospitals were already short of adequate equipment and multitudes of violations of negligence have been discovered in nursing homes. Some states have larger budgets than others, but none are capable of funding a crisis of this magnitude. In a pandemic we should operate as one state and not 50. Our taxpayer dollars fund the federal government to protect the nation. When the President declares a federal emergency the federal government needs to act swiftly and effectively to ensure the residents of all states are all treated equally and receive the resources they require. Every patient in every state should have a ventilator if they need one, and every health care professional should have the protection required to treat an infected patient."

Wisconsin: (1 Response)

Again with only one response, but this response is from one of my good friends. He has worked and lived on the border of Wisconsin and Minnesota so it gives a perspective of following restrictions between state borders. Along with this, this pandemic came on while he was traveling in a different state. He hopes that the hospitals and healthcare systems are doing their best: "I don't have any examples since I haven't been around the hospitals. However, while I was in St. Louis, MO the local government diverted a mass majority of their resources to taking care of patients and preventing more outbreaks by reducing the types of calls they (the police) would take. I can imagine that the government around here may be doing something similar." As for the healthcare system in general, he believes "my healthcare system is okay. We personally haven't been too impacted by the way healthcare is for us, so I can't give a positive or negative opinion about our healthcare." And for the entire country handling this pandemic he thinks, "Yes and no. I think we decided to push it off until the last minute. Now things are getting out of control for the United States, and the president keeps telling lies to give the people hope. I think being open and honest is the best way to go for ANY situation including this pandemic. People don't want words and promises, they want information and numbers alike. The country is just not doing enough to limit the number of people going outside and doing non essential things."

Conclusion and reaction to each state and/or country:

As for California, there is always going to be a mix of people. My brother went to college and lived out in California, I used to be there quite frequently. From my understanding and being there, most places are spaced out and there are hotspots of where people gather. You mostly have to drive everywhere, if not, it will most likely be a long straining walk. I believe this is one of the reasons why the virus isn't as bad, many people are spaced out, however there are those hotspots. I can see why people believe it isn't as bad - they don't see the change, they need cars to travel everywhere. (Similar to my findings that are found in my CR #2 and my reflection of going out to Long Island).

As for Canada, their healthcare system is phenomenal, there weren't any flaws from what I have read from the responses. They have the virus under control and although I haven't done much research on Canada, I knew prior that their system was intact and everyone loves it.

I don't know much about Chile and its healthcare system, but my general knowledge of Central and South America is that there is a lot of division. This has probably definitely influenced the virus and how people are treated and prioritized.

As for Florida, the student that answered the survey is one of my close friends and I have talked to him throughout this whole pandemic. While I was in NY and the city being on pause, he was going outside and still doing the same day to day activities acting as if everything was normal. He seemed very optimistic about everything and it kind of hurt to see him act like it wasn't going to affect him or others around him. Now they are on pause, I continue to see him doing the same things as he did before, although it is less frequent, he is still breaking the rules. However, I do agree with him on his last answer that people should be more knowledgeable. This outbreak and the news that comes out of it is not permanent and is in flux.

It seems that Germany has more room to help others, although it is currently in the top 5 places to get hit the hardest from COVID-19 the death rates are extremely down compared to other countries. It seems that the European countries are helping one another especially because of the healthcare coverage between Europe. There is a huge impact between how they feel about their government but once they are on the same page, everything works out and it seems as if the majority of the country agrees.

I don't have that much input on Hong Kong itself nor do I do know the healthcare system that's in place. But as far as China, Wuhan and other regions have been containing the spread, although I don't believe it 100%. A lot of trust has been lost through this pandemic.

Surprisingly Maryland had two responses, I wasn't expecting responses from MD. I agree with both of these responses in different ways but also the same. For instance, I feel like we are doing the best we can (in NYC) with what is provided, although I know there is more that we could do - but unfortunately that is up to our President. I have not personally had problems with the healthcare system but I know people who have and haven't been protected. As for the last question, I agree that in certain states there should be a stronger restriction and seeing significant others are not "essential" and people should try to help others before bettering themselves.

Not much to say about Michigan, all I know is that Detroit was getting hit hard and that a lot of African Americans were the ones being affected. I find it interesting to look at a "purple-blue" state because although I don't know where this student is from, the opinions on the healthcare system can be from anyone.

New Jersey is very similar in the way they are dealing with it, here, in NY. I agree with the two students and as I stated before, it's all about the government and how they spread the money, essentials, products around.

New York had over 40 responses and although I have separated it into NYC and Long Island I have differing opinions about the two places. As said before, I feel as if we are doing the most we can with what is given. However, many on Long island are not taking it as seriously and I see that even in NYC people are losing their barriers. It is quite scary to witness and although I might have contracted the virus before, we don't know anything about the immunity and how it works. I feel as if we still act like we were when the spike of it was here, if we follow that protocol, the sooner we can go out and go back to our daily routine. Many of the responders were hating on Trump and blamed the government for the abundance of deaths, but that there is room to change and that it needs to be done right now. This may not just be for Long Island but I see a pattern of people playing the hospitals and health facilities for having enough tests or treatment. Some expect people to be more informed, but it is not singly handed on hospitals and facilities to have more tests. That is our Government that isn't giving out as much as we can, but not only that, it's the fact that we did have a scarce amount of supplies. They had to do the best they could with what was provided.

Not much to say on Pennsylvania, but I agree that people are not taking this pandemic seriously enough. It also made me think about all the people who think this is a hoax and what is going through their minds.

The United Kingdom has one of the best healthcare systems which amazes me and I agree with his answers.

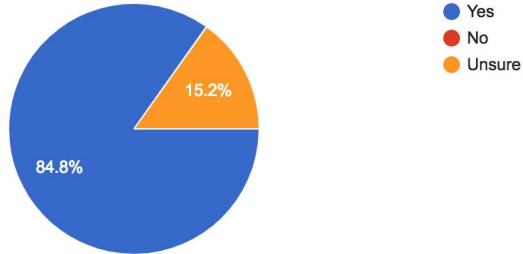
I find it interesting for Virginia to question if their hospitals and healthcare systems in their area are doing their best. I wonder why that is? But living in NYC brings a whole different perspective compared to many people who live in the suburbs who don't see the direct effect. (This also refers to my CR statement that is posted above in the Long Island Section)

Although these responses are supposed to be for Wisconsin, this different aspect of being in the midwest is completely new to me. Very different aspects of what I thought of how they are handling it. I agree very heavily on his last statement on how "things are getting out of control for the United States, and the president keeps telling lies to give the people hope. I think being open and honest is the best way to go for ANY situation including this pandemic. People don't want words and promises, they want information and numbers alike."

As for the next two questions I decided to pie chart the data:

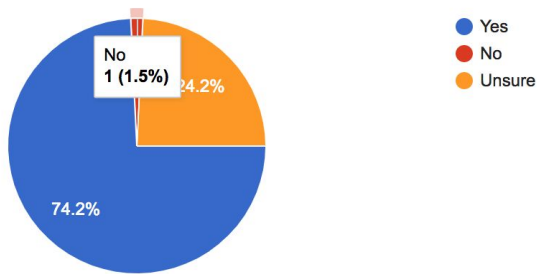
If you catch COVID-19, do you have healthcare coverage?

66 responses



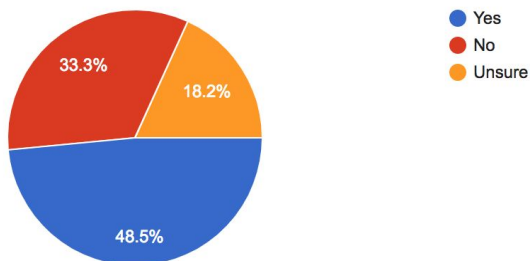
If you are hospitalized, would you be covered?

66 responses

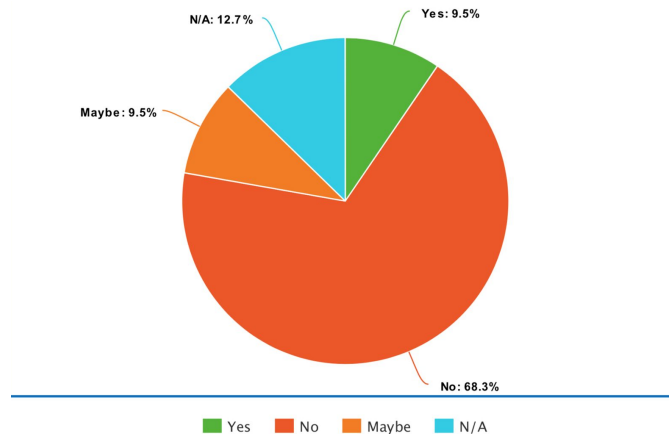


Has this taken an economic toll on you/your family?

66 responses



Are you scared that your healthcare won't provide what you need?



The last question that I asked was: What are your expectations once we come out of this? This allowed me to give a broad topic of what people were thinking about so I decided to categorize the answers into different topics.

For the first section I filtered the answers into personal insights of what is to come. People said, "I do think healthcare reform will be more pressing than ever. I HOPE that we will be kinder and more unified as a nation. That we will make individual and policy changes that will protect us from something like this happening again. That we will come out of it a bit wiser to what is important." And that "even if the country opens quickly, I imagine I will still be very cautious. I do not see myself at the hair and nail salon, the gym, engaging in frivolous shopping, or being in large gatherings. I may give up handshaking all together and I will be more sensitive to people who appear to be ill." People are taking it very seriously that the world has changed but "hope that we are able to define for ourselves what is really important in life and what can be done differently. I hope that we can maintain unity in society to support each other. I hope we learn from these crises and stand up for each other in Europe instead of closing borders." But hopefully that "this crisis can be a learning experience for our leaders" and there will be "celebrations and the economy bouncing back". Finally because this is taking a toll on my senior year, that "gen z will have an entirely new appreciation and set of values for our interactions with one another."

The next section is based on economics, that the expectations after this pandemic would be that, "That we as a country will hopefully be able to handle the next pandemic or another disaster better." That we will "finally recognize that the real drivers of our economy are the people who are treated the worst: food and grocery workers, nurses and aides, delivery people, and sanitation workers" and rebuild our economy and understand that "people will have a hard time trying to put their lives back on track." And "likely an economic recession because of the impact on the economy"

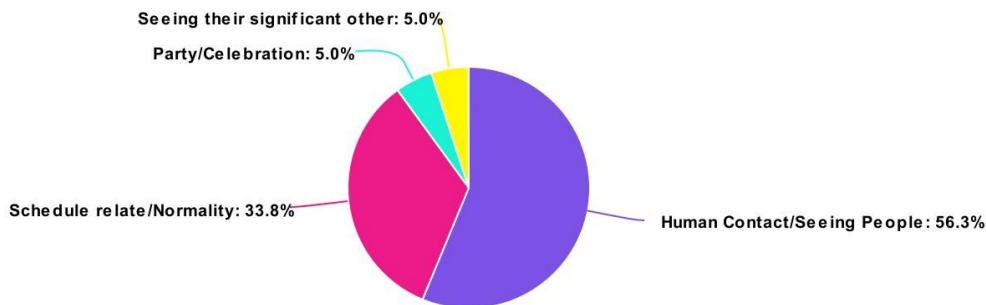
The third section is how we can work from the after effects and seeing the statistics on how this pandemic is damaging everyone's lives and what we can do from there. This is the broad scheme of the healthcare system, not directly related to COVID-19. Right off the bat people stated that "we change the healthcare system" and to "hopefully countries changing for the better and putting its citizens over money." People hope that "will be a fairer, more compassionate country with realization that we need social safety nets and cheaper health insurance for all Americans" as well as "[increase] safety measures in restaurants and airports." A major aspect of it was to "expect that after this crisis, hospitals will stockpile PPE resources and operate as if another similar crisis is just around the corner. We all need to be better prepared. (As an aside, and I know this is none of my business, I expect [hope] that Mr. Trump is held accountable for not taking the pandemic seriously in February, and thereby endangering the lives of his citizens, and causing the number of deaths to be as high as they are -the worst in the world. Viruses do not respect borders, and they don't care if this crisis is a federal or a state responsibility. This is not about politics, but Mr. Trump thinks everything is about politics, about him. He is responsible for the expected deaths of between 150000 and 240000 Americans and should be held accountable. That number could have and should have been much lower.)". But also to realize the benefits of this pandemic, "know that around the world, for the first time in centuries, people are able to enjoy their homes as they hadn't ever before because pollution is going down, I believe that people will start to reduce the amount that they pollute now that they can see the positive effects of stopping."

The fourth topic is the healthcare system and working from the effects of COVID-19. To realize the damages of what is happening around the country and that people will be more respectful and "everyone will realize

how much we impact not only each other but the world as well.” For instance, “a country like Chile where all of our greetings are composed of kissing someone on the cheek or hugging them. It’s part of our culture and it’s going to have to change. I also think it will change the way people take care of themselves and others. Hopefully this quarantine will have taught us things about ourselves that we can use to better ourselves and humanity.” But yet again, “What’s weird about this is that it’s so unknown so I don’t really know” but hopefully “people will start to take sickness much more seriously. Not just the general public, but companies and hospitals as well. I also expect people’s personal space to be taken much more seriously too” as well as to “appreciate being able to go outside more, and never take for granted being able to live normally again.” Others expressed of keeping up with this routine, “I hope people continue to wash their hands and clean their homes and such as much as they are right now” and for “large group gatherings will be avoided for a while” and to notice that “Healthcare professionals will all have suffered extreme trauma and there will be a mental health crisis” from all of this.

The fifth is looking at the pandemic from a social perspective and the expectations of it. Many expressed that they hope for everything to go back to normal and that they can “enjoy the time lost with my friends over the summer, and that everyone will be more conscious of not being nasty.” But most importantly that “this pandemic has brought the community together and reduced a lot of crime, violence and discrimination and I hope that coming out of this it continues to get better.” However the sixth and last category is fears. People fear that “nothing will be the same” or that “people are going to return to ‘normal life’ too soon and the virus will re-emerge. I do not see things returning to any normalcy for a very long time, if ever.” Even having a “greater fear than [expected] when we come out of this.” Or even thinking that they “can go back to how we were before, but so much has changed on a global level that I’m scared to imagine what the new normal will be.” And that there will be “one massive party then later in the year it comes back.” As stated before, this virus is unknown.

The last question I asked everyone is what they were looking forward to after this quarantine. I thought this would be a nice and sweet way to wrap up the survey. Here is a pie chart below: (one quote that stood out to me though is, “Not wanting to shoot myself every time I look at people wearing masks in their cars” which I thought was funny and relatable.



■ Human Contact/Seeing People
 ■ Schedule relate/Normality
 ■ Party/Celebration
■ Seeing their significant other

People's Well-being

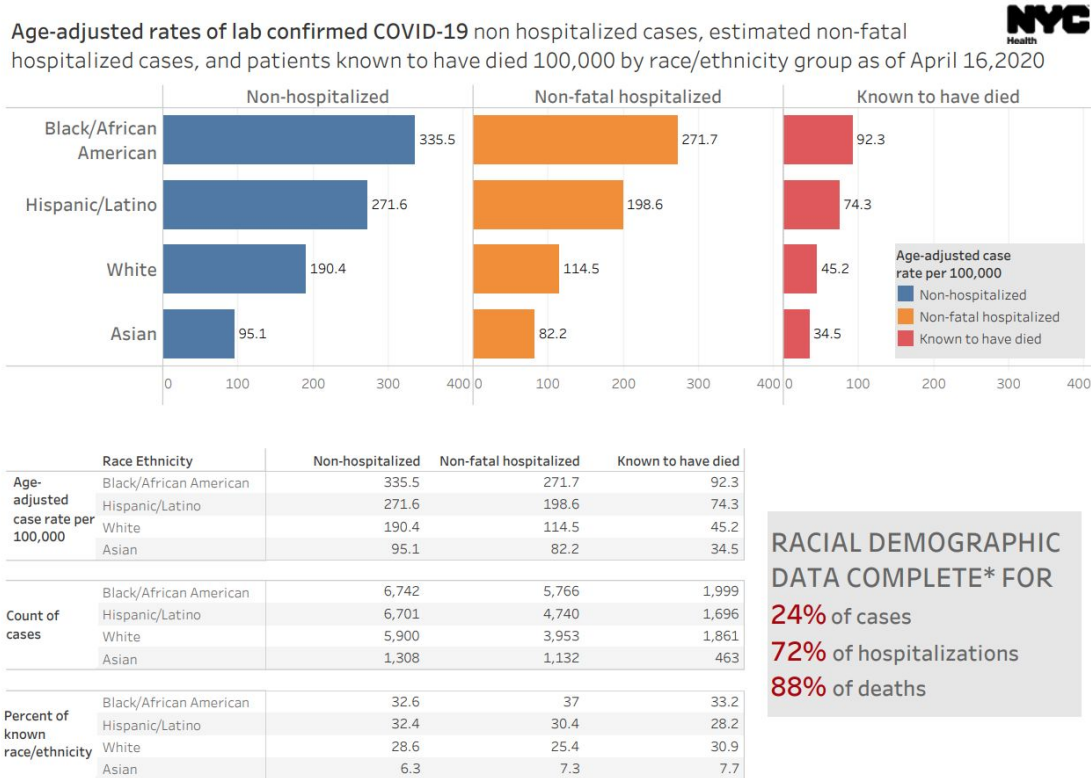
Mental Health²⁷

This pandemic has taken a huge toll on people with mental illness. It inevitably can increase anxiety and panic. Quarantine can be distressing; The trauma over losing loved ones due to COVID-19. Mass media and news can increase fear if not managed well. However this can be eased if you promote easy access to family and support, have basic needs, water, heat, electricity, food, and find a good source to get your information from.

Race based Health:

Race based health shapes patients' diagnoses on how they are measured, treated, and prescribed. Doctors sometimes use race as a factor to determine what is best for the patient, for instance, Blacks and Latinos are twice as likely to receive no pain medication. They are stereotyped to have a pre-exposed drug addiction and have a higher tolerance. There was another study that was done that said that Black people have a lower lung capacity than White people which could affect the amount of oxygen they would need if they would have to be intubated and ventilated.⁴¹ “Race medicine is bad medicine, it's poor science and it's a false interpretation of humanity. It is more urgent than ever to finally abandon this backward legacy and to affirm our common humanity by ending the social inequalities that truly divide us.”⁴¹ However all of this is “much easier and more lucrative to market a technological fix for these gaps in health than to deal with the structural inequities that produce them.”⁴¹

The pandemic has dramatically shown the inequalities of our healthcare system. People of color are being affected way more than whites. They are consuming the majority of the cases in NYC.



As of April 25th, 34% of NYC deaths due to COVID-19 was among Latinx populations, 29% Latinx is in the city's population. 28% of black people are dying and they make up 22% of the city's population. “COVID-19 is exposing our nation's long standing social and political inequities based on race, class, gender, national origin, age, disability, and other factors.”¹⁵

Solution:

We can't fix the future, but it is up to the future to fix and keep up with what is happening. However, the United States healthcare system “spends nearly 20% of its gross domestic product on healthcare- more than twice the average of its developed countries” (p 2).¹² In fact, “the U.S. health system generally delivers worse health

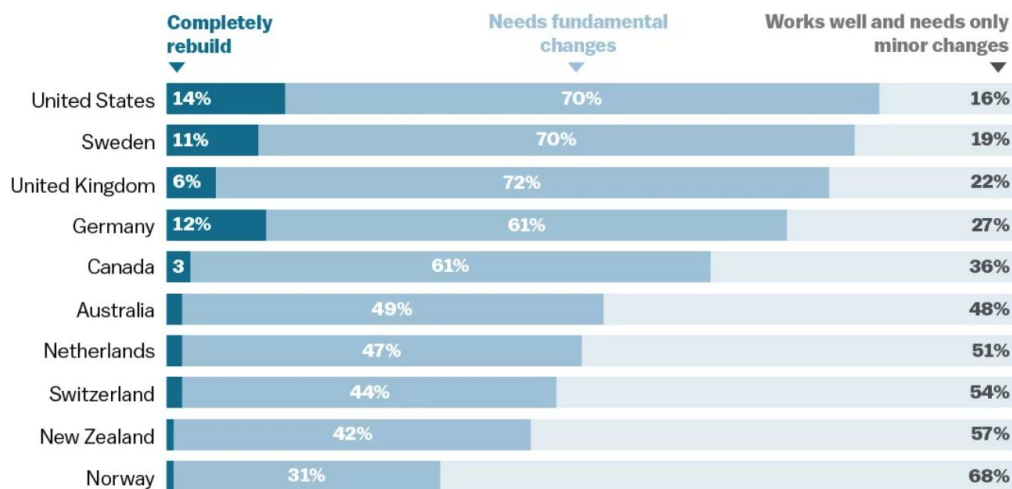
⁴¹ Roberts, Dorothy. “The Problem with Race-Based Medicine.” TED, www.ted.com/talks/dorothy_roberts_the_problem_with_race_based_medicine?referrer=playlist-the_link_between_health_and_racism.

⁴² “Covid-19 Deaths by Race/Ethnicity.” NYC Health, 16 Apr. 2020, www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-deaths-race-ethnicity-04162020-1.pdf.

outcome than any other developed country, all of which spend on average about half what we do per person” (p 3).¹² “Unless you’re part of the 1% you’re only ever one unlucky step away from medical financial disaster” (p 241).¹² Data shows that as the complexity has increased, we found that the most expensive care is not necessarily the best care. And vice versa, the best care often turns out to be the least expensive -- has fewer complications, the people get more efficient at what they do.⁴³

Another reason as to why I picked these choices is because I volunteered at Bellevue Hospital on the hospitalist and infection control floor. I worked there for 3 months 3 times a week for 2-3 hours. I saw the ins and outs of the hospital before this pandemic took over. Here are some of my insights that altered and shaped my solutions.

Views of health care systems among primary care physicians



Source: 2015 Commonwealth Fund International Health Policy Survey of Primary Care Physicians, 2015



Quality/Cost

Knowing the right time to receive health care is ideal. But once people go in to receive the help they need, they end up with different bills that don't composite all charges so there is an abundance of bills that you get with large numbers on them. It would be ideal for all the costs/charges to be on one bill and a layout of what you are paying for. “Patients and physicians are freed of inefficient administrative and billing tasks, documentation requirements are simplified, payments and charges are more transparent and predictable, and delivery systems are redesigned to make it easier for patients to navigate and receive needed care conveniently and effectively.”⁴⁴

Working Together

By having a united public healthcare system for all Americans we could use the examples of other countries with such systems to figure out what works best and what does not. We could create allies that would prevent our system from falling behind. I believe that having a bi-lateral agreement with other countries would not only help us have better healthcare, it would also help us to have a better economy where workers felt secure that

⁴³ Gawande, Atul. “How Do We Heal Medicine?” TED, www.ted.com/talks/atul_gawande_how_do_we_heal_medicine/details?referrer=playlist-what_doctors_worry_about.

⁴⁴ “Envisioning a Better U.S. Health Care System for All: A Call to Action by the American College of Physicians.” 21, Jan. 2020. <https://www.acpjournals.org/doi/10.7326/M19-2411>.

they could keep their healthcare even if they lost their jobs. We could be leaders and create a world community that could work for all nations.

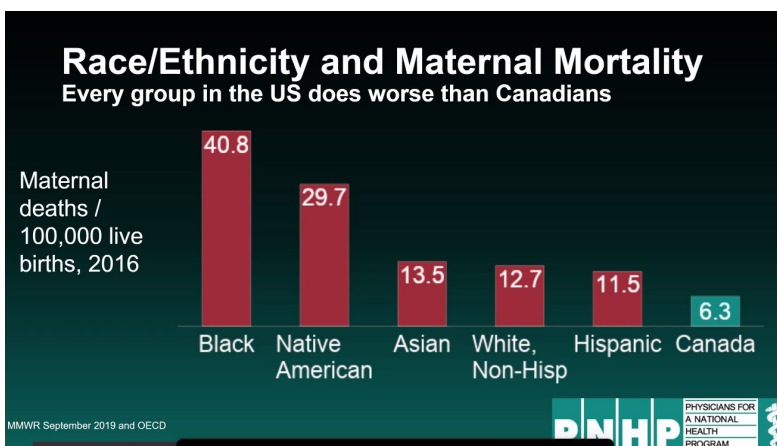
This also ties in with what is set up in France. As of 2016, they instituted a new healthcare system for foreigners, known as Protection Universelle Maladie (PUMA), which allowed access to state healthcare after three months of residence. If we had this in place, it would allow easier access to healthcare for people visiting and on working visas to the US. Although this might seem costly, it would prevent the possibility that infected visitors would avoid getting treatment and be more likely to transmit an infectious disease which would be more expensive to the system in the end.

Telehealth/TeleMedicine⁴⁵

Increased use of telehealth and telemedicine would allow people to access their doctors and resources from anywhere. People living in remote locations and people who need to travel for their jobs often can't afford all the trouble just for a check up, but this would make it easier for them to receive treatment. However there is the down factor that some people do not have access to an electronic device. This can also be addressed by public policy.

Medicare:

“U.S. health care costs too much; leaves too many behind without affordable coverage; creates incentives that are misaligned with patients' interests; undervalues primary care and public health; spends too much on administration at the expense of patient care; fails to invest and support public health approaches to reduce preventable injuries, deaths, diseases, and suffering; and fosters barriers to care for and discrimination against vulnerable individuals.”⁴⁵ Medicare in the United States has been successful in allowing more people with good healthcare and controlling the costs of treatment. However, it is said that once people turn 65 and have medicare, their life expectancy rises. (picture)¹⁵



Medicare has also allowed access to healthcare to people who would not have it otherwise. For these reasons I think that the Medicare for All Act of 2019 would be a great fit. Here are the parts that I agree with that should be placed into our system:⁴⁶

- SEC. 101. ESTABLISHMENT OF THE UNIVERSAL MEDICARE PROGRAM.
 - There is hereby established a national health insurance program to provide comprehensive protection against the costs of health care and health-related services, in accordance with the standards specified in, or established under, this Act.
- SEC. 102. UNIVERSAL ENTITLEMENT.

⁴⁵ Madu, Ernest. “World-Class Health Care.” *TED*, www.ted.com/talks/ernest_madu_world_class_health_care/details?referrer=playlist-what_doctors_worry_about#t-3282.

⁴⁶ Sanders, and Bernard. “Text - S.1129 - 116th Congress (2019-2020): Medicare for All Act of 2019.” *Congress.gov*, 10 Apr. 2019, www.congress.gov/bill/116th-congress/senate-bill/1129/text?q=%7B%22search%22%3A%5B%22Medicare%2Bfor%2BAI%2BAct%2Bof%2B2019%22%5D%7D&r=1&s=1#toc-id543f8d72ce1c4b05b7d6e4c41b0d31ee.

- In General.—Every individual who is a resident of the United States is entitled to benefits for health care services under this Act. The Secretary shall promulgate a rule that provides criteria for determining residency for eligibility purposes under this Act
 - may make eligible for benefits for health care services under this Act other individuals not described in subsection (a) and regulate their eligibility to ensure that every person in the United States has access to health care; and shall promulgate a rule, consistent with Federal immigration laws, to prevent an individual from traveling to the United States for the sole purpose of obtaining health care services provided under this Act.
- SEC. 104. NON-DISCRIMINATION.
 - In General.—No person shall, on the basis of race, color, national origin, age, disability, or sex, including sex stereotyping, gender identity, sexual orientation, and pregnancy and related medical conditions (including termination of pregnancy), be excluded from participation in, be denied the benefits of, or be subjected to discrimination by any participating provider as defined in section 301, or any entity conducting, administering, or funding a health program or activity, including contracts of insurance, pursuant to this Act.
- SEC. 105. ENROLLMENT.
 - Include a process for the automatic enrollment of individuals at the time of birth in the United States or upon the establishment of residency in the United States
 - The individual is a resident of the United States.
 - The individual is—
 - a citizen or national of the United States; or
 - an alien lawfully admitted for permanent residence.
 - Include a process for the enrollment of individuals made eligible for health care services under section 102.
 - Issuance Of Universal Medicare Cards.—In conjunction with an individual’s enrollment for benefits under this Act, the Secretary shall provide for the issuance of a Universal Medicare card that shall be used for purposes of identification and processing of claims for benefits under this program. The card shall not include an individual’s Social Security number.
- SEC. 106. EFFECTIVE DATE OF BENEFITS.
 - For any eligible individual who has not yet attained the age of 19, benefits shall first be available under this Act for items and services furnished on January 1 of the first calendar year that begins after the date of enactment of this Act. (NOTE/FIXTURE: give until their 19th birthday, at 18 they should be looking to switch over, giving them a year. Also if they have ongoing treatment when this happens or is taking a prescription see if it can carry over until you're done but also have a different provider, unless they are going to medicare, then it would be fine.)
 - Any person who is eligible to receive benefits as any coverage described in section 901, private health insurance coverage, or coverage offered pursuant to subtitle A of title X (including the amendments made by such subtitle) until the effective date described in subsection
- SEC. 107. PROHIBITION AGAINST DUPLICATING COVERAGE
 - Construction.—Nothing in this Act shall be construed as prohibiting the sale of health insurance coverage for any additional benefits not covered by this Act, including additional benefits that an employer may provide to employees or their dependents, or to former employees or their dependents.
- SEC. 201. COMPREHENSIVE BENEFITS.
 - In General.—Subject to the other provisions of this title and titles IV through IX, individuals enrolled for benefits under this Act are entitled to have payment made by the Secretary to an eligible provider for the following items and services if medically necessary or appropriate for the maintenance of health or for the diagnosis, treatment, or rehabilitation of a health condition:
 - Hospital services, including inpatient and outpatient hospital care, including 24-hour-a-day emergency services and inpatient prescription drugs.
 - Ambulatory patient services.
 - Prescription drugs, medical devices, biological products, including outpatient prescription drugs, medical devices, and biological products.
 - Mental health and substance abuse treatment services, including inpatient care.

- Laboratory and diagnostic services.
 - Comprehensive reproductive, maternity, and newborn care.
 - Pediatrics, including early and periodic screening, diagnostic, and treatment services
 - Oral health, audiology, and vision services.
 - Short-term rehabilitative and habilitative services and devices.
 - Emergency services and transportation.
 - Necessary transportation to receive health care services for individuals with disabilities and low-income individuals.
 - Home and community-based long-term services and supports (to be provided in accordance with the requirements for home and community-based)
- SEC. 206. STATE STANDARDS.
 - Nothing in this Act shall prohibit individual States from setting additional standards, with respect to eligibility, benefits, and minimum provider standards, consistent with the purposes of this Act, provided that such standards do not restrict eligibility or reduce access to benefits or services.
 - States may not prohibit an individual or entity from participating in the program under this Act, for reasons other than the ability of the individual or entity to provide such services.
- SEC. 302. QUALIFICATIONS FOR PROVIDERS.
 - A health care provider is considered to be qualified to provide covered services if the provider is licensed or certified and meets
 - all the requirements of State law to provide such services; and applicable requirements of Federal law to provide such services.
- SEC. 401. ADMINISTRATION.
 - The Secretary shall establish uniform State reporting requirements and national standards to ensure an adequate national database containing information pertaining to health services practitioners, approved providers, the costs of facilities and practitioners providing such services, the quality of such services, the outcomes of such services, and the equity of health among population groups. Such standards shall include, to the maximum extent feasible without compromising patient privacy, health outcome measures, and to the maximum extent feasible without excessively burdening providers
 - The Secretary shall regularly analyze information reported to it and shall define rules and procedures to allow researchers, scholars, health care providers, and others to access and analyze data for purposes consistent with quality and outcomes research, without compromising patient privacy.
 - ANNUAL REPORT
 - Beginning January 1 of the second year beginning after the effective date of this Act, the Secretary shall annually report to Congress on the following:
 - The status of implementation of the Act.
 - Enrollment under this Act.
 - Benefits under this Act.
 - Expenditures and financing under this Act.
 - Cost-containment measures and achievements under this Act.
 - Quality assurance.
 - Health care utilization patterns, including any changes attributable to the program.
 - Changes in the per-capita costs of health care.
 - Differences in the health status of the populations of the different States, including income and racial characteristics, and other population health inequities.
 - Progress on quality and outcome measures, and long-range plans and goals for achievements in such areas.
 - Necessary changes in the education of health personnel.
 - Plans for improving service to medically underserved populations.
 - Transition problems as a result of implementation of this Act.
 - Opportunities for improvements under this Act.

- make statistical and other studies, on a nationwide, regional, State, or local basis, of any aspect of the operation of this Act
- SEC. 601. NATIONAL HEALTH BUDGET.
 - By not later than September 1 of each year, beginning with the year prior to the date on which benefits first become available as described in section 106(a), the Secretary shall establish a national health budget, which specifies the total expenditures to be made for covered health care services under this Act.
 - DIVISION OF BUDGET INTO COMPONENTS.—In addition to the cost of covered health services, the national health budget shall consist of at least the following components:
 - Quality assessment activities under title V.
 - professional education expenditures.
 - administrative costs.
 - Innovation, including in accordance with section 1115A of the Social Security Act (42 U.S.C. 1315a).
 - Operating and other expenditures
 - Capital expenditures.
 - Prevention and public health activities.
- SEC. 611. PAYMENTS TO INSTITUTIONAL AND INDIVIDUAL PROVIDERS.
 - Except as otherwise provided in this section, the Secretary shall establish, by regulation, fee schedules that establish payment amounts for benefits under this Act in a manner that is consistent with processes for determining payments for items and services under title XVIII of the Social Security Act including the application of the provisions of, and amendments
- SEC. 614. PAYMENTS FOR PRESCRIPTION DRUGS AND APPROVED DEVICES AND EQUIPMENT.
 - The prices to be paid for covered pharmaceuticals, medical supplies, and medically necessary assistive equipment shall be negotiated annually by the Secretary
 - The Secretary shall establish a prescription drug formulary system, which shall encourage best-practices in prescribing and discourage the use of ineffective, dangerous, or excessively costly medications when better alternatives are available.
- TITLE VIII—CONFORMING AMENDMENTS TO THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974
- SEC. 1011. MEDICARE PROTECTION AGAINST HIGH OUT-OF-POCKET EXPENDITURES FOR FEE-FOR-SERVICE BENEFITS AND ELIMINATION OF PARTS A AND B DEDUCTIBLES.
 - the term ‘out-of-pocket cost-sharing’ means, with respect to an individual, the amount of the expenses incurred by the individual that are attributable to
 - coinsurance and copayments applicable
 - Title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.), as amended by section 1001, is amended by adding at the end the following new section: “PROTECTION AGAINST HIGH OUT-OF-POCKET EXPENDITURES
 - if the amount of the out-of-pocket cost-sharing of such individual for a year (effective the year beginning January 1 of the year following the date of enactment of the Medicare for All Act of 2019) equals or exceeds \$1,500, the individual shall not be responsible for additional out-of-pocket cost-sharing occurred during that year.
- SEC. 1102. DEFINITIONS.
 - the term “Secretary” means the Secretary of Health and Human Services;
 - the term “State” means a State, the District of Columbia, or a territory of the United States; and
 - the term “United States” shall include the States, the District of Columbia, and the territories of the United States.

Universal Healthcare - The Arguments Against It

To complete my analysis of Universal Healthcare I decided to look at some of the most popular arguments against it.

- Universal health care, also known as free health care, is not actually free because the registered members must pay it using certain taxes.

- That is true, but I think we should tax people based on income so the expense could be shared more fairly.
- Employee sponsored healthcare that we have now is not free either as employees use this as a bonus and therefore pay their employees lower salaries.
- Individual ingenuity, competition, and profit motives always lead to bigger cost effectiveness and control.
 - This would be true if we had real competition in the insurance marketplace but the entire US market is controlled by a few insurance companies who set rates based on what the competitors charge.
- There will be no patient flexibility because healthcare is controlled by the government.
 - I thought about a way to come up with a system in which anyone opposed to the concept doesn't have to participate. Such as a member of the Libertarian Party. There would be the placement of private insurance. This is what politicians refer to as "The Public Option".
- The procedure from the government will make doctor flexibility reduced and there will be a chance for patients to get poor care.
 - Right now we have a two tiered system for rich and poor and the fact is that private care is more useful for the wealthy. But maybe with the help of telehealth, electronic medical record keeping and the website option it might become easier for poor people to get quality care as well. But also we just need more doctors and healthcare professionals.
- Anyone who feels healthy but needs a health care plan must still pay for the expense of those who are obese, smoke, and much more.
 - Help everyone not just yourself, it creates a better society. But again, tax based on income. Also, if more people have access to treatment we can concentrate on wellness rather than sickness. People will see doctors for regular checkups and get diagnosed earlier in the illness cycle. This will ultimately eliminate expensive hospitalizations and surgeries.
- The cost of malpractice lawsuits can increase because the government controls it and exposes the government to legal liability as well as a chance to sue somebody with a low budget will give more lawsuits.
 - The government has the ability to regulate this whereas private practitioners do not. A large percentage of current medical costs are for doctors' liability insurance protection.
- Since the government controls universal health care, access to drugs, health care equipment, and medical services can become more limited if they choose to regulate certain conditions.
 - This is true, but other things such as listed above and below will be in place. Also, private insurers often choose not to pay for certain procedures.
- Anyone who is part of a universal health care member may have extremely long waits when needing treatment.
 - If we have more doctors this will help. Also we can utilize nurse practitioners and physician's assistants.

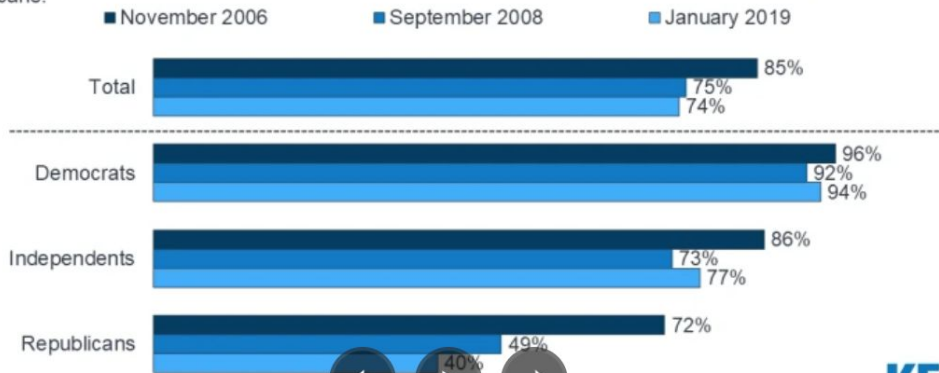
Here are some graphs to put it into perspective⁴⁷

⁴⁷ Published: Apr 03, 2020. "Public Opinion on Single-Payer, National Health Plans, and Expanding Access to Medicare Coverage." *The Henry J. Kaiser Family Foundation*, 3 Apr. 2020, www.kff.org/slideshow/public-opinion-on-single-payer-national-health-plans-and-expanding-access-to-medicare-coverage/.

Figure 1

Most Support Federal Government Doing More To Help Provide Health Insurance, But Republican Support Has Declined Over Time

Percent who say they **favor** the federal government doing more to help provide health insurance for more Americans:



SOURCE: KFF Polls. See topline for full question wording and response options.

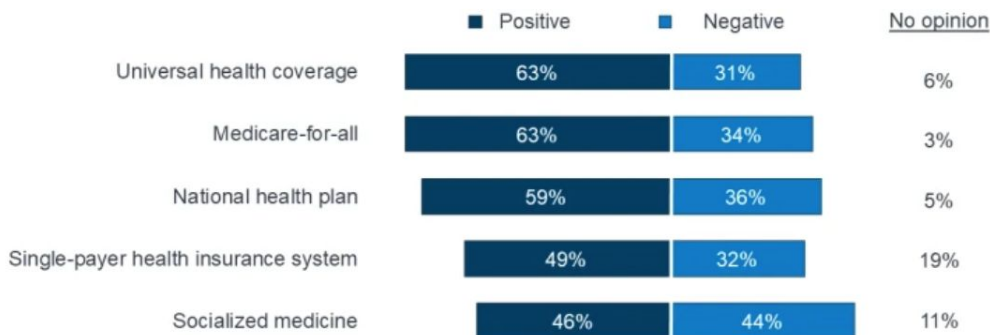


Figure 5

Chartpack Single Payer 04-03-20 Figure6

Terminology Affects Public Opinion On A National Health Plan

Do you have a positive or negative reaction to each of the following terms?



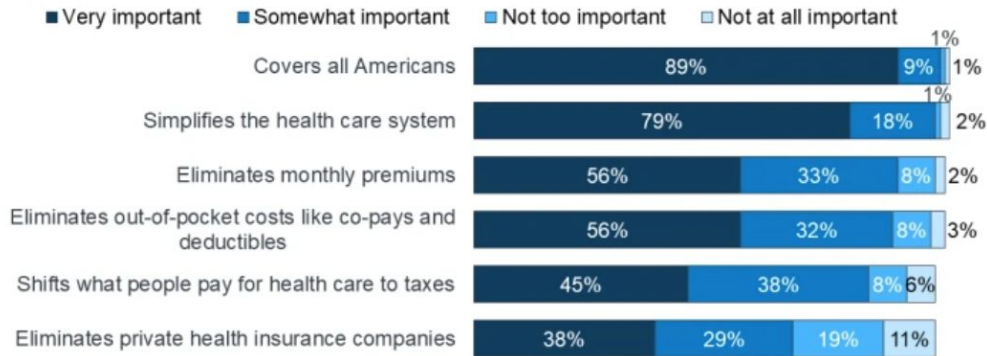
SOURCE: KFF Health Tracking Poll (April 11-16, 2019). See topline for full question wording and response options.



Figure 8

Universal Coverage Is Most Important Feature Of A National Health Plan Among Supporters

How **important** is it that a national health plan...?



NOTE: Among those who favor a national health plan.

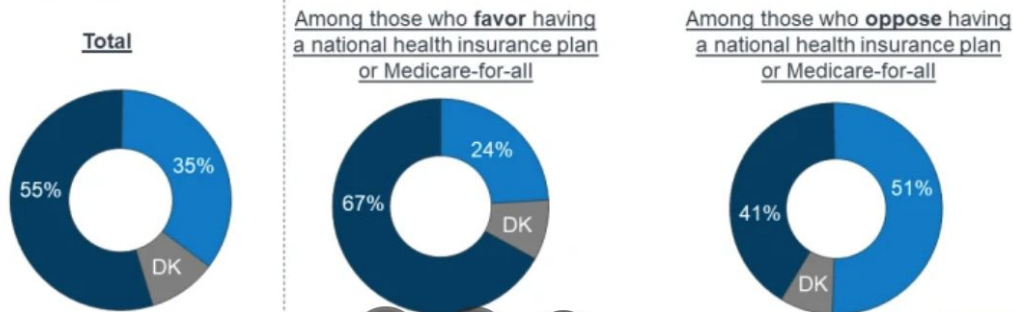
SOURCE: KFF Health Tracking Poll (March 13-18, 2019). See [topline](#) for full question wording and response options.



Figure 11

Most Medicare-for-all Supporters Think They Would Be Able To Keep Their Health Insurance

- Yes, think they and their family would **be able to keep their current health insurance**
- No, think they and their family would **not be able to keep their current health insurance**



SOURCE: KFF Health Tracking Poll (January 9-14, 2019). See [topline](#) for full question wording and response options.



Fixed Pricing

By having fixed pricing for procedures, medication and with the overall system in place it would allow for a more affordable and equal system. “We accept the drugmaker’s argument that they have to charge twice as much for prescriptions as in any other country because lawmakers in nations like Germany and France don’t pay them enough to recoup their research costs” (p 1)¹². It is making the argument that if we replaced the word prescriptions with cars or films things would be different. Why is health okay to switch? Hospitals should have a fixed amount depending on the diagnosis. “Many countries, Germany, Japan, Belgium, and more -- set national fee schedules for some combination of medical encounters of supplies and medicines...National fee schedules inevitably yield prices that are far lower than those in the Unites Stare because a nation has far greater negotiating clout than a single insurer or an individual.” (p 244).¹² For example, sonograms can cost between \$1,000-\$8,000 in the US whereas in

Japan and Belgium they have a fixed price of under \$150. I feel as if fixed pricing could work in the United States, however, it should be negotiable depending on your income - but the price can't go up.¹²

Covered insurance:

I believe that if you hold private insurance and a procedure is covered, then all the tests, screenings, and treatments related to that procedure should be covered as well. Insurance policies are designed to meet patients' needs. Although the government will still need to make enough money to pay for the expense of the service they are providing they will not be trying to make a profit and can therefore bring down costs. Even if everything associated with a procedure is not covered, there should be a fixed price or a lowered price set by Medicare. There can also be package deals that are 20-25% lower than the actual cost.

⁴⁸Insurance could also be used for economic purposes There should be more expansive unemployment insurance. For instance, in the UK employees are receiving 80% of their salary; this is the reason as to why in the UK unemployment didn't rise as much as it did in the US, they had the policy that their labor department would subsidize salaries during an emergency like an epidemic. Unfortunately in the U.S. the government subsidies had to go through big bank corporations which delayed the process so that by the time some companies received the money it was too late and they had already laid people off.

New Government website:

I think there should be a new government website that allows everyone to log on (similar to the telehealth/telemedicine websites previously discussed). But this website would inform everyone with information about generic medicine brands and alternative treatments. This could be partnered up with WebMD, or a program like that. These brands and treatments would not include surgical procedures, as one can do their own research. This would strictly be for over the counter drugs and non-medical treatments. There could also be another section on the portal where prescriptions could be received and fulfilled. There could also be a Reddit section where people from all over could give recommendations and reviews (shows age, place where they got it, and rating). There could also be information and advice about insurance. This would help inform and unite people.

Broader Workforce/Doctor Training:

I also think that our doctors need to have additional training regarding patient relationships and that we need a broader workforce including more RN's, PA's, technicians and medical clerks. This training/session should be a course set in place to form relationships with the patient in order for them to get the best care they need. In order to create more jobs and to make it easier for people who can't afford to go through medical school, we could have helpers in the waiting room. This job would include helping out the patient with their paperwork as well as just getting to know the patient more on a personal level. This could even be a college student, just being able to make a connection to a patient. A cure isn't always based on medicine, it could be housing, a balanced relationship, food supply, transportation etc. Doctors would prescribe something but the underlying factors are at home or can't be seen. "A simple model where doctors and nurses can prescribe nutritious food, heat in the winter and other basic resources for their patients the same way they prescribe medication. Patients then take their prescriptions to our desk in the clinic waiting room where we have a core of well-trained college student advocates who work side by side with these families to connect them out to the existing landscape of community resources."⁴⁹ One of the few positive outcomes of this terrible pandemic is that people have learned to appreciate and value healthcare workers. I think this will inspire many young people to want to take up a career where they can service others and be of help to society.

⁴⁸ Why we're seeing mass layoffs in the US but not the UK vox." *Youtube VOX*, 5 May. 2020, <https://www.youtube.com/watch?v=HaraFkhonFo>.

⁴⁹ Onie, Rebecca. "What If Our Health Care System Kept Us Healthy?" *TED*, 2020, www.ted.com/talks/rebecca_onie_what_if_our_health_care_system_kept_us_healthy/up-next?referrer=playlist-what_doctors_worry_about#t-5675.