DELIVERING IMPACT AND VALUE

COVID-19 HEALTHCARE COALITION MEMBERS REPORT

JULY 2020
MAKING A DIFFERENCE TOGETHER

In mid-March, the COVID-19 Healthcare Coalition was established as a coordinated public-interest, private-sector response to the COVID-19 pandemic, convening healthcare organizations, technology firms, nonprofits, academia, and startups. Today, Coalition contributors continue to actively work together on strategies to preserve the healthcare delivery system and protect people. While we have a long way to go before this crisis is over, the Coalition’s close to 1,000 member organizations and thousands of staff remain committed to making a difference together.

What do you do first when confronted with challenges on so many fronts? The Coalition worked quickly to build a rapid response to immediate crises like providing personal protective equipment (PPE) for healthcare workers. At the same time, we stood up the critical infrastructure to enable collaboration and shared analytics. And in the roughly four months following our formation, the Coalition has made an impact on the COVID fight, creating resources and tools that can evolve and endure as this challenge continues.

SUPPORTING THE COVID-19 SUPPLY CHAIN

Leveraging the Coalition’s network, we identified quality manufacturing sources, negotiated low prices, worked around numerous export challenges, and were able to deliver 675,000 masks to over 60 locations during a time when 50% of hospitals in New York City were running out of N95 respirators. Through the partnership of the charity Masks4America, these masks went to hotspots including Illinois, Virginia, Maryland, Louisiana, Michigan, Washington, D.C., and Puerto Rico. The Coalition also helped to accelerate production of 10,000 low cost ventilators, and aggregated a marketplace catalog to provide buyers the simplest possible access to the many PPE marketplaces that have emerged across the country. Where the supply chain wasn’t able to deliver resources, we also provided guidance to help healthcare systems with the difficult choices around alternatives and reuse. The Coalition helped get the word out quickly on the best possible methods for sanitizing N95 masks for multiple reuse, and published “how-to” guidance on available N95 respirator decontamination strategies. Stanford University, with support from other organizations, is piloting an N95 alternative with health systems across the country—a modified snorkel mask that filters better and is more cost effective than the original N95 masks.

As part of the Coalition’s efforts to accelerate new technologies that could promote reuse and replenishment of resource-limited PPE, we engaged with a UV curing company called INPRO Technologies. With assistance from Coalition scientists, an open source ultraviolet germicidal irradiation design is progressing through FDA emergency use authorization.

To help decision makers start to prepare for the challenges ahead, members including Cardinal Health, GHX, Llamasoft, LogicStream Health, MITRE, and Sodexo Healthcare Services came together to develop a PPE and pharmaceuticals demand model. State and local leaders are using this demand model to determine if current PPE stocks are sufficient to satisfy expected demand.
INFORMING COORDINATED SOCIAL POLICIES

Informed by the National Governors Association Roadmap to Recovery, the Coalition team developed and is supporting ongoing development of the COVID-19 Decision Support Dashboard.

This tool synthesizes large amounts of complex, essential data into easy-to-use key findings for public and private-sector leaders navigating the “reopening” of communities and businesses. It provides a structured understanding of how a state or county is performing by adding red-yellow-green indicators for key areas.

Additional data dashboards from the Coalition provide understanding of the secondary effects of key decisions including a critical dashboard focused on identifying vulnerable populations—all free, and built with publicly available data and models. Topics covered include NPI implementation, dis/mis information, hotspot detection, short-term forecasting, and regional analysis and comparison. These dashboards were developed with input, partnership, and data from many members, including:

- Esri
- Jataware
- LLamasoft
- SafeGraph
- Surgo Foundation
- Tableau

Coalition members have come together to understand and support many of the testing and contact tracing needs and solutions that are emerging to support public and private sector leaders.

One of the tools presented to the coalition is Sara Alert™, a standards-based, open source tool that automates the process of public health monitoring and reporting of individuals exposed to or infected with COVID-19. Sara Alert was developed by MITRE in partnership with national public health organizations, and is currently being deployed in close to 20 jurisdictions, including Pennsylvania, Vermont, Virginia, Arizona, and Puerto Rico.

COVID Aware is a no-cost automated proximity notification app to address one of the biggest gaps in contact tracing: identifying exposure from strangers. COVID Aware provides a free, open-source tool developed for public health agencies to tailor for their own needs and offer to their residents. It frees up critical personnel for other aspects of disease mitigation and response and builds in strong protections for privacy, information security, and anonymity through a reliance on MIT-developed Private Automated Contact Tracing (PACT) protocol using Apple | Google Exposure Notification Service technology.

A landscape analysis has been completed to outline the potential use cases, end-to-end process, stakeholders, and technical challenges associated with wastewater-based epidemiology (WBE) for COVID-19. The Coalition is collaborating with Oak Ridge Associated Universities, the Thurgood Marshall College Fund, and Hispanic Association of Colleges and Universities to connect universities interested in launching WBE programs with leading experts at Yale University, Rice University, and Arizona State University. We are also partnering with the Start Coalition, to identify partners to launch pilot projects for using WBE in vulnerable communities.
Leading companies in health data analytics and electronic health record vendors, including Allscripts, athenahealth, Cerner, Epic, Health Catalyst, and MITRE, are working together to investigate potential therapeutics to prevent and treat COVID-19. The Coalition has created a de facto COVID-19 data standard to facilitate rapid sharing of outcomes and federated analytics on the effectiveness of treatments such as remdesivir, convalescent plasma, and famotidine as well as reinfection rates.

Coalition members have led the nation’s efforts to pursue research and treatment with blood plasma from convalesced COVID-19 patients. Members of the coalition including Mayo Clinic, Michigan State University, Amazon, and others are supporting the country’s largest medical study on COVID-19 patients receiving convalescent plasma treatments. This was followed up with a national plasma donation campaign (The Fight Is In Us) supported by the CoViD-19 Plasma Alliance, American Association of Blood Banks, American Red Cross, Grifols, Bill and Melinda Gates Foundation, Mayo Clinic, Michigan State University, Uber, and many more. The website was developed by Coalition members Microsoft and MITRE, and was promoted by celebrities, including Dwayne “The Rock” Johnson, Helen Mirren, Samuel L. Jackson, Awkwafina, Ken Jeong, Daniel Dae Kim, and Ryan Tedder.

As telemedicine has surged during COVID-19, we are rapidly sharing insights, educating on waivers and policy changes, and collectively studying the scope and scale of this unprecedented growth in remote and virtual healthcare.

Our weekly Executive Forums convene leaders in the telemedicine ecosystem to solve real-time challenges in expanding telehealth rapidly, enabling health systems to expand medical capacity and patient care during the outbreak.

Additionally, Coalition members have launched the COVID-19 Telehealth Impact Study to track the use of telehealth using claims data and surveys of providers and patients. Collaborators include provider organizations, Change Healthcare, The American Medical Association, The American Telemedicine Association, The Massachusetts Health Quality Partnership, The Digital Medicine Society, and others. Finally, Coalition members continue to work collaboratively to understand and address disparities and treat vulnerable populations using virtual modalities, connecting patients to care virtually when and where they need it most.

Our weekly COVID-19 Healthcare Coalition Response Webinar convenes hundreds of technology, social policy, and healthcare system leaders to showcase activities and accomplishments. Participants drive productive and candid discussions of best practices and protocols, and sharing of insights.
EMPOWERED WITH TECHNOLOGY TO COLLABORATE IN NEW WAYS

As sharing data-driven insights was a key objective of the Coalition, we needed a substantial infrastructure to collaborate, collect, analyze, visualize, and share data and insights from close to 1,000 member organizations in a trusted and secure manner.

We envisioned an infrastructure that would quickly provide members and many other stakeholders with tools and information they could use to make decisions on how to keep their populations safe.

We achieved that vision within weeks thanks to the leadership and extraordinary contributions of members, including:

- Acumen
- Amazon Web Services
- Box
- Deloitte
- Google
- Microsoft
- MITRE
- Okta
- Salesforce
- Slack
- Splunk
- Tableau

In collaboration with these and other outstanding technology partners, the Coalition rapidly stood up a cloud-native platform that today supports a public website with hundreds of curated resources, a member database, as well as a member site where data is safely shared for collaborative research. In our first four months, we logged more than 110,000 page views and more than 15,000 views of the Decision Support Dashboard. Thousands downloaded and shared our resources on respirator decontamination. The public site currently houses more than 300 curated resources and best practices.
MOVING FORWARD
As COVID-19 shows little signs of waning, new challenges continue to emerge. The Coalition is shifting from emergency actions to building and sustaining the most important enduring capabilities that help fight the adverse impacts of this pandemic. Working groups and project teams are actively pursuing efforts that can drive that enduring impact. We have also acknowledged and identified the health disparities in how COVID-19 is unduly affecting vulnerable populations, particularly across racial and ethnic minority groups. We are committed to ensuring the Coalition’s efforts are part of the solution in achieving greater health equity.

You have graciously shared your time, effort, relationships, and knowledge. We hope you can clearly see the positive impacts your contributions have made, and that you are able to continue to participate as we enter a new phase of COVID-19’s impact on society.

IN APPRECIATION FROM MITRE
When asked by Coalition founders to take on the operations of the COVID-19 Healthcare Coalition, MITRE was eager to contribute. We are humbled by the depth of member contributions and the power of this community to make a difference during this pandemic. We are honored to serve with the private sector to help address this public challenge and are committed to continuing this effort with a renewed focus on enduring impact as the pandemic continues to spread across the United States. Thank you for your continued commitment to the greater good. Please reach out to us anytime at C19HCC@mitre.org

SALUTING OUR MEMBERS
COVID-19 HEALTHCARE COALITION MEMBERS

The COVID-19 Healthcare Coalition has more than 900 member organizations, many of which are working behind the scenes on technology, research, and collaborative projects. Listed below are the organizations who wished to publicly acknowledge their membership.
COVID-19 HEALTHCARE COALITION WORKING GROUPS

We’d like to acknowledge the organizations and individuals who have donated significant time and resources to the Coalition in their specific technical specialties. Working Groups are dynamic within the Coalition and evolve over time as priorities and needs shift.