

HCA Healthcare Magazine



COVID-19 Special Edition





HCA Healthcare Family,

In my 37 years with our organization, I have never witnessed such incredible teamwork, courage, partnership, and unwavering commitment to our mission as I have this year. HCA Healthcare is truly an organization of incredible people.

While our front-line caregivers have taken center stage and raised the bar for what it means to provide superior care, many colleagues who are not at the bedside have also played a crucial role in our preparation, response, and reboot efforts. These past few months have not been easy, but your remarkable teamwork and dedication to each other have endured.

Our organization has a storied history of responding to disasters, from hurricanes and floods to mass-casualty events like the concert shooting in Las Vegas. Together, we've used these experiences to guide and inform our planning and response during the COVID-19 crisis, the first of its kind that we have faced collectively across the enterprise.

This event has required us to respond differently, with a structure that includes a more balanced approach between corporate support, division coordination, and facility execution. We developed five guiding principles that established a framework for decision-making and actions throughout the crisis:

- Protect our colleagues and physicians.
- Be there for patients.
- Partner with others.
- Be a resource for communities and government.
- Accelerate the organization through the crisis.

Throughout this special edition of *HCA Healthcare Magazine*, we highlight how the combined efforts of our organization are critically important in supporting these guiding principles and why the promise of HCA Healthcare lies not in our name, but in our people. From our emergency operations teams and front-line heroes (*page 4*) to our supply chain (*page 12*), data science and IT teams (*page 14*), clinical labs (*page 16*), community and government partners (*page 18*), and more, the work you do shines brightest during times of adversity.

I want to thank each of you for your commitment to our patients, your tremendous sacrifices, and your hard work. As we continue to move forward, I am confident that our unique scale and incredible people will help shape the new healthcare landscape that is before us. I am incredibly proud to call you my HCA Healthcare family.

Sam Hazen
CEO, HCA Healthcare

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SCAN ME

Visit [Magazine.HCAhealthcare.com](https://www.HCAhealthcare.com)

for more stories about our incredible colleagues and their heroic efforts throughout the COVID-19 pandemic.

“We care for patients like they’re family. The compassion we feel, and the passion we have for our jobs, keeps us going in times of crisis.”

—Amy Huffman, RN
TriStar Centennial Medical Center
Nashville, Tenn.

Battling COVID-19

Pandemic puts Enterprise Emergency Operations Center in the spotlight.

Mike Wargo's job is to expect the unexpected. So when the dark clouds of the coronavirus began gathering in late December 2019, Mike, RN, BSN, MBA, PHRN, CMTE, HCA Healthcare's vice president of Enterprise Preparedness & Emergency Operations, and his team acted quickly. The Enterprise Emergency Operations Center (EEOC)—part of the larger department that Mike oversees—mobilized with laser-sharp precision, transitioning from awareness to preparation to response.

"Before we identified our first patient in San Jose, California, our EEOC was activated, and directives were given for all facilities to activate their facility EOCs," he says. "Readiness for a potential COVID-19 surge across the U.S. was the organization's top priority."

Four priorities

In short, the EEOC is tasked with ensuring that leaders enterprise-wide have the resources needed for their

facilities to provide "uninterrupted patient care and to fulfill our mission to our communities," says Mike. The EEOC functions under an "all-hazards" approach, with four priorities that pertain to any hazardous situation.

The first priority is **life safety**. "We focus on the physical and emotional well-being of our patients and families, staff and families, and the community at large."

The second priority is **infrastructure**, Mike says, "ensuring that we have the people, supplies, equipment and physical space required to deliver care or perform business functions." Third is **operations**, ensuring the organization can care for patients, protect staff and respond to the greater needs of the community.

The final priority: **delivering on our commitment** to the care and improvement of human life. Mike adds that the priorities may take shape in different ways. "Our top life safety priority was to ensure that our staff had the appropriate personal protective equipment (PPE) and ➤➤➤

"It is quite amazing to see everyone coming together during this time. I am very proud to be a part of this amazing organization, especially in times like this, when the level of uncertainty is at an all-time high."

—Rose Amazan, BSN, RN
Memorial Health University
Medical Center
Savannah, Ga.

80%+

Approximate percentage of the world's personal protective equipment that's made in China

knew how to assess and care for patients to reduce their exposure to the virus.”

The three C’s

To address the EEOC’s four priorities, Mike says his team follows the three C’s:

■ **Communication**

In early January, with the virus likely to spread rapidly, HCA Healthcare began briefings with leadership and engaged all of our facilities about potentially activating their pandemic plans. “Each facility was asked to review their plan and let division EOC leadership know of any shortcomings,” says Mike.

■ **Coordination**

The EEOC held a TOPOFF (Top Officials) exercise to assess clinical surge operations and global supply chain, with emphasis on products from China, where so many are made.

Our teams then took preparedness to another level by

conducting a series of virtual tabletop exercises related to pandemic response and surge capacity, Mike explains. “This helped our action planning on what areas needed the greatest focus and support from the corporate level.”

■ **Collaboration**

Fortunately, our organization’s sheer size and scale enables us to address big challenges. Based on early models estimating outbreaks, COVID-19 had the potential for what Mike calls a “mass surge” of patients across the communities we serve. That required a response on an enormous scale. “Never have we been challenged so that all of our facilities and their staff and their families would be at risk, and the most-needed supply chain items were made and distributed from the global epicenter of the virus.”

Timing is everything

Another major challenge: the unknown timeline created by the unpredictable nature of COVID-19. “At any time,

this virus could have presented as one patient or a community outbreak,” says Mike. Enterprise-wide response was on several levels, he explains, primarily because “the virus spread quickly and very differently in each community. The challenge was to ensure every one of our facilities was prepared.”

We were able to scale testing and clinical capabilities, focusing on creating a safe environment, says Mike. “Alternate screening sites and teams were established to quickly protect all patients and staff, and to identify potential cases.”

Emergency response teams also helped set capacity plans and protocols to expand ICUs and ventilator capabilities. Moreover, use of data science teams allowed for the uniform assessment and a consistent operating picture that guided readiness plans. “Few organizations have the scope of data that we have in near real-time reporting,” says Mike.

Front-line support

Throughout the coronavirus response, our executives and EEOC team members continue to work closely with the physicians, nurses and other colleagues who deal directly with patients. Julia Moody, MS SM (ASCP), CIC, senior director of infection prevention with our Clinical Services Group, says the EEOC’s emphasis on communication allows the organization to keep up with the most current recommendations.

“It’s so important to be able to listen to the front-line caregivers and get their feedback on what’s working and what’s not,” says Julia. “They’re very smart innovators who adapt quickly and share that innovation, so we can incorporate it in other divisions and facilities that are currently in surge.”

There’s no question that COVID-19 has had a tangible effect on every aspect of our organization. Patients and colleagues can take heart that we’re committed to care, regardless of the threat and when it may first occur—or return. The EEOC will make certain of it. ■



CHECK IT OUT!

To learn more about HCA Healthcare’s response, please visit HCAhealthcare.com/COVID-19.

**LEADING THE
FIGHT**

Voices from the front lines

As an organization, we take great pride in our approximately **280,000 colleagues who care for patients** in one way or another, no matter the circumstance. Nowhere has that been more evident than on the front lines of the COVID-19 response. **You’re all heroes.**



Nurse Karl Harris Bernas

— A nurse at HCA Houston Healthcare North Cypress in Cypress, Texas, Karl Harris Bernas, RN, volunteered to be an employee entrance screener and took extra shifts to allow colleagues a needed respite. This sense of service reflects his commitment to others when he served in the U.S. Army. “Karl has a big heart,” says his director, Amanda Edgmon, RN. “He has amazing energy. He always makes his patients feel important.”



Dr. Susan Ryan & Wynn

— Fledgling service dog Wynn is not only a best friend to her trainer, emergency medicine physician Susan Ryan, DO, of Rose Medical Center in Denver, Colo., but she’s also the facility’s best friend. Thanks to social media, a touching photo of the pair in a hospital hallway spread quickly. “Wynn provides a heart-to-heart connection,” says Susan. “This helps us remember to be human and connected.”



Nurse Amy Huffman

— A nurse at TriStar Centennial Medical Center in Nashville, Tenn., Amy Huffman, RN, never hesitated when asked to serve on a tracheostomy team for COVID-19 patients. “This is what we do. We work hard to save lives. Friends say they’re keeping me in their prayers. My only prayer is that the patients live. We care for them like they’re family. The compassion we feel, and the passion we have for our jobs, keeps us going in times of crisis.”



Nurse Amber Craig

— An emergency services manager at West Valley Medical Center in Caldwell, Idaho, Amber Craig, RN, (right) understands there are two teams supporting all front-line colleagues: hospital and home. She knows that her family has also made sacrifices because of her profession. “I’m a nurse in an ER during a pandemic. I know that at any moment my normal world could be turned upside down.”



Surgical Technologists

— At Lakeview Regional Medical Center in Covington, La., surgical first assistant Lisa Jones and certified surgical technologists Terry Fehn and Kelsey Bolar are normally in the OR sterilizing surgical tools. With the onset of the coronavirus, all have broadened their roles to include sterilizing personal protective equipment. “My job is to ensure the safety of patients and my Lakeview family,” says Terry. “Whatever needs to be done, you can count on us.”



Angel Monroy

— Sometimes the little things stand out—especially during a pandemic. Little things like getting a haircut. With many salons and barbershops temporarily closed, Angel Monroy, FNP-BC, assistant chief nursing officer at Menorah Medical Center in Overland Park, Kan., opened Angel’s Clip Joint to offer haircuts to his colleagues. The cost? A donation to the HCA Healthcare Hope Fund.



Cherpoa Lee

— On April 7 at Presbyterian/St. Luke’s Medical Center in Denver, colleagues gathered for the discharge of their first COVID-19 patient, Cherpoa Lee. He’s familiar to many, having worked at the hospital for 36 years on the food and nutrition services team. “I want to thank all of the nurses, doctors and food services for helping me. It has been difficult, but I know a lot of people care about me and pray for me, and I want to thank them.”

Caring Like Family

Geography becomes secondary when colleagues respond to calls for help.

When COVID-19 began to spread, the hospitals that were both short-staffed and overwhelmed with coronavirus patients needed reinforcements. Could HCA Healthcare, with our vast network of medical personnel and resources, lend a hand to help inside and outside our family of hospitals? The answer was—and remains—yes.

HCA Healthcare nurses traveled far from home to serve in major COVID-19 zones such as New York and New Orleans. Elsewhere, a different sort of help was being offered. St. David's Round Rock Medical Center near Austin, Texas, was one of many facilities to set up a colleague grocery so front-line workers could buy basics that were increasingly hard to find at local stores. (Read about how we partnered with Sodexo to help feed the homeless in Nashville, page 21.)

That's what the "care" in HCA Healthcare is all about.

It's our people, of course, who define the enterprise with their resilience, dedication and generosity. "It's

wonderful to see the innovation and collaboration of our teams," says Tami Taylor, chief nursing officer at St. David's Round Rock Medical Center. "Our Food and Nutrition Services director, Beth Bowles, is taking care of our staff while we work to care for our community. Once again, they're showing all of us, in big ways, what it means to care like family."

A roster full of veterans

Military personnel are accustomed to serving away from home. More than 28,000 of our quarter-million-plus HCA Healthcare colleagues are veterans, reservists or active duty personnel. One of them is Maria Spingos, director of nursing for behavioral health at West Florida Hospital in Pensacola, Fla.

A nurse for 12 years and with HCA Healthcare since 2018, Maria is also a credentialed psychiatric nurse with ►►

"HCA Healthcare has been amazing throughout this process. They've been fully supportive and nothing but helpful during a stressful time . . .

It's been an unforgettable experience."

—**Maria Spingos**
(pictured above)
Director of nursing for behavioral health
West Florida Hospital
Pensacola, Fla., and Navy
Reservist

28K+

Number of military veterans, reservists or active duty personnel hired at HCA Healthcare since 2012



BREATHING EASIER THANKS TO A GENEROUS DONATION

Sometimes, HCA Healthcare becomes a different sort of care provider. In April, the organization announced it was donating up to **1,000 ventilators to hospitals as part of the American Hospital Association’s collaboration** with the federal government to help facilities experiencing a surge of coronavirus patients.

HCA Healthcare CEO **Sam Hazen spoke at a White House briefing** with President Trump to announce the launch of the Dynamic Ventilator Reserve, which includes an online inventory of ventilators and supplies that hospitals and health systems will list as being available to lend. (Read more in the “Partnerships” story starting on page 18.)

“One of the guiding principles we had when we went into this COVID-19 battle was to find **partnerships with other components of the healthcare industry**, with other health systems and with governments, both local and federal,” says Sam. “We’re proud to be part of this, and I think it’s going to do great good for the community.”

Even better: The reserve concept can be applied to other critical areas of need that may emerge if the COVID-19 pandemic persists.

Nurses on the job in New Orleans
(from left):
Monica Howard, RN
Cabrina Ridley, RN
Cassie Champagne, RN

the Navy Reserve. In early April, duty called: Like many other military personnel, she was told to mobilize to New York to help treat COVID-19 patients. As of this writing, she’s still there, working at the Javits Center in Manhattan, where a temporary care facility has been built to handle hospital overflow; Maria serves on what’s called the prone team. “On a regular schedule, we turn patients in their beds to the prone position [chest down] to help improve lung function,” she says. “This allows the nurses to continue care without interruption of position.”

Initially, Maria was told to anticipate serving for 60 to 90 days. When she received her orders, they read 270 days—roughly nine months—but she doesn’t expect to be in New York that long. As different as they are, Maria says her Navy service has helped prepare her for work in a civilian setting. “In order to make rank, you have to work for it through

education and collateral duties. They also offer other courses that prepare you to treat patients on the battlefield.” She says HCA Healthcare has been “amazing” throughout the process. “They’ve been fully supportive and nothing but helpful during a stressful time . . . The COVID-19 crisis has been eye-opening and clearly demonstrates how quickly diseases can spread. It’s been an unforgettable experience.”

Answering the call

When Louisiana Gov. John Bel Edwards asked for nurses from areas less affected by COVID-19 to supplement medical personnel stretched thin in New Orleans, 200 nurses from HCA Healthcare facilities in the Kansas City area volunteered to help at affiliate Tulane Medical Center.

Monica Howard, an ICU nurse at Menorah Medical Center in Overland Park, Kan., agreed to go wherever she

“It’s wonderful to see the innovation and collaboration of our teams.

Once again they’re showing all of us, in big ways, what it means to care like family.”

—**Tami Taylor, chief nursing officer**
St. David’s Round Rock Medical Center
Round Rock, Texas

was needed most, so it was off to New Orleans. “These patients were the sickest I’ve taken care of in my career. You really don’t know how bad it is until you’re on the front line in a hot zone.”

Another colleague who volunteered to make the trip south is nurse Cassie Champagne of Overland Park Regional Medical Center. She says she was inspired to become a nurse by her mother, who worked with other nurses for months after 9/11, identifying bodies at ground zero. “I never imagined I’d be called on to help with anything like COVID-19,” Cassie says.

Cabrina Ridley, a nurse at Tulane Medical Center, says it meant so much seeing the out-of-state reinforcements arrive. “It showed us that we are being supported and everybody is in this together. There’s no need to feel exhausted anymore because help is actually here.” ■

Supply (Chain) and Demand

Management and conservation of personal protective equipment has been a collaborative effort to ensure we are supporting our front-line caregivers.

In the incredibly important world of supply chain, three disciplines loom large in ensuring that a health system runs smoothly: **procurement** (acquiring items efficiently and at the right price), **management** (taking care of those items and making sure they're stored and utilized properly) and **distribution** (efficiently getting items to where they're needed, on time). With the onset of the pandemic, a fourth discipline, **conservation** (managing the sustainable use of products to ensure their availability amid scarcity) is added to the equation. For us, conservation is a necessity driven by a shift in global demand for personal protective equipment (PPE) coupled with shortages of these critical supplies.

Over the past two decades, HCA Healthcare's supply chain team has evolved to meet the needs of caregivers and patients during events as sweeping as hurricanes, floods and wildfires. Supply chain is an intricate, multifunctional service aligned with each division of HCA Healthcare to ensure facilities and staff have the supplies necessary to support high-quality care, even during a global pandemic.

It takes tremendous teamwork, organization and technology to keep supplies on hand and up to date. From surgical supplies to pharmaceuticals and disposable gloves, the system touches every aspect of facility operations. As the virus expanded globally, supply chain's effort became one of unprecedented intensity, especially since so many products are sourced overseas and supply was threatened. From the start, this event aligned supply chain and the Clinical Services Group (CSG) more than ever before.

"That's definitely true," says Ron Powell, National Group Supply Chain CEO. "In the case of a crisis, supply chain becomes very much a logistics organization tasked with sourcing product and moving it around the country. Whatever the

needs may be—from tents to PPE—we're going to do everything we can to support our clinicians and hospital staff."

During the pandemic, one link in the supply chain that's seen an enormous amount of attention is the importance of conserving PPE—the garments and accessories front-line colleagues depend on when caring for patients with infectious diseases. "Our management of PPE has been a collaborative effort with HCA Healthcare's Clinical Services Group to identify the appropriate uses of those products and take measures to conserve the products for sustainable use during this unprecedented event," says Ron. "How do we, as a supply chain organization, best manage those products in light of shortages, allocations and growing demand?"

Conservation

Managing PPE has been key in meeting the extraordinary demands of the pandemic, Ron explains. And it just so happens that more than 80% of the world's production of PPE is in the region first impacted by COVID-19. Globally, demand was outpacing supply, and production stopped for about six weeks, making availability that much more difficult. "We set up a command center at the end of January when we saw that the supply line was getting tight and recognized that there were a number of things we needed to do to protect staff," Ron says. "We started working very closely with CSG and others to review clinical guidelines and COVID-19 projections, thus informing our supply management decisions. Throughout February, we were acquiring product and setting up measures to ensure sustainability. We refined our reporting infrastructure to meet the unique needs of this event."

Adaptability

One of the challenges of preventing weak links in the supply chain is ensuring that distributors can meet the sudden demand surge. "Hand sanitizer is a great example," Ron explains. "Our supplier was overwhelmed by the demand, not just from healthcare providers, but the retail business as well. Our team members worked daily with our supplier to provide need projections and ensure supply was obtained. We then turned to alternate suppliers like distilleries to quickly meet the need."

Government relations

That work-together spirit extends to one of the supply chain's key partners: government entities, be they local, state or federal. Without their cooperation and resources, the necessary tasks would be nearly impossible to complete.

"In each state where we operate, we have a robust relationship with the government," says Ron. "We've received product in most of our markets from the state stockpiles. Some of those are very highly restricted to a specific facility; others are available more for our facilities in that state, and we can move product around as needed." Having established

connections in Washington is also a good thing for supply chain operations. "HealthTrust and HCA Healthcare have been influential at the federal level as well," says Ron, "with representation on Vice President Pence's Coronavirus Task Force."

Being ready for the next phase

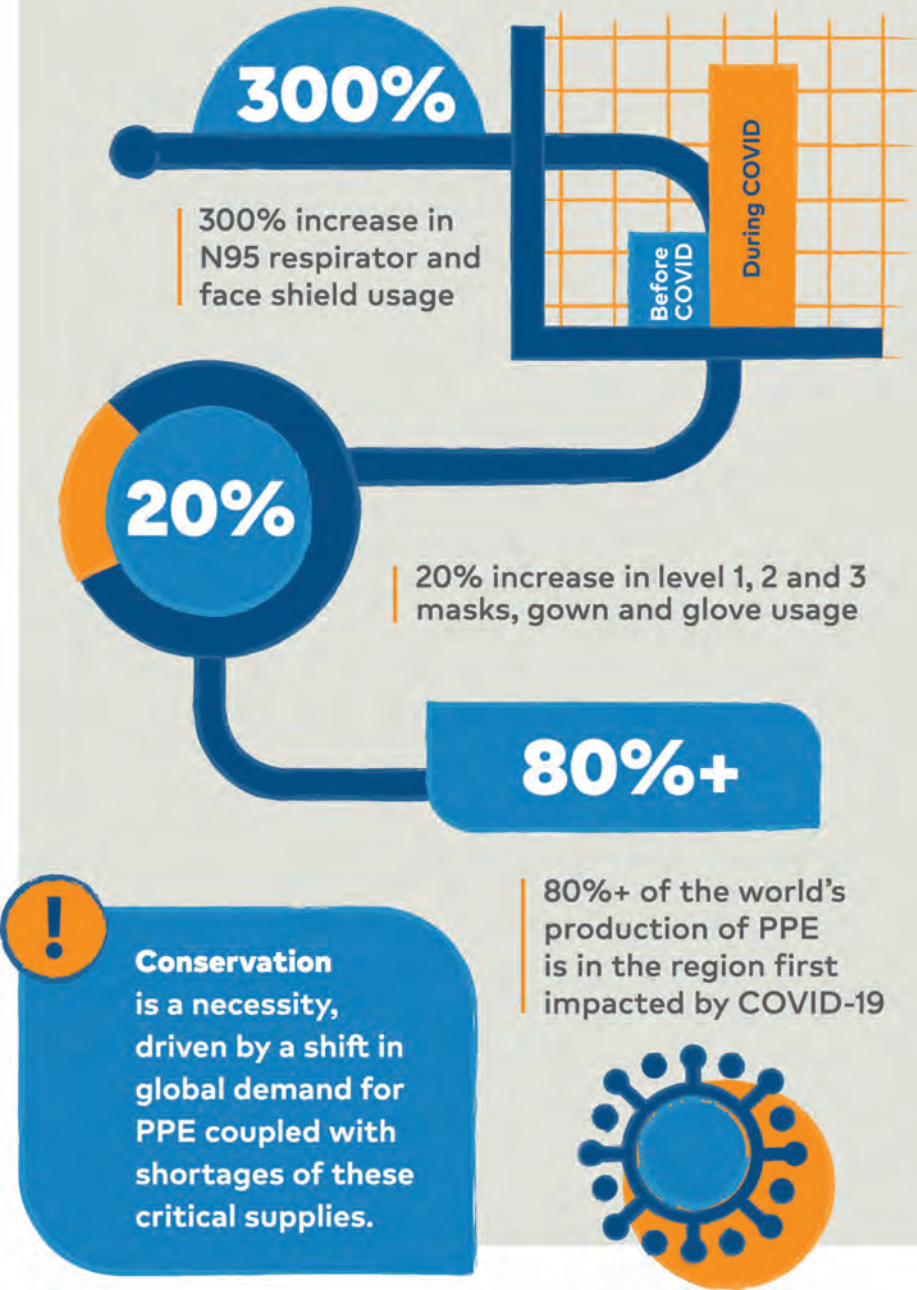
The COVID-19 pandemic has been devastating in more ways than one. Yet in the midst of this event, our organization has learned so much through collaboration, rapid response and a general willingness to think creatively. "We've certainly changed our approach. It's not a question of if but when there's a second round of COVID-19, because everybody's predicting there will be," says Ron. "We'll be better prepared to know how we need to respond from a supply side. We're preparing for it by projecting our future needs based on lessons learned from this first phase. We'll be better informed as to what we really need, how hospitals will be set up and how they'll take care of patients. This event will inform how our supply chain meets the needs of our hospitals as they reopen." ■

"We are blessed to have all the PPE and equipment we need to appropriately care for our patients while staying protected. Our workload has increased but we have adapted, communicated and **come together to provide the best care for our COVID-19 patients.**"

—Noel Edwards
RN, BSN, CCRN, TNCC
Rapides Regional
Medical Center
Alexandria, La.



Impact of COVID-19 on Personal Protective Equipment (PPE)



Updated May 2020

IN THE KNOW

Supply Chain Facts and Figures This event was the first time supply chain used **advanced analytics** with our Data Science team to predict future PPE needs based on ever-changing patient volumes.

Nearly 240M | Units of PPE distributed to our hospitals since March 1, including **151 million gloves**

2,200 | Approximate number of requests for assistance logged in our Supply Chain Command Center

15M+ | Ounces of hand sanitizer obtained from new sources—including 5.4 million ounces from two distilleries

Colleague Q&A: Armed With Information

Data is key in responding to COVID-19.



It's easy to see the critical roles our physicians, nurses and other front-line staff play during a prolonged public health emergency. But many colleagues are behind the scenes—including a dynamic, innovative group of business intelligence specialists, software developers and scientists led by Chief Data Officer Dr. Edmund Jackson.

Part of the Clinical Services Group, his team has invested countless hours developing products to support COVID-19 preparedness and response, devising ways to leverage the value of statistics to help keep our colleagues safe and ensure the best care for patients. One of the newest tools—the COVID-19 National Response Portal (NRP)—resulted from a partnership between HCA Healthcare, Google Cloud and SADA Systems. It enables healthcare providers to securely share anonymous numbers pertaining to ICU bed and ventilator supply and use, test results and total visits to U.S. hospital systems.

Here, Edmund discusses the data science team's important work during this extraordinary time.

A CONVERSATION WITH
Edmund Jackson, Ph.D., Chief Data Officer
HCA Healthcare
Nashville, Tenn.



How has COVID-19 altered what you do every day? Presumably it's been a challenge unlike any other.

Edmund: In the same way that [former U.S. Defense Secretary] Donald Rumsfeld spoke about 'unknown unknowns,' COVID-19 feels like an 'unlike unlike.' It's unlike everything else that was unlike normality before. We've all learned how to operate in much leaner, faster ways, and my teams have formed bonds with other teams that weren't there before. We're a stronger team of teams coming out of this first phase of COVID-19 than going into it.

What is your main task in assisting colleagues at the hospital level who take care of COVID-19 patients?

The data science teams focus on bringing our colleagues actionable data and analysis. So our main contribution to the COVID-19 effort was coroNATE, which provided real-time, organized intelligence around COVID-19 patients for every bed in the organization. The other piece was collaborating with leadership to create projections of the likely COVID-19 impact in our hospitals over time. By combining the operational experience, skills and data of the enterprise, we gained confident, early insight that this was not going to be as bad as many expected, which enabled us to react efficiently and well.

“We use
coroNATE daily,
as the technology
helps us to more
accurately predict
volume changes
and **ensure that our
team is better
prepared for the
urgent needs of
our patients.**”

—**Scott Montgomery, COO**
Lakeview Regional
Medical Center
Covington, La.

Daniel O'Neal
Systems engineer
Crossings Data Center
Antioch, Tenn.

Is there an aspect of your “usual” job—or any training or experience—that helped prepare you for this?

The central element of HCA Healthcare's preparation was having trust in another [person] already in place. We have the great strength of many tenured people who have faced a lot together, so they can mobilize and execute rapidly because they know and trust another's expertise. This was really on display throughout the organization during the response. We were not specifically prepared for COVID-19, but we are always ready for whatever comes at us. For data science, I'd say the team's prior focus on building platforms put us in a good place when the pandemic hit. We spent two years building the platform [SPOT—Sepsis Prediction and Optimization of Therapy—into NATE] so when we needed new products every two weeks, we were able to deliver. That and the existing dedication and spirit of the team prepared us to go to war together against COVID-19.

The data portal sounds like a major development. Can you compare it to the impact that SPOT has had on the clinical side?

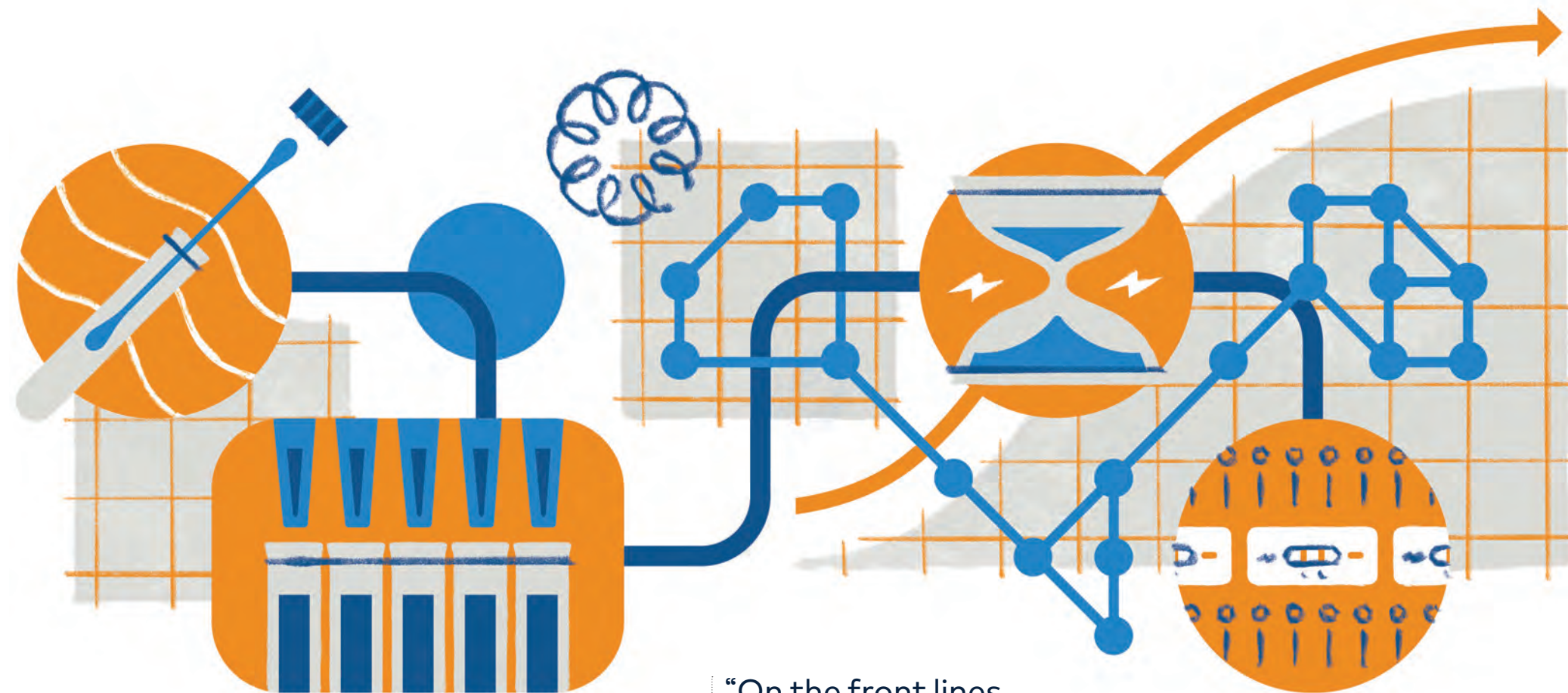
The NRP was conceived in the early days of the pandemic, when we realized that we needed to be able to coordinate in a low-friction way with our sister healthcare facilities through a shared, open national data platform. We were preparing for scaled, high-stress coordination under surge conditions. Fortunately, the surge we feared was suppressed through really effective social distancing, so the initial need for the NRP has dissolved. However, the question now is about the national restart. I foresee the NRP serving as an impartial, data-based platform to manage the reopening and detect any resurgences early.

Is there a primary lesson learned from all of this?

It's not a new lesson, but another example of HCA Healthcare living up to our mission. I've participated in normal and emergency operations several times now, and the organization always turns up the same way with vigor, resources and absolute dedication to patient care. Beyond that, we've now sustained operating with previously unthinkable speed and precision. That sets a new bar, and, as I said earlier, gives us the keys to post-COVID-19 success. ■



READ ON!
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Rapid Response, Rapid Results

Clinical labs shine in their crucial role during the pandemic.

When facing a problem as complex as COVID-19, accurate information is vital. Once the coronavirus took hold, HCA Healthcare’s clinical laboratories and partnering reference labs got busy—extremely busy—working around the clock to process tests as rapidly as possible to confirm infection. The goal: results in under 48 hours, prioritizing in-house patients and colleagues.

“We quickly began mobilizing efforts to get test results fast; it can’t be seven to 10 days,” says Dr. Heather Signorelli, DO, vice president and chief laboratory officer of the Clinical Services Group. “Initially, this was through short-term efforts with our reference labs, while we developed a long-term strategy with in-house testing. We relied heavily on our vendors, who were quickly trying to manage increasing demands for equipment and test kits.” Joanne Trout, CEO of Integrated Regional Laboratories in Fort Lauderdale, Fla., and the operational lead for our lab service line, was instrumental in managing these strategies, says Heather.

The organization continues to work with a variety of vendors on sharing test kits to ensure every facility has what they require. “We’re able to handle about 95% of our essential testing needs using the capacity we have today,” says Heather. “We can get results for every sample in less than 48 hours, and we can do a large proportion of that in-house or in our markets. That’s a huge change.”

We’re all in this together
In January and February—during the earliest stages of the pandemic—reference labs were completing between 10,000 and 20,000 tests daily. By late April, they were approaching 100,000. Heather explains one reason results could be available so quickly: unprecedented cooperation between HCA Healthcare and its vendors—and competitors.

“Stanford University let some of our hospitals in northern California send them tests before our automated platform was up and running,” says Heather. “To allow us testing for patient care is really great.”

The testing process also benefited from a laboratory restructuring across the enterprise that began rolling out in early 2019. “We had core teams of people who could address key laboratory issues, so they were ready,” says Heather. “They had already worked together and knew how to make things happen quickly.”

Within HCA Healthcare, there was streamlined cooperation. “We had multiple divisions—Gulf Coast and San Antonio, to name two—with excess capacity for testing,” says Heather. “They recognized that we had shortages, so they shipped equipment and test kits that were allocated specifically to them to other divisions that didn’t have anything in house, so we could have testing capabilities in other hotbed markets.”

“On the front lines, we’re caring for patients as if they are our own family members, and **we’re dedicated to providing the most accurate and timely diagnostic information for our wonderful health-care providers.**”

—Matt Glynn
Lab manager
Alaska Regional Hospital
Anchorage, Alaska



While that was a short-term fix, says Heather, it allowed time to devise long-term strategies as facilities waited for additional vendors to make test kits available. “To see that level of cooperation between divisions—‘We know our sister facilities are struggling more than us, and we’re going to make sure that they’re taken care of’—was just amazing.”

Applying lessons learned
After adapting to the initial surge in testing, Heather and Joanne continue to focus on capacity, constantly assessing how many tests are needed. “The next piece is, can we rely on the vendors providing testing capabilities to continue to have that level of manufacturing?” she says. “It’s making sure that one market isn’t relying solely on a single vendor because if that vendor becomes short on supplies, we’re in trouble. So we’re constantly trying to anticipate who’s our backup—and who’s our backup to the backup.”

Given the nature of the coronavirus, it will be an ongoing process requiring constant monitoring of the testing chain, Heather says. “Just as you solve one problem, you have another one to fix. It’s just part of the reality of trying to recover from this huge pandemic. We’re thinking about not only what our capacity looks like today, but what it will look like in July and September in case it does come back. We have to make sure we’re completely prepared for that as well.” ■



“The COVID-19 testing we’ve been involved in has made all the difference. We are trying to bring information and light to people who might be anxious and fearful about the situation around them.”
—Barbara Blanke
Lab director
Timpanogos Regional Hospital
Orem, Utah

Better Together

Strategic partnerships strengthen our ability to serve our patients and our communities.

As we face one of the most significant global health challenges of our lifetime, we find ourselves with the ability to uncover new opportunities. One such opportunity for our organization has been identifying and sourcing additional supply chain providers and forming partnerships with government and community agencies. We're also working with technology companies and other health systems to share resources and capabilities, creating innovative alliances that help improve the national response to COVID-19.

Data portal

In early April, we partnered with Google Cloud and SADA Systems—a cloud-based solutions provider—on the COVID-19 National Response Portal, an open data-sharing platform. Information can be submitted to the portal each day from hospital systems nationwide. Metrics include supply and use of ICU beds and ventilators; number of positive,

negative and pending COVID-19 test results; and number of healthy patients who have been discharged.

“By pooling our data into one cohesive platform, we can share best practices to better prepare communities across the country for this unprecedented pandemic,” says Mike Wargo, HCA Healthcare’s vice president of emergency preparedness. (To learn more about the National Response Portal, read our Colleague Q&A with Chief Data Officer Dr. Edmund Jackson on pages 14–15.)

Ventilators and PPE

Ed Jones, CEO of purchasing entity HealthTrust, was instrumental in the creation of the Dynamic Ventilator Reserve. He worked on its development with the American Hospital Association, the Federation of American Hospitals, the White House Coronavirus Task Force and other major healthcare group purchasing organizations. ▶▶

All in a Day's Work at TriStar Centennial Medical Center

(from left):
Dr. Joyce Williams, ICC
Intensivist; Tessa Starkey,
RN; Rachel Oddo, BSN,
RN; Kevin Homen, RN;
Kimberly Harvey, BSN,
RN, CCRN

“You can’t even
**imagine what is
going on behind the
scenes or how hard
everyone is working**
to keep our staff
safe. Even in this
chaos, I wake up
every day feeling
blessed to have the
team we do.”

—**Samantha Hackley**
Supply chain clinical resource
director
Blake Medical Center
Bradenton, Fla.

240M

Approximate units of PPE
we've distributed to our
hospitals since March 1,
including 151 million gloves

A Visit to Washington
(near right): HCA Healthcare CEO Sam Hazen took part in a White House briefing with President Trump on April 14 to announce the launch of the Dynamic Ventilator Reserve.
Sodexo Partners
(far right): Executive Chef Demetriss Conley of Sodexo Group, Nashville, Tenn.



Photography, above, Sam Hazen, Alex Brandon/AP/Shutterstock

The reserve—which includes an online inventory of ventilators and associated supplies—is a concept that can be applied to other critical areas of need that may emerge as the pandemic continues to evolve. One area of persistent concern throughout the healthcare industry has been the availability of personal protective equipment (PPE) for front-line colleagues. So we’ve made it our mission to ensure that everyone has what they need, when they need it.

“Toward the end of January, we got concerned there might be export challenges,” says Trina Kaylor, HCA Healthcare’s vice president of clinical operations. “We started thinking about what happens if the supply stops, and we began aggressive sourcing to protect our supply. We weren’t even looking at a COVID-19 surge in the U.S.; we were just focused on our supply chain and working to get ahead of this thing to protect staff and patients.”

“We had unprecedented challenges in front of us,” Ed explains. “Worldwide, demand for PPE was outstripping supply. The majority is produced in China. Production went offline for about six weeks, stretching capacity even more.” He says they worked with existing suppliers to move

capacity to other locations.

“Any time there’s a disaster, we have to make sure our providers have what they need to take care of themselves and their patients,” Trina adds. “COVID-19 has changed things. Now you have to think, is that really the right strategy when you think of the volatility of the supply chain and mission-critical supplies? I think it looks a little bit different now.”

“We’ve seen a Herculean effort from everyone,” says Ed. “It’s been impressive to watch and humbling to be a part of.”

Community partnerships
The value of community partnerships becomes even more apparent in times of crisis.

Joanne Pulles, vice president of community engagement and president of the HCA Healthcare Foundation, says her team aims to work at the intersection of community need and organization strategy. “Strategy is all about taking care of our patients and our caregivers who are on the front line. In terms of the community, I think we’re only beginning to realize the depth of the [pandemic’s] impact.”

HCA Healthcare’s unique size and scale can benefit community engagement, as they benefit other areas of the

“This was probably the most challenging defining moment I’ve ever seen our organization face. I’m so proud to be part of an organization that showed up the way we did.”

—Joanne Pulles
Vice president of community engagement, HCA Healthcare

organization, Joanne says. For example, a new national partnership with the YMCA grew from Community Engagement and HR business partners working with local YMCAs to identify childcare services to support our colleagues and other medical professionals.

March of Dimes is another longstanding partner. In a typical year, HCA Healthcare would’ve been promoting the organization’s annual walk. This year, in the midst of social distancing practices, our promotion efforts centered on Facebook Live events supporting new moms and moms-to-be during these uncertain times.

We also continue to partner with the American Red Cross, and we joined a coalition of the nation’s leading mental health advocacy groups, the largest healthcare insurance companies and the U.S. Department of Veterans Affairs to launch Psych Hub—a package of free digital resources to address mental health needs during the pandemic.

“[Hurricane] Katrina, [the mass shooting in] Las Vegas, COVID-19—these are defining moments,” Joanne says. “This was probably the most challenging defining moment I’ve ever seen our organization face. I’m so proud to be part of an organization that showed up the way we did.” ■



**FEEDING
NASHVILLE’S
HOMELESS**



Most days, our Sodexo partners would be busy preparing meals for our corporate office in Nashville. During the COVID-19 crisis, days are anything but normal.

Joanne Pulles saw a **prime opportunity to help the city’s homeless community**. “The organization made an incredible commitment to keep all of us employed during this time,” she says. “We really did not have work for our Sodexo partners to do, but we wanted to keep them busy and employed.”

Joanne says the community needed someone to make meals for homeless people in a shelter set up by the city. “**I reached out to a contact at Second Harvest Food Bank and shared with her that we had kitchens available** and people who could do the work. The pieces came together in record time.”

Each day, as many as **25 Sodexo employees prepare 600 ready-to-eat meals**, using food donated by Second Harvest, and deliver them to the temporary shelter for homeless residents.

“It’s all good,” Joanne says. “We keep our people employed, work with a valued community partner and **provide wonderful meals for our homeless neighbors**.”

Giving the Gift of Promise

Generosity drives support of the HCA Healthcare Hope Fund, community grants and our workforce.



Feeling Hopeful
Margarita and her aptly named pal, Handsome.

While 2020 will likely be associated with a global public health crisis and the severe economic hardship it created, we’ll also be reminded of the many ways our HCA Healthcare family banded together to take care of our communities and each other.

During what CEO Sam Hazen calls an “unprecedented time with immense challenges and uncertainties,” the HCA Healthcare Hope Fund received a record number of donations to aid colleagues affected by COVID-19, including \$1 million from The Frist Foundation. Additionally, HCA Healthcare allocated more than \$1 million in charitable funds for grants to aid COVID-19 relief efforts and address community needs through the HCA Healthcare Foundation and a tax-exempt trust.

“The HCA Healthcare Hope Fund sends an important message by providing an avenue for us to take care of our colleagues so that they, in turn, can care for our patients,” says Joanne Pulles, vice president of community engagement and president of the HCA Healthcare Foundation.

The Frist Foundation contribution is “just one example of how HCA Healthcare rallies around each other to provide support when devastation strikes,” says Sam. As our colleagues on the front lines care for our patients,

local organizations are being praised for the “remarkable ways they’ve stepped up to address the needs of their communities,” including emergency response, food shortages and childcare for healthcare workers and first responders. HCA Healthcare’s one-time grants of between \$10,000 and \$250,000 assist food banks as well as community foundations focused on the COVID-19 response.

For Natalie Jayroe, whose Louisiana charity helps feed some of the neediest in her community, the HCA Healthcare Foundation grant came at a critical time. “We’re so honored by this gift of love,” says Natalie, president and chief executive officer of Second Harvest Food Bank of Greater New Orleans and Acadiana. “It’s because of generous support from partners like HCA Healthcare that our staff and volunteers will be able to provide meals and emergency food in the months to come for those most impacted.”

Many colleagues have turned to the HCA Healthcare Hope Fund for support after their spouse lost their job or due to other unexpected financial challenges caused by the pandemic. In addition to assisting with critical household expenses as it always has, the fund is also offering a special financial program to help working parents with childcare costs due to temporary school closures.

“When I first heard of the HCA Healthcare Hope Fund, I thought it was a great concept. I was happy to support it through donations and volunteering. I never imagined I’d need it. I’m truly grateful for the assistance the Hope Fund and my HCA Healthcare family gave me.”

—**Margarita San Juan**
Hope Fund recipient and Sr. lit accounting assistant
HCA Healthcare
Nashville, Tenn.
(Read her story at HCAhopefund.com.)

Pandemic pay continuation programs
Another significant aspect of the organization’s response to COVID-19: protecting jobs. The pandemic pay continuation programs support approximately 120,000 full- and part-time colleagues who are working fewer hours as a result of temporarily reduced patient volumes.

The pay continuation programs are designed to assist colleagues until we better understand the long-term implications of the pandemic on the enterprise.

Along with other senior executives, Sam made a personal investment in relief efforts: He donated 100% of his pay during April and May to the HCA Healthcare Hope Fund. Additionally, all 27 members of the senior leadership team have either contributed their pay or greatly increased their contributions to support our colleagues in need. Hospital CEOs and their leadership teams across the organization have also joined the effort. The HCA Healthcare Board of Directors waived their cash compensation for the remainder of the year, allowing the organization to make additional contributions to the Hope Fund. ■



IN THE KNOW

\$1M | Donation made by **The Frist Foundation** to the HCA Healthcare Hope Fund to support colleagues affected by COVID-19

\$1M+ | Amount given by the HCA Healthcare Foundation for grants to local community organizations to aid in COVID-19 relief

1,000+ | Number of colleagues who have turned to the Hope Fund for help with unexpected financial challenges due to COVID-19

70 | Approximate percentage of requests for Hope Fund grants since the onset of COVID-19 that are related to the loss of a spouse’s income; some 20% of requests are for childcare assistance, and 10% are illness-related

100 | Percentage of his salary for April and May that **CEO Sam Hazen donated to the Hope Fund**, inspiring significant gifts from other senior officers

Emphasis on Innovation

The novel coronavirus requires a novel response.

In the fight against a global pandemic, HCA Healthcare's scale offers many advantages. With approximately 280,000 dedicated colleagues, our collective know-how has fueled a number of innovations that benefit patients and caregivers.

"There's so much talent," says Kristy Frazier, MBA, BSN, RN, CSSM, clinical director of surgical services for the Clinical Services Group (CSG). "It's great that they can come up with innovative ways that are safe for [everyone]."

The mindset that drives innovations reflects our core mission, says Dr. Michael Schlosser, National Group chief medical officer and vice president of clinical excellence and surgical services. "As a learning health system, we use our data to conduct research and create innovative tools that improve patient outcomes."

Pre-intubation and intubation tents

The spread of the coronavirus causes concern that certain procedures such as intubation (insertion of a breathing tube) and extubation (removal of a tube) can put anesthesia providers and others at greater risk for infection.

"We know that COVID-19 is transferred from one person to another, or one surface to another, through aerosolization," says Sandra Garrett, RN, MSN, CNOR, assistant vice president for surgical services for CSG. "We have procedures considered very high risk for that aerosolization, so we have to take more extreme [safety] measures."

To limit potential exposure during airway manipulation, anesthesia providers have developed several devices to reduce aerosolization. One is an intubation box created by the staff at TriStar Centennial Medical Center in Nashville, Tenn.

"Our telehealth visits grew tremendously and **the patient response has been fantastic.** I feel blessed to offer this option for patients and am proud to work for a healthcare organization so dedicated to advancing technology and always doing right by the patient."

—**Dr. Rachel Hailey, MD**
HCA Midwest Health
Overland Park, Kan.

Made from clear Plexiglas, the large box goes over the patient's head, with holes allowing anesthesia providers to place their hands inside to perform intubation or extubation.

"I'm amazed at all the ideas from the different staff members that just started flying at us," says Sandra. "They're actually moving quicker than we can give them approval to do so. Typically, healthcare initiatives don't move that fast."

PPE sanitation

Healthcare professionals have relied heavily on personal protective equipment (PPE) during the pandemic. Medical masks—particularly the N95 model—have been a key tool.

The well-documented global shortage of masks, however, required our facilities to get creative. One solution, says Sandra, was reprocessing the masks to allow multiple use. "We have several facilities that implemented a pilot using ultraviolet germicidal irradiation, or UVGI." She says a team visited the Xenex company to learn about the process.

Part of the training was to test the masks to ensure they fit after they were sanitized, since there was very little information on using UVGI, Sandra explains. "The team, including nurses, wanted to provide assurance that this method would not compromise the integrity of the mask. Since the successful trial, they're able to reprocess several hundred masks per day, allowing masks to be reused up to five times." ▶▶▶



IN THE KNOW

Innovation by the numbers

5 | Number of times an **N95 mask can be reused** if treated with ultraviolet germicidal irradiation

10,000+ | Average telehealth **visits per day in April. In January and February, that number was 50.**

Front-line hospital staff also need face shields, goggles and PAPR (Powered Air Purifying Respirators) shields and hoses, says Sandra. Like masks, these critical items have been in short supply. Sterile Processing Department staff members have stepped up to take on reprocessing this gear.

Telehealth

The pandemic has turned the “regular” practice of medicine upside down. However, patients who don’t have COVID-19 still need to be seen and still expect the usual high-quality care. The rapid expansion of telehealth medicine across our network allows caregivers to provide clinical excellence at more than 2,000 sites of care, says Christopher Northam, vice president of Telehealth Services.

The system includes an app-based program to screen for COVID-19 symptoms through a remote monitoring partner, Vivify Health. HCA Healthcare teams scaled this technology across more than 180 hospitals in less than seven days and (as this publication was going to press) had monitored more than 20,000 patients and colleagues. Those teams also added more than 3,000 telehealth endpoints so hospital clinicians can round on patients and finish consultations without entering patients’ rooms, preserving critical PPE.

HCA Healthcare teams also enabled telehealth capabilities for more than 6,000 physicians to provide continuity of care for primary and specialty care practices. Those physicians scaled from an average of 50 telehealth visits daily in January and February to more than 10,000 daily in April.

“Telehealth allows a patient to get much-needed care while staying safely at home,” says Gwen McCoy, assistant vice president of Telehealth Operations. “For those with a chronic illness, seeing his or her physician during this pandemic gives patients a welcomed virtual ‘house call.’”

Dr. Jeffrey S. Guy, MD, MS, MMHC, vice president of Emergency, Trauma and Critical Care Services, describes telehealth as “not a technology but a program of care,” emphasizing patient safety. “Our telehealth COVID-19 monitoring program uses a technology to connect patients and colleagues to clinicians who monitor their condition daily and, when needed, navigates them to a site of care. We’re able to stay connected to our medically fragile patients during a time when they feel vulnerable and anxious. Telehealth helps to prevent an ‘avoidable surge.’”

Drive-through convenience

Since people with preexisting conditions are at high risk for infection, Medical City Plano in Texas launched a drive-up service allowing Coumadin and heart failure patients to be seen right in their car.



Drive-up Service at Medical City Plano
(from left)
Maureen Wilkerson, BSN, RN, CCRN
Jeanne Cross, BSN, RN, BC-N
Haley Franco, BSN, RN

“The team is waiting outside with kits for lab draws and any vitals,” says Tammy Bauer, assistant vice president of Cardiovascular Services at Medical City Healthcare in Dallas. “For heart failure patients who need more than labs, after completing lab work, they’re sent home and the rest of the visit is managed using telehealth technology.”

COVID-19 “calculator”

With the capacity of the U.S. healthcare system challenged like never before, Michael is focused on measuring that capacity, which he says is where our organization can be most influential: determining “the number of cases that our system can handle without becoming overwhelmed.”

To aid in that effort, HCA Healthcare developed a COVID-19 “calculator.” It combines variables such as transmission estimates, average “normal” daily patient numbers and how fast the virus is spreading.

“Based on these analytics, we can estimate how many ICU beds will be needed across our system,” says Michael. “Hospitals are identifying rooms that can be converted into additional ICU capacity.” HCA Healthcare’s network was one of the nation’s first to handle COVID-19, in San Jose, Calif.

“Our experience provided real-time data, which the analytics team spun up within a week into an enterprise-wide tool to predict how many cases a hospital can expect, and the speed and severity of the outbreak,” says Michael. “This told us we needed more ICU beds.” The result: 44 beds were quickly converted to meet the wave of patients.

“We’re working around the clock to increase our capacity to handle the influx of patients,” he says. “There’s never been a more important time to be working in our profession.” ■

An Unvarnished View | From preparation to response and reboot efforts, we’re seeing heroes throughout every phase of the pandemic—especially our front-line caregivers who’ve faced some of the most difficult patient scenarios of their lives. In this social media testimony, ICU nurse **Ashton Crocker** tells it like it is, unfiltered and from the heart. Thank you to Ashton and all other front-line colleagues who have unselfishly served in the face of COVID-19.

“Witnessing families lose their loved ones is one of the hardest parts of nursing. I’m a words person, and in these moments there are never enough adequate words. It is hard.

Seeing families watch us try to save their loved one is even harder. The room fills quickly and the measures taken to save a life are not peaceful or pleasant. It is traumatizing for families. Sometimes it’s even traumatizing for us.
It is hard.

Consoling, hugging and even crying and praying with families after they lose their loved ones.
Hard.

Holding the hand of a grown man, an only child, in the same room where my friends are pounding on his mother’s chest trying to keep her alive.
Hard.

Sitting beside another nurse, both quietly crying, as we witness a large family let go of a very young woman.
Hard.

Explaining to teenagers what just happened to their mom after you turn off the monitor.
Hard.

Watching a husband leave the unit with a personal belongings bag and without his wife.
Hard.

We see hard regularly in the ICU. I’ve been pulled into the med room to cry over the hard. I’ve questioned if my heart can handle the hard. I’ve hugged it out with my friends when they’re experiencing the hard. I’ve hated the hard. But today I have a new respect for the hard, because the hard we are familiar with isn’t comparable to this new kind of hard. This hard is incomprehensible. It’s the kind of hard we’re going to be talking about for the rest of our careers—the rest of our lives.

The normal that many of us want to get back to so badly is waiting on us, while normal for SO many people is gone.

People are dying with only unidentifiable strangers at their bedside. Their families are getting the tragic news via phone calls. If they’re lucky, they may get to see their already deceased loved one through a glass door or they may get to watch their loved one die via FaceTime. If you told me that I would have to speak the words, “he is gone now” over FaceTime, I would’ve never believed you. It’s unfathomable, but it is life for many people right now and
IT. IS. HARD.

Stay home. Quit complaining. Because that, from our perspective, is not that hard.”



ASHTON CROCKER, RN
Doctors Hospital of Augusta
Augusta, Ga.



Visit [Magazine.HCAhealthcare.com](https://www.Magazine.HCAhealthcare.com) for more stories about our incredible colleagues and their heroic efforts throughout the COVID-19 pandemic.



TO LEARN MORE
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Forward.

The human race has faced an enemy like no other these last few months, one that has made time stand still for our nation and our world. Never in our lifetimes have we faced a crisis like this one. Homes have turned into offices, schools, sanctuaries. Social distancing has become common language. We have been stretched to imagine a new way of life, a new normal. Stretched, but not broken. Each day that passes brings the hope of a healthier tomorrow.

Through it all, HCA Healthcare has remained focused on one thing—the care and improvement of human life. It's what we do. It's who we are. In times of uncertainty, our people show up. When faced with a challenge, we see the path forward.



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