Medxcel

WHITE PAPER

Strategic Response:

How Integrated Facilities Management Solutions Overcame the COVID-19 Challenge



In January 2020, news of a new strain of coronavirus began to hit the headlines. At the time, it was just background noise for most of the population, but Medxcel was already prepared to face what would become one of the greatest healthcare challenges the United States has ever faced. Our team of emergency management experts had plans in place and was ready to execute them when the pandemic hit the United States shores. Medxcel leaders were quoted in the media saying, "Not if, but when."

This white paper details how proper planning for an emergency allowed for the continuation of hospital operations during COVID-19. Medxcel's team members came together to ensure that our client hospitals across the nation and the patients they serve continued to receive the highest level of care during this unprecedented crisis.

Consistently prepared

As COVID-19 began to challenge the American healthcare system in ways many never imagined, Medxcel's emergency management teams set our facilities up for successful continued operations. Our emergency preparedness focuses on four key areas critical to the ability of our facilities to weather a crisis.

1. Proper staffing
2. Compliance and survey readiness
3. Supply chain strategy
4. Emergency planning



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Balancing full-time employees (FTE)

"We understand that we will never be prepared without the right number of hands helping out, which is why we place such an emphasis on being fully staffed," says Michael Burgett, Vice President, Operations for Medxcel. "Determining the correct number of full-time employee positions at Medxcel's client facilities is vital to successfully plan for an emergency such as COVID-19."

The right balance of full-time employees is often hotly debated at healthcare facilities. "Unfortunately, the answer to staffing isn't a one-size-fits-all formula," notes Burgett. "Medxcel begins with a general recommended guideline of one FTE per 36,000 square feet and we tailor the number from there based on the specific needs of the facility." This successful model has allowed Medxcel to not only be proactive in the facilities they serve, but also helps to battle the pressures of cost-cutting "quick wins", such as reducing headcount that will ultimately need to be supplemented by costly contracts. "During a crisis, having to access third-party maintenance personnel will greatly negatively impact your response time," says Burgett. "Medxcel's on-site team members empowered us to act early and respond quickly."



Maintaining compliance

A complete on-site team allows you to be proactive, rather than reactive; addressing both immediate compliance needs and planning for the "what-ifs" that are suddenly critical during an emergency.

These methodical and deliberate plans, inventories, and risk assessments put the steps in place that were needed when COVID-19 hit. Although The Joint Commission (TJC) paused surveys for two months during the pandemic, Medxcel team members worked to ensure that facilities remained compliant to avoid additional complications or delays when surveys resumed. This often meant working around areas that were suddenly off-limits to many staff members, so careful planning was necessary to make sure all the boxes were checked. Creative thinking and advance planning helped our teams find new and innovative ways to maintain compliance during the pandemic.

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Supply chain strategy

Being hands-on in our hospitals meant that Medxcel team members needed personal protective equipment (PPE) – and lots of it. One of the primary goals of supply chain management is to enhance an organization's ability to react to change. Medxcel's robust supply chain allows for maximum flexibility in unexpected situations.

Nothing highlights the importance of good supply chain management in healthcare facilities like a pandemic. Medxcel was ready for the challenge and fully prepared for any situation that could possibly impact a hospital. While many supply chain managers push for a single purchasing source, a single supplier can severely limit you during a crisis. Supporting a large number of healthcare facilities across the United States, Medxcel utilizes multiple vendors for products and services. Our strategic relationships with a variety of vendors played a pivotal role in securing PPE at the onset of the pandemic while many others struggled to locate critical supplies.

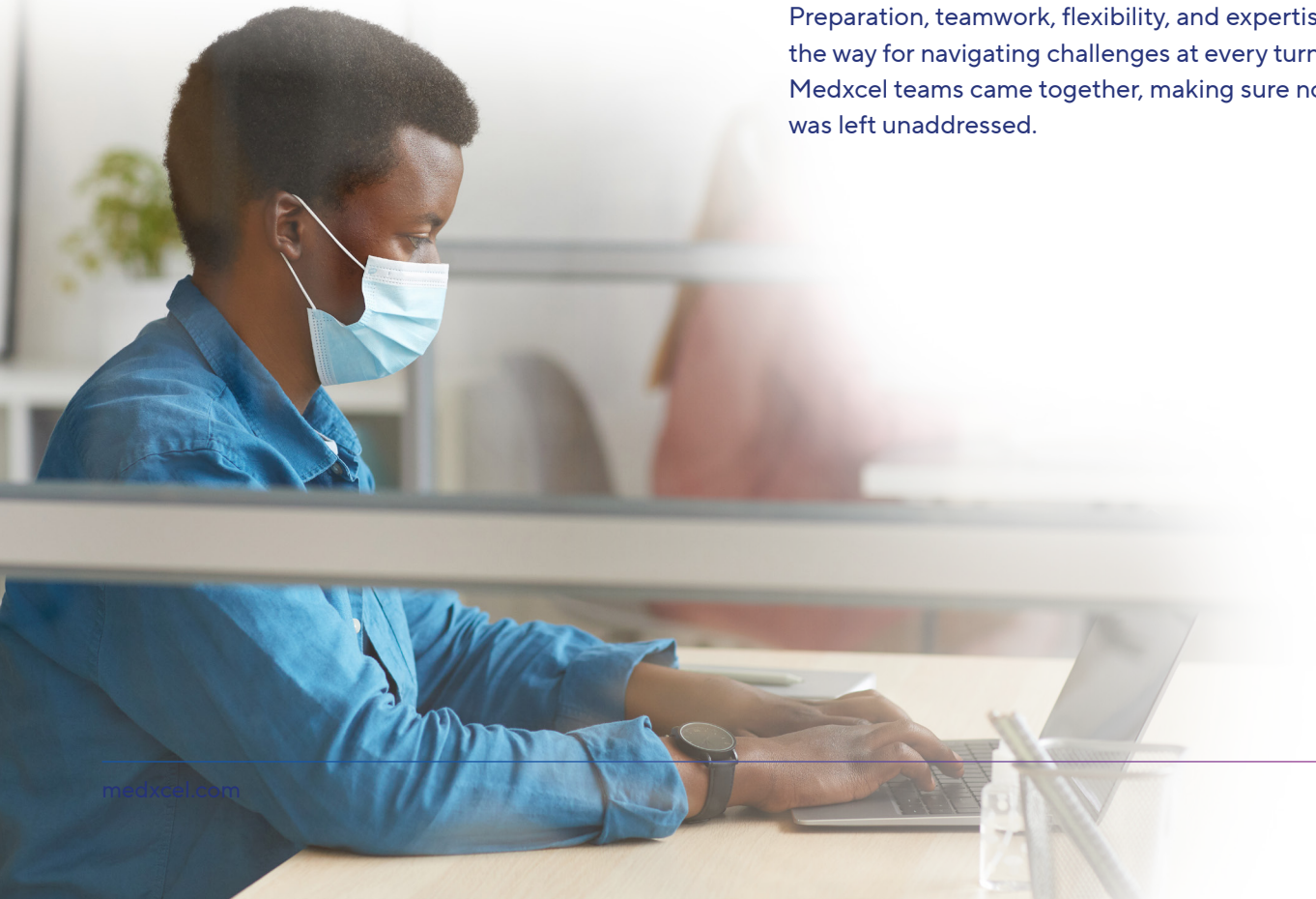
Emergency management

Once the investment has been made in staffing, compliance, and supplies, creating an emergency management plan is much more manageable, and it is a crucial part of mitigating and responding to any crisis – not just a global pandemic.

"To create a successful emergency management program, it's important to prioritize ensuring that all facilities are able to best serve their communities and patients during great times of great need rather than focusing upon cost-cutting or meeting minimal requirements," says Matt Keahey, Chief Operating Officer. "It's more than just meeting regulations, it also requires the expertise developed through planning and implementation, and the relationships built at local, state and national levels."

Having a good emergency management team in place establishes the foundation for effectively addressing the unexpected. "Adjusting to an emergency is a much more seamless process when a plan is proactively developed before disaster strikes, as opposed to reacting and creating a plan after the crisis occurs," says Keahey.

When COVID-19 struck, all Medxcel facilities activated their emergency plans and quickly adapted procedures to prepare for an infectious disease outbreak. Preparation, teamwork, flexibility, and expertise paved the way for navigating challenges at every turn as Medxcel teams came together, making sure no detail was left unaddressed.



Navigating a pandemic

Medxcel's emergency preparations paid off when the first cases of COVID-19 were confirmed in the United States. Rather than playing catch-up, we were able to quickly adapt to ever-changing guidelines and implement life saving measures. Our teams used creative thinking to solve issues quickly, enabling hospital staff to focus on caring for patients.

A FAST response

As information about the unique challenges presented by COVID-19 continued to evolve, Medxcel personnel met, planned, and continued to adapt to ensure that facilities were well prepared for the outbreak. Crafting and implementing new infection prevention protocols to accommodate both COVID-19 and non-COVID-19 patients was a high priority. To centralize Medxcel's response, we established the Facilities Assessment and Support Team (FAST) to anticipate and respond to changing facility needs as quickly as possible.

FAST was crucial in evaluating and designing next steps to address a wide variety of issues as they arose, from traffic flow and elevator use to restoring normalcy in a facility once a surge subsided. FAST team members were contacted by hospitals in crisis, who utilized a cross-functional team of on-site employees to evaluate the situation, brainstorm solutions, then share their recommendations and advice with others in the facility.

Increasing capacity

The first concern raised by healthcare facilities was, 'How are we going to handle a COVID-19 patient in the operating room?' Medxcel teams participated in an all-call meeting on a Friday to dive into the topic, and by Sunday morning, FAST had developed the concept for the isolation operating room.

The isolation operating room concept outlined a consistent response plan for handling infectious patients by providing protection against surgical site infection, as well as protecting the safety of the staff in or adjacent to the operating room.

A plan was outlined for discussion, resulting in the creation of a guidance document for hospital use. Within 72 hours, the guidance document was approved and disseminated to our regional facility leaders. Each facility leader then modified the plan to meet their specific circumstances. This was one of the first deep dives Medxcel facilitated virtually, demonstrating the ability to react quickly and communicate effectively while safely social distancing.

A longer stay

Early in the pandemic it became clear that emergency departments were going to be impacted quickly and severely by COVID-19 patient surges.

The average hospital stay in the United States is five days, but COVID-19 patients were admitted for 15 days on average. With a surge of patients tripling the average stay, increasing the number of available beds was critical.

The state of Michigan saw an early influx of cases, and FAST joined our Detroit-area facilities to support the local team for bed surge planning. Working with one of our Detroit-area facility planning managers, the team turned a large conference room into a planning operations center. Together they developed contingency plans for everything from controlled heating and ventilation to locating additional room for patients within the facility. The facility manager provided invaluable knowledge of the facility and online access to plans and records helped identify creative opportunities that might have been otherwise overlooked. Over the course of four days, the team increased the bed capacity in our Detroit client hospitals roughly 30% without resorting to using temporary structures. These plans were added to the FAST "tool kit" and were quickly extended to all Medxcel facilities across the United States.

Efficient use of space

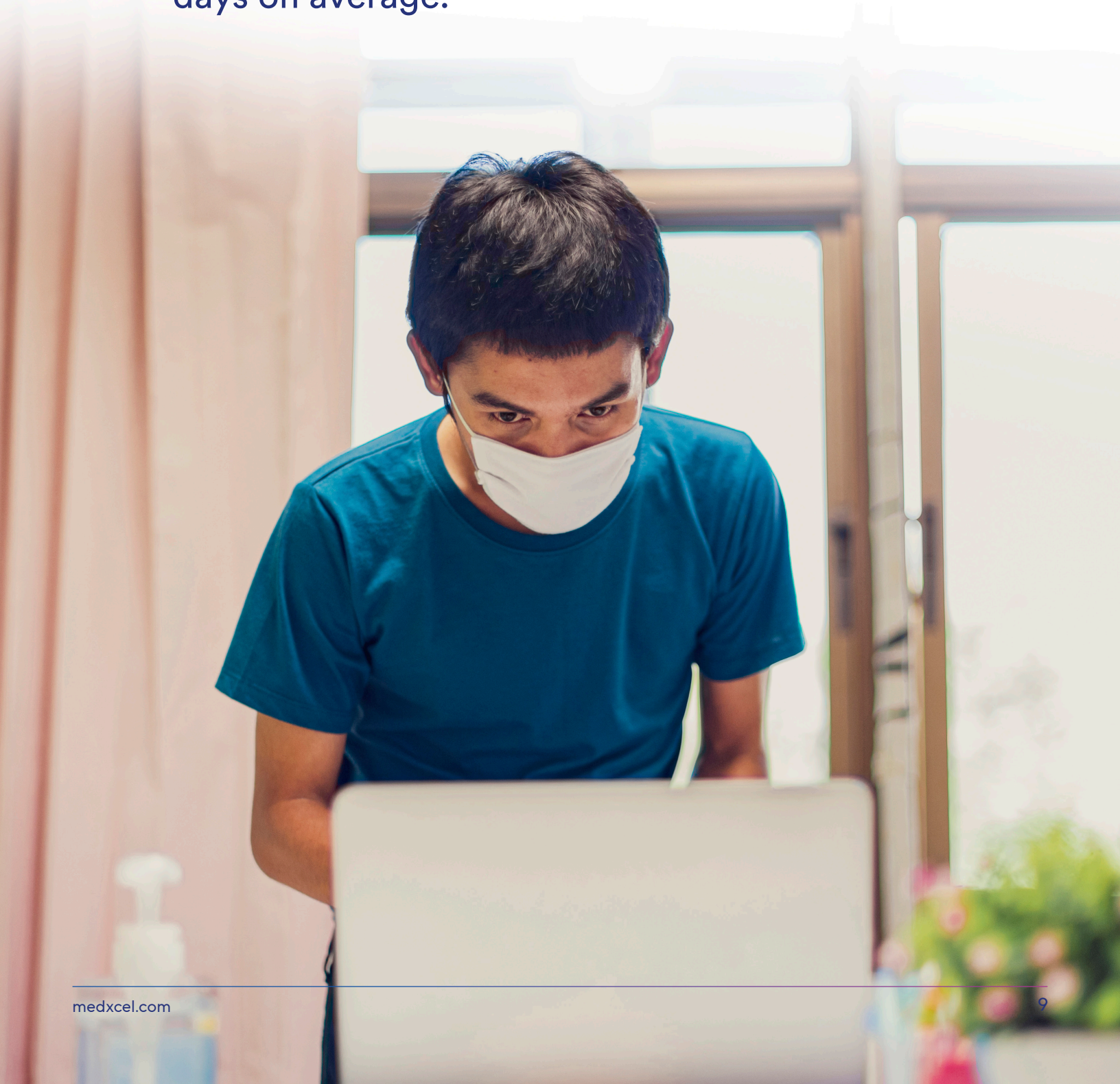
By regulation, every nursing unit must have an isolation room. Isolation rooms are equipped like any other inpatient room on a floor but are designed specifically to handle infectious patients. These rooms make up less than 10% of the beds within a facility, not nearly enough capacity to accommodate the expected influx of COVID-19 patients.

As hospitals saw an increase of cases, their initial reaction was to add more isolation rooms. Medxcel quickly realized that the individual room approach would lead to the consumption of excessive amounts of PPE as clinicians would be required to doff and don fresh PPE as they moved between each isolation room from patient to patient.

Collaborating with FAST, Medxcel recommended a different approach in the form of isolation wards. COVID-19 patients were treated together in a single nursing unit. Specific areas were set up for staff to doff and don PPE before entering, and because every patient in the ward was COVID-19-positive, clinicians only needed to doff their PPE when they left the isolation unit. Not only did this create efficiencies when treating COVID-19 patients, it also conserved valuable PPE, often in short supply.



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Access to critical supplies

While Medxcel had a good handle on supplies that were used daily, some additional highly specialized items were suddenly required. Mobile morgues, emergency tents, air scrubbers – none of these items were part of a typical buy, but suddenly became critically important. To source these items, Medxcel relied heavily in its national network of vendor partners. As soon as a need was identified, we reached out to our suppliers and began the procurement process, working the supply chain until the needed supplies were located.

It became suddenly important to stockpile high demand items such as masks and gowns for the expected patient surge, while continuing to provide normal supplies of these items for everyday use. The supply chain team facilitated the storage and deployment logistics of stockpiled supplies to ensure availability as needed.

Medxcel is accustomed to preparing for natural disasters, but a pandemic of this magnitude is the type of crisis situation that healthcare facilities management must also be prepared for. Responding at this level by providing the products and supplies necessary on the front lines is the mark of supply chain excellence.

Construction management

While teams did their best to repurpose existing space in the hospital, the nature of COVID-19 required specific spaces to contain infectious diseases. Medxcel relied heavily on its planning, design, and construction (PDC) experts to assist hospitals in redesigning spaces. "With its ability to spread so rapidly and easily, COVID-19 presented containment challenges that we had never experienced before," says Mike Wood, Vice President, Planning, Design, and Construction. "The physical environment simply wasn't prepared."

Design and construction changes had to be implemented quickly. Medxcel team members had to build more rooms to create more space to deliver critical care to COVID-19 patients. HVAC technicians configured negative pressure rooms to remove and filter contaminated air. Our designers, researchers, and construction workers analyzed every aspect of the facility to determine if the facility was prepared to handle the expected influx of patients. "When a need was identified within a facility, it often took us less than an hour to begin sharing solutions," says Wood. "We are the first and only integrated facilities management organization to be able to support our healthcare clients in this way."



The role of real estate

At times additional space was required outside of the hospital. For these needs, we turned to our real estate team. Their expertise in property management, lease administration, development, transactions, and portfolio strategy played a key role during the pandemic.

Medxcel's real estate team didn't hesitate to jump in and assist our clients in preparing for COVID-19. They did this by locating and setting up drive-through test clinics, arranging for storage facilities, preparing to receive and deploy FEMA tents, conducting surge planning, and entering into housing discussions.

Most of these activities require a set of complex sub-processes around negotiations, contracting, governmental permitting, vendor engagement, and clinical operations coordination, especially when procuring control of properties to increase bed capacity.

Real estate may not normally be viewed as a typical facilities management function, but Medxcel's ability to synergize cooperation between real estate, construction, and facilities management departments provides incredible cohesion within our healthcare facilities. The team's continuous drive to identify and work with commercial facilities to accommodate future growth was the exact type of flexibility and foresight needed when the pandemic hit.

Operational excellence

Shifting a hospital's operational plans, processes, and programs is never an easy task, especially amidst a global pandemic. Hospitals across the country were challenged to develop new approaches and resources to manage population health as time, money, and labor became scarce. To monitor facilities' activity and adapt quickly in real-time to this crisis, Medxcel established the National Incident Command Center to complement FAST and provide a framework for combating the pandemic operationally. "Under guidance from the CDC, our operations teams got to work immediately to figure out what facilities could do to adjust processes, and programs to keep patients, staff, and visitors safe," says Keahey.

The facilities teams prepared for the surge of COVID-19 patients and outlined what that might look like in each facility, whether that required installing plexiglass shields, establishing mobile screening sites, or adapting the infrastructure of a facility in other ways. Keahey continues, "With our detailed reviews of all areas of a hospital to determine next steps, it was a quick shift from preparing facilities in the early stages to keeping them up and running in the thick of it."

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Enabled by technology

Social distancing became a buzzword in 2020 and digital capabilities became critical as many were forced to work remotely. Our teams were no different. Despite being on-site, there were many areas that could not be accessed as often as necessary. Medxcel had to find creative ways to provide service solutions to our healthcare facilities to ensure that nothing was overlooked.

"We looked at how we could further automate solutions from a building automation perspective including HVAC systems," says JD Duigou, Chief Information Officer. "We had to improvise and entertain ideas such as installing a camera down in front of systems that can't be automated to provide remote monitoring and ensure that things were running smoothly. We directly connected to that system to trigger it remotely should an issue arise."

Duigou continues, "We have spent countless hours preparing for and making sure our technology systems can be managed virtually and provide remote capabilities for our facilities across the country. Our tools and technologies are helping to shape a playbook for digital problem solving going forward."

Teamwork ensures success

With over 2,000 team members serving healthcare facilities across the U.S., Medxcel understands that meaningful, lasting success hinges on passion for the work and open communication. As the crisis endured, our team stepped up in ways that would not have been possible without an engaged workforce.

"Our team is driven, connected and focused on service, and you can really see that shine at a time like this," says Casey Garamoni, Vice President, Human Resources. "Our workforce showed a commitment to maintaining a safe environment so that doctors, nurses, and other personnel could focus on what matters most, healing patients." Working as an engaged team during the pandemic has been crucial to the success of Medxcel and the facilities it serves. Our team members are proud to work at Medxcel, and we are proud to have these passionate team members call Medxcel home.

Mike Wood echoed these sentiments, "We work with some incredibly dedicated individuals. We're learning to work together in a different way, at a different pace, at such a remarkable time in our lives. In all my years of working in construction management and healthcare, I've never seen us act as more as a community of one, and that's exactly what we needed."

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Preparing for the next crisis

COVID-19 has given Medxcel the opportunity to perfect our plan so that we will be even more prepared the next time around. To that end, we must ask ourselves some valuable questions:

- ✔ What unique lessons can we take away from this experience?
- ✔ How can we prepare to navigate concurrent disasters such as a pandemic, flu season, and a severe weather event?
- ✔ How can our facilities be more flexible in preparing for what the future may bring?

Moving forward, the answers to these questions will help to ensure that we have the right plan in place and that we have thought through all the contingencies. Medxcel's incident command structures have now been proven ready and able to handle the stress of a pandemic thanks to our preparation and teamwork.

COVID-19 was an unprecedented global event and though we were prepared, we can't rest on our laurels. We must constantly ask ourselves if we are ready for what's next, whether that is another infectious disease outbreak, a new strain of flu, or something as yet unknown. If you find yourself questioning your facility's readiness, let the Medxcel team of trusted experts work alongside you to evaluate your emergency preparedness.



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