

Built for This

Rush University Medical Center COVID-19 Response Efforts: A Report to Our Donor Community

September 2020



The Impact of Your Support

In early 2020, Rush University Medical Center, along with health care institutions across the nation, began preparing for the spread of the newly identified novel coronavirus, COVID-19, which infectious disease experts predicted would rapidly accelerate into a global crisis. As we now know, those predictions were correct. For the past several months, doctors, nurses, scientists and many other health care professionals around the globe have been working tirelessly to combat this new challenge.

Rush University Medical Center has been at the forefront of Illinois' response to COVID-19, addressing needs in a multifaceted manner by providing exceptional patient care, advancing research, reaching out to the most vulnerable in our community, and leading public advocacy and education.

Rush has emerged as a national leader in the face of this crisis. Our innovative Tower hospital facility has been lauded for its ability to safely handle a mass contagion event. Our data analysts and research teams have built invaluable patient data and tissue sample warehouses that are being harnessed by researchers across the country to answer some of the disease's most puzzling questions. Rush leaders have coordinated a city- and state-wide response advising governmental agencies on containment practices, providing transparency on the extent of disease spread, and leading outreach and care for some of Chicago's hardest-hit communities.

Rush's willingness to face the most complex health care challenge of our lifetime has permeated every decision within the Medical Center. It has also become a source of pride, courage and determination among Rush's frontline health care heroes.

Meaningfully, our donor community — thousands of patients, families, local leaders and businesses — demonstrated the compassion and vision to join us in this fight. **Donors have contributed more than \$10 million in gifts, food and medical supplies to support Rush's COVID-19 response efforts. Every gift mattered.** We are incredibly grateful to you for responding to the call for support. We hope you feel a great sense of pride in knowing the important role you've played in helping Rush save countless lives.



“While we did not ask for COVID-19 to come to the United States, we as an institution will not run from the responsibility of caring for it.”

– **Dr. Omar Lateef**,
Chief Executive Officer, Rush
University Medical Center

COVID-19 Response Fund

At the onset of the COVID-19 pandemic, Rush was better positioned than many other health care institutions in the country. The foresight – nearly a decade ago – in designing and constructing our Tower hospital gave us the facilities needed to handle a mass contagion event. Additionally, Rush’s data scientists’ strength in predictive modeling allowed staff to accurately predict and prepare for the peak of the virus’ spread in Chicago.



During the spring surge, the Medical Center cared for nearly 25% of all critically ill patients with COVID-19 in Illinois.

Calls came in around the clock with transfer requests from overwhelmed hospitals. Rush proudly accepted each of those calls to bring the region’s sickest patients to our doors. Rush accepted more than 800 high-risk COVID-19 patients from safety net hospitals and had higher survival rates than the national average.

While our facilities, data capabilities and sound planning were critical to meeting the challenges, at its core Rush’s success relied on our people: clinicians who volunteered to care for acute patients; lab technicians who worked to expand testing capabilities; nonclinical staff who coordinated personal protective equipment, or PPE, distribution; and many more unsung heroes who answered the call to serve.

Your generous donation to the Rush COVID-19 Response Fund provided flexible resources that could be directed to the most immediate needs and challenges facing our frontline workers – allowing them the peace of mind to focus on saving lives.

Philanthropic support enabled Rush to take the following actions to support patients and staff:

Ensuring Patient Safety

Rush physically converted the Tower to operate in surge mode. We increased intensive care unit, or ICU, capacity five-fold; used negative pressure rooms to force air outside of the building; and established a second emergency department and triage area to separate patients with COVID-19 from those needing care for other emergencies, like broken bones, heart attacks and strokes. Rush raised tents inside the Medical Center’s ambulance bay to screen and triage symptomatic patients in isolation from the rest of the hospital – providing drive- and walk-through testing. These measures helped control the spread of the virus and expanded testing capacity by 100 patients per day.

Increasing Testing Capacity

In the early days of the pandemic, there was a dire shortage of commercially available testing supplies throughout the U.S. Rather than waiting for the next unpredictable shipment, Rush developed its own novel COVID-19 test. Rush's test provided results within a six-hour time period, circumventing delays and resulting in earlier isolation and care for those testing positive for COVID-19.

Caring for Our Frontline Workers

- Rush provided onsite child care for workers whose children were suddenly home due to closed schools and day cares.
- All Rush employees directly caring for patients with COVID-19 were provided with free meals during their shifts.
- Rush employees received free parking. Individuals who normally relied on public transit were provided with vouchers for ride-sharing services to limit their risk while commuting.
- Rush provided staff with clean scrubs to wear home after their shifts and onsite laundering of scrubs used in direct patient care.
- At the height of the pandemic, Rush infectious disease experts, ICU staff and many other workers worked incredibly long shifts — often days straight with little time for rest. Rush provided overnight lodging for employees who needed to stay close to the Medical Center and for those who were concerned about exposing family members and did not want to go home.



All of these measures required additional staffing, supplies and financial resources.

With your generous support, we were able to meet these challenges head-on.

Emerging Virus Research Fund

The emergence of COVID-19 has necessitated innovative solutions to challenges that were unimaginable just months ago. Our ability to meet these challenges is strengthened by research. Philanthropic support served as a crucial complement to those COVID-19 studies — such as clinical trials of vaccines — that are funded by federal agencies or pharmaceutical sponsors. **Because of your generosity, Rush physician-scientists have advanced more than 70 critically important studies and clinical trials with the potential to save lives and improve outcomes for those with COVID-19.** Below is a snapshot of the incredibly important work that has been propelled by donor support.

Developing an Invaluable Data Research Tool

Rush scientists have been collecting and storing samples, such as blood and tissue, from patients with COVID-19 in a biorepository and then pairing these samples with clinical information, such as their symptoms and treatment outcomes. With more than 35,000 patients tested and nearly 9,000 confirmed cases treated at Rush, this integrated biorepository and patient data registry has become an invaluable research tool — highly coveted by researchers and pharmaceutical companies. Pharmaceutical companies across the country are approaching Rush to partner on new COVID-19 research studies utilizing this novel dataset.

Validating Point-of-Care Testing

Rush played a pivotal role in evaluating the accuracy of Abbott Laboratories' finger-stick rapid test kits for COVID-19 antibodies. This work helped expedite FDA approval of these rapid point-of-care tests, which have been integrated into emergency rooms across the U.S.

Leading Research Into Antibodies and Immune Response

A significant question about COVID-19 is whether the virus causes lifetime immunity or if individuals who have had the disease will be at risk for future infections. Rush researchers are leading several studies to better understand COVID-19 antibodies.

- More than 6,000 Rush employees, students and Chicago-based first responders have now participated in COVID-19 antibody testing. Through follow-up studies of those who previously tested positive, Rush researchers are discovering how our bodies create neutralizing antibodies as well as the type and number of antibodies needed to prevent reinfection.



- Rush researchers are examining how to combat the deadly immune system overreaction to the COVID-19 infection called a cytokine storm. Studying the cytokines from patients treated at Rush, researchers are testing combinations of antibodies that block cytokine receptors in an effort to neutralize the cytokine storm and prevent organ damage.
- Rush has been at the forefront of studying the use of antibodies in convalescent plasma — collected from individuals who have recovered from COVID-19 — to treat severely sick patients. This science remains imperfect, and Rush researchers are studying which types of donor serum are most effective at neutralizing the virus.

Testing and Advancing Novel Therapies

- Rush was a major trial site for the antiviral drug Remdesivir, a study that found patients who received the drug recovered 30% faster than those who received a placebo. This promising finding helped the FDA give emergency authorization for its use.
- The Rush team led a successful national clinical trial investigating prone positioning —turning patients with acute respiratory symptoms onto their stomachs for extended periods with oxygen treatment. Rush’s proning process, which has been shown to reduce patient mortality and the need for mechanical ventilation, has become a standard of care.



Exploring the Long-term Impact of COVID-19

- COVID-19 has been shown to inflict damage to the heart. More than 50% of patients hospitalized with COVID-19 are diagnosed with cardiac rhythm disorders and have a significantly higher risk of being hospitalized for a future stroke. Rush researchers are leading research efforts to better understand the effects the virus has on the heart.
- Treatment of respiratory complications from COVID-19 requires prolonged immobilization and the use of the prone position. These care strategies can result in patients developing pressure ulcer injuries, which are highly susceptible to infection. Rush scientists are examining risk factors and the long-term impact of these pressure ulcer injuries as well as how to prevent them.
- Family members of patients hospitalized with COVID-19 are more likely to develop clinically significant psychological symptoms than families of patients hospitalized with other conditions. Rush researchers are studying the mental health impact of COVID-19 and are piloting a program for family members to receive mental health care when a loved one is discharged.

Studying Risk Factors and Care Strategies for Those Most Vulnerable

- Because of their immunocompromised state, cancer patients who become infected with COVID-19 are viewed as especially vulnerable. Rush scientists are examining which factors put them most at risk for severe illness. These findings will be critical to developing care plans for cancer patients who are treated in the outpatient setting.
- People from minority populations and lower-income communities who contract COVID-19 have an increased risk for hospital or ICU admission and death. Pairing data from Rush's electronic medical record system with social data gathered in the community, Rush scientists are analyzing which social determinants of health have the strongest association with poor COVID-19 outcomes. This work will yield valuable insights that help to prepare at-risk communities for a resurgence of the virus and future pandemics.

Philanthropic support has enabled Rush researchers to propel these and other studies forward, serving as a catalyst for additional grant funding and dozens of scientific publications. **Research conducted over the next several months and years, made possible because of your generosity, will yield dividends that change and save lives. Thank you.**

Student Relief Fund

Extraordinary times call for extraordinary responses. Time and time again, students report choosing Rush University because of the caring culture, one that values the health of our campus community just as much as the health of our patient community. COVID-19 has posed both a health threat and a very real financial threat to our students. They have faced unprecedented disruptions to their education, including food insecurity, unexpected medical costs and loss of income or housing.

In this time of great uncertainty for the next generation of health care leaders, Rush redoubled its commitment to our students and put a call out to our generous donor community. **Alumni and friends donated \$207,156 to the Rush University COVID-19 Student Relief Fund to provide our students with the support needed to continue their education without interruption.**

Your philanthropic support provided 456 of student applicants with financial relief support to date. As you will see from the chart below depicting the number of applications by college, there was no shortage of need in our student population.



“Thank you for supporting our students — you are their greatest advocate today and every day.”

– Dr. Sherine Gabriel,
President, Rush University

Applications by College	Student Applications
Rush Medical College	228
College of Health Sciences at Rush University	179
Rush University College of Nursing	138
Graduate College at Rush University	33

Your generosity underscored the deep sense of care Rush University instills in all who walk our halls, not only for our students’ future patients but also for them as individuals and future alumni. You put food on the table; you provided internet access so students could remain in class. You helped students return home to care for parents or extended families. Your support had immense impact. You showed Rush University that its alumni, supporters and friends are willing to support students not only in the classroom or lab but in all aspects of their lives.

A Message From

Jonah Moss, MD Candidate, Class of 2023

Dear Student Relief Fund Donor:

I wanted to write a note as both a thank you and response to receiving a Rush University grant for COVID-19 relief efforts. When I engage in volunteer activities, I do so because I am passionate about serving the members of my community without expectation of recognition or reward. This award was unprecedented and left me feeling humbled by — and grateful for — such an honor. I am honored the University views my contributions as valuable, and I am eager to continue my service over the coming months and years.

After some reflection, I want to go a step further and thank the leaders at Rush for the support they provide that extends beyond this grant. Rush is an outstanding institution to be trained at, and I have never been more proud to be part of it. This is not just because of the achievements of those who work at Rush, but rather because of the many ways the Rush community has empowered me to serve the people of Chicago.

The resounding support of my teachers, mentors, administrators and peers has fueled my passion and emboldened me to strive for heightened levels of service I could have never imagined possible for a first-year medical student. The level of support I have received from the Rush community is unprecedented, and I am grateful for every person at Rush who makes efforts, such as the COVID- 19 response, possible.

To conclude my note, I recently attended a lecture via Zoom in which one of the speakers presented this quote by Rabindranath Tagore: “I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy.”

Thank you for supporting my education and training through this grant in a way that has allowed me to behold my continued service as joy.



A Message From

Stephanie Moss, MD Candidate, Class of 2023

Dear Student Relief Fund Donor:

I would like to express my sincere appreciation for the financial assistance and recognition for my homeless and health volunteer work during the COVID-19 pandemic. I did not pursue any of this work with expectations for recognition, but I am thankful for the grant I have received.

My family has gone through multiple emotional and financial challenges during medical school and COVID-19, so this grant is very meaningful.

Thank you again for your support.



Saving the Lives of Chicago's Most Vulnerable

The disproportionate toll COVID-19 is having on underserved communities and communities of color — especially those on Chicago's West Side — is a matter of national attention and highlights the long-existing shortcomings of the American health care system. As an institution that is deeply committed to understanding and addressing health inequities, Rush launched widespread efforts to educate our neighbors about the pandemic and connect them to needed resources. Through collaborations with a network of West Side churches, West Side United and other community organizations, and Chicago Public Schools, Rush is leading a newly formed Racial Equity Rapid Response Team focused on developing data-informed strategies to slow the spread of COVID-19 and improve health outcomes among communities that have been most heavily affected.

Your generosity has served as the catalyst for an extensive and well-coordinated effort to provide care, education and much-needed hope for our most vulnerable neighbors.

- Rush launched special programming for underserved Chicago Public School students, connecting families in need of internet to free access programs.
- Rush galvanized hundreds of student and employee volunteers to conduct wellness checks by phone, distribute food at local pantries and deliver meals to community residents.
- When 35% of Chicago's vulnerable homeless population tested positive early in the pandemic, Rush conducted more than 3,500 COVID-19 screenings of housing-insecure residents.
- Rush partnered with the city of Chicago and A Safe Haven to provide supplies and client support for a new 100-bed COVID-19 respite isolation center.
- Rush distributed PPE, touchless thermometers and a multilingual printed guide on preventing the spread of COVID-19 to more than 70 congregate living facilities in Chicago and individuals in high-hardship areas across Chicago's West Side.

Rush's response to COVID-19 in Chicago's homeless community has been so successful a playbook of best practices was published for other cities to follow. **We are incredibly grateful for your compassion and partnership in making these essential outreach activities possible.**



Rush Medical College students volunteered to screen patients for COVID-19 at Franciscan Outreach, a leading provider of homeless services in Chicago.

Food Donations

Nourishing Faculty and Staff

The Chicago area community has rallied behind Rush's health care workers with an outpouring of food donations. **More than 400 donors came together to provide approximately 45,000 meals, 130,000 snack items and 20,000 assorted beverages for employees working 12-hour shifts on the front lines.** These contributions offered essential nourishment for physicians, nurses and staff when food services within the Medical Center were closed and local restaurants were shut down. Food donations ranged from cupcakes to three-course meals prepared by renowned local chefs. Our staff is tremendously grateful for these gifts, which played an important role in raising the morale of Rush employees and keeping everyone healthy during the surge.



When COVID-19 forced Lindsey Richardson to postpone her dream wedding, she donated cupcakes from the Vanille Patisserie in Lincoln Park. She hoped this small gesture represented her support for both Rush health care workers and small businesses.

In-kind Donations

PPE, Medical Supplies and Gifts

While Rush began stockpiling essential supplies in February to ensure adequate resources would be available to protect staff, we were incredibly grateful to receive donations of PPE and medical supplies from our donor community to bolster our resources. Donors also stepped forward with a multitude of thoughtful self-care items and gifts — Easter lilies to lift spirits, skincare items to heal faces chapped by goggles and masks, and comfortable footwear to support staff on long shifts. **Knowing you cared sustained our team during the most challenging times.**



Thank you

You Make a Difference

On behalf of the many clinicians, faculty, researchers, staff members and students at Rush who continue to work tirelessly in response to the COVID-19 pandemic, thank you for stepping forward to support our efforts. This is an unprecedented moment in the history of health care. What began as a sprint in early 2020 to prepare the Medical Center to provide excellent patient care to those affected by COVID-19 has turned into a marathon. In the face of this new long-term reality, Rush's commitment remains as strong as ever.



Our front-line health care workers continue to provide heroic, expert care for many of Chicago's most acutely ill patients with COVID-19 in our hospital, while our faculty, staff and students drive outreach to Chicago's most vulnerable communities. At the same time, Rush researchers are studying the virus from multiple angles, forging a path that will usher our city and nation out of this crisis. Your gift helps make this work possible.

While Rush was as prepared as any health system could be for the pandemic, no institution could thoughtfully respond to a challenge of this scope without a community of partners — those who delivered food to staff on the front lines, sent cards and messages of support and, most importantly, have stepped forward to make a donation. We are grateful beyond words for your partnership.

At the beginning of the pandemic, Rush CEO Dr. Omar Lateef said, "Medicine is a calling. We have a mission, and we cannot fail." Those words remain true today. Rush's successes are shared by those who have stood with us in the face of adversity and joined us in meeting this historic challenge. Thank you for standing with us as we mount the region's best-possible defense against COVID-19.