

Responding to COVID-19 Challenges as a Safety Net Hospital: Lessons from Norwegian American Hospital in Chicago's Humboldt Park July 2020

Introduction

For over 125 years, Norwegian American Hospital (NAH) has been deeply committed to providing affordable, culturally competent health services in the Humboldt Park community on the west side of Chicago. An independent community hospital, its mission is to provide high quality and compassionate health care services by partnering with patients and their families, its employees, physicians, and the communities it serves. These communities are among the most racially and ethnically diverse, yet most socioeconomically challenged, areas in the city of Chicago – and are areas that were disproportionately hard-hit by Chicago's initial wave of the COVID-19 pandemic in spring 2020.

This report seeks to highlight the challenges faced by a small, urban safety net hospital in a COVID-19 hot spot serving a predominately Latinx and Black population, and how it overcame these challenges. It first details some of the defining characteristics of the hospital, neighborhood, and patient population. It then explores several challenges faced by the hospital and how it successfully addressed each one, including challenges around personal protective equipment, hospitalization, testing, social determinants of health, staffing, and funding. It concludes with some lessons learned and policy recommendations emerging from these experiences.

Hospital Background

Founded in 1894, NAH serves as one of Chicago's "Safety Net Hospitals," defined by the Institute of Medicine as providers that deliver a significant level of health care and other health-related services to patients with no insurance or with Medicaid, and to other vulnerable populations.¹ Safety net providers are distinguished by their commitment to provide care to individuals with limited or no access to care.

NAH's service lines include inpatient acute care, emergency care, diagnostic services, and primary care in a 200-bed hospital, as well as a full-service professional building, and three community clinics. Ever responsive to the critical needs of its communities, the hospital also offers innovative services such as pediatric mobile health services, a comprehensive diabetes center, and medication assisted treatment. These programs address key local issues such as access to pediatric care, high rates of diabetes, and the opioid use disorder crisis.

In keeping with the demographics of the local community, approximately 50 percent of NAH's patients identify as Latinx and another 34 percent as Black/African-American. The hospital serves a largely low-income population, with a payer mix that is 47 percent Medicaid, 35 percent Medicare, and 8 percent self-pay or uninsured. A large portion of the uninsured patients are thought to be undocumented individuals or immigrants in mixed-status households; more than \$1.3 million was spent in FY19 in uncompensated emergency department care for patients thought to be undocumented.

Community Background

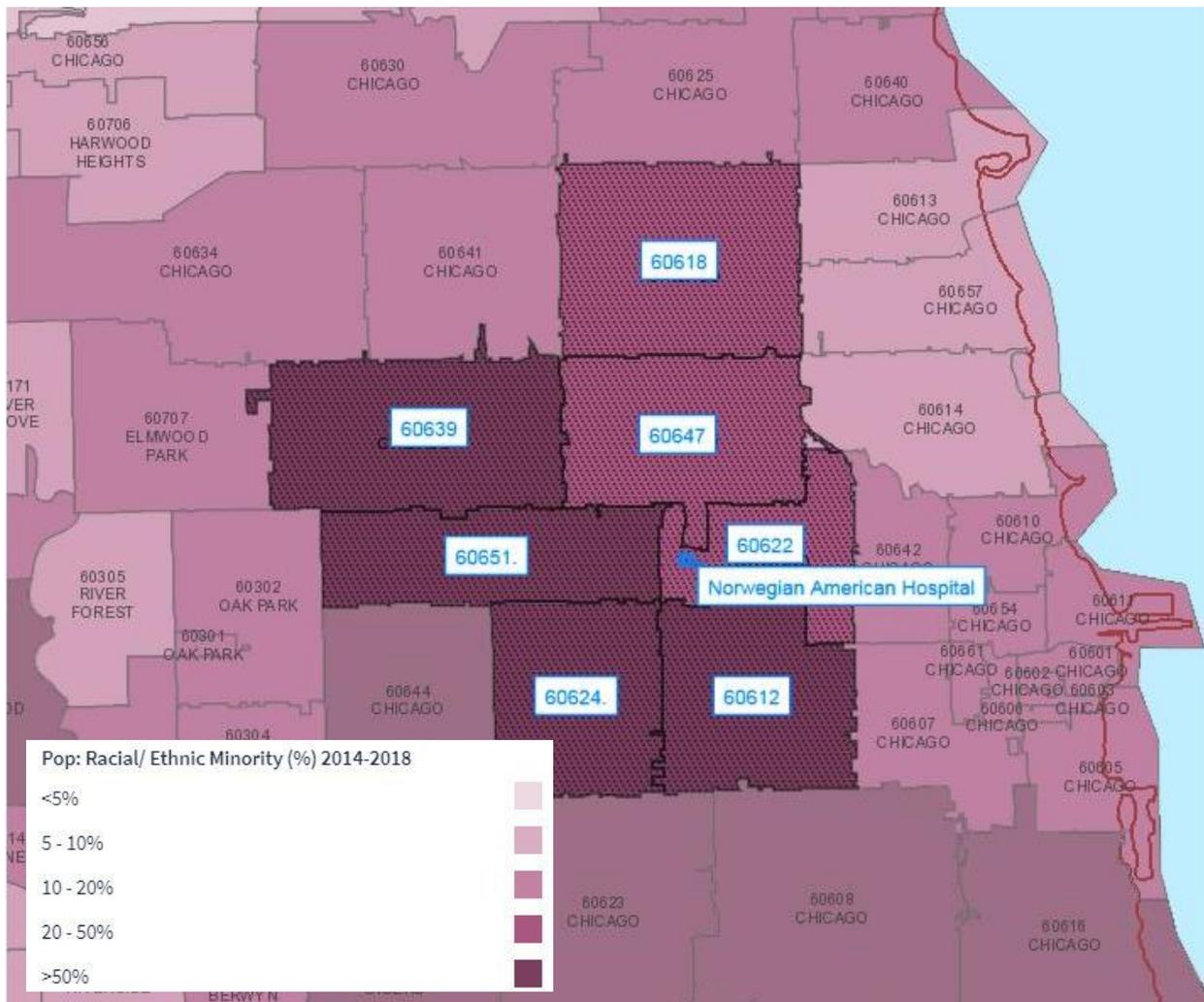
NAH serves the communities of Humboldt Park, West Town, Logan Square, and Austin, as well as the surrounding neighborhoods of Avondale, Irving Park, Hermosa, Belmont Cragin, West Garfield Park, East Garfield Park, and Near West Side. These communities are rich in cultural diversity but struggle with significant socioeconomic challenges and barriers; according to Sinai Urban Health Institute (SUHI), 18

¹ Institute of Medicine. 2000. *America's Health Care Safety Net: Intact but Endangered*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/9612>.

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percent of Humboldt Park adults are unemployed, 31 percent lack a high school degree, and the median household income is \$12,000 less than in Chicago as a whole.²

Humboldt Park and its surrounding communities face disproportionately high rates of numerous health conditions compared to the rest of Chicago, from higher rates of adult obesity, smoking, asthma, and diabetes to higher rates of death from opioid overdose, heart disease, cancer, and infant mortality. Yet with nearly 22 percent of Humboldt Park residents lacking insurance (compared to 9.8% of Chicagoans as a whole), access to care to prevent and treat these conditions can be a challenge. Latinx residents, who make up the majority of the community (54.8%), are the racial/ethnic group with the lowest rates of insurance and the lowest rates of having a primary care provider, in part due to the large population of undocumented immigrants and mixed-immigration status households, as well as the large number of Latinx individuals who work in low-wage or part-time jobs and may not have access to affordable insurance.³



Norwegian American Hospital Seven Primary Zip Codes by Percent of Residents that are Racial/Ethnic Minorities

² Sinai Urban Health Institute (SUHI). Sinai Community Health Survey 2.0, "A Look at Humboldt Park" Report, 2017.

³ Chicago Department of Public Health (CDPH). Chicago Health Atlas, 2020. Accessed at <https://www.chicagohealthatlas.org/healthy-chicago>

COVID-19 Impact on NAH’s Served Communities

During Chicago’s initial wave of COVID-19 in spring 2020, Humboldt Park and surrounding communities saw a disproportionate number of cases and deaths compared with other Chicago neighborhoods. As of 7/17/20, in the seven primary zip codes served by NAH (see map above), 11,299 COVID-19 cases have been diagnosed (roughly 20% of all Chicago cases) and 442 individuals have died of COVID-19 (more than 16% of all Chicago deaths). At the height of disease spread, some served zip codes had nearly three times as many cases per 100,000 as the city overall. For example, during the week ending 5/2/20, 60639 had 698.2 diagnosed cases per 100,000 compared to 256.7 per 100,000 in Chicago as a whole.⁴

Zip Code	Cumulative Cases	Cumulative Deaths
60612	785	28
60618	1,516	50
60622	771	57
60624	972	30
60639	3,699	114
60647	1,609	87
60651	1,947	76
	11,299	442

Source: Chicago Department of Public Health, accessed 7/22/20.

Even as late as the week ending 7/4/20, when test positivity in many Chicago zip codes had dropped to below 5 percent, this was not the case in NAH’s served communities. In fact, two of the only four Chicago zip codes that remained at above a 10 percent test positivity rate in early July are served by NAH: 60639 (11.1%) and 60624 (10.3%). 60639 continues to have one of the highest test positivity rates in the entire city.⁵

These geographic disparities in COVID-19 rates and outcomes are consistent with the racial disparities seen in Chicago and across the nation. In Chicago, as of 7/7/20, the cumulative case rate of COVID-19 among Black individuals was 1,615.0 per 100,000 and among Latinx individuals was 2,616.8 per 100,000 – more than two and three times, respectively, the rate among White, non-Latinx individuals (698.7 per 100,000). Mortality rates are just as staggering, with 146.1 and 109.1 deaths per 100,000 among Latinx and Black residents, respectively, compared to only 56.4 per 100,000.⁶ New data accessed by the New York Times only after suing the Centers for Disease Control and Prevention (CDC) demonstrates that Black and Latinx individuals being disproportionately affected by the virus is a widespread, national phenomenon occurring across age groups and in urban, suburban, and rural settings.⁷

Embedded structural racism created a “perfect storm” of risk factors and root causes that result in excess morbidity and mortality in communities of color, from crowded housing to disparities in underlying health conditions.⁸ In fact, for many NAH patients of color, the virus was actually viewed as less threatening than their many other traumatic lived experiences, such as abuse, addiction, poverty, homelessness, violence, and incarceration, all of which only further increased their COVID risk.

“I have survived serious drug abuse, gun-shot wounds, prison and abuse of every kind. I will be able to survive the virus.” – NAH patient

⁴ CDPH. COVID-19 Daily Dashboard, 2020. Accessed at <https://www.chicago.gov/city/en/sites/covid-19/home/covid-dashboard.html>

⁵ *Ibid.*

⁶ CDPH. Chicago COVID-19 Update, July 7, 2020. Accessed at https://www.chicago.gov/content/dam/city/sites/covid/reports/2020-07-07/Chicago_COVID-19_Update_V8_7.07.2020.pdf

⁷ Oppel Jr., Richard A et al. “The Fullest Look Yet at the Racial Inequity of Coronavirus.” New York Times, July 5, 2020. Accessed at <https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african-americans-cdc-data.html>

⁸ Sequist, Thomas D. “The Disproportionate Impact of COVID-19 on Communities of Color.” New England Journal of Medicine, July 6, 2020. Accessed at <https://catalyst.nejm.org/doi/pdf/10.1056/CAT.20.0370>

Experiences Addressing Key Challenges

As a small, underfunded safety net hospital in a COVID-19 hot spot serving a majority minority patient population, NAH experienced its share of challenges between March and June 2020. These included shortages of personal protective equipment (PPE), issues relating to hospitalizations and transfers, drive-through testing site implementation barriers, increasing community food insecurity, staffing-related challenges, and funding scarcity. Each of these challenges is explored below.

Personal Protective Equipment Shortages

Like many healthcare facilities in the early days of the pandemic, NAH experienced significant shortages of personal protective equipment (PPE) in March and April. Surgical masks, face shields, and coveted N95 masks were in short supply due to soaring international demand and insufficient distribution of the national stockpile to state governments.⁹ Fraud and opportunism in the broken international supply chain further challenged US healthcare workers’ abilities to acquire needed PPE at affordable – or any – prices, and particularly disadvantaged small community hospitals with limited resources.¹⁰

During the height of the shortage, NAH’s minimum inventory for N95 masks dropped to just two weeks’ worth; for surgical masks, the hospital had less than a week on hand, and for gowns and shoe covers, it was less than a day’s worth on hand (see table below). On April 22, at a time when 30 of its roughly 60 medical beds were occupied by COVID-positive patients, the hospital was down to less than one day of gowns, and in need of more than 2,000 just to meet the immediate need.

	Face shields	Preferred N95 Masks	Gowns	Surgical Masks	Bouffant Caps	Shoe Covers
Minimum Inventory						
Minimum Inventory (since Early April)	830	828	370	2,550	300	150
Daily Burn Rate	16	59	626	575	180	210
Implied Inventory on Hand	> 1 month	2 weeks	< 1 day	< 1 week	< 2 days	< 1 day
Current Inventory						
June 16, 2020 Inventory	2,381	2,090	9,135	11,530	6,990	8,348
Inventory on Hand	> 1 quarter	> 1 month	> 2 weeks	> 2 weeks	> 1 month	> 1 month

Source: Norwegian American Hospital

During this acute phase, NAH leadership worked closely with staff to make the most of the limited PPE available. Practices were put into place to reuse gowns with the same patients and to sterilize N95 masks for additional uses. Most importantly, daily communication helped reassure staff to trust the leadership would get them the PPE they need, so that staff did not hoard PPE needed by another department and cause further issues with the already precarious supply.

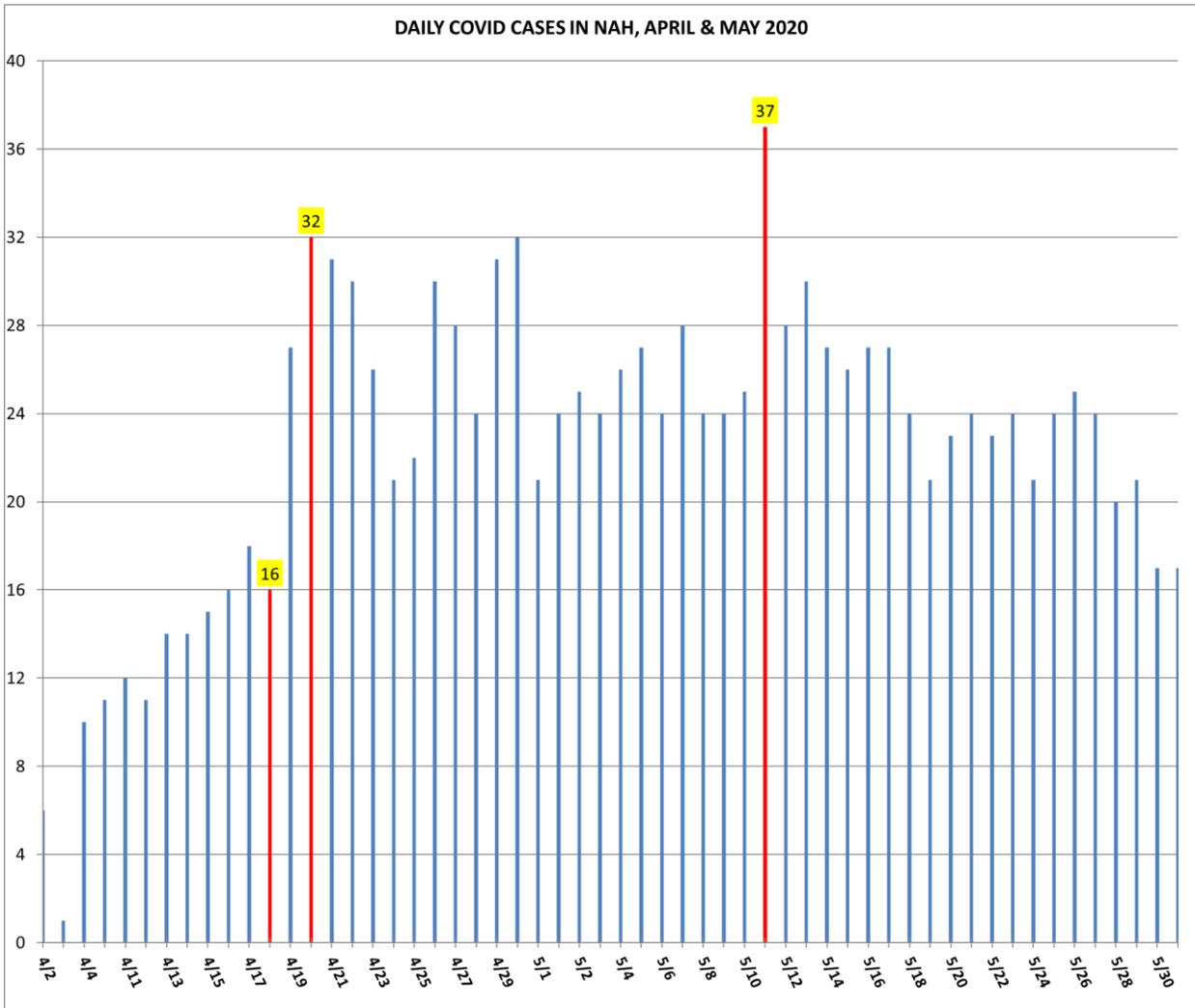
Over time, with support and donations from the City of Chicago Emergency Services as well as private donors, corporations, and other local partner hospitals, NAH was able to build up its inventory to more sustainable levels. As of June 16, inventory stood at more than two weeks for gowns and surgical masks, and more than a month for all other PPE. NAH is now acquiring additional PPE to prepare for a possible second wave and reduce the likelihood of future shortages, as well as working to acquire other protective equipment such as HEPA filters, ventilation improvements, and intubation-related tools.

⁹ Heinzmann, David. “Why are masks for doctors, nurses in short supply just when needed most? Blame a broken supply chain.” Chicago Tribune, March 29, 2020. Accessed at <https://www.chicagotribune.com/coronavirus/ct-coronavirus-ppe-supply-chain-masks-20200327-yjwvx5zkljdexjtaxqlztm42i4-story.html>

¹⁰ Butler, Desmond et al. “‘No offense, but is this a joke?’ Inside the underground market for face masks.” Washington Post, May 18, 2020. Accessed at <https://www.washingtonpost.com/health/2020/05/18/sea-sleaze-inside-underground-market-coronavirus-masks/>

Hospitalization and Transfer Challenges

NAH hit its peak of COVID-19 hospitalizations in mid-May 2020. As shown below, cases doubled from 16 patients to 32 patients in the course of two days in mid-April (see red lines); on 5/11/20, it reached a peak of 37 COVID-positive inpatients – nearly 60 percent of the hospital's general medical bed capacity. This volume never fully let up until mid-June, when it returned to below 10. Occupancy for COVID-19 positive patients averaged 37 percent over the course of May with an occupancy high of 52 percent on 5/11/20. From 4/2 to 5/22 – just 50 days – NAH's COVID-19 positive patient days totaled 1,300 days.



Source: Norwegian American Hospital. Highlighted dates mark beginning of surge and peak number of COVID cases.

Although a unit with more than 20 beds had been dedicated to COVID-19 positive patients from early on, the rapid surge quickly overwhelmed this unit. In particular, the hospital's 12-bed intensive care unit (ICU) was constantly at capacity, with patients waiting in the emergency department (ED) for a bed to open up. To address the need for ICU beds, the hospital's team sought to transfer patients to other local hospitals that seemed to have available ICU beds, according to a statewide database. Yet when the team reached out, hardly any hospitals would accept their transfers. Some hospitals were full despite what the database said, while still others would not accept Medicaid patients. Most challengingly, transfer rules only permitted transferring patients in need of a higher level of care but who are still stable enough to make the transfer, leaving only a narrow set of eligible patients. According to a report from public radio station WBEZ, within one 24-hour period at the height of the surge, NAH contacted 21

different hospitals and were able to transfer just two patients.¹¹ Even when patients were successfully transferred, new ones would immediately need to be admitted to the ICU.

NAH also sought to transfer some less sick patients to the 3,000-bed temporary field hospital set up by the Army Corps of Engineers at the McCormick Place convention center. This site was designed to accept COVID-19 positive patients with more mild symptoms to alleviate the capacity issues at hospitals. Yet, very few NAH patients were able to qualify and be transferred to McCormick Place over this entire time period – even as the field hospital closed in early May due to declining need amidst slowing case growth.

Another challenge was hospitalization of COVID-positive behavioral health patients. Many NAH patients with significant mental health or substance use disorder needs are unable to adhere to mask-wearing, social distancing, and hand washing, putting them at higher risk of contracting and spreading COVID-19. Typically, patients on the behavioral health floor have some mobility, but allowing a COVID-positive patient freedom of movement risks transmitting the disease to others. Simultaneously, since medical units are not as well-suited to treating behavioral health needs, putting a COVID-positive behavioral health patient on the medical floor can risk that patient harming themselves or others. Although NAH was fortunate to have only a few known dual need (COVID and behavioral health) patients, leadership faced complex decisions around finding an appropriate place within the hospital to provide this care amid limited options.

Just as transferring patients was a challenge, so too was finding places to which to discharge COVID-positive patients. While some patients could return to their homes, many of the patients seen in safety net settings like NAH lack stable housing or require ongoing supportive services. Long term care and skilled nursing facilities, many of which had experienced COVID outbreaks, were often unable or unwilling to accept COVID-positive patients, limiting options for those needing longer-term support. Treatment facilities for patients with substance use disorders such as the Haymarket Center had also experienced outbreaks, and many had decreased their occupancy to limit COVID spread, which also reduced the number of new patients they could accept.¹²

Perhaps most challenging was discharging homeless patients, many of whom also have co-occurring mental health, substance use disorder, and/or chronic disease needs. These patients lacked anywhere to which to be discharged at the exact moment when homeless shelters were reducing occupancy to manage outbreaks. To address this, partner organizations on Chicago's west side were able to establish greater hotel room capacity and other spaces for isolation of COVID-positive patients, which provided NAH one facility to which to discharge homeless patients.¹³

Through the focused resolve of the leadership and COVID-19 task force, NAH was able to weather these challenges during the most severe period of hospitalizations. Ongoing calls, relationships with other facilities, and sheer determination of the team helped enable some successful ICU transfers. Consistent efforts to discharge patients in a timely fashion allowed some beds to be freed up. Partnerships across the health and social service sector facilitated some successes at placing patients into residential services, despite the limitations.

¹¹ Schorsch, Kristen. "The Pandemic Revealed Another Gap In Chicago Health Care: Hospitals Are On Their Own To Transfer Patients." WBEZ Chicago, June 29, 2020. Accessed at <https://www.wbez.org/stories/one-chicago-hospital-called-for-8-hours-to-transfer-covid-19-patients-thats-problematic-for-future-outbreaks/1ecd60f3-f185-4deb-ae65-3e3ca25f0063>

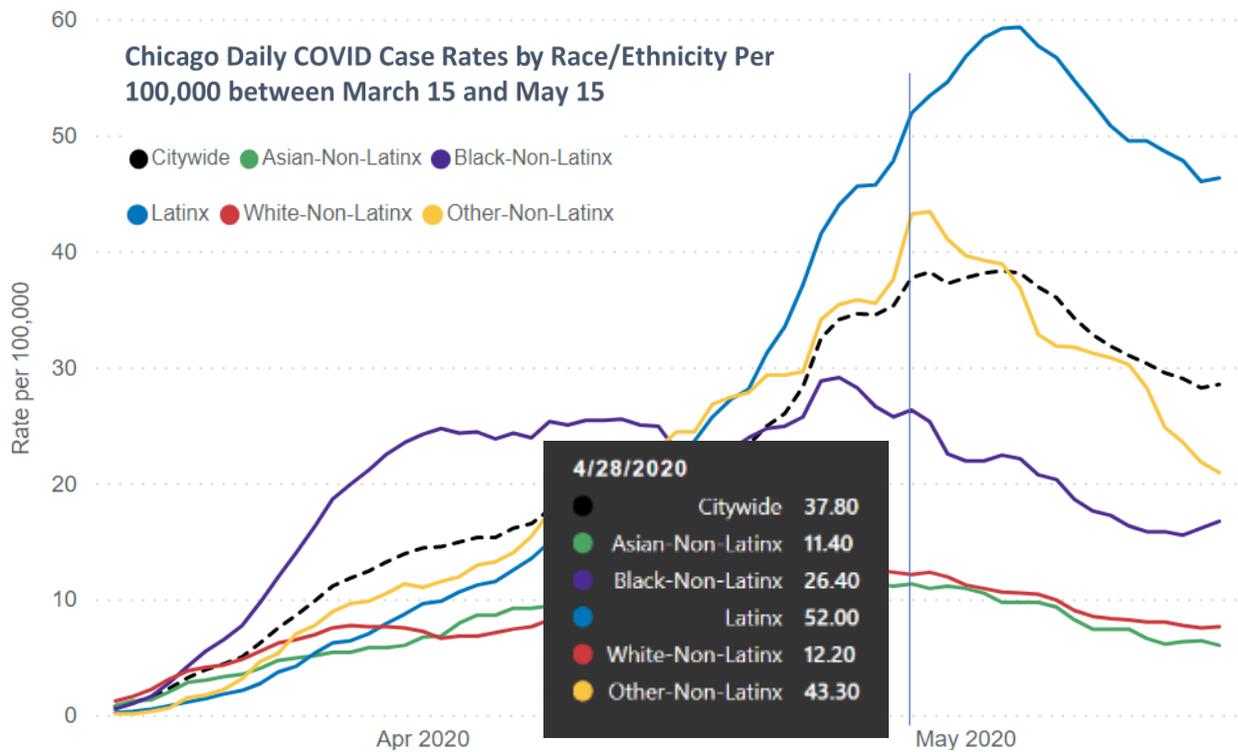
¹² Bruce, Giles. "Coronavirus Crisis Disrupts Treatment For Another Epidemic: Addiction." Kaiser Health News, July 6, 2020. Accessed at <https://khn.org/news/coronavirus-crisis-disrupts-treatment-for-another-epidemic-addiction/>

¹³ Chicago Homelessness and Health Response Group for Equity (2020). The CHHRGE Report: Building an effective cross-sector partnership to address COVID-19 among vulnerably housed populations of Chicago. CHHRGE.org.

Drive-Through Testing Implementation Barriers

NAH faced many barriers to setting up and implementing widespread community testing. Although NAH began testing patients presenting to the ED or inpatient units in mid-March, testing for community members with mild, moderate, or no symptoms remained unavailable. Challenges acquiring enough accurate testing kits even just for its inpatient needs forced NAH to prioritize its in-house testing first before launching community testing. In early April, some safety net hospitals and clinics in hard-hit Black communities on Chicago’s south side began to offer drive-through community testing, but little community testing existed on the west and northwest sides.¹⁴ This further contributed to the city’s health inequities and disparities by limiting city officials and healthcare providers’ grasp on the extent of COVID-19 transmission within these west and northwest side neighborhoods and the Latinx community.

However, by mid-April, the positivity rate both in the community and in NAH’s in-house testing could no longer be ignored. Chicago Department of Public Health (CDPH) data showed a steep increase in case rates among Latinx residents, and test positivity rates of more than 30 percent in nearly all of NAH’s served zip codes. One zip code, 60624, hit 51 percent positivity the week ending April 4 and another, 60639, reached 46 percent the following week.¹⁵ Internally, NAH saw a huge spike in its own test positivity rates, from 38 percent over the first four weeks of testing, to 51 percent the week ending April 18. This led to an immediate prioritization of launching community drive-through testing.



With support from Governor Pritzker and other legislators, officials, and leaders, NAH’s drive-through community testing tent launched on April 28, with an immediate and overwhelming community

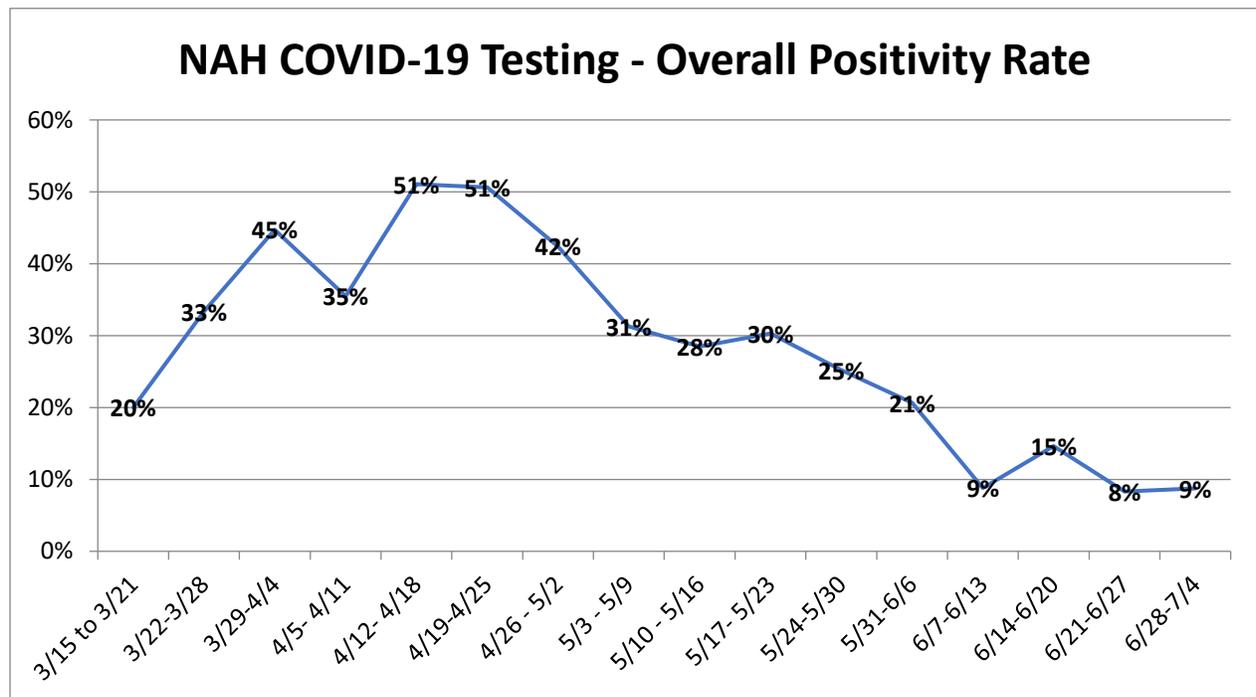
¹⁴ Ramos, Manny. “Roseland Community Hospital launches drive-thru COVID-19 testing.” Chicago Sun Times, April 3, 2020. Accessed at <https://chicago.suntimes.com/coronavirus/2020/4/3/21206994/roseland-community-hospital-launches-drive-thru-covid-19-testing>

¹⁵ CDPH. COVID-19 Daily Dashboard, 2020. Accessed at <https://www.chicago.gov/city/en/sites/covid-19/home/covid-dashboard.html>

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response. By that time, case rates among Latinx Chicago residents were nearly double those of Black non-Latinx residents and remained on the rise (see table above). Local partners serving this population, such as Rincon Family Services, Vida/SIDA, and the Puerto Rican Cultural Center, played an integral role in ensuring community members were informed of the testing availability.

As of July 4, over 4,000 total tests had been conducted, and NAH now consistently conducts more than 500 tests per week. Since late May, this has included both tests by appointment as well as walk-up, first-come first-serve testing. As Chicago and Illinois have come down from their peak positivity rates, test positivity at NAH has decreased significantly from its high of 51 percent, yet it remains high (see graph below). In fact, during this entire period, NAH consistently has had positivity rates three to four times as high as the state average.



Source: Norwegian American Hospital

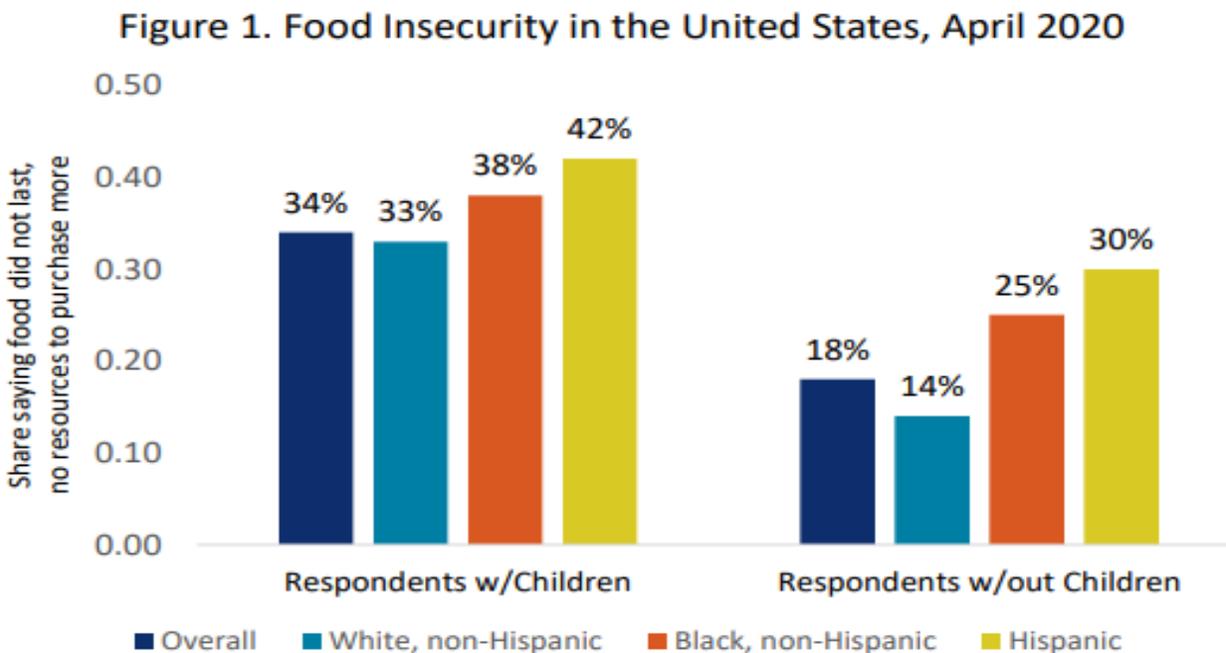
Furthermore, many challenges remain in testing implementation. The total staffing required to make drive-through community testing possible is significant, with roughly 15-20 total individuals devoted to conducting the testing, managing registration, making calls, and managing the data. NAH was able to manage this staffing need by reallocating staff from other community programs that were paused. This allowed the hospital to avoid furloughing some staff while also meeting community demand for testing.

Additionally, community members remain anxious waiting for results, as turnaround times could be as long as seven days at times, accounting for delays. Staff developed careful plans to manage this anxiety, such as providing sufficient staffing and time for follow-up calls, emphasizing acquiring accurate patient phone numbers, and getting consent to email results for shorter turnaround times. Finally, staff developed protocols for screening community members at the point of testing for social needs such as food insecurity, housing, transportation, childcare, mental health services, reproductive health services, or prescriptions. This led to additional information about the depth of resources needed among community residents, such as the food insecurity challenges discussed below.

Increasing Food Insecurity

In recent years, NAH has broadened its reach to more proactively addressing some of the challenges around social determinants of health that its patients experience. Specifically, in fall 2019, it launched a twice-monthly food pantry to provide healthy food access to the many food insecure patients and community members. According to SUHI, 49 percent of Humboldt Park households receive Supplemental Nutrition Assistance Program (SNAP) benefits and 30 percent access emergency food. Yet despite these supports, 46 percent of area households remain food insecure, compared with 13 percent nationwide.¹⁶ This pointed to a role for the hospital in meeting this need.

Nationally and locally, the COVID-19 pandemic has dramatically intensified food insecurity. Analysis from Northwestern University’s Institute for Policy Research suggests that food insecurity in April 2020 doubled overall and tripled among those with children. Approximately 42 percent of Hispanic respondents with children lacked resources to purchase food when it ran out; when the question was phrased as being “worried” about not being able to buy food when it ran out, this increased to 52 percent.¹⁷ Internally, among community members tested at NAH’s drive through testing, food was far and away the most common resource needed.



Source: Northwestern University Institute for Policy Research

In response to the soaring needs, between March and June 2020, NAH distributed more than 1,000 bags of food, including fresh fruits and vegetables, as part of its food pantry program. In April 2020, it doubled its efforts, providing 300 bags per month compared to 150-200 bags per month previously. It also added food distribution to local senior buildings and patient homes as part of its services, bringing bags directly to community members so that they need not leave their homes to access food.

¹⁶ SUHI. “A Look at Humboldt Park,” 2017.

¹⁷ Schanzenbach, D. and Pitts, A. *Estimates of food insecurity during the COVID-19 crisis: Results from the COVID Impact Survey, Week 1 (April 20–26, 2020)*. Institute for Policy Research Rapid Research Report, May 13, 2020. Accessed at <https://www.ipr.northwestern.edu/news/2020/food-insecurity-triples-for-families-during-covid.htm>

Staffing Difficulties

The pandemic's impact on staff and staffing has been significant. In early April, as Chicago approached its peak, it was not clear if there would even be sufficient staffing at small community hospitals for the surging local need, especially amidst agency and travel nurses being lured by higher pay away from safety net care to alternate care facilities like the McCormick Place field hospital.¹⁸ Leadership was unsure if surge capacity would be there should its own staff become sick. Indeed, of its over 700 FTEs, a total of 48 NAH staff members tested positive for COVID-19 between March and June 2020. Another 49 who eventually tested negative took time off for testing, quarantine, or caring for a family member.

To ensure surge capacity, NAH strategically redeployed its staff and family medicine residents around the hospital. Senior residents staffed the ICU seven days a week to support the doctors. Other residents worked on the medical/surgical and telemetry floors and provided overnight support to understaffed nursing teams on those units. A resident team conducted case reviews of COVID patients daily to coordinate efficient delivery of treatment, and many supported the community testing team with follow-up calls. Even medical students volunteered in the ED screening tent to facilitate patient triage.

Likewise, staff working in ambulatory care clinics or other programs that were consolidated or paused were redeployed strategically throughout the hospital. The COVID-19 task force individually considered each of the 47 available staff members to find an ideal fit for each person's skills and experience. Two outpatient nurse practitioners (NPs) – one with prior ICU experience and one who had previously worked at NAH on an inpatient floor – were assigned to inpatient work. Case management staff assisted with ED management and testing follow-up calls. Transportation drivers supported materials management. An employee with a master's degree in public health was moved to infection control.

At times, creative redeployment of staff led to unforeseen challenges, such as a need to teach common inpatient terminology to staff accustomed to outpatient or community-based work. Overall, however, the approach was extremely successful and helped the hospital minimize furloughs or layoffs, meet areas of increased staffing needs, and provide staff with ongoing opportunities for meaningful work.

Another, perhaps more substantial challenge, was the psychological trauma experienced by staff. Witnessing so much severe illness and loss of life among patients, as well as fearing for their own safety and that of their families and colleagues, have been huge sources of emotional trauma for staff across the country.¹⁹ The level of trauma experienced by those who witnessed the surge and excess deaths is akin to that of war veterans, pointing to a significant need for ongoing mental health support resources for staff. In a community hospital like NAH where many staff live within the same heavily-impacted community, these issues have only been exacerbated. Several providers personally lost family or friends to the pandemic and have been unable to mourn with them, yet they continue serving patients.

NAH's leadership took several steps to support staff during this trying time. The CEO personally reached out to sick staff members to provide emotional support and show deep appreciation for their commitment and sacrifice. From April through June, every staff member was provided a free meal per shift, as well as access to ordering grocery staples through the hospital, to reduce some of their personal burden. Coordinated by a designated staff member, numerous restaurants, local businesses, and other partners, provided food to hospital departments to show the community's thanks to the staff.

¹⁸ Waldroup, Regina. "Chicago Hospital Losing Nurses to McCormick Place Alternate Care Facility." NBC5 Chicago, April 10, 2020. Accessed at <https://www.nbcchicago.com/news/local/chicago-hospital-losing-nurses-to-mccormick-place-alternate-care-facility/2254038/>

¹⁹ Wei, Eric et al. Coping with Trauma, Celebrating Life: Reinventing Patient and Staff Support During the COVID-19 Pandemic. Health Affairs, July 16, 2020. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00929>

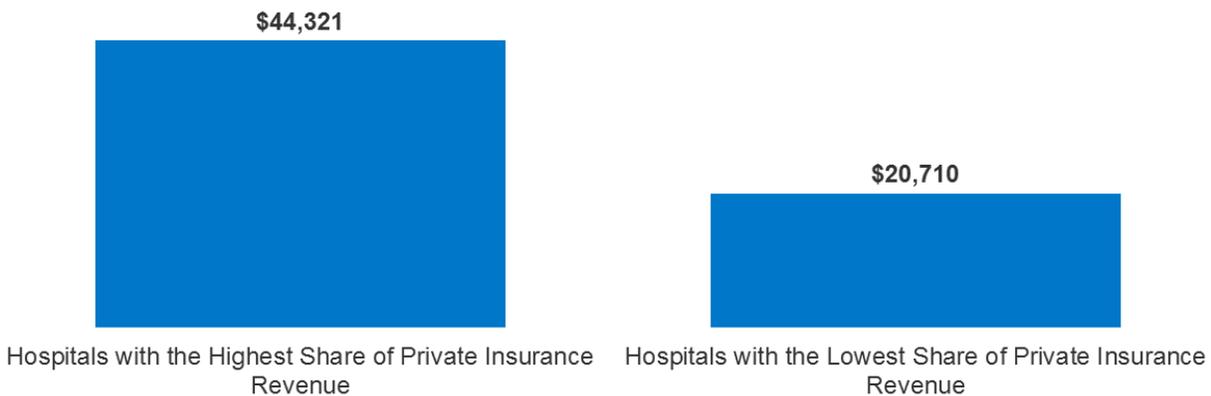
Funding Scarcity

Finally, funding has been a significant challenge that has disproportionately impacted small urban community hospitals like NAH. Nationally, the AHA estimates a total four-month financial impact of \$202.6 billion in losses for America’s hospitals and health systems, or an average of \$50.7 billion per month.²⁰ This includes the effects of hospitalizations on hospital costs; the effect of cancelled services on hospital revenue; and costs associated with extra PPE and support to workers.

To combat the adverse financial impact on hospitals, several rounds of relief funding have been made available to health systems by the federal government as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act and other programs. Yet some funding methodology unfairly favored large hospitals rather than community-embedded safety net hospitals like NAH. For example, initial federal stimulus funds only supported hospitals that treated 100 or more COVID-19 inpatients between 1/1/20 and 4/10/20. This threshold did not consider the number of COVID patients relative to the hospital’s size. More importantly, it unfairly favored large hospitals with multiple campuses that individually would have fewer than 100 admissions, while penalizing small independent community hospitals. It also penalized hospitals in communities that peaked after 4/10, such as Chicago’s west side.

Relief Funds Per Hospital Bed for Hospitals with the Highest and Lowest Share of Private Insurance Revenue

Relief funds per hospital bed for hospitals in the top and bottom decile of private insurance revenue as a share of total net patient revenue:



Note: Hospitals with missing data were excluded
Source: KFF calculations based on analysis of data from RAND Hospital Data tool for analyzing the data in the CMS Healthcare Cost Report Information System (HCRIS)



Source: Kaiser Family Foundation

Furthermore, analysis of CARES Act funding distribution conducted by the Kaiser Family Foundation found that hospitals with the highest shares of private insurance revenue actually received 214 percent more per bed in relief funds than those with the lowest share.²¹ Hospitals with lower shares of private insurance revenue tend to be safety net hospitals like NAH with low operating margins, high volumes of Medicaid patients, and substantial uncompensated care. At a time when NAH and other low-resource

²⁰ American Hospital Association. “Hospitals and Health Systems Face Unprecedented Financial Pressures Due to COVID-19.” May 2020. Accessed at <https://www.aha.org/system/files/media/file/2020/05/aha-covid19-financial-impact-0520-FINAL.pdf>

²¹ Schwartz, K. and Damico, A. “Distribution of CARES Act Funding Among Hospitals.” Kaiser Family Foundation, May 13, 2020. Accessed at https://www.kff.org/health-costs/issue-brief/distribution-of-cares-act-funding-among-hospitals/?utm_campaign=KFF-2020-Health-Costs

hospitals in hard-hit communities were struggling to meet patient needs and protect their staff, federal funding was disproportionately awarded to wealthier hospitals that serve a less high-need population.

NAH was able to access some valuable sources of relief funding designed for Medicaid recipients. Federal legislation authorized a 6.2 percentage point increase in federal Medicaid matching funds, giving the State of Illinois extra resources for Medicaid disbursement to hospitals.²² The enabled NAH to receive roughly \$400,000 extra per month during this time period. Having access to adequate capital to pay staff and key suppliers at a time when staff and the PPE to protect them were desperately needed was hugely helpful to ensuring the hospital could meet the need during the surge period.

Lessons Learned and Next Steps

NAH continues to embrace lessons learned from this first wave of COVID-19 cases to mitigate future challenges. Some key lessons learned were the effectiveness of certain management practices. From the earliest days of the pandemic, seven-day-a-week phone conferences of senior management staff were held, which helped to rapidly identify challenges on the ground around ICU transfers and testing. Collaboration and communication with frontline staff and creative solutions from COVID-19 task force members helped ensure responsiveness to emerging needs.

Looking ahead, NAH is anticipating several increased areas of need. One is the exacerbation of adverse chronic disease and behavioral health outcomes due to delays of needed care, including care postponed or cancelled during the Illinois stay-at-home order. Even as telehealth clinics have opened and in-person primary care and chronic disease services have reopened, not all patients have returned, in part due to fear. As one op-ed in the *Journal of the American Medical Association* put it, "long after the last patient in the United States recovers from the coronavirus disease 2019 (COVID-19), many others will still be afflicted... They will have missed office visits and screening tests that might have prevented or delayed illness or even death... and they will have become fearful of clinics and hospitals."²³

Although it is too soon to determine whether NAH is seeing increased chronic disease needs, the hospital is bracing for increased non-COVID-19 hospitalizations – for diabetes, heart disease, chronic obstructive pulmonary disease, asthma, and other chronic conditions neglected in recent months. With the community's high rate of pre-existing conditions, ongoing fear of care has the potential to significantly worsen health outcomes and exacerbate the health disparities that already exist.

Additionally, with the months of stress, isolation, and high unemployment levels, NAH is also readying itself for increased patient behavioral health needs. Behavioral health acuity at NAH is already high and has not decreased. Both outpatient and residential treatment has been disrupted for many patients, putting them at risk of acute inpatient needs in the future. Still other community members may need behavioral health care in the future as they face loss and grief or self-medicate with alcohol or drugs.

To mitigate these problems, NAH is working to establish greater telehealth and virtual clinic capacity for chronic diseases and behavioral health needs. The hope is to reduce fear and delayed care-seeking so that chronic issues can be prevented, alleviated, and treated as quickly as possible. The hospital has also been working aggressively to safely get patients in-person services like labs without further delays to identify patients with the greatest needs. NAH is also strategizing how best to meet the behavioral health needs of its staff who are experiencing burnout and post-traumatic stress.

²² Musumeci, MaryBeth. "Key Questions About the New Increase in Federal Medicaid Matching Funds for COVID-19." Kaiesr Family Foundation, May 4, 2020. Accessed at <https://www.kff.org/coronavirus-covid-19/issue-brief/key-questions-about-the-new-increase-in-federal-medicaid-matching-funds-for-covid-19/>

²³ Thronson Renata. Lost Space. *JAMA*. 2020; 323(20):2019–2020. doi:10.1001/jama.2020.7237

To prepare for a future surge of COVID-19 cases, NAH has developed a COVID phase two surge plan based on its experiences with the first surge. The plan defines levels of response that correspond to the real lived experiences during April and May 2020, and identifies the number of COVID-positive inpatients that would trigger the reinstatement of certain of its surge practices.

Even in advance of these triggers, the hospital is now prioritizing stocking up on testing supplies, PPE, and other tools to improve ventilation, airflow, intubation safety, and more. NAH also continues to increase access to its food pantry and other resources needed by the community, to reduce the underlying inequities that have exacerbated the impact of COVID-19. Finally, the hospital continues to collaborate and coordinate with other local partners. Most recently, this took the form of a joint letter with other safety net healthcare providers as part of Chicago's Racial Equity Rapid Response Team decrying racism as a public health crisis, advocating for concrete steps to support marginalized communities, and committing to solutions within their own organizations.

Policy Recommendations

From NAH's experiences between March and June 2020, several key policy recommendations emerge:

- **Ease transfer rules during crises:** Hospital transfer rules dictate that patients have to be seeking a higher level of care to be eligible. During moments of crises, this requirement should be waived so that hospitals with overflowing ICUs in hard-hit communities are able to transfer patients to those with more capacity – both available beds and available staffing for those beds. Hospitals should also not be permitted to reject transfers on the basis of the patient's insurance; policy solutions to address this are already under discussion among lawmakers in NAH's area.²⁴
- **Provide hospitals better access to clinical staff:** Staffing limitations can make it impossible for small community hospitals to implement their established surge plans. Having access to traveling nurses through the city, state, or federal agencies like FEMA, for example, would provide hospitals with the confidence to expand their capacity knowing that staffing would be available if and when needed. Staffing alternate care facilities should not come at the expense of safety net providers; rather, collaborative plans should be established to ensure clinical staff is available for facilities in need.
- **Invest in community resources to decrease social needs:** COVID-19 has only further exposed the disparities and inequities that under-resourced minority communities like NAH's experienced, from food insecurity to lack of access to affordable, non-crowded housing. To ensure these communities are able to survive through crises and not bear all the burden, significant investments are needed across the social services sector. Community-embedded hospitals can play a key role in bringing human service partners together and connecting patients to needed resources.
- **Recognize – and fund – safety net hospitals:** Safety net hospitals are anchor institutions in many communities, employing and meeting the health and social needs of local residents. Access to capital is essential to ensure these smaller community hospitals can secure PPE, pay staff, and meet patient needs in times of crisis. While the state has provided some relief funding to providers of Medicaid and uncompensated care, much of the federal relief has favored large, wealthy health systems with larger patient volumes that are not deeply rooted in high-need communities.

²⁴ Schorsch, Kristen. "Illinois Hospitals Have A Patchwork System For Transferring COVID-19 Patients. Some State Lawmakers Say That Should Change." WBEZ Chicago, July 14, 2020. Accessed at <https://www.wbez.org/stories/lawmakers-want-to-change-covid-transfer-system/1572eff2-79d0-43fd-b8e4-9c10b8f9059d>

Conclusion

NAH serves as an exemplar of both the vast hurdles and the tremendous opportunities to make an impact experienced by small, under-resourced safety net hospitals located in minority communities hard-hit by the COVID-19 pandemic. Shortages of PPE and testing supplies, difficulty transferring and placing patients, and funding scarcity all made serving a community with soaring test positivity rates and disproportionate mortality rates that much more challenging.

Despite these challenges, NAH achieved several impressive accomplishments through its cohesive team efforts, including initiating virtual visits and increasing access to needed resources like food. Most notably, the hospital was able to successfully launch and scale community testing targeted towards the local Latinx population, a community that faced the highest positivity rates in Chicago and which had been overlooked and underserved in the early days of the pandemic. Even as funding challenges have loomed large, hospital management has focused its efforts on its people first and foremost, prioritizing access to PPE, support to affected staff, and providing testing, food, and other resources to its community members. NAH will apply the lessons learned to the many challenges that lie ahead in its community's ongoing recovery period and support will systemwide efforts to prepare for and protect against future COVID-19 surges.

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