Report

An acute care nurse practitioner volunteers on the coronavirus frontline in New York City

By Shana M. Judge

One of my research colleagues, Kristopher Jackson, is an Acute Care Nurse Practitioner in San Francisco and a doctoral student in Nursing at the University of New Mexico. Last week, he decided to take a leave of absence from his day job and place his dissertation research on hold to volunteer on the frontline of the coronavirus pandemic, in one of the worst-hit areas: New York City.

At the time, Kris had cared for a handful of Covid-19 patients in the intensive care unit of California Pacific Medical Center in San Francisco. The Bay Area appeared to have enough resources to handle its Covid-19 patients. But by all accounts, New York City's public hospitals did not. So Kris reasoned that the skills he had gained from almost seven years as an ICU and critical care nurse practitioner could be put to better use in New York in the coming weeks. His supervisors agreed and he prepared to leave.

I will report on his experience on this website.

April 2-4, 2020: Preparing to depart despite a lack of coordination

As New York and other states waive in-state licensing requirements to permit the freer flow of health care workers, some news reports have indicated that tens of thousands of medical professionals are traveling to New York City to assist regular hospital staff in the epicenter of the coronavirus outbreak. The logistics involved in coordinating travel arrangements and work assignments for such large numbers of staff would be tough in the best of times.

In these, the worst of times, the coordination wasn't working very well. Kris was advised to rely on either United Airlines or JetBlue for flight arrangements, both of which were supposedly committed to providing free flights for relief workers traveling to the region. United offered an 800-number and email address for booking, but the number didn't work and Kris's emails went unanswered. JetBlue required travelers to fill out online forms with a minimum turnaround time of several days for booking. However, JetBlue finally expedited the process after Kris exchanged messages with airlines representatives on Twitter, and his flight was booked.

He was then assigned to a hospital in the Bronx for a two-week stint. Friends and colleagues gave him enough of the coveted N95 face masks to last for that period so that local hospital staff could use local supplies. Protective gear and other supplies went in his carry-on and Kris took a backpack with personal items. That was it.

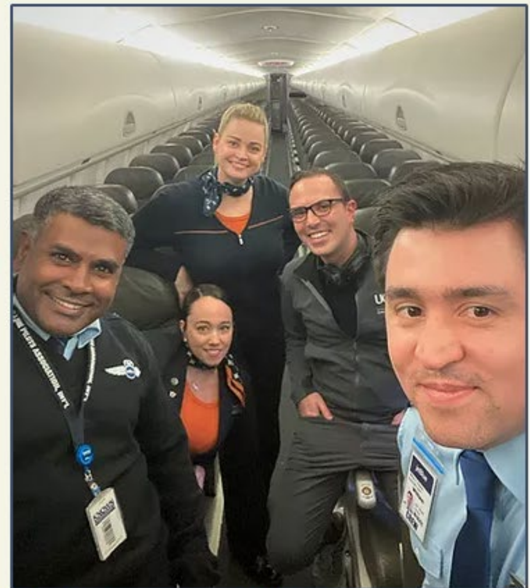
April 5, 2020 – Flying from coast to coast during a pandemic

Traveling on a near-empty flight - but you still must pay to move to a better seat.

Kris traveled non-stop from San Francisco to Boston, with a connecting flight taking him on the last leg to New York City. Only six other people traveled with Kris on the cross-country flight. Coronavirus-related restrictions meant no food or beverage service. "One woman politely asked if she could move to one of the empty seats in first class," he told me. "She was told yes – for an additional $549."

After Kris arrived in Boston, the crew for his NYC flight found him in the airport and asked if he was willing to depart for New York a little early, since he was the only one on the plane.

The volunteer coordinator arranged for Kris to stay at a local hotel in the Bronx, and he arrived safely. He was scheduled to start work on Monday, April 6, at 8am.



No social distancing on this flight.

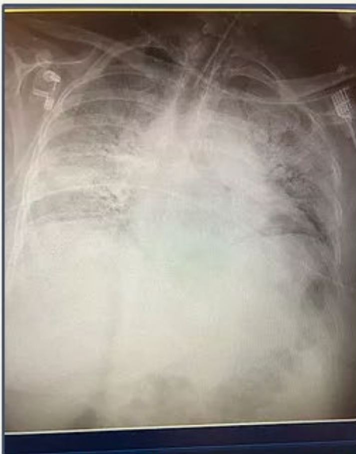
April 6-8, 2020: Starting volunteer work at a public hospital in the Bronx

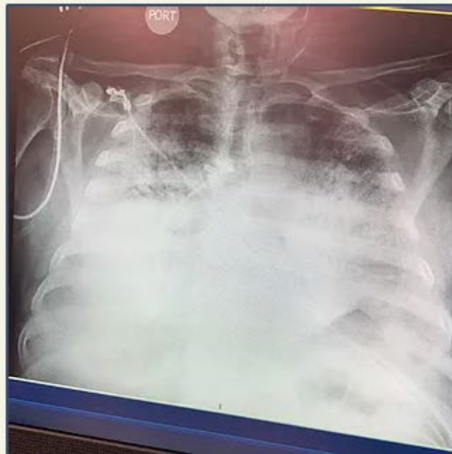
Kris in PPE, with an impromptu name tag

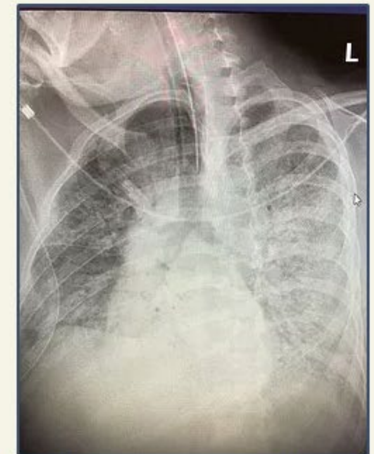
On Monday, April 6, Kris began work at his temporary assignment in a public hospital in the Bronx. More than 1,200 Covid-19 patients had died in New York City during the previous weekend. In addition, the city was preparing to conduct provisional burials of victims, as morgues and crematoriums were becoming overwhelmed by the death toll.

He told me that his first few days were just as hard as one might have expected they would be, in both anticipated and unanticipated ways.

Several hours into his first shift, he spent more than 20 minutes overseeing the resuscitation of a 42 year-old Covid-19 patient he had been caring for. The patient died. "The hospital just doesn't have the capability to offer advanced treatments for this disease," Kris said. "These are the sickest patients I've ever seen."







X-rays of Covid-19 patients at Kris's assigned hospital: Chest x-rays of healthy lungs should appear dark, with only the bone structures absorbing the radiation and appearing white. Hazy or white shadows on the lungs indicate abnormalities caused by pneumonia or fluid buildup.

Kris described a range of limitations the hospital faces in providing an appropriate standard of care for coronavirus patients: insufficient hospital-grade ventilators, a lack of space in Covid-19-dedicated ICUs, a lack of supplies for both patients and the people who care for them – all problems that have been widely reported elsewhere in hospitals located in coronavirus hotspots across the U.S. Local, state, and national governments are still struggling to address these issues in a coordinated and methodical way, with the federal government's anemic response being particularly troubling.

Kris confirmed that the lack of hospital-grade ventilators was among the most serious of these problems. "We are using home ventilators for these patients," he said. "Those are the simple machines that you use at home for people with conditions, like ALS, that cause breathing problems." He added that it's "really hard to manage very hypoxic patients [those patients who are experiencing oxygen deprivation] with these machines." Moreover, the hospital does not appear to have a systematic approach for determining which patients should be placed on the institutional ventilators and which may be placed on the "home ventilators."

On the left is a home ventilator being used at hospital where Kris is volunteering. A standard hospital-grade ventilator is shown on the right.

Kris also described another emerging problem in the provision of care to Covid-19 patients, one that has not yet been widely discussed in the media: It involves some of the caregivers themselves. Hospitals in coronavirus hotspots have been contracting with private sector recruiting companies to bring in temporary health care providers to supplement existing staff. However, at Kris's assigned hospital, many of these "outsiders have no ICU experience at all," he said. Kris described primary care providers, physicians with specialties far from the ICU, pediatric nurses, OB-GYNs, and other staff being "thrown in the ICU" with no specialized training.

Apparently, temporary staff are being compensated under a mish-mash of arrangements: Some, like Kris, are volunteering, some may be receiving their regular salaries, and others are being paid under incentives to compensate for the increased risks they currently face. At least one physician's assistant told Kris she was receiving $200 per hour, almost four times the typical hourly rate for PAs in the New York City region. Some nurse practitioners said they were receiving $13,000 per week in "combat pay," a fee arrangement similar to that reported in other outlets.

These rates are designed to compensate caregivers for the risky and indispensable work they are providing in the middle of a pandemic. Yet without experience in the ICU, "they're just floundering, . . . and we have to correct them or clean up the aftermath," Kris said. "My sense is that if you had a fully trained staff and the set-up to treat large numbers of people, you could be saving some people who are now dying." Although some of the sickest Covid-19 patients cannot be saved under the best of circumstances, "there is a group of people in the middle, particularly the younger patients, whom you could save, and we're not saving them right now. I don't think that's an unfair statement."

For now, Kris is focusing on smaller changes that staff can implement, even within the severe constraints they face. "I'm insisting that we call patients' families every day, because the families can't be here," he said. In addition, some family members have not been able to track the location of their relatives. Kris called the husband of one elderly patient at the Bronx hospital whose prognosis was not good: She had a range of underlying medical conditions that limited her ability to fight the coronavirus infection. Nevertheless, "her husband told me, `I am really happy you called because I took my wife to a hospital in Harlem. But I didn't even know where she was now.'"

The lack of communication between hospitals and patients' families, also reported elsewhere, is a heartbreaking problem in the region. The issue is exacerbated by the need to isolate patients and by the transfers of patients who initially land at one hospital but who are then transferred elsewhere because the first hospital lacks a coronavirus ICU bed for them.

Because the hospital where Kris is assigned keeps trying to expand its ICU capacity, it appears to have become a destination for patients from other hospitals that may not be undertaking (or cannot undertake) a similar expansion effort. Thus, the influx of Covid-19 patients at the Bronx hospital seems likely to continue for now.

April 9-13: Working without a break as the pandemic continues

Kris reported that he has continued his volunteer work at his assigned hospital in the Bronx, without a day off, though he did say he left early on a recent night to get some much-needed extra rest.

The following evening, the National Guard arrived at the hospital with plans to convert operating rooms into additional space to care for critically ill patients coming from other public hospitals in neighboring boroughs. Meanwhile, refrigerated trucks outside the hospital continued to serve as temporary morgues to ease pressure on the hospital's own overwhelmed facilities.

Unfortunately, a problem persists at the hospital that Kris noted earlier, a problem of inexperienced staff – the "relief workers" – who have been brought in under extraordinary incentive pay programs to help regular hospital staff, but who lack the experience to fully assist in the ICU.

Refrigerator trucks serve as temporary morgues outside the Bronx hospital.

I asked Kris to give me a concrete example of the problem and its impact. He told me how he had been caring for a Covid-19 patient who was on a ventilator, like most patients he has been taking care of. The patient's respiration rate was controlled by the ventilator and Kris had increased the set rate to help the patient reduce the amount of carbon dioxide in the patient's blood.

However, an inexperienced, temporary nurse questioned the patient's increased respiratory rate, asking the attending physician whether it was too high. The physician responded by recommending the patient be given additional sedation to slow the rate. Kris later intervened to explain that the ventilator controlled the breathing rate and showed the nurse where the rate was indicated on the machine's control panel. "Oh, I didn't know," was the response.

Ironically, Kris was later the target of a bout of rage from an experienced nurse colleague. "We are all in PPE (personal protective equipment, with face masks and goggles)," he said, "and she didn't recognize me. So she screamed at me for making adjustments to patient IV drips and other equipment." The co-worker is an ICU nurse, so when she realized that Kris was similarly experienced, she immediately apologized. "She realized that we are both mad at the same problem: that they are putting unprepared [health care providers] in unsafe situations.. . . I was actually glad she was angry because it meant that she cared."

The problem is not unique to Kris's assigned hospital. Several medical workers who were recruited to other hospitals and nursing care centers in the New York City region have filed a lawsuit against the recruiting company, alleging that they were placed in critical care roles for which they were not prepared. Still, other temporary workers continue to work in Covid-19 ICUs, regardless of their lack of experience, under incentive pay conditions that may be too lucrative to refuse.

Kris did describe several bright spots. A friend from nursing school who lives in the region has joined him in volunteering at the same hospital in the Bronx, so he has an ally at work. And another ally has emerged in the form of a critical care physician from Mississippi, who has joined Kris in helping to set up an "overflow" Covid-19-dedicated ICU that will soon serve eight patients. The two of them continue to refine a set of protocols – a "rulebook" – for the new ICU to address problems they both had noticed in the hospital's other overflow ICU and to keep patients safer.

Kris bemoaned the lack of partitions and equipment in the new set-up but acknowledged the need to make use of whatever resources are currently available to alleviate crowding. "We just admitted a woman who had been laying on a stretcher in an emergency room in Queens for three days," he said.

Another bright spot is the food donations that regularly appear in the hospital break rooms. New York-style pizza is the dominant fare, of course.

An overflow Covid-19 ICU in the making.

Despite his previous ICU experience, Kris said it's difficult talking to families every day about the poor prognosis of their loved ones. And contrary to earlier perceptions of coronavirus patients, these patients are not always elderly. "I lost a gentleman today who was in his early 40s. I really thought he'd make it," he told me.

"I'm taking care of people who are only a few years older than I am and they are dying," he added. "I don't have symptoms, but every dry cough makes me stop and think, 'Is this when it begins?'"

Kris also described other staff who may be at even greater risk. He mentioned talking with a security guard who had underlying medical conditions. The guard was using a single cloth mask for protection that he washed every night. "I gave him a fistful of my N95 masks," Kris said. "[As he took them,] I thought he was going to cry . . ."

Stacks of donated pizzas are balanced in the hospital break room.

April 14 and onward: Finishing work and heading home to self-quarantine

Kris reported that he wrapped up his volunteer work at the end of a two-week stint at his assigned Bronx hospital. He then headed home to San Francisco, on a half-full flight that he jokingly termed as being "much too full."

He is now in a self-imposed quarantine for 14 days, as recommended by the California Department of Public Health. He said he spent his first day at home lying in bed, not moving except to eat cookies.

Kris's second week of volunteer work was more stable than the first but remained challenging. Along with the other volunteers and regular hospital staff, he continued caring for Covid-19 patients and working to implement up-to-date ICU protocols in a constantly changing environment.

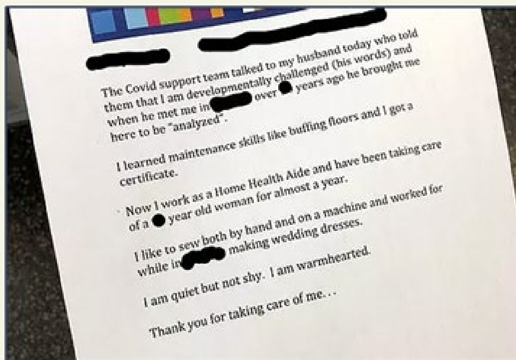
Flying from East to West in a pandemic.

Kris again noted how the ICU experience was new for many of the temporary staff – both paid and unpaid – who had been trained in other specialties. A fellow volunteer whose training had been in trauma care commented that although the Covid-19 patients were as sick as she had expected, she was surprised by how much "waiting and watching" is involved their ICU care. Kris told her that unlike trauma patient care, caring for these critically ill patients is much like "watching a turtle try to climb a playground slide. You hope, you know, the turtle can make it to the top, but it can be slow and painful to watch the process – and there will be some sliding backwards" along the way.

"Home" for Covid-19 ICU patients at Kris's assigned hospital.

Kris and his team also continued their focus on communicating with families and giving them daily updates about the status of their relatives in the ICU. He described how staff had begun gathering personal details about patients from their families and posting notes with the information at the foot of the patients' beds. Improvement in these patients can occur at a "glacial pace" as they lie sedated and intubated, he said, so it's important to humanize each patient and acknowledge the person who is lying there.

In his last week, other moments also stood out. The use of "prone positioning" – placing Covid-19 patients onto their stomachs to increase oxygen flow to the lungs – has been increasing. Prone positioning is a well-established practice for critically ill patients who require mechanical ventilation and who are difficult to oxygenate. But an increasing number of patients with Covid-19 are being placed on their stomachs in a last-ditch effort to improve oxygenation and prevent the need for a ventilator.



The Covid support team talked to my husband today who told them that I am developmentally challenged (his words) and when he met me in over years ago he brought me here to be "analyzed".

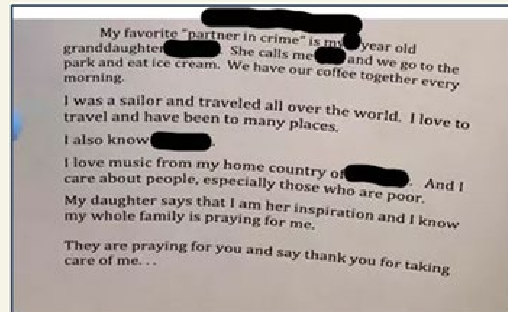
I learned maintenance skills like buffing floors and I got a certificate.

Now I work as a Home Health Aide and have been taking care of a year old woman for almost a year.

I like to sew both by hand and on a machine and worked for while in making wedding dresses.

I am quiet but not shy. I am warmhearted.

Thank you for taking care of me. . .



My favorite "partner in crime" is my year old granddaughter . She calls me and we go to the park and eat ice cream. We have our coffee together every morning.

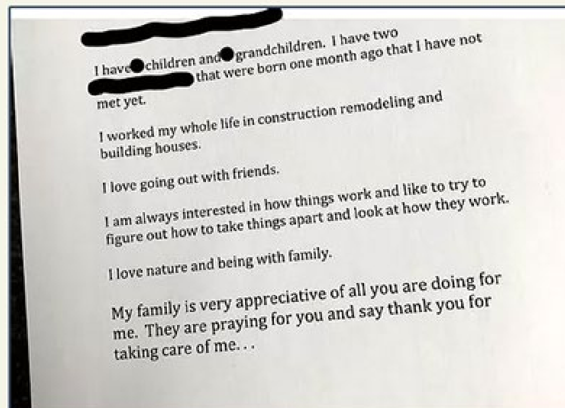
I was a sailor and traveled all over the world. I love to travel and have been to many places.

I also know .

I love music from my home country of . And I care about people, especially those who are poor.

My daughter says that I am her inspiration and I know my whole family is praying for me.

They are praying for you and say thank you for taking care of me. . .



I have children and grandchildren. I have two that were born one month ago that I have not met yet.

I worked my whole life in construction remodeling and building houses.

I love going out with friends.

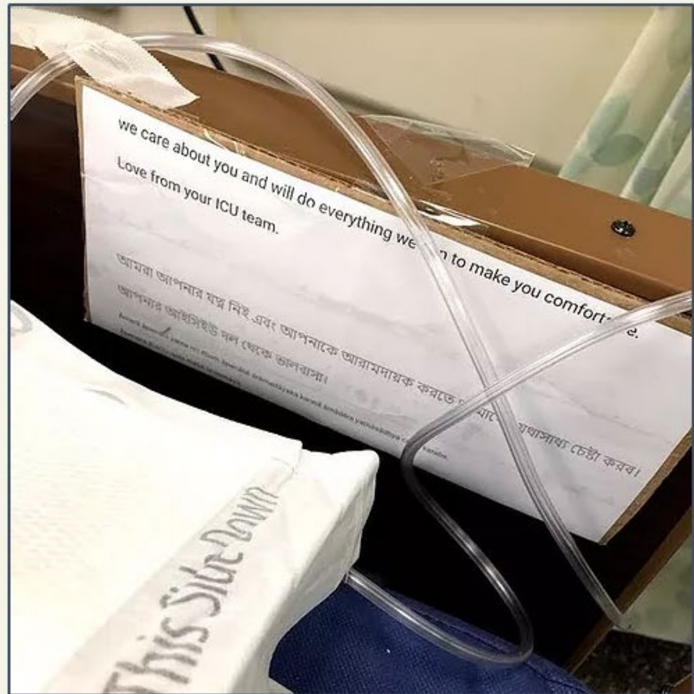
I am always interested in how things work and like to try to figure out how to take things apart and look at how they work.

I love nature and being with family.

My family is very appreciative of all you are doing for me. They are praying for you and say thank you for taking care of me. . .

Individualized notes about the Covid-19 patients that were attached to their ICU beds.

After staff had repositioned one particular patient from his back to his stomach, they posted a note, in both English and the patient's native language, on the inside of his bed railing. In any moments of confusion, the patient would then be able see the note and be reminded, in a language he understood, that staff were caring for him and cared about him.



A reminder for a patient, in English and his native language.

Kris spoke of another Covid-19 patient who had been extremely sick and who had already been in the Bronx hospital for a couple of weeks before Kris arrived. The patient had been transferred to the makeshift ICU that Kris had helped to set up. The patient was unstable and his condition difficult to manage. He suffered a cardiac arrest at one point. He later began showing signs of renal failure, a particularly problematic comorbidity given debates at Kris's hospital and elsewhere over whether institutions have the resources to provide dialysis to every Covid-19 patient who may need it.

Staff had been calling the patient's worried family every day. On one day that week, the family mentioned that it was the patient's birthday. He was turning 50. "So we put the family on the phone, with the speaker on, and sang `Happy Birthday' to him," Kris said. The patient was intubated and sedated, so "really, we sang for the family, to acknowledge his birthday, so they would know that we cared." He added that connecting with families "is also good for staff morale – it makes us feel as though we are doing something that matters to them." Kris learned this past week that, remarkably, the patient had come off the ventilator and was doing better with just supplemental oxygen.

I asked Kris what is was like to leave the hospital on his last day of volunteer work. "It was odd," he said. "I just walked out the door that Friday, and that was it." He said he was more concerned about the impact that staff turnover can have on families who grow accustomed to hearing from the same provider each day. Family members will call, expecting to talk to him, but he will not be there, and they'll have to get used to getting updates from a new staff member. And this turnover will be repeated, again and again. "The transient nature of staffing can be hard on these families," he added.

Since returning to San Francisco, Kris has been working remotely while quarantining. He said he is healthy. He is also in touch with two colleagues from San Francisco who are currently volunteering at other New York City hospitals. Based on his experience in the Bronx and those of his colleagues at other hospitals in the area, we are working to develop and report several recommendations for the care of Covid-19 patients. The coronavirus pandemic is far from over and treatments and vaccines remain in the study phase only. Because the end is not yet in sight, our hope is that medical workers can continue to improve the care they provide for Covid-19 ICU patients – and for their worried families.