The emergence of the novel coronavirus SARS-CoV-2 and resulting global pandemic have significantly taxed the capabilities of health care systems around the globe. The long-term psychological impact of the Covid-19 pandemic on frontline health care workers has yet to be fully understood. Attention to staff mental health and well-being is a critical aspect of crisis management. However, many health systems lack a practical model for providing mental health support to frontline staff engaged with the pandemic. Rush University Medical Center in Chicago, Illinois, created a simple, easy-to-follow framework as an interdisciplinary, proactive effort that promotes staff well-being during Covid-19 and with generalizability to other similar health care crises. The program was adapted during separate deployments corresponding to infection surges in the spring and fall 2020.

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The Challenge: Covid-19 Psychological Impact on Health Care Workers

Rush University System for Health is an academic health system in Chicago, Illinois, comprising Rush University Medical Center (RUMC), Rush University, Rush Copley Medical Center, and Rush Oak Park Hospital, as well as numerous outpatient care facilities. As a leader in the Illinois Covid-19 response, the system has treated many critically ill patients. At one point in the pandemic, RUMC cared for 20% to 25% of all ventilated Covid-19 patients in the state.

The psychological impact of the Covid-19 pandemic on frontline health care workers has yet to be fully understood. As the national conversation moves to discussions of reopening and a
return to a new normal, the importance of mental health and well-being is more relevant now than ever. Existing disaster models predict an impending period of disillusionment in our future, characterized by high stress, physical exhaustion, burnout, and substance misuse as the adrenaline, camaraderie, and broad community support of the past few months begin to fade.1

Infectious disease outbreaks pose unique challenges to health care workers compared with other disasters, arising both from the nature of the disease and from the need to protect themselves from infection with measures such as quarantine and the use of personal protective equipment.2 Undesirable effects on psychological well-being among frontline health care workers have already been documented, including increased risk of depression, anxiety, substance misuse, and sleep disturbances.3,4

We sought to preempt these issues by thoughtfully designing a proactive organizational approach to supporting the mental health and well-being of our frontline staff.5 The institution’s comprehensive plan for staff wellness first took into account concerns for the attainment of basic physiologic needs and the promotion of physical and emotional safety, as well as the basic needs of their immediate families.6,7 Institution-wide measures to address these issues included the creation of additional on-site childcare, transportation assistance, and alternative lodging.

The Goal: Creating Wellness in a Pandemic

Early in our evolving response to the Covid-19 pandemic, the Office of the Chief Wellness Officer commissioned a special Wellness Task Force devoted to coordinating the institution’s efforts, as part of an overarching command center structure. Representation on the Wellness Task Force included the Office of the Chief Wellness Officer, chaplains, social work, nursing (psychiatric nurse liaisons), psychiatry, and behavioral sciences.

The task force used its collective expertise to develop four key mitigation strategies, described in detail below, to reinforce staff wellness throughout the crisis: Wellness Rounds, a Wellness Consult Service, an advanced mental health intervention program known as Wellness Plus, and a central Wellness Resource Hub with Wellness Rooms on frontline floors. Later, an additional cornerstone of the institutional response was added through the Center for Clinical Wellness.

“The CCW has a three-part mission: creation of a culture of wellness, increased promotion and access to mental health services, and the use of data and research to enhance support for well-being within the health care community.”

The task force also created an interdisciplinary Wellness Response Team to serve as the primary workforce supporting the Covid-19 staff well-being efforts. Volunteers were recruited from redeployed staff representing each of the task force departments, many of whom were available as a result of lower overall non-Covid-19 hospital census, yielding some 20–30 individuals with consistent availability. If the needs of the hospital extended beyond the capabilities of the group, as
would be the case if additional ICU units needed to be opened, up to 15 additional providers were available.

Two operational leads were designated to develop consistent staffing ratios and schedules, as well as to ensure quality control for the training and onboarding of new Wellness Response Team members. Each team member was given a resource tool kit that included an algorithm for the triage and assessment of employees in need; an escalation pathway for rare but serious scenarios, such as an employee at risk of self-harm; as well as a list of all institutional wellness resources available for staff use. To ensure ease of communication among the group and to provide rapid responses to emerging issues, all Wellness Response Team members were given access to the Cisco Webex Teams platform. This portal functioned as the primary tool for quick group discussions, notifications, follow-up of urgent cases, and the sharing of resources and best practices.

**Implementation**

The initiatives outlined below were created to promote mental health and well-being for staff during the Covid-19 pandemic.

**Wellness Rounds**

While supportive rounding is not a new concept, distinguishing features of our approach include its formal structure, consistency, interdisciplinary composition, and empowerment of the participating group to address urgent issues through a real-time feedback loop with the highest levels of organizational leadership. These characteristics create a dynamic and agile framework for organizational decision-making.

Members of the Wellness Response Team were divided into unit-specific teams targeting areas of the medical center with the heaviest Covid-19 clinical burden. Five standing teams were created, with an additional “flex” team that covered general medical (non–Covid-19) floors and a night team that covered all floors 3 times a week, from 10 p.m. to midnight.

Each team has a physician leader, a psychologist, a nurse (often a psychiatric nurse liaison), a chaplain, and a licensed clinical social worker. Each team rounds on the same locations at the same time every day, to create familiarity and a sense of rapport with the clinical teams. Wellness Response Team members were preferentially assigned to floors where they have established relationships, promoting rapid assimilation into the units.

Because mornings are busy for clinical staff on patient units, the wellness rounds take place in the afternoon. Each day the Wellness Response Team huddles at 2:30 p.m. for a regular briefing, and the rounds begin at 3 p.m. These briefings include updates from the Chief Wellness Officer regarding the latest developments from our Covid-19 command center and the latest talking points on emerging issues. Team members also share their key findings from rounds the day before.

As cases increased once again in the fall, the Wellness Rounds infrastructure was reactivated with some variations. During the first wave, Wellness Response Team members had greater
availability due to temporary organizational changes such as employee redeployments, furloughs, and clinic closures. This was not the case in the fall, and as a result Wellness Rounds followed the same structure as previous but with decreased frequency. Continuing rounds under different circumstances was a challenge, but it also provided an opportunity for a real-world test of sustainability. Conditions in the second surge, with fewer resources and limited support staff availability, were closer to what could be expected under typical circumstances in the post-pandemic environment.

The availability of Wellness Response Team members was ascertained using a simple online survey. Based on this information, rounding was scaled back from a near-daily frequency to twice per week. Timing was maintained at late afternoon to avoid interrupting clinical teams during the busy morning hours. An interdisciplinary mix of clinicians was achieved once again, although in smaller overall numbers. The fall surge had many clinical characteristics distinct from the spring, including heavier utilization of non-ICU general medical floors, a dedicated Covid-19 intermediate care unit (IMCU), and a significantly decreased overall patient length of stay.

“During the first surge, staff passed through an initial ‘I’m fine’ phase in which they were reluctant to engage. Over time, this eventually gave way to more engagement, meaningful discourse, and opportunities for targeted mental health interventions.”

While the spring Wellness Rounds were initially met with some confusion and resistance, in the fall they were welcomed with excitement and familiarity. Staff expressed their enthusiasm for our return, including in one instance welcoming us to their unit with a round of applause. During the first surge, staff passed through an initial “I’m fine” phase in which they were reluctant to engage. Over time, this eventually gave way to more engagement, meaningful discourse, and opportunities for targeted mental health interventions. By contrast, in the second surge, frontline clinical staff actively sought out Wellness Response Team members, at times requesting tools for addressing stress and anxiety or seeking other forms of mental health support.

**Wellness Consult Service**

We established a consult service (Figure 1) where any clinical unit or individual can connect directly with a member of the Wellness Response Team for evaluation, triage, and recommendations to improve mental health and well-being. Clinicians are familiar with the “consult” model, and this approach helps us normalize the concept of wellness by incorporating it more formally into the clinical environment. Group sessions are made available for entire units, departments, or clinical teams in need. All individual consults are anonymous and are not added to a staff member’s medical record.
Wellness Consult Service Triage Algorithm

- **Receive Notification**
  - In-Person Consult
  - Paper (2320)
  - Walk-up

- **From an individual at work:**
  1. Brief intervention in the resource center
  2. Brief intervention on the unit
  3. Offer a callback

- **About another individual:**
  1. Do you feel comfortable telling the person that we're coming?
  2. If not, when will they be working so we can stop by?

- **From an individual not at work:**
  1. Active listening
  2. Offer BWA*†
  3. Call with the person
  4. Offer in-house alternatives
  5. Offer callback

- **Page about a group:**
  Initiate SOS*†

*Support Our Staff: a facilitated small group session following a traumatic event. †BWH Wellness Assistance Program: a 24/7 employee assistance program offering short-term counseling support.

Source: Adibe, Bryant. *Creating Wellness In a Pandemic: A Practical Guide for Health Systems Responding to Covid-19.* NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

**Wellness Plus**

We created an immediate, targeted response to individual employees in a mental health crisis. Through a predetermined escalation algorithm (Figure 2), any member of the Wellness Response Team can trigger the Wellness Plus pathway. When triggered, the individual is escorted to one of the unit-level Wellness Rooms or the central Wellness Resource Hub (see below), where an experienced clinician (typically a physician or other prescriber) completes a thorough mental health assessment, including identifying an immediate therapeutic intervention and appropriate follow-up.
Wellness Resource Hub / Wellness Rooms

We established a centrally located Wellness Resource Hub, managed by psychologists and licensed clinical social workers, where any staff member can receive confidential, on-site counseling support, escape busy clinical areas, process their emotions, and relax. To facilitate respite, on entering the hub staff are greeted by calming music, a 12-foot projection of nature scenes, and available lounge chairs evenly spaced 6-feet apart. For frontline staff unable to leave the unit, a network of five Wellness Rooms were launched throughout the medical center, with a special focus on high-volume Covid-19 intensive care units. These rooms include healthy snacks, resources for self-care, and written prompts on the walls to encourage reflection. Although social workers were not assigned to individual Wellness Rooms, we encouraged regular use of the Wellness Resource Hub for staff with more personalized needs.

Source: Adibe, Bryant. “Creating Wellness In a Pandemic: A Practical Guide for Health Systems Responding to Covid-19.” NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society
Center for Clinical Wellness

In July 2020, we opened the Rush Center for Clinical Wellness (CCW) — a first-of-its kind facility where each color, texture, sound, and lighting feature was carefully selected using an evidence-based approach designed to enhance the well-being of all visitors. We sought to create a space grounded in the tenets of an optimal healing environment where staff could escape the demanding pace of the hospital and slow down and focus on their own mental health and well-being needs. The CCW was under construction prior to the start of the pandemic, but the opening was prioritized in response to the evolving needs of our community.

Considerable effort was made to protect privacy throughout the design process and to mitigate fears or stigma associated with visiting the center. In lieu of an open waiting area, we designed a custom “scoop and bowl” seating arrangement with 7-foot dividers separating each seat so that visitors cannot see one another. Clients follow a one-way flow of traffic, entering through one door and exiting through another, so as to prevent them from encountering anyone else. Within each treatment room we embedded acoustic foam inside the drywall and sealed the lining of the doors in order to enhance sound reduction and further support privacy.

Additionally, given the impact of Chicago’s often long and dark winters on mental health and morale, we installed three-dimensional sunroofs within the space. These digital sunroofs are designed to simulate the sun’s movement and lighting pattern to produce the psychological benefits of being outside on a bright sunny day. Finally, the CCW’s most popular amenity is the reflection room, where clients enjoy use of a futuristic energy pod accompanied by a self-reflection exercise.

The CCW has a three-part mission: creation of a culture of wellness, increased promotion and access to mental health services, and the use of data and research to enhance support for well-being within the health care community. The center’s services are free to the entire Rush community, including learners and clinical and nonclinical employees. The initial programmatic offerings included one-on-one wellness coaching, mental health counseling, and mini-wellness retreats. The CCW’s staff are known as Well-Being Advocates and come from a diverse set of backgrounds, all with a master’s degree or higher, including LCSWs, PhDs, and MDs.

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Since the center’s opening, we have seen a stepwise increase in total registered clients across disciplines (Figure 3). The current volume far exceeds our projected utilization at 6 months of 300–400 registered clients, which was based on figures from a previously available on-site counseling center at Rush. We believe the CCW’s popularity is a reflection of the high degree of need within our community as a direct result of Covid-19–related psychological distress, as well as growing staff recognition of an emerging shift in institutional culture focusing on the importance of well-being.
Hurdles

We faced several hurdles in implementing this initiative:

**Stigma attached to mental health services.** The Wellness Response Team was heavily weighted with mental health professionals, and some staff were reluctant to interact with them initially.
because they were concerned for their privacy and thought the team’s function was to identify mental illness. To address this, we made sure that teams included a mix of disciplines — chaplains, nurses, and social workers — and that their onboarding emphasized a consistent message of wellness. If an employee specifically requested a mental health evaluation, or was demonstrating poor coping strategies that interfered with patient care duties, team members were encouraged to default to their professional judgement. In these cases, the framework of the Wellness Response Team provided rapid linkage to a mental health practitioner for prompt assessment via the Wellness Plus pathway.

**Integrating the Wellness Response Team into the daily routine.** In the initial phases of rolling out this program, Wellness Response Team members were often met with skepticism and, at times, even confusion. Clinical teams were often busy, did not want to be interrupted, or were otherwise reluctant to talk. This was overcome through an emphasis on consistency; each unit had a designated team that rounded at the same time each day. The teams were encouraged to engage only when clinicians were available and interested. As the initiative continued, Wellness Response Team members became identified experts in resources for employee well-being, as well as a low barrier access point to receive support. Over time, the teams experienced an increase in staff appreciation as well as anticipation of their visits.

**Measuring impact.** We faced a dilemma regarding how to effectively measure impact of the initiative because we did not want to overburden clinicians with a new assessment or survey while they were grappling with the stress of an evolving disaster. In place of an initial assessment, we adapted an emotional well-being screening tool, originally developed for the identification of acute and chronic stress disorders, including PTSD, in our military veteran population, for use in frontline health care workers. As of this writing, the tool is under internal review board review; once complete, we plan to disseminate it broadly throughout our community, with a particular focus on clinical units with the heaviest Covid-19 case load. The assessment will provide valuable information regarding our organization’s current state, and we also hope to perform a comparative analysis against a comparable outside institution with no such wellness infrastructure in place. Further, the screening tool includes an assessment of burnout prevalence, which we can compare against existing internal data.

**Shifting concerns and vaccination reticence.** An important distinction between the spring and fall deployment of Wellness Rounds was in the nature of the concerns expressed by frontline staff. Discussions in the fall varied from concerns about exhaustion, burnout, and anticipatory anxiety of the second surge, to optimism regarding additional treatment options and enhanced clinical knowledge available to assist patients. Frontline staff also expressed a range of emotions about the novel Covid-19 vaccinations. Prior to authorization, some staff expressed ambivalence about vaccination, but it was unclear how widespread this reticence might have been. To answer this question and in anticipation of the vaccination’s distribution, we deployed a simple Web-based survey to ascertain how many clinical staff would be willing receive a vaccine. The overwhelming majority of over 6,000 survey participants stated their willingness to receive the vaccine (Figure 4). Correspondingly, as of this writing, over 73% of Rush University Medical Center employees have received at least one dose of the Covid-19 vaccine.
Lessons Learned

Across the board, the initiatives have been incredibly well received since their launch. Increasingly, we found staff to be more at ease contributing concerns, thoughts, and feelings that they faced when interacting with Covid-19 patients. Over time, staff have moved from the “I’m fine” position to being more forthright about their distress and anxieties. Centrally recurring themes include the following: (1) moral distress around patient deaths, resource allocation, and absolute scarcity; (2) personal safety; (3) economic insecurity; (4) social and family life disruption; (5) stigmatization of health care workers; and (6) sense of powerlessness.

Calls to the Wellness Consult Service and escalations to Wellness Plus varied in scope, but steadily increased over time. These ranged from practitioners whose levels of anxiety made them apprehensive about providing needed care to Covid-19 patients, to requests from managers elevating concerns about employee well-being. Over a 4-week period, utilization of the Wellness Resource Hub increased from 5–10 people per day to 30 or more per day with a total to date of more than 400 people. The majority of visitors are daytime employees encompassing a wide range of departments and functions in the hospital. As the number of visitors increased, we established back-up staffing from Wellness Response Team members for additional immediate support in the Wellness Resource Hub. Unit-level Wellness Room use was not tracked, but anecdotal evidence suggests a similar trend of increasing use over time.
For an initiative like this to work, having a senior-level executive champion is critical. In our hospital system, senior-level leadership was provided by the Chief Wellness Officer. However, this need not be the case, and institutions may appoint a different executive leader for such efforts, particularly one who does not have competing responsibilities within the overall pandemic response and has the ability to oversee an interdisciplinary team and convey emerging concerns to appropriate channels among hospital decision-makers. We believe that without clear leadership, the initiative will break down over time; we found that the daily huddles with the Chief Wellness Officer reenergized the team and helped it focus on its mission.

**Future Considerations**

Covid-19 has presented unique challenges to health systems across the globe. The impact of this pandemic on the psychological well-being of frontline health care workers is expected to be widespread. As we continue to reflect on our experiences thus far and understand more about this evolving situation and its broad impacts, we are progressing to the next phase of our institutional wellness response.

While Wellness Rounds have taken place in one form or another throughout our health system since their inception at RUMC, the comprehensive framework detailed here will be implemented more formally at each site going forward, including the identification of an executive sponsor to ensure local support. As Rush looks to resume normal clinical operations, we plan to continue this infrastructure for the next 6–12 months, albeit with a less frequent rounding schedule (likely 2–3 times per week), as redeployed staff return to their original roles. Most importantly, we will allow the data obtained from the emotional well-being screening tool to inform our next phase of targeted interventions.

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References

1. Phases of Disaster. Adapted from Zunin & Myers as cited in Training Manual for Mental Health and Human Service Workers in Major Disasters. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. Accessed April 19, 2020. https://www.samhsa.gov/dtac/recoveringdisasters/phases-disaster.

2. Pfefferbaum B, North CS. Mental Health and the Covid-19 Pandemic. N Engl J Med. 2020;383(6):510-2

3. Bai Y, Lin CC, Lin CY, Chen JY, Chue CM, Chou P. Survey of stress reactions among health care workers involved with the SARS outbreak. Psychiatr Serv. 2004;55(6):1055-7

4. Wu P, Liu X, Fang Y. Alcohol abuse/dependence symptoms among hospital employees exposed to a SARS outbreak. Alcohol Alcohol. 2008;43(6):706-12

5. Adibe B. Creating Wellness in a Pandemic: A Practical Guide for Health Systems Responding to Covid-19. Rush Wellness. April 24, 2020. https://www.rush.edu/sites/default/files/2020-07/creating-wellness-pandemic-toolkit.pdf.

6. Greenberg N, Docherty M, Gnanapragasam S, Wessely S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ.

7. Brymer M, Jacobs A, Layne C, et al. Psychological First Aid: Field Operations Guide. 2nd ed. National Child Traumatic Stress Network and National Center for PTSD. July 2006. https://www.ptsd.va.gov/professional/treat/type/PFA/PFA_V2.pdf.

8. Ulrich RS. Effects of interior design on wellness: theory and recent scientific research. J Health Care Inter Des. 1991;3(6):97-109

9. Jonas WB, Chez RA. Toward optimal healing environments in health care. J Altern Complement Med. 2004;10(6):S1-6