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Caring for health care workers during crisis

Creating a resilient organization

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Summary: Action steps taken by an organization before, during and after a crisis will reduce psychosocial trauma and increase the likelihood your workforce will cope or even thrive. How physicians and other health care workers are supported during a time of acute stress impacts how they cope and whether they recover from the crisis, or alternatively, whether they will adopt unhealthy coping mechanisms and show signs of stress injury (e.g., burnout, insomnia, dysphoria) or even worse, chronic stress illness (e.g., depression, anxiety, PTSD, substance abuse). Effectively caring for the health care worker may decrease their risk of leaving practice or limiting their fulltime effort. Successful organizations will take a systems approach and focus on becoming a resilient organization prior to times of crises, rather than limiting their efforts to a focus on individual resilience or only attending to the well-being of health care workers after crises develop. Furthermore, resilient organizations will need to rapidly reconfigure their well-being priorities to meet the biggest new drivers of stress in a crisis setting.

Introduction: Crises are inherently stressful and often involve uncertainty, unpredictability and increased work intensity. Such events also require flexibility, endurance, equanimity and professionalism from health care workers precisely when these attributes are most threatened. For health care professionals to successfully navigate these challenges and serve their patients and society during a public health emergency, they need organizational support. How well organizations plan for and support their workforce during a crisis will influence the organization's capacity for patient care, and the personal impact of the crisis on the health care workforce.

Short-term stress has the potential to lead to long-term growth and thriving (i.e., "post-traumatic stress growth") or to long-term stress injury and illness depending on the infrastructure, culture and actions of an organization. (Figure 1) Creating a plan to provide support for the workforce during and after a crisis will help maintain a healthy and sufficient workforce to meet societal needs over time.

Most health care organizations have an emergency preparedness incident management system, such as a hospital incident command system (HICS), covering important topics, like planning, response and recovery capabilities for unplanned and planned events. It is critical such preparations include plans to support physical, emotional and psychosocial needs of the workforce. It is also critical for organizations to attend to the well-being of the health care workforce prior to an emergency so that the they do not enter times of crises with a team that is already exhausted, depleted and burned out. In most cases, the well-being infrastructure that is in place prior to a crisis can serve as the framework to apply new or modified support systems in the midst of an emergency. This module provides a 17-step process for activities before, during and after a crisis.

Overview of steps for caring for health care workers during a crisis

1. Before: Creating a resilient organization

1. Appoint a chief wellness officer (CWO) and establish a professional well-being program.[1-7]
2. Create a "caring for the health care workforce during crisis" plan and coordinate with HICS leadership.
3. Develop a plan to support workforce needs for professional competency during crisis reassignments.
4. Establish a plan to suspend or reduce non-essential tasks.
5. Develop mechanisms to assess stress and needs within the workforce.

2. During: Supporting physicians and other health care workers during a crisis

6. Assess the current situation and evaluate the adaptability of the pre-existing plan to the current circumstances.
7. If necessary, develop new support and resources to meet needs specific to the crisis.

8. Emphasize and embody the importance of visible leadership.
9. Connect with other institutions, share and learn together.
10. Assess the needs and stress level within the workforce at regular intervals.
11. Adapt support plan to meet evolving needs.

3. After: Learning from a crisis to be an even more resilient and effective organization in the future

12. Debrief unit by unit as well as by profession.
13. Catalogue what was learned and update the crisis plan for next deployment.
14. Deploy an organization-wide approach for supporting the workforce after the crisis; identify new needs to facilitate recovery and restoration.
15. Honor the dedication, commitment and sacrifice of health care professionals.
16. Memorialize health care professionals that have been lost.
17. Resume efforts to attend to organizational and system factors that promote well-being and create a resilient organization.

Conceptual model: Caring for health care workers during crisis

When crisis occurs, there are inevitable stress reactions. In an ideal state, workers feel well-trained, physically and mentally fit, motivated, calm, steady and in control prior to the crises. Then the unexpected happens: a pandemic occurs with a new pathogen for which there is no cure, a natural disaster strikes bringing in mass casualties, a nuclear reactor explodes and contaminates and sickens an entire region, or some other calamity not yet imagined.

How does the workforce respond to this crisis? Stress may come from one of four major sources:

- A threat to the worker's personal/family health and life
- A loss of colleagues or threat to professional mastery and identity
- An inner conflict between ones values and aspirations and what they are able to accomplish in their work
- Fatigue, simply feeling worn out by the relentless work and need, without time for rest and recovery (See Figure 1)

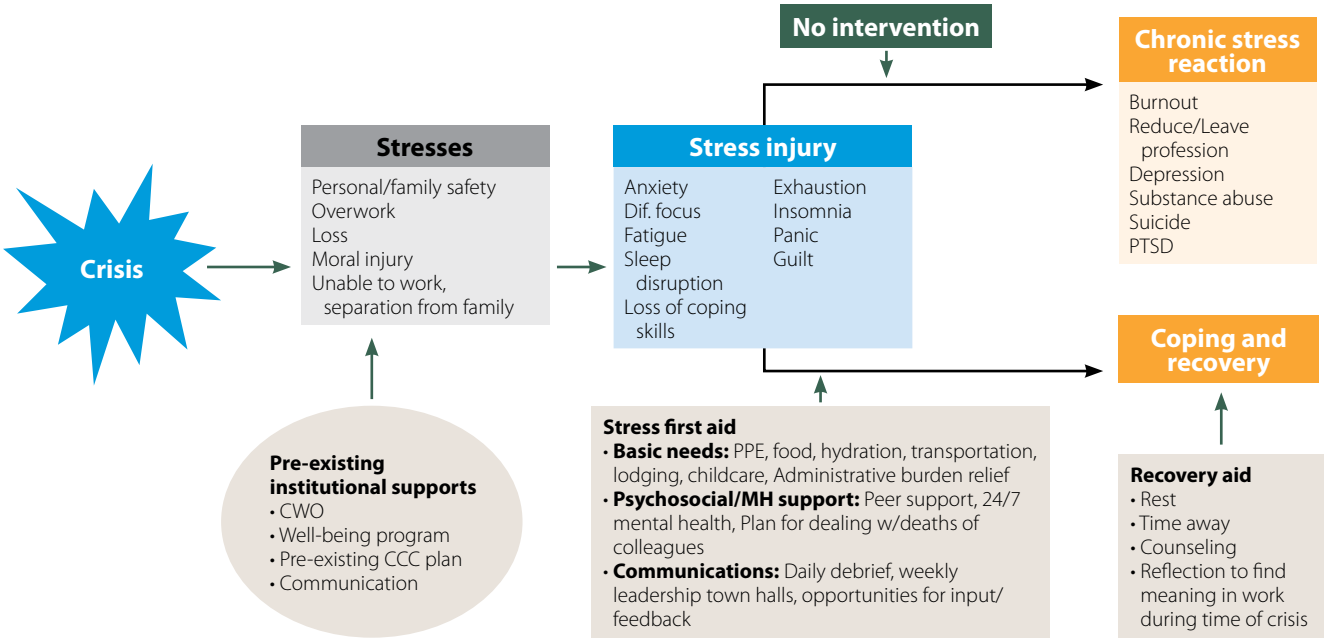
Figure 1: Four causes of stress injury

Life threat	Loss	Inner conflict	Wear and tear
A *traumatic* injury	**A *grief* injury**	**A *moral* injury**	**A *fatigue* injury**
Due to the experience of or exposure to intense injury, horrific or gruesome experiences, or death	Due to the loss of people, things or parts of oneself	Due to behaviors or the witnessing of behaviors that violate moral values	Due to the accumulation of stress from all sources over time without sufficient rest and recovery

How one reacts to stress may vary, from a minor reaction (i.e., feeling irritable or down, experiencing muscle tension or minor difficulty sleeping), to a serious stress injury (i.e., not feeling like one's normal self, having excessive guilt, shame or blame, feeling out of control, experiencing dysthymia or panic), and if left untreated the acute stress reaction can evolve into a persistent social or occupational impairment (i.e., depression, anxiety, substance abuse, PTSD, suicidal ideation).

Fortunately, progression from a stress reaction to stress injury to a chronic stress illness is not inevitable. Proactive institutional supports initiated before a crisis, "stress first aid" delivered during the crisis and "recovery aid" provided after the crisis will each increase the odds that individuals will recover and thrive. (Figure 2)

Figure 2: Conceptual model: Stress first aid during and after crisis impacts outcomes
Adapted from The Schwartz Center, Patricia Watson, PhD, "Caring for Yourself & Others During the COVID-19 Pandemic: Managing Healthcare Workers' Stress."



Before: Creating a resilient organization

1. Appoint a CWO and establish a professional well-being program

With a CWO and well-being program in place there is a unit which can rapidly shift the focus of their work to address the needs created by the crisis event. [See AMA Steps Forward module on Creating the Organizational Foundation for Joy in Medicine] In crises with significant societal disruption and anticipated psychological stress, it will be necessary for the CWO to partner with behavioral health, communications and other support services.

In many organizations the CWO is appointed to lead the workforce support response in a crisis since the CWO will have built partnerships/relationships with all of these health care system units prior to the crisis. Depending on the nature of the crisis, the CWO may establish a task force structure to help coordinate across many areas (e.g., food, transportation, lodging, security, communications, behavioral health).

2. Create a "caring for the health care workforce during crisis" plan

Assemble a time-limited group, charged with identifying the needs of the workforce for the tangible physical, logistical and psychosocial support at work and at home during a crisis. Ensure that the HICS plan includes these dimensions of basic logistical, communications, psychosocial and mental health support. In creating a plan to support health care workers, be aware that the barriers to seeking and receiving help may be greater among those in the healing professions.

The Stanford Medicine Hear me, Protect me, Prepare me, Support me, Care for me model[8] is one framework. The Mt. Sinai model of a hierarchy of needs is another, available at Mt. Sinai's "Well-Being Staff Resources During COVID-19."

See Table 1 for domains of needs and examples of programs to meet those needs. An organization that has cataloged existing resources, identified potential workforce needs and outlined a plan for how to address will be a step ahead when a crisis occurs.

Table 1: Domains of need for workforce psychosocial support during a crisis.
Framework adapted from Dr. Jon Ripp, available at Mt. Sinai's "Well-Being Staff Resources During COVID-19."

Detail	Examples
Basic needs	
Personal safety	Personal protective equipment during pandemics On-site showers, toiletries, laundry services, access to scrubs
Family safety	Clear instructions on how to avoid bringing infectious or nuclear contamination home
Dependent care	On-site low or no-cost childcare A grant program for those experiencing financial hardship, a referral list for local childcare/eldercare facilities
Transportation and parking	Waive all parking costs for employees during crisis transport assist (Uber, Lyft) for sleep deprived health care professionals on rapid cycle shifts
Healthy food and water	Food stations in well-being center, in residents' lounge, in break areas
Lodging	Free or subsidized temporary, nearby housing depending on the need
Communication and leadership	
Communication	Includes receiving steady, reliable, accurate, transparent, information from leaders about the nature of the crisis, the institution's response. Important to acknowledge challenges or deficiencies in the health system's ability to fully meet the present crisis and to clearly state what is being done. Important to be bidirectional; front line workers need a forum to express their immediate needs and experiences Format may include email, townhalls, video interviews, surveys, comment boxes, 5-min beginning or end of shift communication with supervisor
Psychosocial and mental health needs	
Psychological safety	Assurance that one won't suffer professional consequences (e.g., reprimand, job demotion or loss) for speaking up (e.g., for PPE and personal safety during a crisis)
Peer support	Peer support (e.g., Peer RX Med) Crisis support group, spiritual practices group, grief group Group meditation parent support group Facilitated group reflection sessions facilitated pairings Connectivity/social sessions [e.g., Mayo COMPASS dinners]
Partner and family support	Virtual support sessions to address partner and family concerns, such as emotions as partner heads to work and fears about contamination when they return and discuss grief at loss of everything individuals had planned that is now on hold
Supportive 1:1 conversations	These are distinct from mental health evaluation and treatment. At the University of Washington a social worker does an intake and then pairs the health care worker to the one of 80 volunteer mental health experts for a supportive, listening conversation.
Unit debriefs	Some organizations have found that these are challenging to hold on-site (e.g., end of shift) as health care workers may still feel "on" and in their role. One organization found it helpful to offer virtual unit debriefs from home, where team members could choose to listen in or speak and could choose to have their camera on or not. The distance and chose of anonymity were found to facilitate more conversation.
Confidential support and referral hotlines	Consider hotline and referral resources dedicated specifically to students, residents/fellows and other trainees National Suicide Prevention Line: 1-800-273-TALK(8255)
Mental health crisis team	Provides 24/7 phone support and can be deployed on site for a critical event, such as an employee death
Mental health liaisons	Behavioral health experts assigned to proactively reach out to the cohort to which they are attached
Tele-psychiatry	Confidential access to virtual psychiatric care
Self-care	Provide the workforce with information on self-care and normalize the importance of prioritizing these elements by leadership example: sleep, exercise, time with friends/family, limit exposure to media

3. Develop a plan to support workforce needs for professional competency during crisis reassignments

Physicians and other health care workers may need to be reassigned to responsibilities that are outside of their recent practice and comfort zone. This is a substantial source of stress, which can be reduced with communication, along the lines of "you will not be alone, you will have support to prepare you; here are a few resources to read or watch before arriving." A mentoring and training system will help preserve feelings of professional competence. A structure that includes oversight and ready access to expertise is essential.

Patience with onboarding and creating psychological safety are also key. This professional transition support could take one of several forms. (Table 2)

Table 2: Professional transition support during crisis reassignments.

	Examples
Volunteer	Asking for volunteers to be redeployed early on rather than mandating job changes allows staff to step forward and meet the calling relying one's professionalism.
Retraining	Redeployed physicians are provided an in-person bootcamp or online training course to prepare to provide inpatient care. This could include training videos with tips on how to use the inpatient version of the organization's EHR. For more information, visit "Critical Care for the Non-ICU Clinician" by the Society of Critical Care Medicine.
Mentorship	Redeployed physicians are assigned to a hospitalist mentor and have a transition period rounding with a hospitalist team for several days.
Teamwork	Hospitalists lead teams of redeployed physicians and are available for consultation.
Tele-ICU	Intensivist support for hospitals where internists are now managing the ICUs. An intensivist at a central referral center has access to the patient records and monitoring data and co-manages the patients with the on-site team.
Force-multiplier for expertise	Physicians in specialties in high demand due to the crisis reduce the amount of direct 1:1 patient care they deliver in order to provide back-up support to multiple physicians stepping into areas adjacent to their areas of expertise. This is a "force multiplier" for expertise that is limited and required in greater volumes in a crisis.
EHR	Develop crisis-specific templates and order sets for HER.
Liability	These physicians will also need support and understanding of potential medicolegal issues that could arise from their assumption of new areas of responsibility.

Additional resources from Mt. Sinai Health System in New York City are available on Mt. Sinai's "Faculty and Staff Education During COVID-19" landing page.

These physicians will also need support and understanding of potential medicolegal issues that could arise from their assumption of new areas of responsibility.

4. Establish a plan to suspend or reduce non-essential tasks and to delegate other tasks to staff

During ordinary times physicians may spend as much as two hours on EHR and deskwork for every hour of direct patient care. This is wasteful at any time; it is unsustainable during a crisis. They also often devote time to numerous other tasks such as annual compliance training, patient satisfaction reports, and, for academic physicians, applications related to promotion and reappointment. Leaders can free up physician time, cognitive bandwidth and emotional reserve by monitoring changing requirements from CMS and others, and taking some of the following steps to lighten administrative burden. (Table 3)

Table 3: Modifying policies and reducing non-essential tasks

Teamwork	• Permit verbal orders • Implement crisis-specific standing orders • Delegate billing/coding to support staff or billing staff
Administrative	• Discontinue non-essential annual compliance and training modules • Suspend quality measure documentation • Stop sending patient satisfaction reports to physicians • Suspend dimensions of academic promotion • Suspend compensation models/bonuses based upon targeted RVU's • Postpone annual performance evaluations
Documentation	• Reimplement transcriptionist services. (By some estimates, transcription by a human requires 50% of less physician time than use of manual typing or voice recognition software. This service can be delivered by transcriptionists working from home.) • Consider novel workforce pools, for example, at some institutions medical students volunteered to work as virtual scribes* • Simplify EHR documentation with decision support • Delegate billing/coding to support staff or billing staff

5. Develop mechanisms to assess stress and needs within the workforce

Understanding the evolving stresses and needs of the particular workforce will allow leaders to be flexible in meeting those needs. An organization can utilize existing well- being infrastructure to understand the needs of the workforce. For example, the CWO, department well-being champions and staff can scan for units at risk for moral distress (e.g., in a respiratory crisis with a shortage of ventilators the workforce will experience morale distress in triaging limited supplies) and identify the communication and resources necessary to prepare and support health care workers dealing with these issues. (Table 4)

Table 4: Mechanisms to assess stress and needs within the workforce

Listening sessions[8]	At the onset of the crisis, Stanford's WellMD Center hosted 8 listening sessions to quickly identify the needs and stresses of their workforce.
Leadership walk-rounds[9 10]	These provide information, identify concerns, and identify unmet information needs. They can also be useful to help identify and resolve operational problems. As described by Dr. Tom Staiger, medical director at the University of Washington: *"I go when I have a gap in my schedule. I've been walking through ED and our med-surg and ICU units that have COVID 19 patients and then check one or two other units, time permitting. In the ED, I routinely check in with the attending(s) and charge nurse unless they are busy with other activities. I typically go into a few team rooms and/ or talk briefly to teams on rounds to pose the questions below and also do the same with nursing leaders and nurses that I see and who look like they have time to talk. If people look busy, I typically wave and smile. I have also been routinely thanking many of the medical, nursing, and especially the environmental services and public safety staff that I see for being present and for their contributions. It typically takes me 30-40 minutes to round. When I have less time, I go to the ED and a couple of units and can do this in about 20 minutes. I've gone every day that I have been in the hospital (about 6 days/wk) for the last month and have found it to be both enjoyable and a valuable activity. I think people have appreciated seeing our leaders present, especially during the first few weeks when activities and concerns were ramping up."*
Roll-up communication	Using the existing structure of well-being champions in each department and training program, these champions have been tasked with understanding the "voice from the field." Ex: At Mt. Sinai in NYC these wellness champions meet with the CWO weekly to relay the concerns, which are in turn relayed to crisis communications and leadership to inform messaging and affect policy change.
Department updates	Each department holds a brief information session, with crisis updates that specifically impact their specialty, guest experts to provide additional information, and time for staff to ask questions.
Stress pulse surveys	For example, the AMA created a monthly "Coping with COVID-19" survey and a weekly two question pulse survey deployable via mobile phone to allow leaders to track stress and its drivers among the workforce.
Daily huddles	Some crises will require establishing new clinics, hospital units and workflows. It can be helpful to schedule the work unit with time for the staff to provide input and help refine the work as they do the work. For example, during COVID-19 one new respiratory clinic scheduled an hour at the end of each day for staff to debrief about what went well and what could be improved. This helped improve operations and also staff morale.

During: Supporting physicians and other health care workers during a crisis

6. Assess the current situation and evaluate the adaptability of the pre-existing plan to the current circumstances

The most well-intended, meticulous playbook created before the current crisis may not be sufficient to meet the needs of the current crisis, which may have been wholly unanticipated and not previously experienced. The CWO and wellness leadership team, potentially with the aid of psychiatry and behavioral health leads, must assess the situation, evaluate the adequacy of the plan and consider the need to evolve it before deployment. In some cases it may even be necessary to discard the prior playbook and rapidly develop a new plan to address current needs.

For example, during the first week of the 2020 COVID-19 crisis, eight listening sessions with clinicians were held at one institution (Stanford) with the goal of surfacing primary sources of anxiety and fear. Three questions were discussed:

i. What are you most concerned about?
ii. What messaging and behaviors do you need from your leaders?

iii. What other tangible sources of support would be helpful to you?

Once the sources of anxiety were identified, leaders could develop target approaches to support the health care workforce.[8]

7. If necessary, develop new support and resources to meet needs specific to the crises

Assess for emerging needs and stress levels of the workforce through channels in step 6 above.

Some organizations established respite stations throughout areas where frontline workers were most affected. These stations might include healthy food, water and reminders of available peer support and mental health services.

If the task force addressing needs has a strong mechanism to capture the "voice from the field" and relay them to leadership, incident command and behavioral health leads who can effectuate rapid change, then this is the way to develop new supports. Most/All of the new resources we rolled out were based on real and perceived needs ascertained by leaders and the front line providers.

8. Emphasize and embody the importance of leadership and communication

Leaders at multiple levels within an organization need to be visible to the health professionals they lead, in order to understand the needs and concerns and to clearly and honestly address those needs, accomplished through frequent and multi-modal communications (e.g., in person, electronic, virtual). There is a great deal of anxiety among the workforce from unmet "information needs." The uncertainty inherent in a rapidly changing environment is a significant stressor which can be ameliorated with good communications. The leaders won't always have the answers and in the face of uncertainty should strive to be transparent about what is known, what they can do and what they are trying to do. (Table 5)

Table 5: Mechanisms of leadership and communication

Daily updates	Daily updates specific to the crisis (e.g., during COVID-19: number of patients screened, testing positive and hospitalized, along with ICU/ventilator utilization and capacity) reassures and empowers the workforce that we are all in this together and helps prepare for expected trends.
Townhall meetings	For example, the University of Washington held weekly virtual townhall leaders during the COVID-19 crisis. The chief medical officer, chief nursing officer and the incident command leader addressed issues in a conversation moderated by the assistant dean for faculty. The workforce submitted questions (over 1000 were submitted in the first month) that were grouped thematically and presented to the leaders. This was structured as a conversation and not a presentation; there were times when the leaders didn't have the answers, and others where they could transparently speak through their decisions and rationale and acknowledge the difficulties. It is also a time for leaders to genuinely express gratitude for the workforce.
Reports on impact of crisis on workforce health	Providing information about the health of the workforce (e.g., during COVID-19: number of staff exposed or who have contracted COVID-19 and their status) can be reassuring that this is being tracked and shared transparently.

9. Connect with other institutions, share and learn together

Organizations can learn from each other, rather than building all programs from scratch. Existing networks of CWOs or other hospital leaders, professional associations, social networking sites and other social media can serve as a rapid means of disseminating shared learnings.

10. Assess the needs and stress level within the workforce at regular intervals

It is important to keep a finger on the pulse of stress and anxiety in the health care workforce during the crisis. This assessment should also include assessment of the adequacy of the support resources and the need for new resources. Accurate assessment can help identify workers who need a break, determine the need to bring in additional team members and identify where support is lacking. Listening sessions, leader walk-rounds and pulse stress surveys as outlined above can help leaders track the stress levels of the

workforce during and after the crisis. Both proactive and reactive means to assess and react to stress are helpful. For example, mental health liaisons can reach out proactively to units under stress, and a mental health crisis team is available to react as needed to hot spots of stress.

11. Adapt support plan to meet evolving needs

Depending on the duration of the crisis, sources of concern and needs may evolve over time. This may include the need for new information (e.g., adequacy of PPE, new PPE guidelines, number of hospitalized patients, number of employees who have developed infection) or new support (e.g., need for childcare when schools close, need for lodging close to the hospital with increased reliance on rapid cycle shifts). Leaders must continually develop plans to address new and emerging needs.

After: Learning from a crisis to be an even more resilient and effective organization in the future

12. Debrief unit by unit as well as by profession

After the crisis it is helpful to continue to support individual health professionals and learn from this experience in order to be better prepared for future crises. In small group debriefs (hospital work units, specialty divisions, etc.) leaders or facilitators can adopt an appreciative inquiry approach, asking "What went well?" and "Is there a positive story you can share?" See STEPS Forward™ module on Appreciative Inquiry.

These debriefs can be arranged virtually and facilitated using an appropriate framework. Providing these sessions as an integrated part of the workday and offered in a way that is "strongly encouraged" as opposed to "mandated" may be most effective.

The leader/facilitator may also ask for creative, constructive ideas for ways to improve the unit/profession's response to a crisis in the future

Finally, the leader/facilitator can ask, "How are you doing personally?"

SFA group questions

Cover	Calm	Connect	Competence	Confidence
• How has this affected your sense of safety?	• What changes have occurred regarding sleep or ability to keep calm?	• Has there been an impact on how you connect with others?	• Do you have any concerns about being able to handle anything?	• Have you noticed any change in your confidence in: • yourself • leadership • equipment

Patricia Watson, Schwartz Center Rounds, COVID-19 webinar. (3/28/20)

13. Catalogue what was learned and update the crises plan for next

Difficult as it is to consider facing another crisis when the current crisis is just subsiding, the odds are that another will develop. It is important to learn from the current crisis while it is relatively fresh. At the same time, the nature of the next crisis is unknown and will undoubtedly bring with it unique needs, so no matter how much preparation is done ahead of time, provisions for doing real-time assessment and response will remain critical. The CWO and team can integrate the learnings from the debriefing sessions into the "caring for the health care workforce plan." (Step 3 above)

14. Deploy an organization-wide approach for supporting the workforce after the crisis, and identify new needs to facilitate recovery and restoration

Physicians and other health care workers will continue to need help after the crisis subsides to deal with this communal, work-related trauma. Having borne close witness to significant tragedy can have long-lasting effects. In fact, many individuals are able to hold it together during the stressful time but may feel things are falling apart afterward. This is where "recovery aid" is helpful. Furthermore, barriers to seeking care may be greater for those in the healing professions than others, so finding ways to normalize receipt of "recovery aid" is also useful. Universal screening for depression and post- traumatic stress can be considered.

It is important to continue to provide confidential and readily accessible emotional, psychological and mental health support for 6-12 months after the crisis has passed. This may include telephone support lines, virtual visits and in-person visits. It may also include collegial support groups, which provide an opportunity to find meaning in the tragedy and allow for sense making of an intense, uncontrolled period of time.

In addition, staff may need to be reminded to take breaks during work and to take their vacation time. Physicians and other health care workers may benefit from guidance as to how to re-enter "ordinary time" with their friends and family who haven't had such an intense experience.

15. Honor the dedication, commitment and sacrifice of health care professionals

Corporate recognition for health care workers and their families is part of how culture is built and maintained. Look for physical tokens to recognize these efforts.

16. Memorialize health care professionals that have been lost

In addition to dealing with work related trauma, some physicians and other health care workers may be grieving the loss of colleagues. Consider a time of remembrance ceremony and a physical memorial.

17. Resume efforts to attend to organizational and system factors that promote well-being and create a resilient organization

The work you and your team had done prior to the current crisis helped sustain the workforce during the crisis. Now it is time to keep strengthening these programmatic offerings. It matters!

Additional resources

1. Mt. Sinai in NYC: website of the resources
2. Department of Defense: This site on dealing with traumatic stress
3. Dr. Mark Greenawald of Carilion Clinic in VA has given permission to share a platform he has created for individual physicians to pair up and provide buddy support.
4. New York Times article on traumatic stress anticipated.
5. Videos
    a. Caring for Yourself & Others During the COVID-19 Pandemic: Managing Healthcare Workers' Stress
    b. UNC Psychiatry, "Mental Health and Well Being Survival Guide Webinar"
    c. JAMA interview regarding ethical considerations physicians face in rationing care.
    d. Stanford COVID-19 Clinical Research Response
6. Journal articles
    a. Mental Health Outcomes Among Health Care Workers Exposed to COVID-19
    b. Long-term Psychological and Occupational Effects of Providing Hospital Healthcare during SARS Outbreak
    c. Shanafelt and Ripp: JAMA article April 7th 2020
7. AMA Code of Ethics, Physician Health and Wellness
8. Harvard Business Review, "That Discomfort You're Feeling is Grief"
9. Sports model of psychological resilience to facilitate stress response: "A grounded theory of psychological resilience in Olympic champions"

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