Trainee Wellness and Safety in the Context of COVID-19: The Experience of One Institution

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Abstract

The COVID-19 pandemic has had significant ramifications for provider well-being. During these unprecedented and challenging times, one institution’s Department of Surgery put in place several important initiatives for promoting the well-being of trainees as they were redeployed to provide care to COVID-19 patients. In this article, the authors describe these initiatives, which fall into 3 broad categories: redeploying faculty and trainees, ensuring provider safety, and promoting trainee wellness.

The redeployment initiatives are the following: reframing the team mindset, creating a culture of grace and forgiveness, establishing a multidisciplinary wellness committee, providing clear communication, coordinating between departments and programs, implementing phased restructuring of the department’s services, establishing scheduling flexibility and redundancy, adhering to training regulations, designating a trainee ombudsperson, assessing physical health risks for high-risk individuals, and planning for structured deimplementation.

Initiatives specific to promoting provider safety are appointing a trainee safety advocate, guaranteeing personal protective equipment and relevant information about these materials, providing guidance regarding safe practices at home, and offering alternative housing options when necessary.

Finally, the initiatives put in place to directly promote trainee wellness are establishing an environment of psychological safety, providing mental health resources, maintaining the educational missions, solidifying a sense of community by showing appreciation, being attentive to childcare, and using social media to promote community morale.

The initiatives to carry out the department’s strategy presented in this article, which were well received by both faculty and trainee members of the authors’ community, may be employed in other departments and even outside the context of COVID-19. The authors hope that colleagues at other institutions and departments, independent of specialty, will find the initiatives described here helpful during, and perhaps after, the pandemic as they develop their own institution-specific strategies to promote trainee wellness.

The enormous stress and psychological impact associated with caring for medically complex COVID-19 patients have already been described. Before COVID-19, burnout and depression were already significant concerns among physicians and trainees. Given the association of burnout with increased medical error, these ramifications may affect the quality of patient care. Therefore, in times of crisis such as this, it is imperative that we take care of each other and ourselves to take care of our patients.

In line with findings from Bui et al suggesting that wellness champions have positive effects on well-being, the Department of Surgery at the University of Michigan responded during the COVID-19 pandemic with the development of a Trainee Wellness and Advocacy Committee. This team of faculty and trainees was formed to monitor wellness, promote team building and self-care initiatives, offer support, and mitigate the effects of trainee redeployment on...
well-being. In these efforts, this leader group and our department tried to follow the principles of the fundamental state of leadership laid out by Robert Quinn: to be results centered, internally directed, other focused, and externally open. Importantly, Sharp and Burkart have previously described the importance of leadership, among other things, on physician burnout.\(^7\)

This article describes the practices employed by the Department of Surgery at our institution that may also be adopted elsewhere. We describe our perspective regarding practices surrounding redeployment, provider safety, and wellness. While these solutions were formed by a surgical department, they may be easily applied across medical settings, and many will continue to be relevant even beyond the COVID-19 pandemic (see Table 1 for the main elements of our strategy). Additionally, although some of these efforts are specific to the COVID-19 context, these wellness efforts could be beneficial to trainee wellness exclusive of COVID-19. Notably, our department was in the midst of expanding wellness programs pre–COVID-19, and we strongly believe that these efforts and our culture supported our collective response during this crisis.

**Faculty and Trainee Redeployment**

Redeployment required several important considerations, and while many of these have overlapping elements, each warrants individual attention.

**Reframing the team mindset**

As our general surgery program director eloquently said:

In the days and weeks to come, remember that this is not a medicine problem or a surgery problem. This is not a house officer problem or a faculty problem. This is a human problem.\(^8\)

All surgical trainees and faculty were physicians first and were not defined solely by their subspecialty. In these stressful moments, it was crucial to highlight this team mindset and recognize our role as critical care providers in our larger medical community.

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### Table 1

**Main Elements of the Trainee Redeployment and Wellness Strategy Developed and Used During the 2020 COVID-19 Pandemic in the Department of Surgery, University of Michigan**

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Faculty and trainee redeployment</strong></td>
<td></td>
</tr>
<tr>
<td>Reframing the team mindset</td>
<td>Adopted a “we are physicians first” mentality, independent of subspecialty</td>
</tr>
<tr>
<td>Culture of grace and forgiveness</td>
<td>Provided culture of grace, forgiveness, trust, and empathy</td>
</tr>
<tr>
<td>Multidisciplinary wellness committee</td>
<td>Provided support for trainees and faculty with diverse representation</td>
</tr>
<tr>
<td>Centralized leadership</td>
<td>Centralized COVID-19 resident redeployment decisions to faculty leadership</td>
</tr>
<tr>
<td>Clear communication</td>
<td>Communicated in a transparent, consistent, and centralized manner</td>
</tr>
<tr>
<td>Interdepartmental and program</td>
<td>Coordinated cross-specialty communication with aid of Graduate Medical Education Office to recognize unique skill sets of each trainee population</td>
</tr>
<tr>
<td>coordination</td>
<td></td>
</tr>
<tr>
<td>Phased restructuring</td>
<td>Restructured trainees’ schedules based on both immediate and potential future patient needs</td>
</tr>
<tr>
<td>Adherence to training regulations</td>
<td>Followed ACGME guidelines regarding adequate PPE, training, supervision, adherence to duty hours requirements, and allowance for fellows to function in their core specialty</td>
</tr>
<tr>
<td>Designation of a trainee ombudsperson</td>
<td>Designated a well-respected nonclinician leader to encourage honest, confidential feedback and provide a voice to trainee concerns</td>
</tr>
<tr>
<td>Physical health considerations for high-risk individuals</td>
<td>Allowed trainees to self-classify as high risk without additional explanation; information managed confidentially by trainee ombudsperson</td>
</tr>
<tr>
<td>Deimplementations considerations</td>
<td>Avoided aggressive deimplementation with a gradual, systematic approach</td>
</tr>
</tbody>
</table>

**Provider safety**

| Trainee safety advocate             | Assigned role to one resident who acted as liaison regarding issues surrounding PPE |
| PPE                                | Ensured trainees were updated on proper use, reuse, sterilization, and disposal of PPE |
| Trauma point inactivation          | Provided pamphlets and infographics to optimize safety at home |
| Alternative housing options        | Offered alternative housing to trainees for respite, safe decontamination, and self-isolation |

**Trainee wellness**

| Psychological safety               | Normalized discussions surrounding individual and collective concerns |
| Mental health resources            | Provided easily accessible information on mental health resources |
| Educational mission                | Strived to continue the educational mission of training physicians with virtual didactic and interactive education |
| Fostering community through appreciation | Highlighted a sense of community by encouraging genuine expressions of appreciation and compassion |
| Attentiveness to childcare         | Considered childcare needs during redeployment decisions |
| Use of social media                | Encouraged positive morale with community interaction and by highlighting important work and achievements |

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; PPE, personal protective equipment.
community. Our Department of Surgery houses the sections of general surgery, plastic surgery, oral and maxillofacial surgery, vascular surgery, and thoracic surgery. All trainees, faculty, and advanced practice providers were reallocated based on experience, independent of specialty. Additionally, the department redeployed surgical trainees alongside surgical faculty, taking into consideration each trainee’s skill sets and any high-risk status for exposure to COVID-19 (this self-designation, shared confidentially, is discussed later in the article). We honored voluntary redeployment whenever possible.

**Culture of grace and forgiveness**

The stresses of this pandemic are unfamiliar and uncomfortable to many providers, and so some tension was expected. Therefore, our department advanced a culture of grace and forgiveness. This mindset was promoted by our department's chair, reiterated by all levels of leadership, and embraced by all. Practically, providers were encouraged to trust that colleagues have the best of intentions and to be empathetic.

**Multidisciplinary wellness committee**

The Trainee Wellness and Advocacy Committee was formed with a diverse group of individuals from a variety of specialties and levels of experience. The inclusive nature of the group was intentional. Trainees of all subspecialties were purposefully included to return some amount of control to the house officer community. Diverse representation allowed for the implementation of creative and effective strategies surrounding the complex issues related to COVID-19.10

**Centralized leadership**

Decisions surrounding redeployment were especially difficult due to competing personal, professional, and educational priorities. While our trainee scheduling is typically run by the trainees, COVID-19 restructuring decisions were centralized to faculty. This approach avoided any guilt senior house officers might have experienced if they had had to assign co-trainees to potentially risky situations and also reduced confusion and potential miscommunication.

**Clear communication**

Communication was transparent, consistent, and centralized. Clear communication by leadership drives positive change and, anecdotally, was responsible for quelling several anxieties in our department.11 The department chair provided daily electronic COVID-19 updates, and communication around redeployment was centralized to faculty leaders. In addition, virtual platforms were used weekly for informational town halls. These town halls incorporated insight from institutional experts on specific concerns. For example, our trainees expressed concern about disease transmission; therefore, we invited an infectious disease faculty member to address these questions. Finally, our department disseminated COVID-19–related resources via a centralized electronic folder.

**Interdepartmental and program coordination**

COVID-19 restructuring required effective cross-specialty communication. Our institution’s Graduate Medical Education Office assisted in facilitating these discussions and was helpful in making the COVID-19 hospital redeployment response even less specialty-centric over time. In line with our “we are physicians first” mentality, multidisciplinary strategizing among departments with the help of the Graduate Medical Education Office resulted in the identification of the unique skill sets available in each trainee provider population and allowed for appropriate redeployment by aligning these skills with patient need.

**Phased restructuring**

Our COVID-19 restructuring was phased, based upon immediate and potential patient needs. For example, in our Department of Surgery, we created phased responses proactively. We also compacted our normal clinical services into essential services due to resource scarcity during the surge and the needs of COVID-19 critical care during peak capacity. During each of these phases, house officers and attending surgeons were redeployed based upon their skill sets and in accordance with patient needs, institutional directives, and educational missions. Early planning allowed our group to respond dynamically.

**Scheduling flexibility and redundancy**

Two principles were critical to ensuring a sustainable model of redeployment: flexibility and redundancy. Therefore, we developed a model that minimized personnel in the hospital. Several services across various subspecialties were consolidated, and only emergency surgeries were performed, in accordance with state government mandates.12 As house officers transitioned primarily to a critical care setting, teams of 2 (a senior trainee and a junior trainee) were assigned 12-hour shifts for 6 to 7 days followed by 6 to 7 days of recovery. After recovery, the team returned to the hospital for another week of service. If a trainee became ill, there were reserve providers available. Our institution also ceased all external moonlighting to maintain a healthy workforce and create flexibility.

**Adherence to training regulations**

Despite the practical issues surrounding restructuring, it was important that redeployment practices adhere to the training regulations of the Accreditation Council for Graduate Medical Education (ACGME). The ACGME provided guidance for institutions that entered a stage 3 pandemic emergency status.13 These regulations necessitated adequate resources and training, adequate supervision, adherence to duty hours requirements, and allowance for fellows to function in their core specialty.13 Of note, the American Board of Surgery made several hardship modifications to training requirements in light of the pandemic.14 Moving forward, programs should be aware of any hardship modifications provided by relevant accrediting bodies as a result of COVID-19.

**Designation of a trainee ombudsperson**

Concerns around restructuring were expected. Two practical dilemmas were how to elicit honest, confidential feedback from trainees and how to address these concerns in a timely manner. For these reasons, we designated a well-respected nonclinician leader in our community, outside of the surgical hierarchy, as our departmental trainee ombudsperson. This person was a member of our Trainee Wellness and Advocacy Committee. A primary role of the ombudsperson was to advocate for house officers and provide a voice to trainee concerns in a confidential manner. This role can clearly be helpful beyond the COVID-19 pandemic.
Physical health considerations for high-risk individuals

COVID-19 care has inherent risk. According to the Centers for Disease Control and Prevention (CDC), people have varying risk of developing severe illness if they contract COVID-19. The CDC classified high-risk individuals as those who are aged 65 years or older, have comorbid conditions (e.g., chronic lung disease, moderate or severe asthma, serious heart conditions, obesity, diabetes, chronic kidney disease with need for dialysis, liver disease), or are immunocompromised.15 Similar concerns exist for those who are pregnant, breastfeeding, or have high-risk family members at home. Due to this differential risk, our department allowed for trainees to self-classify as high risk without requiring any additional explanation. While this information was critical to ensuring appropriate protections for house officers, it was clearly sensitive. Therefore, trainee high-risk statuses were managed confidentially in our Department of Surgery by a single individual, the trainee ombuds-person. The trainee ombuds-person also had input regarding scheduling to ensure that high-risk trainees were not placed into frontline care. The ombuds-person also assisted with identifying other clinical opportunities for high-risk trainees, including but not limited to calling patient families, writing clinical notes, and participating in telemedicine initiatives.

Deimplementation considerations

Our department used the same care deimplementing changes in a systematic way that we had used to implement the restructuring efforts. We avoided aggressive deimplementation that did not incorporate the principles discussed above to limit the ramifications that these stressful situations have on well-being.

Provider Safety

Significant media coverage and fear have surrounded the exposure of health care workers to COVID-19 and the risk of death for health care providers.16 These fears are compounded by concerns associated with the availability of appropriate personal protective equipment (PPE).17,18 Provider safety was one of the highest priorities during redeployment, and our department’s safety-specific initiatives are discussed here.

Trainee safety advocate

As part of the work of the Trainee Wellness and Advocacy Committee, a resident was selected as the trainee safety advocate. This advocate acted as the liaison between the surgery department, leadership responsible for institutional policies surrounding PPE, the wellness committee, and trainees. Centralizing communication to this individual standardized the information that was shared with the community as policies were updated.

Personal protective equipment

In accordance with ACGME guidelines, it is the responsibility of the institution and department to ensure that trainees have access to appropriate PPE.15 Institutions have come up with a number of novel methods and policies to ensure appropriate use, availability, and conservation of PPE.17,18 The trainee safety advocate assisted with gathering and disseminating updated information surrounding use and reuse, sterilization, and proper disposal of PPE.

Home safety

At the request of members of our community, we provided information on how to optimize safety at home. This information was provided in easy-to-read pamphlets or infographics on daily life, including advice on grocery shopping and reducing the possibility of COVID-19 contamination of the home.

Alternative housing options

There was understandable fear surrounding the risk of transmitting COVID-19 to family members, compounded if loved ones were classified as high risk.19,20 Alternative housing options were considered. Potential options included but were not limited to hotels, dormitories, and rental properties. Some reasons for use of temporary housing included respite, location for safe decontamination, and self-isolation due to COVID-19 exposure or high-risk individuals at home.

Trainee Wellness

At the University of Michigan, the Department of Surgery instituted several initiatives to promote wellness. Since wellness is multidimensional, promoting physician wellness required a multidimensional approach.21 An important step was the creation of the wellness committee, discussed above, with a diverse group of faculty and trainees.3 Having dedicated wellness champions alone has been previously shown to have a positive impact on burnout.4 A nonexhaustive list of other important initiatives is provided below. Programs can perform a needs assessment to develop an institution- or department-specific approach.8

Psychological safety

Promoting psychological safety through inclusive leadership and minimizing power differences can encourage trainees to report concerns.22 Consequently, our leadership created multiple avenues for trainees to raise concerns and also normalized discussions surrounding individual and collective stresses. Recognizing that one size does not fit all, we also launched the following initiatives to elicit feedback and identify trainee concerns.

Trainee ombuds-person. As stated above, the ombuds-person functioned as an advocate for trainees and navigated concerns confidentiality.

Weekly anonymous survey. Each week, anonymous feedback was elicited via an electronic survey. This feedback went directly to the wellness committee for rapid response.

Intentional peer support and accountability. For each surgical class of trainees, 2 faculty advocates participated in weekly meetings via a virtual platform with the class (in accordance with social distancing guidelines). These virtual weekly engagements were unstructured and included a variety of themes (e.g., hangout, happy hour, game night). These faculty–trainee pairings were also specialty-specific. These events allowed trainees and attendings to bidirectionally express emotions, fears, and stresses in a relaxed social setting.

Trainee Wellness and Advocacy Committee membership. The Trainee Wellness and Advocacy Committee was intentionally set up with a wide membership representation from all specialties and various levels of experience. Therefore, each committee member served as another point of contact who could field concerns from trainees.
Mental health resources

Significant provider stress has been reported during the COVID-19 pandemic.²⁻³²³ Providing easily accessible information to mental health resources for providers during this time was critical.²³ Our department first surveyed the institution and community for local resources. Others have detailed the many available electronic services.²⁴ Additional resources that were considered included but were not limited to psychiatry and psychology care, meditation guides, and gratitude practices.²³⁻²⁵ Our department also used stress management coaches. To widely disseminate this information, leadership added these resources to weekly communications or to an accessible electronic drive. The trainee ombudsperson also had adequate knowledge of these resources.

Educational mission

Even in a pandemic, residents and fellows are still trainees. Therefore, our programs strived to continue their educational mission of training physicians. While our educational work was limited to some extent during this time, we used virtual technologies when possible for didactic and interactive educational activities. At our institution, many sections developed multi-institutional didactic programs and asked alumni to lead and attend didactic sessions. Some programs also opened up monthly events, such as journal clubs, to alumni; these events have improved the depth of educational experience and provided social engagement with former trainees. Maintaining this form of continued education helped reduce the educational gap created by limited traditional learning opportunities.

Fostering community through appreciation

As part of a professional community, we were accountable for each other’s wellness. Therefore, actions that solidified this sense of community were celebrated (e.g., thank you cards from children of community members, gift lunches or gift baskets for staff and trainees). Additionally, in response to the social distancing regulations instituted in the spring of 2020, prioritizing virtual engagement helped to maintain and solidify this community. Frequent reminders that leadership and faculty deeply care for the well-being of trainees had powerful positive effects on morale in our department. We strongly encouraged genuine expressions of appreciation and compassion as another way to promote well-being.

Attentiveness to childcare

As a result of COVID-19, many childcare programs temporarily closed, creating several stressors for adequate childcare coverage for health care workers. At our institution, medical students and other members of the health care community volunteered to provide childcare for those working on the frontlines. We encouraged our staff to explore nontraditional options for childcare in the uncertain times resulting from the pandemic. Childcare needs were carefully considered during redeployment.

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Figure 1 Schematic of the interconnected factors that were considered for promoting trainee wellness during redeployment. Institutions should try to implement strategies in each of the presented realms to take care of the whole person.
Use of social media
Social media offered the potential for our institution and department to encourage positive morale and highlight important work and achievements. It allowed health care workers to connect with and receive support from the local community. These efforts were carried out in collaboration with institutional communication specialists to ensure that all uses adhered to institutional policies.

Concluding Thoughts
The COVID-19 pandemic has had significant ramifications. Determining how to redeploy trainees during these unprecedented and challenging times required several important considerations to promote well-being. Our department took many steps to champion trainee wellness (see Table 1) and adhered to several principles (see Figure 1). Importantly, these initiatives are indiscriminate of specialty and should continue to have value outside of the COVID-19 context. Anecdotally, several faculty and trainees in our community expressed gratitude for the efforts described in this article and requested that we maintain these efforts after the COVID-19 pandemic; therefore, we are continuing many of them. We encourage all institutions to be proactive in developing similar creative policies that promote trainee well-being during the pandemic and beyond.

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