Redeploying Residents and Fellows in Response to COVID-19: Tensions, Guiding Principles, and Lessons From the University of Washington

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As the initial epicenter of the COVID-19 pandemic in the United States, the University of Washington Medicine health system quickly mobilized to respond to the rapidly developing public health crisis.[1–4] For our residency and fellowship programs, this often involved internal restructuring and redeployment of trainees across the clinical environment, from their usual clinical assignments to areas of greatest clinical need.

Several key tensions emerged as the realities of the crisis evolved and our graduate medical education (GME) response was mobilized. Here, we describe principles we used to guide the redeployment of residents and fellows in our system, reflecting on how the responsibilities of GME programs and sponsoring institutions can be coordinated to ensure the safety and well-being of patients and trainees.

Service and Learning

GME program directors (PDs) are constantly balancing institutional service needs against the learning needs of trainees. Under ideal conditions, PDs are expected to carefully weigh the educational value of a clinical rotation before committing trainees to those experiences,[5] yet such vetting was not possible during a rapidly evolving health care crisis. When considering how to balance these tensions between training and clinical need, it is important to recognize the asymmetric power dynamic between trainees and their training programs.[6,7] Residents and fellows have an implicit social contract with the public as they perform service for patients and their institution, as engaging in this work provides foundational training for their future practice. Furthermore, trainees often feel beholden to the expectations of their supervisors and cannot sit for their specialty board certification examinations without the approval of their PD. When coupled with the real risks to health care workers and their families during a global pandemic—particularly those who are pregnant, immunosuppressed, or have chronic medical conditions[8,9]—these asymmetric power dynamics emphasize the importance of supporting trainees for whom redeployment would pose undue risk.

During our response, all requests for redeployment in our system were coordinated through the hospital incident command center, which weighed the clinical need(s) and determined whether a faculty or trainee redeployment would be most appropriate. To support frontline training programs like internal medicine and emergency medicine, we created a pool of residents and fellows across all GME programs that were able to participate in our response to the pandemic with minimal disruption in their training experiences (FIGURE). PDs were instructed to place their trainees in the risk pool based on individual trainees' scope of training, individual requests, and program need. By asking PDs to think globally but act locally, roles could be determined for everyone, some who wanted to volunteer to work with COVID-19 services and some who preferred not to do so. Local decision-making by PDs also gave more agency to individual trainees. Programs were encouraged to develop a variety of options for trainees to assist with the response, both directly through redeployment and indirectly (such as managing the clinical inbox of a redeployed trainee) in order to minimize the chance that any trainees felt compelled to volunteer. Whether residents decided to volunteer or not, they were not asked to provide any justification or reasons for their decisions.

Competency and Supervision

Residency and fellowship PDs are tasked with assessing and monitoring the emerging competence of their trainees and building supervisory structures that support their growth while ensuring patient safety.[10,11] Under usual working conditions, PDs have

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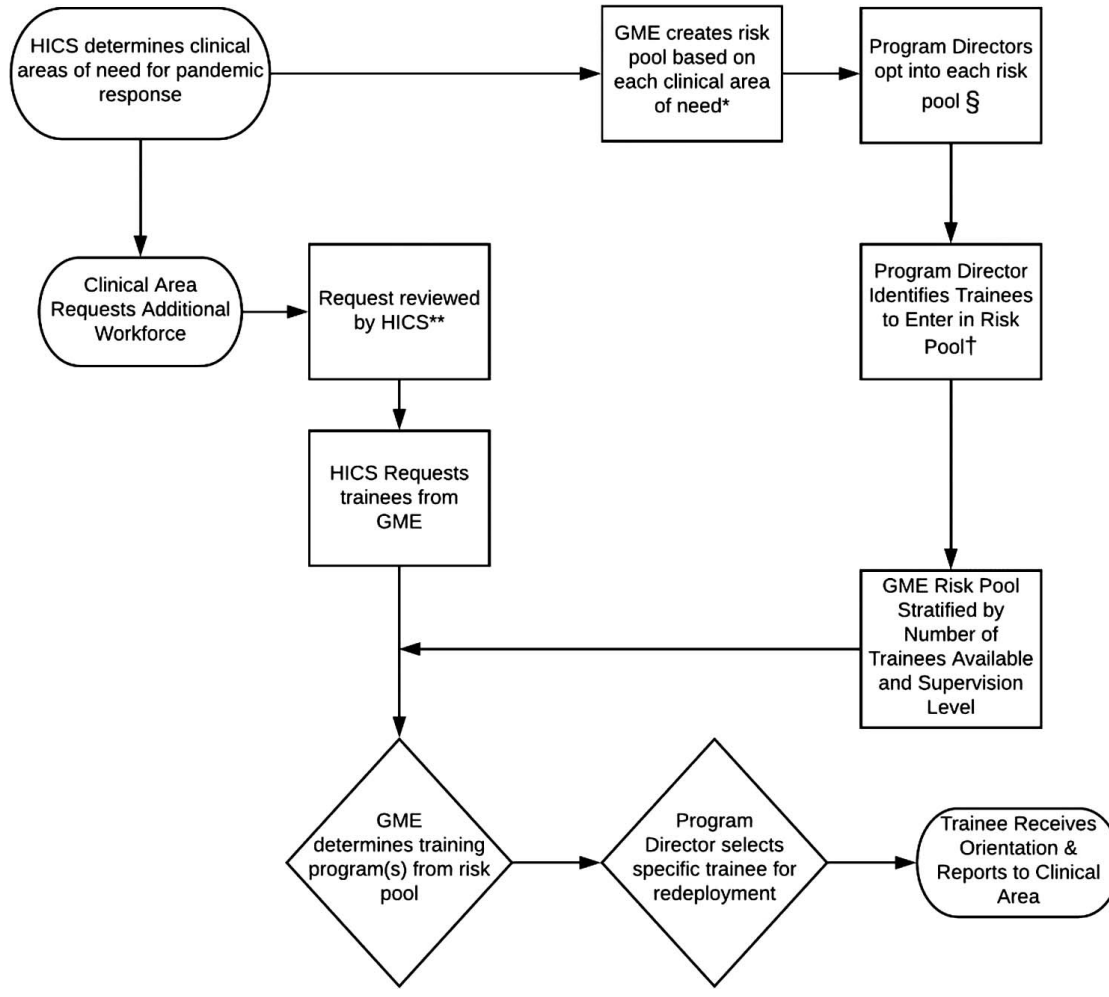
Editor's Note: The online version of this article contains examples for application of the guiding principles.



FIGURE

Deployment Process From GME Risk Pool

Abbreviations: GME, graduate medical education; HICS, hospital incident command system.

* HICS defined critical care, acute care, emergent care, and urgent care as clinical areas of need.

§ For each clinical area of need, the program director determined if their training program could redeploy with existing supervision structures, need additional direct supervision, or not in scope of training.

† Program directors could indicate a trainee was unavailable for the risk pool.

** HICS weighed trainee deployments against other available faculty/advance practice provider resources.

a nuanced catalog of knowledge regarding clinical settings in which they place their trainees and, in this manner, are able to judge whether the degree of supervision is appropriate for a given resident or fellow. Yet redeploying trainees from familiar learning environments (such as the reading room for radiology residents) to less familiar clinical areas (such as acute care medical wards) places them into situations where PDs may have less understanding of the supervisory structure. For supervisors who are receiving trainees from multiple programs, it is inevitable that redeployed residents will have wide variability in competence and the need for greater direct supervision. Redeployments can also create some paradoxical expectations between time in training and level of competence.[12] For example, a first-year gastroenterology fellow who trained in internal medicine in the same hospital may be more ready to redeploy into an ICU setting than a more senior fellow that completed training at another hospital.

When trainees are redeployed to unfamiliar clinical areas, they need to rapidly learn new team structures, work processes, and skills. All trainees in our system were required to complete training with personal protective equipment (PPE) prior to entering the risk pool, and all redeployed trainees were oriented by a supervising faculty member upon arriving to the COVID-19 units. These redeployment experiences for our diverse cohorts of trainees were supported by asynchronous just-in-time training materials, such as

those created by several University of Washington Medicine critical care faculty members, on the basics of managing critically ill patients.[13]

Patient Safety and Trainee Well-Being

Patient safety and the well-being of trainees may be challenged when trainees are redeployed into unfamiliar clinical settings.[14–16] Rapidly evolving protocols, including those detailing appropriate use of PPE—particularly when there are concomitant shortages of these materials—create a level of uncertainty about possible exposures and subsequent risks to family or patients.[17] The decision to fill staffing gaps under pandemic conditions with trainees had to be carefully considered and balanced against the availability of faculty and advanced practice providers who could play similar roles and were more familiar with the workflow in these clinical settings.

Supporting the well-being of trainees throughout the GME community is of paramount importance,[18] particularly during high-stress crises such as the COVID-19 response. We worked to provide as much advance notice as possible for all of our deployed residents and fellows, provided anticipatory guidance for what these experiences were likely to entail, and strictly adhered to work hour requirements to avoid excessive fatigue.[5,19] Redeployed trainees were also regularly reminded about wellness resources that they could access during the response.

Guiding Principles and Early Lessons in Redeployment of Trainees

To date, more than 60 University of Washington residents and fellows have been redeployed and have covered over 200 shifts in the first several weeks of a redeployment response. The initial projections of high patient volumes ultimately were not experienced locally, and thankfully there was no point where the clinical need overcame the capacity of our volunteer risk pool. Should this need arise in the future, however, we feel that these guiding principles will allow us to adapt in an intentional, fair, and equitable manner.

We believe that GME programs in health systems responding to a health care crisis should explicitly address the tensions inherent to involving residents and fellows in their emergency staffing plans. While the specific solutions for each GME program will vary, we believe that a set of guiding principles should be used to inform any plans for trainee redeployment.[20] The guiding principles we developed locally are shared in the BOX, and we have provided examples of their application in the TABLE provided as supplemental material. Ultimately, any redeployment of residents and fellows that balances the needs of the patients while recognizing the unique place of trainees in our health care workforce will serve all.

BOX Guiding Principles for Redeploying Residents and Fellows in Response to COVID-19 Pandemic

1. Trainees may not practice beyond their experience and scope of training and require deliberate just-in-time training to refresh skills germane to their redeployment experiences.
2. Trainees with prior training or familiarity with a clinical area should be prioritized in any redeployment.
3. Program directors are best suited to determine the most appropriate scope of training for each of their trainees and should be actively involved in decisions related to which trainees should be redeployed.
4. Any process to assign trainees outside their usual clinical settings should provide as much agency to individual trainees as possible. Programs should have a supportive deployment process that accounts for those residents or fellows who may have health conditions or living circumstances that place them or their families at higher risk. Program directors should check with their GME office to ensure they are following the institution's human resource policies.
5. Trainees redeployed to work outside their usual clinical settings are at higher risk for error and fatigue. They need deliberate orientation to these new environments, more robust supervisory structures, and support around the anxieties and fears they might experience.
6. Redeployment requests should ideally be coordinated by institutions' incident command centers who can balance these requests with concurrent upstaffing efforts (eg, increasing other independent practitioners in these areas).
7. All ACGME requirements must be followed, including limitations in work hours with adequate rest and recovery following redeployment periods. Programs should also follow applicable university policies, such as those pertaining to disability accommodation, and assist in identifying applicable university resources and policies.
8. Whenever possible, involve trainees to critically evaluate the process and provide feedback.
9. Robust tracking and regular reporting of redeployments of trainees to the clinical care areas can ensure transparency of the process.
10. There is a role, whether direct or indirect, for all faculty, staff, and trainees in a coordinated response.

Abbreviations: GME, graduate medical education; ACGME, Accreditation Council for Graduate Medical Education.

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