The Closing of an Academic Children's Hospital: Ethical Considerations for Graduate Medical Education

Jennifer Kesselheim, MD, EdM Jonathan Marron, MD, MPH Kari Roberts, MD Alan Leichtner, MD, MHPEd

Introduction

In January 2022, Tufts Medicine announced closure of its children's hospital by July, laying the foundation for a new collaboration with Boston Children's Hospital (BCH). After senior hospital leadership made the decision to close, this group of authors was tasked with steering the education and training mission of both hospitals with specific focus on graduate medical education (GME; TABLE 1). Our team of educators did not participate directly in weighing whether Tuft's Children's Hospital would close, but after that decision was made, we considered carefully the ethical obligations to trainees in this setting (TABLE 2); we examined relevant historical precedent and delineated ethical principles to guide decisionmaking (online supplementary data). We now aim to summarize how our management of the announced closure, with regards to GME, mapped to ethical principles and to reflect on the limitations of this approach.

Linking Ethics and Education

As a field of study, ethics examines the moral dimensions of the choices we make and can guide our decision-making through the application of several nonhierarchical fundamental principles^{1,2} (online supplementary data). That these principles must remain a focal point for GME cannot be overstated; our field has not always met its ethical obligations. Historically, power differentials laid a foundation for unethical policy and behavior toward residents, whose intrinsic vulnerability is underscored by their unique status as neither student nor standard employee.³ Commitment to well-being in our clinical learning environments requires organizations to demonstrate vigilant attention to ethical principles and professionalism.⁴

DOI: http://dx.doi.org/10.4300/JGME-D-23-00934.1

Editor's Note: The online supplementary data contains definitions of ethical principles and examples of how they were enacted.

Relevant Historical Precedent

In June 2019, Hahnemann University Hospital announced its imminent closure, leaving nearly 600 residents and fellows without training programs, yielding significant moral injury to residents and fellows, and prompting some leaders to characterize the closure as a moral injury, or "a betrayal of what is right."5 Hahnemann leaders and lawyers restricted certain communications, allowing misinformation about salary funds to flourish.3 Also, due to Hahnemann's attempts to monetize their GME slots and negotiate with those funds,⁵ some hospitals accepting displaced residents risked being incompletely compensated, and some trainees were left without adequate malpractice coverage.⁵ Meanwhile, pressure developed as too many residents and fellows competed to fill too few spots in the region. Processes to facilitate resident and fellow relocation were not predetermined, and creating them de novo led to administrative burden, delay, chaos, and a dominant perception that residents and fellows were left without a voice.6

Ethical Duties to Residents and Fellows

Sponsoring institutions are required by the Accreditation Council for Graduate Medical Education (ACGME) to have policies in place regarding potential hospital closure.7 While the requirements served as a helpful starting place, their language was vague in some cases. Educators at Tufts and BCH deliberately chose to be guided not only by the accreditation requirements but also by ethical principles, such as beneficence, nonmaleficence, justice, transparency, autonomy, and veracity. For example, the risk of harm to individual residents and fellows required an early commitment to nonmaleficence. Required elements of each training program needed to remain available to ensure timely graduation, accreditation, and board certification eligibility. Without inpatient services at Tufts Children's Hospital, many clinical experiences became defunct; 20 new rotations were

 TABLE 1

 Relevant Graduate Medical Education Characteristics of Tufts Medicine and Boston Children's Hospital

Tufts Medicine	Boston Children's Hospital
 45 ACGME-accredited programs 48 nonaccredited programs Pediatric residency program with 36 residents 9 other pediatric-focused programs 13 programs with at least one required inpatient pediatric rotation 	 45 ACGME-accredited programs 45 nonaccredited programs Pediatric residency program with 145 residents and 16 med-peds residents Serves as a participating site for approximately 950 rotators engaged in pediatric training experiences required for completion of their graduate medical education programs

Abbreviation: ACGME, Accreditation Council for Graduate Medical Education.

created rapidly across BCH, so that no resident was harmed by omission of required elements. Development of these new educational experiences required commitment of professional effort, with minimal notice and a short timeline, from medical educators as well as administrative team members. Additional risks of harm emerged from potential instability in trainee compensation and benefits. A commitment was therefore made, with financial support from the Tufts operating budget, that no resident or fellow would experience a decreased salary, and similar

explicit efforts prevented gaps in benefits like health insurance. Avoiding resident and fellow harm from misaligned compensation and benefits depended on an organizational structure allowing access, close collaboration, and continual advocacy between the designated institutional officials and the senior leadership at both institutions. A financial pledge of this kind is challenging to secure at a time of great institutional change but was a deliberate and explicit priority.

Beneficence considerations prompted reflection on how the culture, or program "feel" would be affected.

 TABLE 2

 Ethical Principles and Their Relevance to Graduate Medical Education

Ethical Principle	Definition	Application to Graduate Medical Education
Nonmaleficence	"Do no harm" Minimization of risks/harms	 Avoidance of unnecessary harms to trainees (eg, loss of salary/benefits, loss of learning/research opportunities) Assurance that any harms are distributed equitably among trainees (and off-loaded to nontrainees or avoided entirely, when possible)
Beneficence	Maximization of benefits and positive outcomes	Maximizing benefits to trainees (eg, learning opportunities, access to mentorship, work/life balance, etc) Opportunities for growth, development, and self-discovery
Autonomy	Right to self-determination Respect for an individual's choices	Opportunities for individual choice, when possible (in location of training, subspeciality exploration, scholarly opportunities, etc) Recognition that trainees are adult learners who need to (and should be supported in their ability to) make adult choices
Justice	Equal opportunity Equitable distribution of risks, benefits, harms, opportunities, etc	Equitable pay structures, within and across institutions Equitable learning opportunities Assurance that the benefits of graduate medical education and the potentially risks/harms of it are similarly distributed among (and experienced by) all trainees
Transparency/veracity	Provision of clear, comprehensive, and truthful information	Clarity with trainees about policies, procedures, support structures, etc Clear and comprehensive delivery of information relevant to trainees, particularly regarding relevant changes (including acknowledgement of any areas of uncertainty)

New blending between programs, each a unique microculture, required kindness, inclusivity, and deliberate aligning of expectations. A focus on autonomy required optimizing residents' and fellows' choices for their future training location. Resident transfers, traditionally complex and often cost-prohibitive in GME, were enabled because any resident's remaining salary and benefits through graduation would be paid by Tufts Medicine. Although few residents or fellows relocated (12 across 7 programs), the opportunity to prioritize their autonomy was an ethical obligation.

Justice was emphasized, as above, by ensuring equity in salary for Tufts and BCH trainees at equivalent stages of training as well as equity in opportunity for Tufts trainees looking to transfer. As a result, both the risks associated with this complex process and its potential positive outcomes would be justly distributed among affected trainees, without any individual taking on greater potential harm or benefit than another. This satisfied multiple conceptualizations of justice, including both *distributive justice* (equal distribution of benefits and burdens) and *equality* (similar individuals being treated similarly), with dissimilar individuals being treated dissimilarly).

Finally, based in part on lessons learned from the Hahnemann experience, there was an explicit focus on transparency and veracity (truth-telling). Messaging from the institutions clarified that residents and fellows should feel secure in their salaries and funding for professional liability insurance. Timely and accurate communication and access to honest information was a priority.

Limitations to Applying Ethical Principles

Even as ethical principles guided us, we met challenges. Some programs or rotations at BCH, while sufficient for graduation or board certification, may not have yielded identical experience or exposure to the original, leading to potential harm. Also, some programs closed despite creation of these new experiences. In some cases, modest disparities in benefits and salary persisted, and these had consequences for justice.

Conclusion

As more GME endeavors become disrupted by the financial realities driving consolidation of care, ⁸ GME leaders must remain vigilant to the ethical duties at stake when programs or hospitals close. Future work could delineate ethical obligations to other stakeholders, beyond residents and fellows, such as trainees in other health professions, medical students, teaching faculty, patients, and communities. Additional analyses could explore obstacles for implementation, including

resources needed to meet the challenges of hospital closure. Additional research is needed to study satisfaction, competencies, and career development consequences for residents and fellows whose training was affected by a hospital closure.

As currently written, the language of the ACGME Institutional Requirements is vague and leaves the potential for ethically dubious practices to persist. Additional attention to these requirements could provide tighter protections for residents and fellows experiencing a hospital closure. Specific expectations on the part of sponsoring institutions should be delineated to ensure that regulatory requirements align with ethical reasoning. To build consensus around those requirements, the ACGME could engage stakeholders in dialogue intended to define best practices and develop strategies on how to fund them. Additionally, the ACGME could require sponsoring institutions to keep reserve funds to ensure resident and fellow salaries, in the event of a hospital closure or another calamity, for the full duration of their training programs. Sponsoring institutions also could be expected to engage in more detailed disaster planning.

The ethical duties relevant to the GME community are numerous. It is paramount that hospital and corporate initiatives do not prevent GME educators from protecting the interests of trainees caught in the crosshairs of program closure.

References

- 1. Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 7th ed. Oxford University Press; 2013.
- 2. Shea M. Principlism's balancing act: why the principles of biomedical ethics need a theory of the good. *J Med Philos*. 2020;45(4-5):441-470. doi:10.1093/jmp/ihaa014
- 3. Weiner S. Thousands of medical residents are unionizing. here's what that means for doctors, hospitals, and the patients they serve. *AAMC News*. Published June 7, 2022. Accessed December 1, 2023. https://www.aamc.org/news/thousands-medical-residents-are-unionizing-here-s-what-means-doctors-hospitals-and-patients-they
- Accreditation Council for Graduate Medical Education. CLER Pathways to Excellence Version 2.0: Expectations For an Optimal Clinical Learning Environment to Achieve Safe And High-Quality Patient Care. Accessed December 1, 2023. https://www.acgme.org/globalassets/ pdfs/cler/1079acgme-cler2019pte-brochdigital.pdf
- Roberts LW. The closure of Hahnemann University
 Hospital and the experience of moral injury in academic
 medicine. *Acad Med*. 2020;95(4):485-487. doi:10.1097/
 ACM.00000000000003151

- Nasca TJ, Johnson PF, Weiss KB, Brigham TP. Elevating resident voices in health systems change: lessons from the closure of Hahnemann University Hospital. *Acad Med*. 2020;95(4):506-508. doi:10.1097/ACM.000000000 0003146
- Accreditation Council for Graduate Medical Education. ACGME Institutional Requirements. Accessed April 1, 2024. https://www.acgme.org/globalassets/pfassets/ programrequirements/800_institutionalrequirements_ 2022.pdf
- 8. Baumgaertner E. As hospitals close children's units, where does that leave Lachlan? *New York Times*. Published October 11, 2022. Accessed December 1, 2023. https://www.nytimes.com/2022/10/11/health/pediatric-closures-hospitals.html



Jennifer Kesselheim, MD, EdM, is Associate Professor of Pediatrics, Harvard Medical School, Boston Children's Hospital | Dana-Farber Cancer Institute, Boston, Massachusetts, USA; Jonathan Marron, MD, MPH, is Assistant Professor of Pediatrics, Harvard Medical School, Boston Children's Hospital | Dana-Farber Cancer Institute, Boston, Massachusetts, USA; Kari Roberts, MD*, is Associate Professor of Medicine, Tufts University School of Medicine, Tufts Medical Center, Boston, Massachusetts, USA; and Alan Leichtner, MD, MHPEd*, is Professor of Pediatrics, Harvard Medical School, Boston Children's Hospital, Boston, Massachusetts, USA.

*Drs Roberts and Leichtner served as co-senior authors.

Corresponding author: Jennifer Kesselheim, MD, EdM, Harvard Medical School, Boston, Massachusetts, USA, jennifer_kesselheim@dfci.harvard.edu