



From Panic to Promise: Harnessing Medical Student Leadership in COVID-19

The emergence of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has significantly disrupted the training experience of medical students throughout the United States. The rapidly evolving situation early in 2020 resulted in considerable variability in the involvement of medical students in clinical care. The outcome was a diverse patchwork of responses with most medical schools removing students from clinical environments entirely to mitigate the spread of disease, whereas others fast-tracked their involvement into frontline staff. These solutions were initiated at a time of profound uncertainty, when the luxury of determining an ideal level of medical student involvement was unattainable.

Medical student and medical educators' reflections on the early pandemic response reveal a surreal and chaotic environment. For the students, there was a palpable tension between the fear of a new contagion and a moral and ethical sense of responsibility to help in this crisis.¹ Medical educators wrestled with unease at trying to balance medical student safety and education simultaneously.² Despite the desire to engage in the pandemic response, the sheltered role of medical students in the early pandemic left many feeling sidelined and uninvolved in this pivotal medical moment.

The development of coronavirus disease 2019 (COVID-19) vaccines coupled with masking policies in health care settings has ushered in the transition from a state of emergency to a crisis with defined risks. In this context, medical students have largely returned to their prepandemic roles in clinical settings. Despite their reintegration, the role of medical students in relation to COVID-19 is far from clear. And although their education regarding COVID-19 has

been limited in formal settings, their lived experience with COVID-19 has been profound because the disease touched their families, friends, and communities while also upending their medical education. As our relationship with COVID-19 evolves, so too must our understanding of the ways we can optimize medical student education and involvement in clinical care, so they can be prepared to understand and care for patients with COVID-19.

While addressing our hospital's COVID-19 response we noticed medical student leadership emerge spontaneously when given the opportunity. Our hospital had a problem: There were tens of patients admitted to the hospital who had unknown COVID-19 vaccination status. Local limitations in nursing staffing levels necessitated that any intervention aimed at screening admitted patients for COVID-19 immunization be delegated to physicians. In response, we developed the *Vax the Max* COVID-19 vaccine competition, a gamification of COVID-19 vaccine tasks. Medicine ward teams, made up of an attending physician, 1 senior resident, 2 interns, and 1-2 medical students, were awarded points for the completion of COVID-19 vaccine tasks. Points were awarded for administration of COVID-19 vaccines, providing counseling to vaccine hesitant patients, and confirming previous immunization. The competition was paired with an interactive vaccine hesitancy workshop that provided a framework for navigating challenging discussions surrounding COVID-19 immunization. One medical student reflected that engaging in the workshop felt like "being given permission to take a leadership role within their team" in having conversations on COVID-19 vaccine hesitancy. A trophy rotated to the team with the most points at the end of every week. At the end of their rotations, the final team points were tallied. The winning team members were awarded a certificate signed by the hospital and internal medicine residency program leadership.

Vax the Max was created to engage already task-saturated interns and residents on COVID-19 vaccination with a novel gamification strategy. To our surprise, we observed that the highest performing teams in the competition were propelled by highly motivated third-year medical students. These highest performing teams reached an ideal state of patient care regarding COVID-19 vaccination screening

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with 100% of their patients being screened for COVID-19 vaccination status. Additionally, these teams administered a substantial number of COVID-19 vaccinations. One of the most prolific teams administered 18 COVID-19 vaccines over the course of 4 weeks. The third-year medical students driving the success of these teams developed self-directed structures and organization to obtain these results. The leadership role of these medical students resulted in increased rates of COVID-19 immunization at our hospital. The endeavor also tapped into the intrinsic motivations within the medical students to have a meaningful and concrete role in combatting this pandemic.

Nationwide, hospital censuses and health care worker burnout have swelled simultaneously, leading to a quagmire in efforts to create new systems of task completion. Despite the importance of COVID-19 vaccination counseling, the congestion of clinical tasks is a barrier to having these discussions. Seeing an opportunity to make an impact, the medical students emerged to become primary advocates for inpatient vaccination counseling.

COVID-19 has impacted our world so forcefully as to become a great equalizer of our traditional medical hierarchies. We have all become learners in the effort to care for patients with this novel disease. This was clearly exemplified at our hospital with the leadership displayed by our rotating medical students. Our intervention provided more

than an educational opportunity for students to participate in a meaningful way in the COVID-19 response. It also enabled them to harness their passion, energy, and creativity to improve the quality of care provided to our patients. The COVID-19 pandemic is a defining pillar of all clinicians' careers, students, and teachers alike. It is our responsibility to invite these early trainees into the discourse of pandemic care—not only to improve outcomes for our patients but also to empower the next generation of leaders in medicine.

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