Developing Trust With Early Medical School Graduates During the COVID-19 Pandemic

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The coronavirus disease of 2019 (COVID-19) pandemic has strained the healthcare system by rapidly depleting multiple resources including hospital space, medications, ventilators, personal protective equipment (PPE), clinical revenue, and morale. One of the most essential at-risk resources is healthcare providers. Healthcare providers have been overwhelmed as hospital systems have experienced local surges in COVID-19 patients. Compounding this is the fact that providers are more likely to contract COVID-19, which could sideline portions of an already taxed workforce.

Multiple "surge" interventions have been planned or implemented to mitigate a current or anticipated dearth of physicians. Some institutions are reallocating subspecialists and surgeons to general ward and intensive care unit (ICU) roles, often with support from hospitalists and ICU physicians.[1] Others have used telemedicine to reduce personnel exposure and conserve PPE.[2] A novel and perhaps paradigm-shifting solution arose in March 2020 when several medical schools around the world announced they would graduate final year students early to allow them to join the workforce during the COVID-19 surge.[3-7] In the United States, fourth-year medical students at multiple institutions in cities such as New York, Boston, Phoenix, Tucson, Newark, Portland, and Bethesda were offered the opportunity to graduate in April rather than in May or June. The Liaison Committee on Medical Education stated that for students to graduate early, they must have already met all curricular requirements and be deemed ready by an evaluations and promotions committee.[8] What these early graduates do with their "gap time" before residency is neither standardized nor prescribed. The Accreditation Council for Graduate Medical Education has discouraged individuals from joining their newly matched residency programs early.[9] Some early graduates who wish to bolster the workforce have signed temporary training agreements with local healthcare systems to work for a 1- to 2-month period before moving on to their matched residency program. Some institutions have already been working with local and state officials to rapidly grant provisional temporary licenses for this purpose.[10]

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Early medical school graduation in times of international crisis is not without precedent. When faced with physician shortages during World War II, the United States federal government urged medical colleges to graduate trainees in 3 years.[11] The national medical education milieu was different then, with standardized medical school training still crystalizing merely 30 years following the Flexner report. However, there was pressure from the federal government during World War II, whereas decisions around early graduation today are driven by institutional and local officials. While a few accelerated programs persist today, there has not been an urgent, unplanned early release of graduates to meet a public health need on such a large scale in recent history. The seasonal timing of the pandemic surge in the United States may have been a key factor in deciding to graduate students early. With a late winter and early spring peak, final year students are graduating only 2 to 3 months early. But what if another peak occurs in late summer or early fall, and some students are graduated even earlier? With which aspects of patient care would hospitalists trust these graduates, and with what level of supervision? Whether now or with a future COVID-19 peak, we describe how trust develops with learners and provide hospitalists with a framework for deliberate entrustment if and when they are asked to integrate early medical school graduates into their workforce.

PROGRESSION OF TRUST WITH LEARNERS

The degree of supervision that is provided to a learner is linked to how much a supervisor trusts the learner, as well as the specific context. Trust has many forms, often depending on what type of information informs it. *Presumptive trust* is trust based on credentials, without any actual interaction with the learner.[12] Healthcare systems typically assume that medical school graduates are ready to perform intern-level tasks based on their medical degree. This presumptive trust may be bolstered by the assumption that a residency program director has vetted a learner's credentials during the match process. On meeting a learner, we develop *initial trust*, which is based on first impressions and snap-judgment. Over time, presumptive and initial trust can be replaced by *grounded trust*, or trust based on demonstrated performance after prolonged experience with a learner. Under normal circumstances, supervisors use observations of learner performance in the clinical environment to develop grounded trust. With early graduates, especially those who sign temporary work agreements, the usual progression

of trust may be compressed. Hospitalists may have less presumptive trust because these students graduated early and little time to develop grounded trust before integrating new graduates into patient care. How should hospitalists navigate supervision in this setting?

PRESUMPTIVE TRUST FOR CURRENT EARLY GRADUATES

Missing a few months at the end of medical school likely does not significantly affect competence and, therefore, should not affect presumptive trust. The value of the fourth year of medical school has been questioned because, after fulfilling graduation requirements, students often spend significant amounts of time interviewing, traveling, taking electives with lighter workloads, or exploring nonclinical interests late in the year.[13] More intense "subintern" rotations, which are important for the residency application process, occur earlier in the academic year. It is therefore reasonable to presume that most students graduating in April are not less prepared than those graduating in June.

Additionally, there is significant interlearner variability in rates of competence attainment.[14] This means that there is no magic point in time at which students are fully ready for resident-level responsibilities. Some students are likely competent to be interns without a fourth year at all, while others are still facing challenges in their development at the end of medical school. As Englander and Carraccio wrote, "The notion that every medical student across the nation has somehow achieved all the competencies necessary to start residency training on July 1 of their graduation year is magical thinking."[15] Since there is no universal, time-based finish line for competence, we should not be thrown by a slight change in the arbitrary line currently drawn in June. Whether students graduate in April or June, it remains true that some will be more ready than others.

INITIAL TRUST—HIGH RISK FOR BIAS

With compressed timelines, hospitalists may default to initial trust, relying heavily on first impressions to determine how much supervision an early graduate requires. For example, a graduate who is extroverted, assertive, and articulate may give off an air of confidence, which could entice a supervising hospitalist to give a "longer leash" with higher-risk patient care tasks. It is easy to fall prey to the "confidence equals competence" heuristic, but this has been shown to be unreliable.[16] Initial trust is influenced by both social biases (eg, gender, race, age) and cognitive biases (eg, halo effect) that have little or nothing to do with the actual abilities of learners. While initial trust and accompanying biases often develop unconsciously, it is important to reflect on how unfounded first impressions can influence trust and supervision decisions.

GROUNDED TRUST BUILT THROUGH DIRECT OBSERVATION

Hospitalists must be deliberate with entrustment decisions, especially in a pandemic environment. There are useful guides for making these decisions that can be used in a point-of-care manner.[17] First, it is important to acknowledge that entrustment is based in part on the perceived trustworthiness of a person. Kennedy and colleagues have described four components of trustworthiness, all of which can be assessed by hospitalists in the moment of care delivery: (1) knowledge and skill (Does the trainee possess the requisite knowledge and skill to perform the task?), (2) conscientiousness (Does the trainee follow through on tasks? Are they thorough and dependable?), (3) discernment (Does the trainee recognize personal limitations and seek help when needed?), and (4) truthfulness (Does the trainee tell the truth?).[17]

Entrustment decisions also depend on the specific task being observed (eg, high risk vs low risk) and context (eg, severity of illness of the patient, acuity of the setting).[18] Trust is linked with perceived risk and benefits.[19] More entrustment (less supervision) may be given when perceived risk is low, such as prescribing acetaminophen on a stable patient or taking an initial history. Less entrustment (more supervision) may be given when perceived risk is high, such as with managing septic shock or inserting a central venous catheter. However, the duress of the COVID-19 pandemic may tilt the risk/benefit balance toward less-than-usual supervision if an early graduate is the only provider available for some higher-risk tasks. This underscores the importance of direct observation leading to grounded trust with progressively higher-risk tasks as dictated by the local pandemic environment.

As much as possible, trust should be determined based on direct observation, not fallible first impressions or inference. Supervisors often use inference when assuming that performance on one task reflects performance on others. For example, if learners are observed to be competent when interpreting electrocardiograms, one might infer they also know how to manage tachyarrhythmias. If they can manage tachyarrhythmias, one might infer they also know how to manage acute coronary syndrome. These inferences are not the way to build grounded trust because competence is task and context dependent.

Direct observation can include watching patient interactions, being present for procedures, think-alouds during didactics, cognitive autopsies, reviewing notes, and informal conversations. Being deliberate with direct observation and entrustment decision-making can be challenging because of the high cognitive load of caring for sick and complex patients, maintaining proper PPE practices, and simultaneously assessing an early graduate's performance. However, maintaining a level of supervision that is appropriate for trainee competence is paramount for patient safety. It may be valuable to identify tasks needing to be performed by early graduates and using focused simulation to generate a significant number of observations over a short period of time. Trust should be gained once competence is observed, not inferred or assumed. Instead of "trust, but verify," we should "observe, then trust."

CONCLUSION

There is a moral obligation to patients to avoid placing trainees in situations for which they are ill prepared based on their current abilities. We must balance the risk that exists both in

leaving early graduates on the sidelines (overprotecting them as learners) and in asking them to perform tasks for which they are not prepared (overextending them as a workforce). Focusing on grounded trust derived from direct observation of performance while also balancing the risks and benefits inherent in the local pandemic context can help hospitalists calibrate supervision to a level that helps extend the workforce in a time of crisis while maintaining patient safety.

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