COMMENTARY

Regulation of Overlapping Surgery: Progress and Gaps

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Following a highly publicized *Boston Globe Spotlight* report on concurrent and overlapping surgery, the U.S. Senate Finance Committee released patient safety recommendations, strongly advising hospitals to prohibit concurrent surgery and enact policies to regulate overlapping surgery. In this issue of *The Journal of Law, Medicine& Ethics,* Mitchell and colleagues present an exploration of how U.S. hospitals have adopted and implemented policies relative to the Finance Committee recommendations.[1] Although their sample is small and difficult to generalize given the sampling strategy and low response rate, the results are important. They found broad agreement about prohibition of concurrent surgery and significant variation in the existence of and details related to policies about overlapping surgery.

Surgery is a Scarce Resource

To the uninitiated, overlapping surgery may seem an unjustified and indefensible procedure. Surgery is depicted in the media as all-encompassing and fast paced, given the need to entertain viewers. The reality of surgery is not shown. Surgeons spend a lot down time waiting for cases to start and during turnover between cases. It can take up to two hours to get patients onto the operating table and induce anesthesia, particularly for major surgeries that need invasive monitoring or specialized equipment. Surgical expertise is rarely needed to put a dressing on an incision, to witness a patient emerge from anesthesia or to get the patient out of the operating room, yet these procedures can take an additional 30-45 minutes. While policymakers and patients view surgery as an intense undertaking from start to finish, they seem unaware of the non-critical and non-surgical steps that take place in the operating room. For surgeons who spend hours idly waiting, knowing they have many hours of operating to go, the potential to start a case in one room while the previous case is finishing harbors deep promise for efficiency. By reducing unnecessary down time in the operating room, overlapping surgery can recover productivity. It can also reduce long work hours surgeons are accustom to, making for a healthier and more capable surgical workforce.

Moreover, the demand for surgical care is rising. As our population ages and the burden of complex medical conditions grows, more patients develop surgical illnesses.[2] This demand is compounded by the COVID-19 pandemic as cases were put on hold, creating a back log of operations for patients with non-urgent but life impacting surgical needs. Restructuring perioperative care processes can mitigate the consequences of increasing surgical demand due to pre-existing and evolving surgeon shortages.[3] Overlapping surgery, with clearly regulated boundaries to ensure safety, can enhance access to surgical care. Overlapping surgery

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can increase operative volume during day-time working hours, minimizing the accumulation of delays and downtime that push cases into the night or the following day, and helping patients receive timely care from a well-rested surgical team.

Overlapping surgery also promotes graduated responsibility for trainees, allowing surgical residents and fellows to oversee some aspects of care in the operating room and increase self-confidence. Patients are not left in the hands of an inexperienced clinician; minor portions of an operation can be performed by a trainee with the appropriate level of skill, experience, and supervision to provide safe care. Allowing trainees to mature in a controlled setting benefits future patients by generating a well-trained, competent surgical workforce

Although overlapping surgery is familiar to surgeons and trainees, patients were unaware of this practice and troubled that they had not been told about it. Transparency and disclosure are critical to the formulation of successful therapeutic alliance; if surgeons are viewed as deceitful, patients will not trust them to operate and won't get the care they need. Yet disclosure followed by patient consent cannot denote permissibility. Unsafe treatments or inappropriate interventions are not legitimized through disclosure. Consider a proposal for sleep-deprived surgeons to disclose their lack of sleep to a patient prior to operating.[5] As sleep-deprivation has been compared to alcohol intoxication, disclosure as a policy solution suggests operating when sleep deprived is acceptable without accounting for safety. We certainly would not

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Patient Safety and Transparency

Revelations of undisclosed and self-regulated practices of concurrent and overlapping surgery threatened patient safety largely due to damaging public perceptions of surgical care and generation of mistrust. In response, many institutions without existing prohibition of concurrent surgery, enacted policies banning it due to the obvious threat to patient welfare. Studies of overlapping surgery reveal no impact on surgical outcomes including patient morbidity and mortality and suggest it is likely safe for most patients. However, this research is confounded by variation in the definition of overlapping surgery, which range from "surgeries with >30 min overlapping operating room time" to "two patients under the care of a single surgeon, under anesthesia at the same time for any duration."[4] This variation, also identified in the policies examined by Mitchell et al., makes it difficult to comprehensively assess the risk of overlapping surgery or monitor patient safety. To restore public confidence and ensure surgical safety, additional oversight and recommendations that precisely characterize the limits of overlapping surgery may be needed.

permit a surgeon to operate after disclosing their alcohol intoxication. Concurrent surgery is not safe, and it simply should not be done. We should not rely on surgeon disclosure to a vulnerable preoperative patient to determine acceptability. By contrast, disclosure of overlapping surgery supports patient and public trust, but it must be well-monitored and determined to be safe over time.

Precise and universally applied overlapping surgery policy can foster transparency and safety but cannot manage all competing interests of surgical practice. Every day, surgeons face multiple demands, which are managed through professional judgement and would be difficult to disclose in advance. Surgeons may leave the operating room to use the bathroom, take an emergency call or step out to care for a patient who is struggling in the post-anesthesia care unit; patients are not assured the surgeon's undivided attention just because they are in the operating room. Similar to aspects of overlapping surgery, e.g., leaving a trainee to close the skin, disclosure of the surgeon's other duties may not be salient for the patient. There are limits to regulation and policies about surgical conduct in the operating room. We must trust surgeons and their professional

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judgment to balance the needs of individual patients against the needs of all patients without requiring undivided attention to one individual based solely on their location in the operating room.

Mitchell and colleagues' study is an important advance of our understanding of policies in place presently to regulate concurrent and overlapping surgery. The variation they characterize reveals inadequacies in both policy development and implementation and suggests there is additional work to be done to ensure safety and access to surgical care.

Note

The authors have no conflicts to disclose.

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