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Weighing Entrustment Decisions with Patient Care During Residency Training

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Case Description

The landscape of surgical training is changing. Challenges including work hour mandates, legal restrictions, institutional policies, patient expectations, and advances in surgical care have resulted in an increased pursuit of fellowship training and have raised concerns about trainee readiness to enter independent practice.^{1,2} Residents at any stage of training may find themselves in situations where they demonstrate the ability to work with increasingly more autonomy, yet continue to be relegated to the assistant's role. Perhaps more concerning is a scenario where these same residents nearing the end of training are not comfortable in the resident surgeon's role. *Entrustment* refers to the degree of autonomy a supervising physician confides in the trainee³, and is conspicuously lacking in the scenarios above. As physicians, we accept that patient care is paramount, but we cannot deny a simultaneous obligation to train our future surgeons. Does patient care suffer at the expense of trainee entrustment, and vice versa? Herein, we weigh the importance of ensuring trainee competence for future patient care against providing the best possible care for patients treated in the present.

Point

Academic institutions have an obligation to train residents that are competent to work autonomously. Progressive entrustment is necessary to train competent, fully autonomous surgeons who will ultimately provide better care for future patients.

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In academic medicine, we are facing several recent challenges, including work hours regulations, legal restrictions, operating room (OR) efficiency, new surgical technologies, and high patient expectations.^{4,5} Studies have notably observed a greater number of general surgery residents extending their training via fellowship, yet at the same time incoming fellows are not performing to expectation.^{1,2} Taken together, these challenges have resulted in, or are a result of, decreased autonomy in surgical training. This changing landscape surrounding surgical training highlights the need to develop training models that institute a system of graded responsibility, progressive entrustment, and resident autonomy.

From the supervising surgeon's perspective, *entrustment* refers to the decision to delegate a task with a defined level of supervision. Admittedly, the decision to trust a trainee with a responsibility is complex and weighs many categories. Cate et al have identified the following 5 categories (with provided examples of factors contributing to entrustment decisions):

- i. qualities of the trainee (e.g. competence and recognition of limitations);
- ii. (qualities of the supervisor (e.g. clinical experience and accountability);
- iii. context (e.g. resources and workplace culture);
- iv. task (e.g. complexity and frequency);
- v. trainee-supervisor relationship (e.g. duration and intensity of contact).³

With regard to the trainee-supervisor relationship, establishing shared expectations is critical: Graduated autonomy is a *shared responsibility* between the learner and the supervisor. This concept is not entirely novel, as supervising surgeons make *ad hoc* (in the moment) entrustment decisions on a daily basis, though in many cases lacking a systematic approach.

Clinical educators must consider how to effectively make entrustment decisions.⁶ To *ask whether or not* an attending supervisor can trust the trainee to perform a task is asking the wrong question. Instead, we should consider entrustment in tandem with asking *how much supervision* this particular trainee currently needs. The answer is not binary, but rather lies on a continuum from trainees requiring a high degree of supervision and primarily observing the case to trainees receiving minimal supervision and leading junior learners, with most residents falling somewhere in between (Figure 1).

Entrustable professional activities (EPAs), which are specific tasks or responsibilities that may be advanced to a trainee once they have demonstrated sufficient competency, are integral to a new educational model that simultaneously accounts for entrustment and supervision.⁷ While the Accreditation Committee for Graduate Medical Education (ACGME) has defined core competencies that are foundational to every physician, they are abstract and difficult to assess with specificity. EPAs act as a means of bundling and translating several competencies into observable clinical practice which allows faculty to make competency-based decisions regarding level of supervision for a given task.⁸ As trainees progress at differing rates, it is important to note that entrustment and supervision

are grounded in demonstrated competency by the trainee, which may not align with post-graduate year of training.

Attaining autonomy in the current climate is reliant on deliberate teaching strategies from the supervising faculty, who must consciously test the resident's abilities and understanding to provide the correct level of supervised autonomy. As surgeons, we must consider that we chose this profession because we *love to operate*, and thus to take the assistant's role is truly a deliberate teaching decision. The supervising surgeon must prioritize individualized trainee goals and allocate time to let trainees work independently, perhaps moving more quickly through earlier parts of a case to allow more time to focus on a challenging or "teachable" part. Surgical residents and faculty alike have praised the value of the "safe struggle" in the operating room, whereby trainees are given an opportunity to work at the edge of their comfort level while in a safely supervised context, and patient safety remains a top priority.⁹ This strategy teaches and reinforces recognizing one's limits and asking for help, a lifelong skill. Trainees who embrace this awareness are more readily able to identify gaps in their learning and earn the trust of their supervisors. Simultaneously, supervisors teach with heightened intentionality within a scope of safe, calculated uncertainty.

Effective scales of entrustment with strong validity evidence and reliability have been developed.^{10,11} Such tools promote meaningful teaching moments with simultaneous education and feedback, and *should* be implemented widely. Feedback *should* be constructive and specific, rather than generic (eg, "good job"). As a specialty, otolaryngology has been industrious in the development of competency-based assessments, which may ultimately aid in the objective determination of trainee competence and identification of focused areas for improvement.¹² Implementation of such assessment tools, which must be deemed reliable by supervising surgeons, will be critical for supporting effective training leading to supervised autonomy during surgical residency.

In this context, we must consider the impact that entrustment decisions today (or lack thereof) will have on future patients. Certainly, high-level care is achieved when the most experienced surgeon personally dictates care and performs procedures. Similarly, entrusting an inexperienced resident with a highly complex task places the patient at an unacceptable level of risk of harm. The dynamic in most supervised tasks is subtler, yet the appropriate level of entrustment may still be lacking and results in missed opportunities for trainee growth. In the current time-based system, and with a lack of comprehensive measures of competency, trainees may be released to practice before reaching full autonomy. Without deliberate and systematic application of entrustment decisions, young faculty may be incapable of independently providing appropriately safe and comprehensive patient care. Progressive entrustment is the framework for the trainee's pursuit of full autonomy, and simultaneously fulfills obligations to train future surgeons while providing excellent patient care.

Counterpoint

The best care of *today's* patient is in the hands of the most experienced surgeon. Residency is a place for learning, but entrustment cannot be given to those who are not

“ready”. Fellowships and early independent practice allow surgeons to gain more experience and strive toward full autonomy when treating *future* patients.

While teaching is one priority at academic training centers, patient care should never suffer at the expense of learning. That is, the patient treated *today* is entitled to the best possible care. Indeed, the landscape of surgical training is changing and demands increasing vigilance and oversight by faculty. Trainees face restricted hours, more rotations and less time with any one faculty mentor, leading to less time for faculty to establish a resident’s baseline, abilities, and gaps.⁴ Our field has experienced major advances in all subspecialties, leading to sophisticated technologies and tools to master, and more knowledge to grasp. In addition, the patients we serve are increasingly presenting with greater co-morbidities, higher acuity, and are more engaged about treatment options and shared decision-making. How can we adopt an autonomy approach when there is exponentially more to teach and learn? The focus must be careful, incremental teaching of trainees in the operating room with the balance always tipping in favor of the patient before the trainee. Graded entrustment can still happen this way, but the trajectory may not reach full autonomy for most trainees.

Outside of purely clinical challenges, we see increased regulations requiring numerous points of documentation, as well as heightened medical-legal awareness. Institutional policies require a high degree of oversight, and pressures to use OR time efficiently compete with trainee education. Patients are more involved in their own decision making, and many have set expectations that the highest trained individual will take the greatest role in their care.⁷ When patients ask, ‘who is going to do my operation?’ it is no longer sufficient to provide an incomplete response. Furthermore, if we are espousing patient-centered care, then it is incumbent upon surgeons to proceed with transparency about the role of residents whether or not patients ask. Addressing these points may not be within the purview of our accrediting bodies, and our trainees unfortunately cannot be fully shielded from this reality.

Due to continued specialization, our field has recognized the need for more intense teaching while in residency, thereby necessitating fellowships where confidence and autonomy are honed. Fellowships emulate a senior and junior partnership in practice: They are becoming more critical for reaching autonomy in the current training model and should not be viewed as superfluous or remedial. Consider thyroidectomy as an example, where there is strong evidence that outcomes are related to surgeon volume.¹³ For the purpose of argument, we cannot consider any trainee to be a high volume surgeon. Rather, the volume, autonomy, and associated expertise in practice occurs in fellowship and beyond. Residency is a time to build a foundation for these things, but never at the patient’s expense. Allowing a resident to struggle when there is a high degree of uncertainty leads to an unacceptable level of risk to a patient. Thus, fellowships can be both necessary to gain full autonomy and perhaps *expected* for procedures where fellowship training is available.

An alternative strategy would emulate the Transition to Practice (TTP) program developed by the American College of Surgeons (ACS), which is aimed at new surgeons who have graduated from residency and are entering independent practice.¹⁴ TTP supports general surgeons in their development of autonomy by tapping into the guidance of experienced practicing surgeons. Moving the discussion of autonomy out of residency and into

fellowship or early practice may ultimately provide a more patient-centered model. If full trainee autonomy remains the expectation, we may need to reconsider the benchmarks. For example, resident role (resident assistant, surgeon, or supervisor) for required *key indicator cases*⁸ is highly open to interpretation and a poor surrogate marker for competence.¹⁵

Competency based medical education (CBME) is an excellent concept in theory, but may be less feasible for surgical fields. Indeed, implementation and study of CBME is occurring with a great deal of effort and resources going toward medical specialties.¹⁶ However, the use of competency-based approaches have yet to demonstrate development of better physicians.¹⁷ Scheduling conflicts, case volume, and service needs exist as barriers to implementation in a busy surgical residency program. Thus, a realistic picture of CBME within a surgical subspecialty would include a fixed duration of training with allowance of self-directed electives, emulating an “early fellowship”, for those trainees who exhibit surgical excellence. Determination of “readiness” for this theoretical type of program will continue to be challenging.

While objective measures of procedural competence have been described^{12,18}, measures of surgical competence and autonomy within the field of otolaryngology are still lacking. Further, trainee qualities most important for making entrustment decisions (e.g. competence, reliability, honesty) are challenging to measure objectively.^{3,6} In the current system, supervising surgeons are cautious to rely on measures such as core competencies, milestones, or bundled EPAs (Figure 2), particularly when clinical interactions are spaced or infrequent. Scales and objective measures of entrustment have enormous potential, but will require widespread adoption, frequent and longitudinal use, and intensive faculty development to become effective.^{5,10,11,19,20} With such barriers in place, trainee education will continue at a trajectory that may ungratifyingly reach full autonomy at the fellowship or junior attending level, but fortunately will not compromise patient care in this changing climate.

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Figure 1.
Continuum of Entrustment.

ACGME Core Competencies						
Entrustable Professional Activity	Medical Knowledge	Patient Care	Interpersonal Communication	Professionalism	Practice-Based Learning	Systems-based Practice
Demonstrate competency in performing key indicator cases (eg, thyroidectomy)	X	X			X	
Facilitate patient handoff between teams	X	X	X			X
Lead an interprofessional healthcare team		X	X	X	X	
Manage postoperative head and neck surgical care		X	X	X		X

Figure 2.
Mapping of Entrustable Professional Activities to ACGME Core Competencies.²⁰