

The Millennials are Here and They Expect More From Their Surgical Educators!

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Surgical residency programs are currently populated by residents from the millennial generation¹ who are being trained by academic surgeons from the two previous generations. These mentors are largely “baby boomers” (known for their strong work ethic, competitiveness, self-assurance, and resourcefulness) and “Generation X’ers” (known to be independent thinkers, self-reliant, skeptical, and adaptable). All developed as surgeons and teachers in an environment that embraced exactly their values. Now, they are required to train a generation that has distinctly different values and has been acclimated to previously unimagined educational resources.

Although summative characterizations of any generation imply serious risks of oversimplification, certain characteristics of millennials are often prominently expressed and frequently draw contention. Psychologists find millennials to demonstrate high levels of confidence and optimism.¹ They are generally highly collaborative, seeking team instead of personal success. Paradoxically, these positive values are often confounded by what older generations perceive as individualistic and self-centered behaviors. Millennials effectively combine these traits into a hybrid construct that can be called “collective individualism.”² In their effort to find meaning and purpose in what they do,³ they are often accused of being “dreamers,” not understanding “how the world works.” Although these characteristics may be less strongly manifested in surgical residents, who are thought to be the most competitive and goal oriented of their cohort, there is no question that the phenotype of even the most hard-core surgical trainees has shifted.

Independent of this generational change, modern surgical residency training programs are challenged to ensure clinical competencies.⁴ One can only suspect that the current characteristics of millennial residents and the possible lack of adaptation to these changes by surgical educators complicate the problem even further. Before starting their training, millennials were often “spoon fed” the information they needed to achieve academic success. Transition into a surgical residency required them to start thinking more critically, while they were simultaneously challenged to develop technical

skills and make serious decisions that affect lives. For the first time, their performances were being carefully scrutinized and the traditional metrics of standardized tests were less important. It is understandable that they would experience performance anxiety⁴ and concern regarding future job prospects.

Other industries have been more effective in adjusting to this generational shift, embracing strategies that take advantage of millennial learning habits and values. In specific, the nonmedical corporate world has demonstrated much greater flexibility in training paradigms and the functionalities of human resource services to create successful work environments. This includes more “flex time,” better recreational facilities at work, and structured collaborative social activities. We suggest that better understanding these adaptive responses would be useful for surgical training,⁵ especially when personal and professional divide and burn out are increasingly being acknowledged as real problems with in the surgical field.^{6–8}

On the basis of our experience and discussion with our colleagues, millennials are unabashedly and unapologetically seeking transformational teachers who can efficiently provide them the information they need and do so with limited effort on their part. Traditional concepts such as “patient ownership” or “respect your senior” may not resonate with them as much as previous generations. For them, the old-time advice to just “read more” represents a brush off.

Much more than previous trainees, millennial residents demand that expectations are clear and well defined. They expect educational structures that they can navigate through quickly. They desire frequent constructive criticism and precise feedback that will allow them to perform better in specific areas. Although they value evidence-based medicine and didactic material, they expect their educators to be both self-assured and open-minded. Like residents of the past, they appreciate appropriate levels of independence in patient care but expect and rely upon adequate supervision to avoid misadventures and harm to patients.

The basic principles of ensuring structure, defining specific goals, providing feedback, and teaching practical skills one-on-one have always been elements of professional education. It is just that millennials have taken expectations for such personalized instruction to a new level. To be successful, we more “mature” surgical educators need to embrace the challenge. Although this opinion paper is not intended to be a “how-to” manual, we believe that the following could be a good starting point to rebuild a fruitful and productive relationship between surgical educators and millennial residents:

- 1) Millennials are eager to be successful. Feedback that can most practically facilitate this success is particularly valued.** Surgical educators should embrace individual characteristics that may lead their residents to success and they should understand how this can lead to collective individualism. Negatives should be presented as opportunities for improvement. The feedback should be provided on a regular basis, preferably structured more as a formative “chat between colleagues” rather than a more formal and summative evaluation.

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- (2) **Millennials seek purpose and meaning in whatever they do. Surgical educators should attempt to make them part of their own changing and increasingly demanding reality: clinical workload, regulations, documentation, performance, outcomes, billing, research, and funding.** This can help Millennials refine their expectations from their surgical educators, as they may better understand the challenges they face. In addition, Millennials and surgical educators may be able to better define “autonomy” in this new environment if they have mutual understanding of each party’s needs and expectations. Through this process, the goal should remain the same: patient-centered care. With this will come the new definition of “patient ownership.”
- (3) **Surgical educators are now expected to be resourceful and ingenious. Outdated “slide” presentations and lectures may not be as valued.** Teachers will profit from using a problem-solving approach in preference to structured didactic presentations. Receiving focused practical tips (“clinical pearls”) in and out of the operating room is particularly prized. Questions should not be asked to highlight lack of knowledge (the classic style of “roundsmanship” or “pimping”) but rather to point out what is important to know. The voice tone and language used can be particularly important in this regard. As often said, “you fuse with the words you use.”
- (4) **Millennials are highly creative and imaginative. Combined with their need for collective individualism, they should be given the opportunity to apply their inspired ideas in their working and educational environment.** Blocking these initiatives with the excuse “this is how it has always been done” will result in a missed opportunity to improve this valued relationship. Surgical educators should become more comfortable with change and be able to adapt quickly to these changes.
- (5) **Allowing Millennials to build on their own experiences is perceived as personal validation and success, especially if these opportunities are associated with the development of their leadership skills.** Such opportunities may include structured peer mentorship and teaching that can lead to further mitigation of generational differences and may empower these mentors and mentees to improve their educational experience, their work environment, and most importantly, their relationship with their surgical educators.

It may be easily perceived that our proposed interventions require commitment only from surgical educators. However, full

engagement of the current surgical learners is necessary for this relationship to be rebuilt and remain fruitful. Perhaps one of the most important expectations from millennial surgical residents is to understand how challenging it may be for surgical educators to adapt to these changes, especially when they have the perception that their own practices result in a measured educational effectiveness. In addition, surgical residents should expect, accept, and value variation in educational practices from their educators and understand the impact of this variation on their academic growth and development as they become mature surgeons.

We acknowledge that our perspective may rely on generalizations and that it may not appreciate individual successful practices adopted by residency programs and committed surgical educators. Furthermore, we acknowledge the lack of scientific evidence to support the above strategies in securing educational effectiveness and personal satisfaction and success. We do believe that no matter how curricula are revamped or updated, no matter how new standardized tests are configured, what millennials expect during their surgical residency is to be trained by surgeons who care about them and understand their needs in an environment which is challenging for them. This should not be so hard a task.

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