A Mentorship Model in Residency and Robotic Training, A Revolutionary Approach

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Introduction

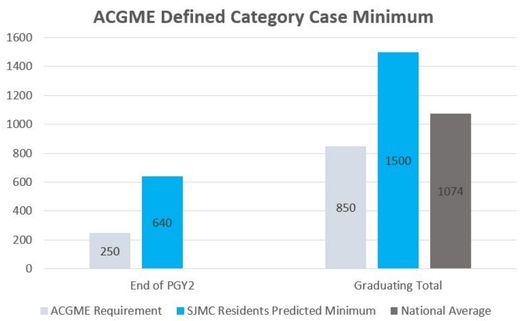
Recent data has shown that surgical residents may complete training with a lack of confidence in their abilities and attendings are similarly not confident in their residents.[1-4] An increasing number of trainees are now pursuing fellowships, often citing a lack of confidence and competency in performing procedures independently.[1] This study presents a novel mentorship model implemented in a community based program, focused on individualized instruction, early operative exposure, and developing overall competency in surgical practice, namely minimally invasive robotic surgery.

Methods

A systematic literature review was completed regarding trainee confidence and competency. The case logs and duty hours of residents at the Virginia Mason Franciscan Health General Surgery Program in Tacoma, Washington were obtained. Publicly available ACGME case log data was also examined.

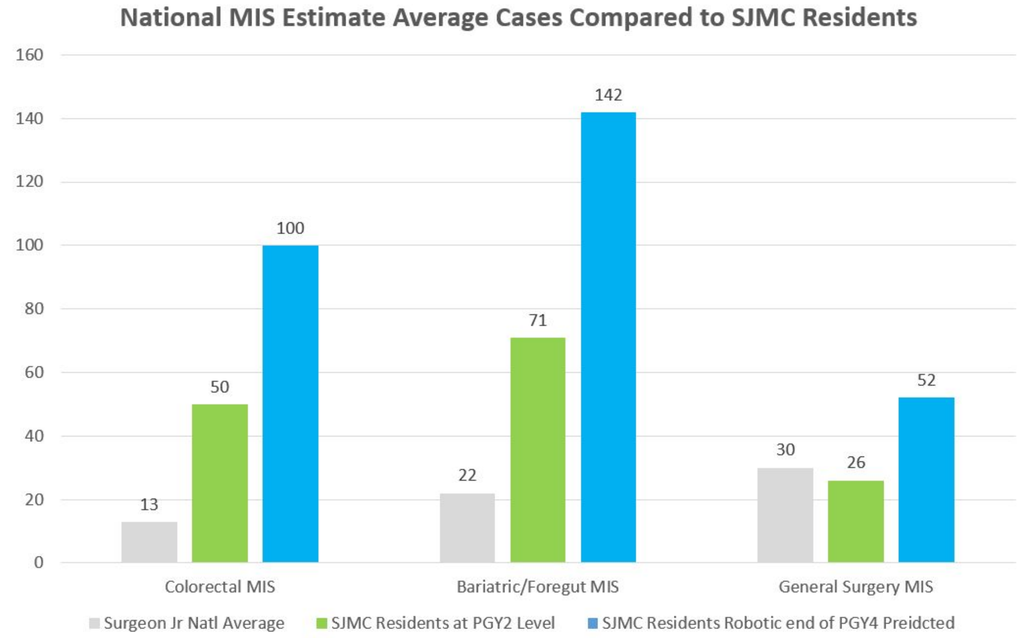
Results

Several recent studies demonstrated that 26-40% of graduating residents and even fellows do not feel confident performing many robotic procedures.[1-4] Anecdotally, trainees at our institution reported increased confidence in their operative skills, abilities, and comfort in performing key components of surgeries with oversight but independent of instruction. Interns completed significant portions of approximately 40 robotic cases. PGY-2 levels averaged 50 colorectal, 65 bariatric, 6 foregut, and 26 general surgery robotic cases as surgeon juniors, while many traditional programs do not allow their residents to sit on the console until their PGY-4 year. Worth mentioning, these PGY-2s are rarely scheduled with another resident and are mentored extensively one-on-one. In addition, the typical PGY-2 here completes their year with 640 cases, compared to the 250 required by ACGME.[5] Our trainees are projected to graduate with >1500 major defined category cases. Residents are able to sustain high operative case loads while averaging 65-70 hours per week, well below the 80 hour/week maximum.



Learning Objectives

- **Surgical trainees nationally report a lack of confidence in independent practice and resort to fellowship training to gain exposure.**
- **A novel mentorship model has been shown to increase trainee confidence by providing more operative exposure and independence in surgical practice.**
- **Trainees are able to operate early and frequently without compromising patient care, well being, and duty hour requirements.**



Discussion

The unique and novel mentorship model presented by our program allows trainees accelerated operative exposure while maintaining schedules below the duty hour requirements. This is achieved with high quality experiences and focus on patient management, operative experiences, and reduction in non-clinical burdens combined with the support of mid-level coverage and mentoring attendings. Trainees mirror their attending mentors in all aspects, including clinic, OR, and call schedules. This approach is associated with increased trainee confidence and wellbeing. Additionally, trainees have increased exposure to minimally invasive techniques including robotic and laparoscopic surgery. Continued research into trainee confidence should be sought to identify avenues for resident growth and success. The model demonstrated by this small community program argues that surgical trainees can operate early, work schedules mirror that of real practice, and provide excellent patient care without compromising their overall education. This model supports the development of a confident and competent surgeon as opposed to the standard surgical resident.

Conclusion

Our program's mentorship model allows significant early operative exposure including a focus on minimally invasive robotic surgery while promoting resident wellness and confidence.

References

1. 120.06 Senior General Surgery Resident Confidence in Performing Abdominal Wall Hernia Repairs. Academic Surgical Congress Abstracts Archive. Accessed March 7, 2023. https://www.asc-abstracts.org/abs2020/120-06-senior-general-surgery-resident-confidence-in-performing-abdominal-wall-hernia-repairs/
2. Köckerling F, Sheen AJ, Berrevoet F, et al. The reality of general surgery training and increased complexity of abdominal wall hernia surgery. *Hernia*. 2019;23(6):1081-1091. doi:10.1007/s10029-019-02062-z
3. Gopakumar S, Kumar B, Ahmed J, Siddiqi N, Mehmood S, Moore PJ. Day case surgery training for surgical trainees: A disappearing act? *International Journal of Surgery*. 2010;8(2):135-139. doi:10.1016/j.ijsu.2009.11.012
4. Mattar SG, Alseidi AA, Jones DB, et al. General Surgery Residency Inadequately Prepares Trainees for Fellowship: Results of a Survey of Fellowship Program Directors. *Annals of Surgery*. 2013;258(3):440. doi:10.1097/SLA.0b013e3182a191ca
5. ACGME - Accreditation Data System (ADS). Accessed March 7, 2023. https://apps.acgme-i.org/ads/Public/Reports/Report/25