



Too Few Cases, Too Little Confidence: A Needs Assessment of Pilonidal Flap Training in Military Surgery

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INTRODUCTION

- Pilonidal disease impacts 0.49% of the military compared to 0.026% of the civilian population.
- In the military, treating complex pilonidal disease is part of the general surgeon's practice especially when stationed overseas.
- Exposure to complex pilonidal disease surgical management of flap closures is limited during residency

HYPOTHESIS

- General surgery residents have limited exposure to flap closures for pilonidal disease both in and out of the operating room impacting confidence in performing the procedures independently.

REFERENCES

1. Pilonidal Sinus Disease: Persistent Quandaries. *Advances in Skin & Wound Care* 29(10):p 438, October 2016. | DOI: 10.1097/01.ASW.0000497031.98410.5b
2. Almajid FM, Alabdrabalnabi AA, Almulhim KA. The risk of recurrence of Pilonidal disease after surgical management. *Saudi Med J*. 2017 Jan;38(1):70-74. doi: 10.15537/smj.2017.1.15892. PMID: 28042633; PMCID: PMC5278068.

METHODS

- **Design:** Anonymous needs assessment survey
- **Subjects:** Residents at multiple military general surgery residency programs
- **Survey Content**
 - Demographics
 - Exposure to flap closures for pilonidal disease
 - Exposure to all types of flaps anywhere on the body
 - Knowledge of complex pilonidal closure
 - Confidence in performing flap closures
 - Barriers to feeling confident in performing flap closures
- **Analysis**
 - Short answer for barriers
 - Likert scale to assess confidence (1: not at all comfortable, 5: Extremely comfortable)
 - Short answer for recommendations on how to increase confidence

RESULTS

- 16 responses with all post-grad years represented

Figure 1: Number of Flaps Completed

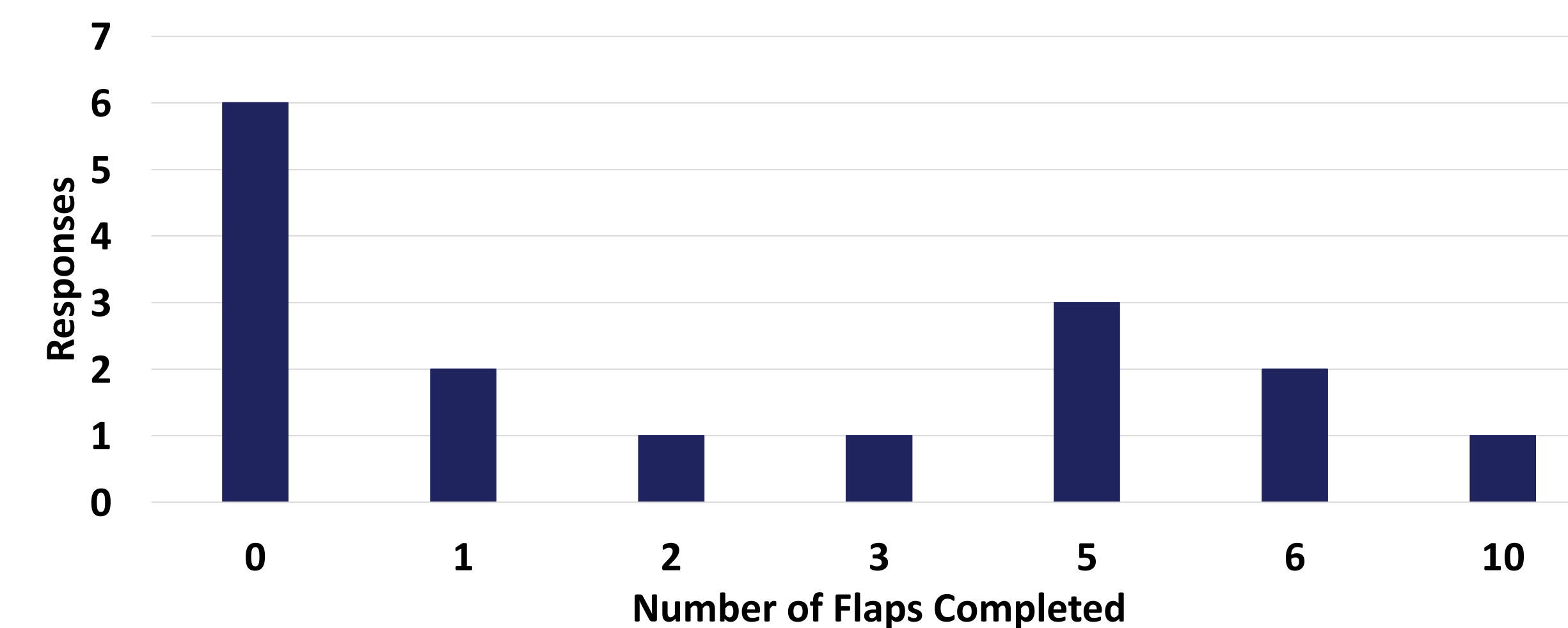


Figure 2: Number of Flaps Completed for Pilonidal Disease

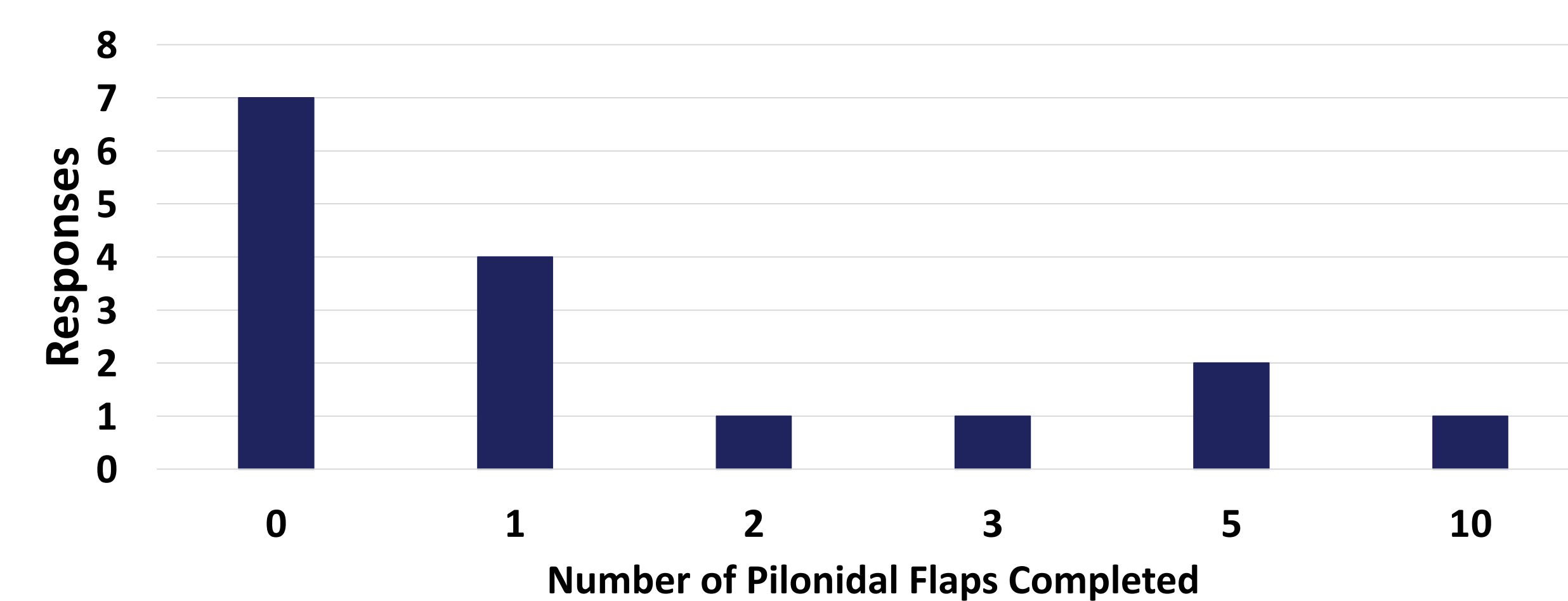
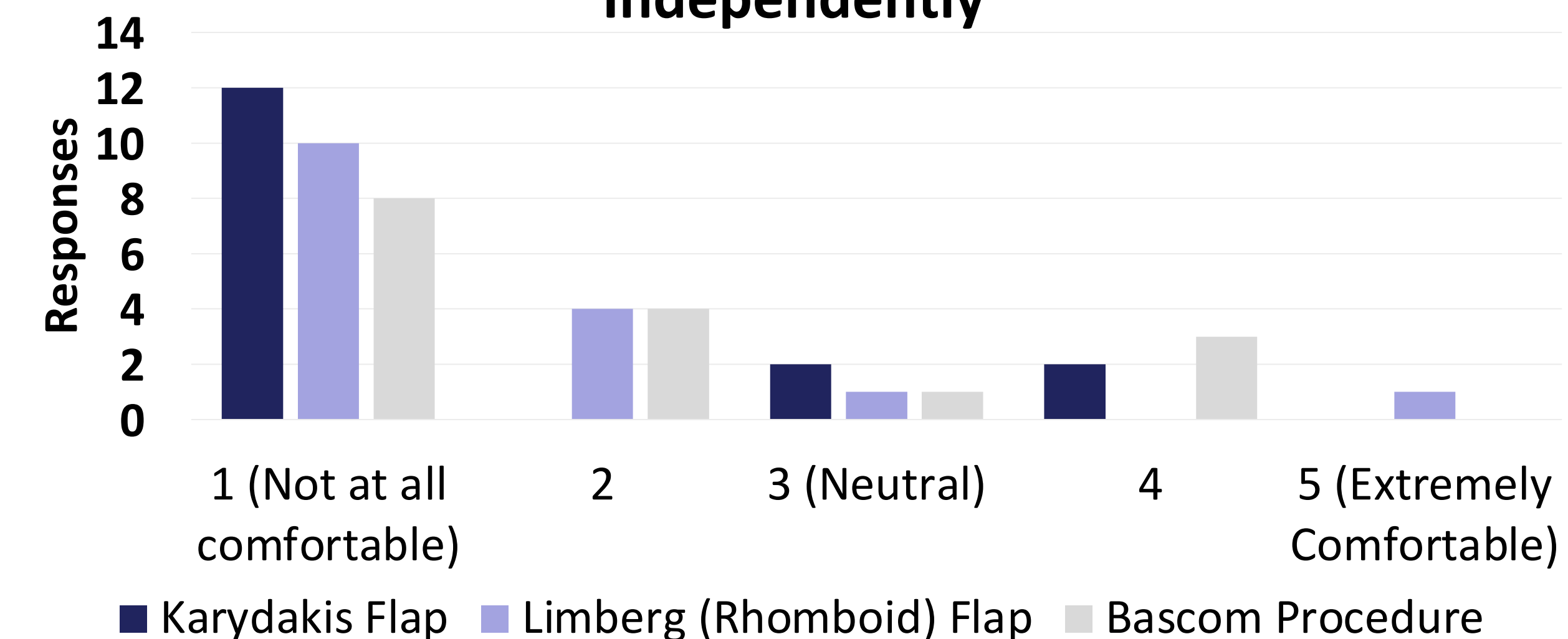


Figure 3: Confidence in Performing Operation Independently



DISCUSSION

- Residents report low confidence in their ability to perform multiple types of flap closures for complex pilonidal disease
- The most common barriers were attributed to low case volume and minimal didactic time spent on the topic
- Respondents believe training involving simulation would increase confidence i

CONCLUSION

- A curriculum is under development that includes a simulation and didactic portion
- The simulation uses a silicone buttocks model allowing residents to practice tissue rearrangement for each flap
- Through deliberate practice, the goal is to increase resident confidence with flap closures for pilonidal disease
- After implementation, the curriculum will be evaluated to determine its impact on resident confidence