

An Open Source Guide to Off Service Rotations May Enhance Intern Learning and Wellbeing

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Background

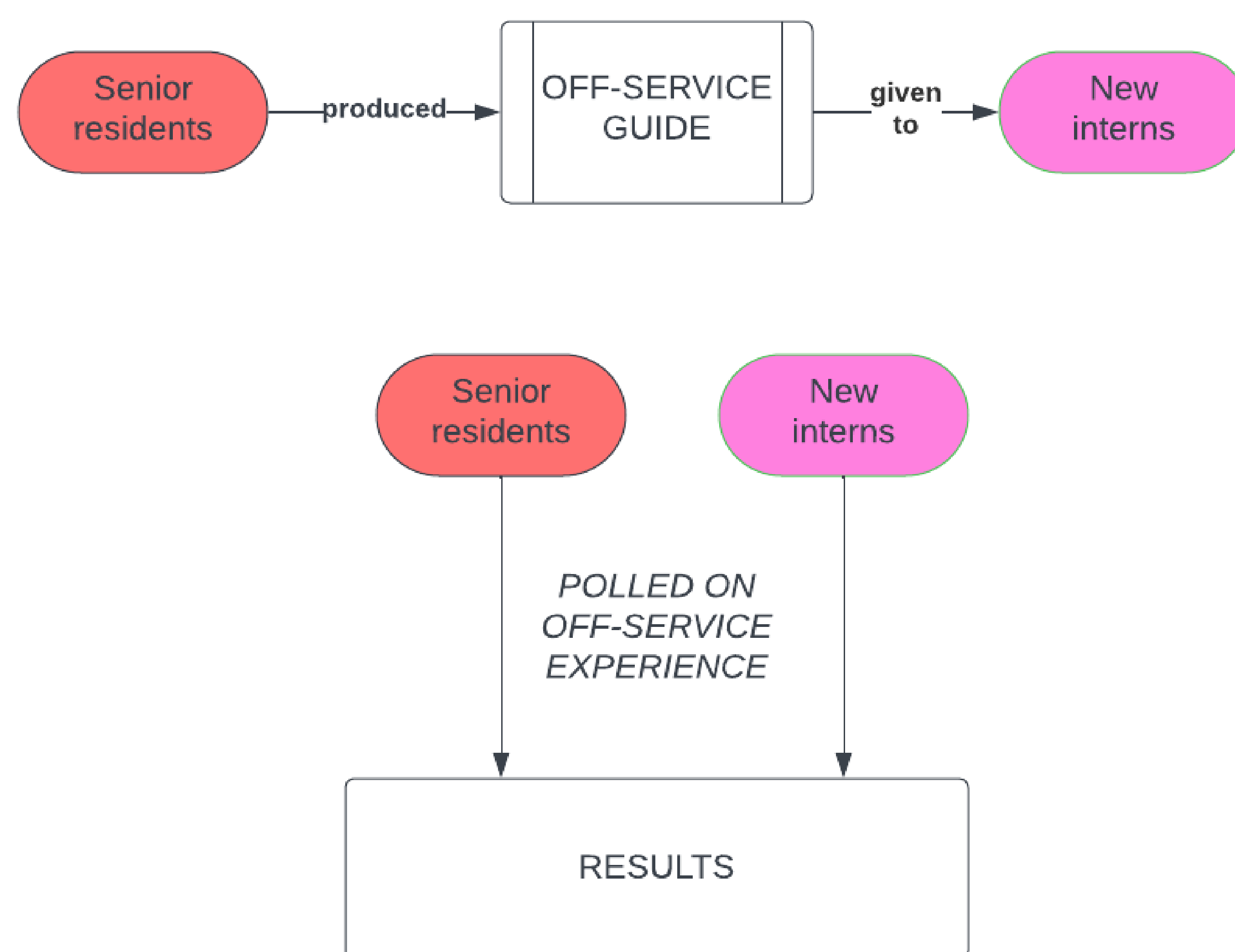
It is often difficult for new doctors to transition from medical school to residency.¹ This transition is often made more difficult by the fact that emergency medicine interns must rotate through many different off-service rotations, such as orthopedics, ultrasound, and ophthalmology. Naturally, each rotation has different schedules, faculty, learning goals, and other unique features. There is no guarantee that any of this information will be readily available to the residents. Centralization of such information could theoretically decrease stress for new residents and perhaps even enhance the educational value of the rotations.

Objective

We set out to evaluate whether a centralized residency guide, written by residents, could enhance the off-service experience of interns.

Methods

An open-source word document was created and shared with all senior residents. Residents were encouraged to voluntarily contribute to the document, in a fashion like that employed by other open-source platforms such as Wikipedia. The new intern class was provided with the completed document at the beginning of the 2023-2024 academic year. Halfway through the academic year the new intern class was polled on the quality of their off-service experiences, as were the previous two classes which did not have access to the document during their intern year. Data was gathered through online self-reporting.



Results

Four interns participated in the poll and nine PGY2 and PGY3 residents participated. Testing for statistical significance was deferred due to low power. A trend towards improvement was identified in five of the seven questions. No trend was discernible in the remaining two questions. Interns reported higher levels of enjoyment, lower levels of anxiety, and greater perceived clinical utility of off-service rotations. There was no trend to suggest an effect on feelings of preparedness or understanding of responsibilities prior to starting the rotations.

Survey Questions & Results

	Interns (guide used) AGREE / NEUTRAL / DISAGREE (n=4)	PGY2, PGY3 (no guide) AGREE / NEUTRAL / DISAGREE (n=9)
I usually knew where to go on the first day of off-service rotations.	50% / 25% / 25%	44% / 22% / 33%
I usually knew what workday hours to expect prior to starting an off-service rotation.	50% / 25% / 25%	55% / 11% / 33%
I usually had a clear idea of the relevant learning goals before starting an off-service rotation.	25% / 50% / 25%	44% / 22% / 33%
I usually understood my role and responsibilities prior to starting an off-service rotation.	0% / 50% / 50%	33% / 11% / 55%
I enjoyed my off-service rotations.	50% / 50% / 0%	33% / 55% / 11%

	Interns (guide used) HIGH / MOD / LOW (n=4)	PGY2, PGY3 (no guide) HIGH / MOD / LOW (n=9)
My comfort level on the first day of an off-service rotation was...	50% / 50% / 0%	0% / 44% / 55%
The clinical utility of off-service rotations was...	25% / 75% / 0%	11% / 66% / 22%

Discussion

This study evaluated the impact of a resident-written guide for interns on the subjective experience of interns during off-service rotations. Our data demonstrated a trend towards improvement. This trend was clearest in regards to resident anxiety levels, comfort level with objective information regarding the rotation (duty hours and locations), and perceived utility of the rotation. The effect of the guide on perceptions of preparedness for more complex features of the rotation (learning goals and roles/responsibilities) was equivocal. It is possible that these complex topics are inherently difficult to communicate in a written guide that is already heavily laden with information. Additionally, these features can vary based on the attending running the service, which could also lead to internal contradictions in the outcome of open-source information consolidation. The greatest limitation of this study was the small sample size, which prevented us from analyzing for statistical significance. Future studies should consider employing larger sample sizes, perhaps through a multi-institutional design, to enable analysis for statistical significance.

Conclusion

This study suggests that a resident-generated open-source guide to off-service rotations improves the experience of interns during the rotations.

References

1. Peterlini M, Tibério IF, Saadeh A, Pereira JC, Martins MA. Anxiety and depression in the first year of medical residency training. Med Educ. 2002 Jan;36(1):66-72. doi: 10.1046/j.1365-2923.2002.01104.x. PMID: 11849526.