

Examining Clinical Productivity: The Influence of Advanced Practice Providers in Plastic Surgery

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INTRODUCTION

- Advanced practice providers (APPs) have faced resistance as they assumed greater autonomy, despite the benefits of using APPs in team-based care models.^{1,2}
- APPs are especially valuable in plastic surgery due to complex perioperative care, frequency of staged procedures, and broad scope of practice.
- Several surgical specialties have reported increased surgical volume and reduced wait times due to APP integration.¹⁻⁵ Despite this, there is limited data on the impact of APPs in plastic surgery at academic institutions.

METHODS

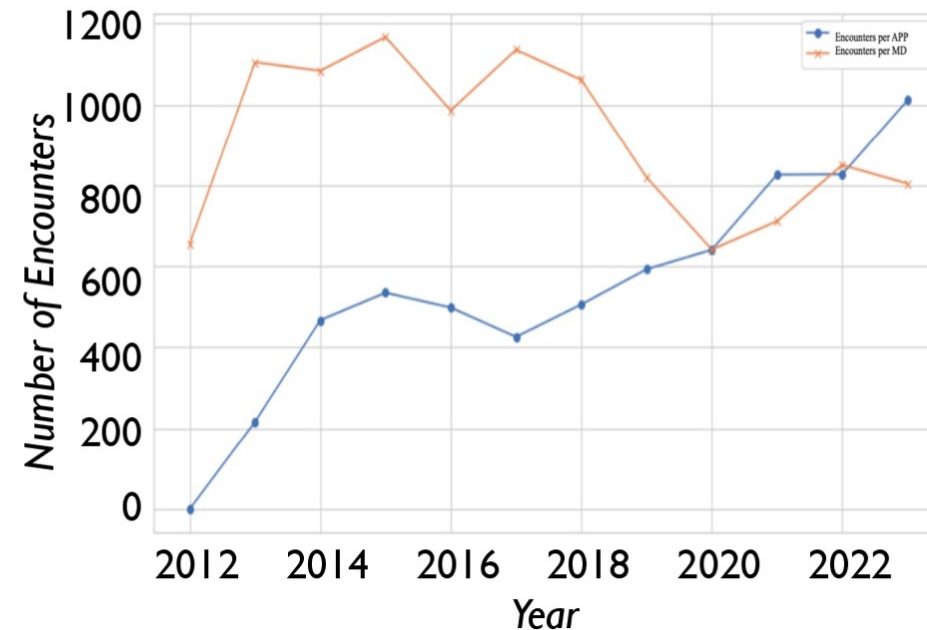
- Retrospective review of APP and surgeon performance metrics for the division of plastic surgery at Texas Children's Hospital - Oct. 2012 to Sep. 2023

Metrics included the number of clinic visits, OR cases, and providers. Clinical full-time equivalents (FTE) was used as a proxy for the # of APPs.

$$\text{Surgical conversion rate} = \frac{\text{MD clinic visits}}{\text{OR cases}}$$

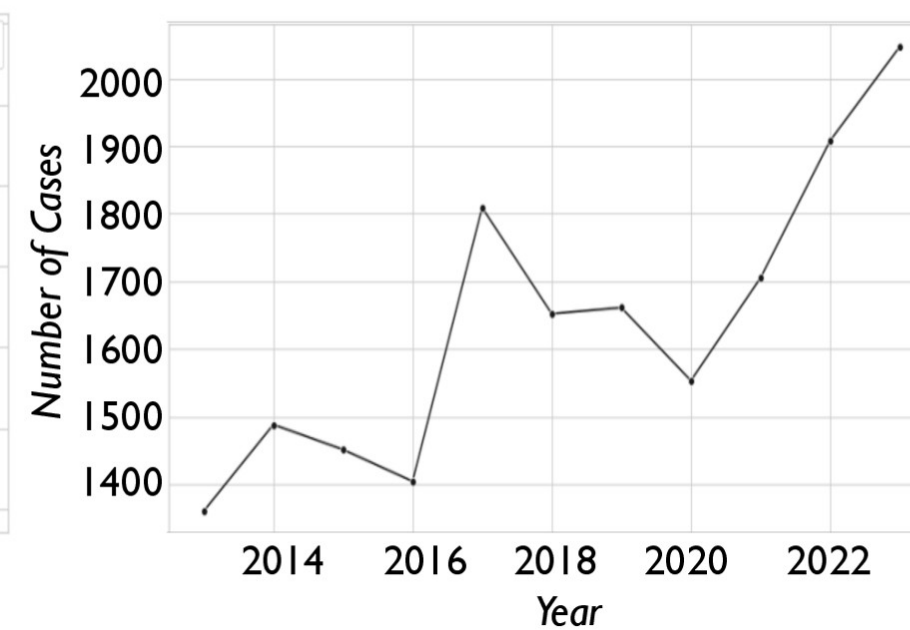
RESULTS

2013: 1 APP per 5 MDs → 2017: 1 APP per 1 MD → 2018 to Present: 1 APP per 1.3 to 1.6 MDs



Clinic encounters per APP and per MD

- 2013: APPs saw 1 patient for every 5 by MDs
- 2020 onward: APPs have **matched** or **surpassed** the number of encounters by MDs per provider.



Surgical case volume by fiscal year

- The COVID-19 pandemic led to clinical delays and surgical backlog.
- FY 2021 to FY 2023: OR cases surpassed pre-COVID volumes despite a stable number of MDs

The surgical conversion rate improved from:

2018: 1 OR case per 5.3 clinic encounters

to

2023: 1 OR case per 3.8 clinic encounters

CONCLUSION

- Optimizing APP utilization has corresponded with increased productivity.
- Growing operative volume and surgical conversion rates suggest APPs may be generating additional procedural time for MDs.
- Limitations:** Insufficient granularity to examine productivity beyond clinical & surgical volume. Our division has used both 1:1 pairing and team-based models. Transition periods could not be adjusted for.

As APPs continue to evolve their roles, institutions are responsible for incorporating patient care models that fully leverage the training and skillset of all providers.

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