



# Does Spine Surgery Clinic Referral Lead to Spine Surgery?

## A Comparison of Spine Specialty Physiatrists in a Multidisciplinary Spine Center versus Other Providers

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### INTRODUCTION

#### Background

- A multidisciplinary spine center should strive to provide timely and efficient patient-centered care in a cost-effective manner.
- Only a minority of back pain patients ultimately need surgical intervention. As such, the rate of surgical candidates within spine surgery clinic referrals can be quite low. [1,2]
- Inappropriate surgical referrals can result in delayed treatment for patients who require surgery while simultaneously delaying optimal nonsurgical care for those who do not. These delays are associated with worse outcomes, including less pain relief and lower likelihood of return to work. [3,4]
- Successful patient triage has the potential to increase the yield of surgical candidates seen in spine surgery clinics while also providing appropriate non-operative care to the majority of patients who either do not want or need surgery.

#### Objective

- To determine if outpatient spine surgery referrals within a multidisciplinary spine center were more likely to be surgical candidates and undergo surgery when referred by physiatrist spine specialists compared to conventional provider referrals.

### METHODS

- Data were collected by retrospective chart review.
- Setting is a multidisciplinary comprehensive spine center within a single academic medical center.
- A total of 394 individuals seen between February 2016 and January 2017 were identified.
- Main outcome measures are rates of surgical candidacy and rates of patients ultimately undergoing spine surgery.

### RESULTS

#### Referrals from Physiatrists

- 187 spine surgical referrals from physiatrists.
- 65% were offered spine surgery and 42% underwent surgery through spine center.

#### Referrals from Other Providers

- 207 spine surgical referrals combined between primary care, spine center nurse practitioners (NP), spine center non-spine physicians, and other University specialty providers.
- NP referrals resulted in 46% offered surgery and 34% underwent surgery.
- Non-spine physician referrals resulted in 48% offered surgery and 33% underwent surgery.
- Other University specialty referrals resulted in 35% offered surgery and 30% underwent surgery.
- Primary care referrals resulted in 26% offered surgery and 21% underwent surgery.

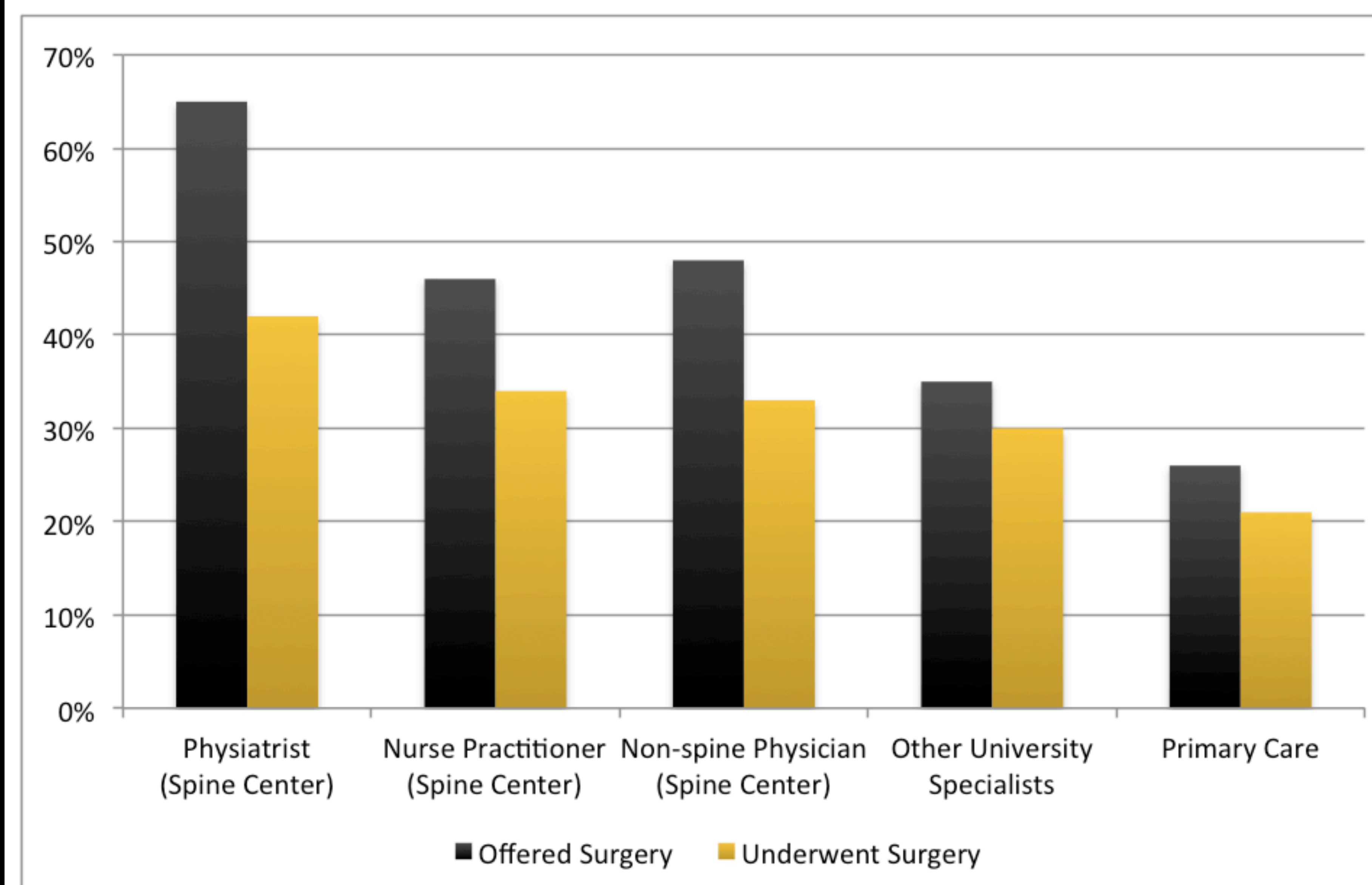


Figure 1 – Rates of surgical candidacy and eventual surgery among spine surgery clinic referrals

### CONCLUSIONS

- Spine surgery referrals from physiatrists within the multidisciplinary spine center resulted a greater proportion of both surgical candidacy and patients who underwent surgery compared to all other referral types.
- The increased surgical candidacy from physiatry referrals demonstrates the benefit in a physiatrist-led multidisciplinary pathway to providing care for patients within a comprehensive spine center.
- This may result in reduced time to treatment for patients and potentially reduced costs due to increased spine surgery clinic efficiency and decreased utilization of healthcare resources.
- These results provide goals for quality improvement including improving the percentage of appropriate spine surgery referrals from primary care and other healthcare providers.

### REFERENCES

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