# 2022 NEHS Annual Meeting Abstract Submission



NEHS Vice President, Daniel Mastella, M.D., is currently accepting abstract submissions for presentation at our Annual Meeting on December 2, 2022.

This meeting will be held at the Sturbridge Host Hotel in Sturbridge, MA.

Therapists, NPs, and PAs are also encouraged to submit.

THE DEADLINE FOR SUBMISSION IS OCTOBER 15, 2022

RESIDENTS AND FELLOWS ONLY. Please indicate if you want your paper to be considered for the prestigious H.Kirk Watson, M.D. Founder's Award. The abstracts for award consideration will be presented in the morning and the award will be presented in the afternoon.

CREATED	IP ADDRESS
PUBLIC Oct 15th 2022, 1:36:45 pm	
* ABSTRACT TITLE	
The Impact of Age and Socioeconomic Status on Trigger Finger Surgical Disparities	
* Contact Person Name	
Christine Kang	
* Contact Person Email	
* Contact Person Phone Number	
* Name of who will present abstract at NEHS meeting on December 2, 2022 Pl person cannot present more than one abstract at the meeting.	ease note that the same
Christine Kang	
* Please indicate if the presenter is:	
Resident	
* List full names of abstract authors	

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# \* ABSTRACT - should include background information and a description of methods, programs, or practices.

### Introduction

Surgical disparities can be influenced by factors external to a patients' inherent genetic or pathological disease. However there have been no studies examining whether socioeconomic status and education impact the course of treatment plans in hand surgery patients. The second most commonly performed hand surgery in the United States is trigger finger release (n = 15,345).(1)

#### Methods

Identified 41,204 patients at the Beth Israel Deaconess Medical Center from 2015-2020 who had ICD codes for hand surgery. Patients were excluded if they were a duplicate, or if they did not have diagnoses for trigger finger; final patient count was 3,141 patients. Microsoft Power BI was used to create automated reports. Evaluated socioeconomic status indicators including the patient's median household income, education level, insurance type and the influence on a decision to undergo conservative management without surgery versus surgery. We performed a Wilcoxon test to measure the association between age and whether patients underwent surgery or not. Pearson test used to understand the relationship between race and whether patients underwent surgery. Kruskal-Wallis test was applied to understand the relationship between race, ethnicity, educational level, insurance type, type of surgery, number of postoperative visits and the time difference between procedure dates or procedure to surgery dates.

#### Regults

Average age of those who underwent surgery were younger (59.7 years old  $\pm$ 11.6, p<0.001) while those who did not pursue surgery were older (62.6 years old  $\pm$ 12.9, p<0.001). White patients were more likely to undergo trigger finger surgery while Black patients were less likely to undergo surgery. Patients who chose surgery had more total office visits (2.52  $\pm$  2.079, p<0.001), postoperative visits (1.505  $\pm$  0.984, p<0.002), and injection procedures (2.34  $\pm$  1.98 p<0.001). Patients with workers compensation or commercial insurance were more likely to undergo surgery. Patients with motor vehicle accident/medicare/medicare replacements/medicaid, health safety net overview/Masshealth limited/self-pay/corrections/free care/no insurance were less likely to choose surgery. Patients with motor vehicle accident/medicare/medicare replacements spent more time with conservative management than patients who had medicaid, health safety net overview/Masshealth limited/self-pay/corrections/free care/no insurance. Patients with motor vehicle accident/medicare/medicare replacements were more likely to have prolonged interventions and undergo surgery first before conservative management. Patients who had college or post graduate education spent more time pursuing conservative injection treatments(451.29  $\pm$  780.35, p<0.03) before surgery while patients with only some college or technical education were quicker to undergo surgery (232.37  $\pm$  612.36, p<0.03).

#### Conclusion

The relationship between insurance coverage and elderly patients suggest a tendency for conservative treatment. Perhaps patients who are younger chose surgery because the benefits outweigh the risks and they may have less comorbidities. Patients of lower socioeconomic status may choose to have or be offered less invasive procedures more than patients of a higher socioeconomic class. Having better insurance coverage or less education may be related to an unconscious bias for quicker solutions like surgery. Further studies are needed to determine if its patient or surgeon or mixed factors that influenced the patient's decision to undergo surgery and timeliness of care.

1. Veltre DR, Yakavonis M, Curry EJ, et al. Regional Variations of Medicare Physician Payments for Hand Surgery Procedures in the United States. Hand (N Y). 2019;14(2):209-216. doi:10.1177/1558944717734370

## Please attach files with diagrams and/or photos to support your abstract (10 MB limit)

\* Please attach the abstract presenter's CV

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