



# Mental and Physical Health Disparities in Patients with Carpal Tunnel Syndrome Living with High Levels of Social Deprivation

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### Introduction

- Carpal tunnel syndrome (CTS) is a common condition with socioeconomic implications
- Mental and social health can impact symptom intensity and magnitude of disability in many medical conditions
- This study aimed to assess the impact of social deprivation on patient reported physical and mental health (as measured by PROMIS) in individuals with CTS

### Methods

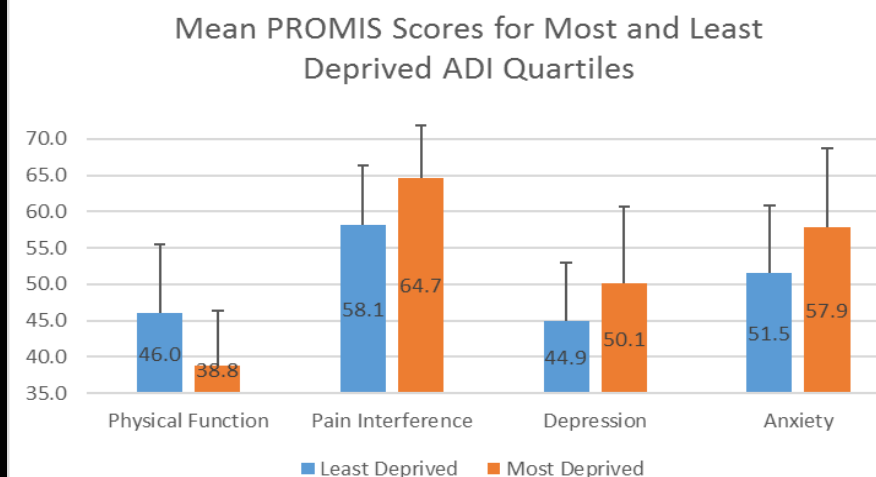
- 367 patients
- Social deprivation measured by the area deprivation index (ADI)
- PROMIS domains assessed: Pain Interference, Physical Function, Depression, and Anxiety
- Tobacco use, opioid use, and medical comorbidities also recorded

### Table 1

Patient Characteristic	Most Deprived Quartile (n=83)	Least Deprived Quartile (n= 87)
Mean ADI *	115.7	76.4
Tobacco use (+)*	26% (21)	8% (7)
Opioid use (+)	20% (16)	14% (12)
Any comorbidity	85% (70)	82% (71)
Mean Charlson Comorbidity Index (CCI)*	1.402	.407
CTS Symptom Duration		
=< 1 month	5% (4)	7% (6)
> 1 month, =< 1 year	54% (45)	52% (45)
> 1 year	41% (34)	41% (35)
Unilateral CTS	48% (40)	51% (44)

\*statistically significant, p<0.05

### Figure 1



### Results

- Significantly worse PROMIS scores in most deprived quartile, across all domains (p<0.05)
- Higher level of tobacco use and higher comorbidity burden in most deprived quartile
- No difference in duration of symptoms or opioid use between most and least deprived quartiles

### Conclusions

- Social deprivation impacts how patients with CTS perceive their health and well-being, as measured by PROMIS
- CTS has a greater negative impact on the lives of the most deprived patients
- Social deprivation is also associated with worse objective health in patients with CTS
- Social environment should be considered when evaluating patients with CTS