

INTRODUCTION

Chronic pain often interferes with an individual's work or other daily activities. From a clinical perspective, assessment of pain related **work loss, social, and personal activities** and clarification of socio-demographic, medical co-morbidities, and behaviors are essential in the development of comprehensive pain management strategies.

Between October 2009 and December 2010 **2,732 patients** with chronic pain were consented to be enrolled in a large study to explore factors relating to **continuing outcomes and factors related to chronic pain**. A sample of subjects from this study were chosen to explore the **relationship between patient demographics, behaviors, symptoms, and loss of time at work and loss of social time**.

RESULTS

• **Race, and symptoms such as leg weakness, depression, migraine, herniated disk, and reported higher than average pain experience** may relate to **cutting time at work**.

• **Sex, insurance source, and symptoms such as leg weakness, depression, irritable bowel syndrome, herniated disk, and reported higher than average pain experience** may relate to **cutting social time due to pain**.

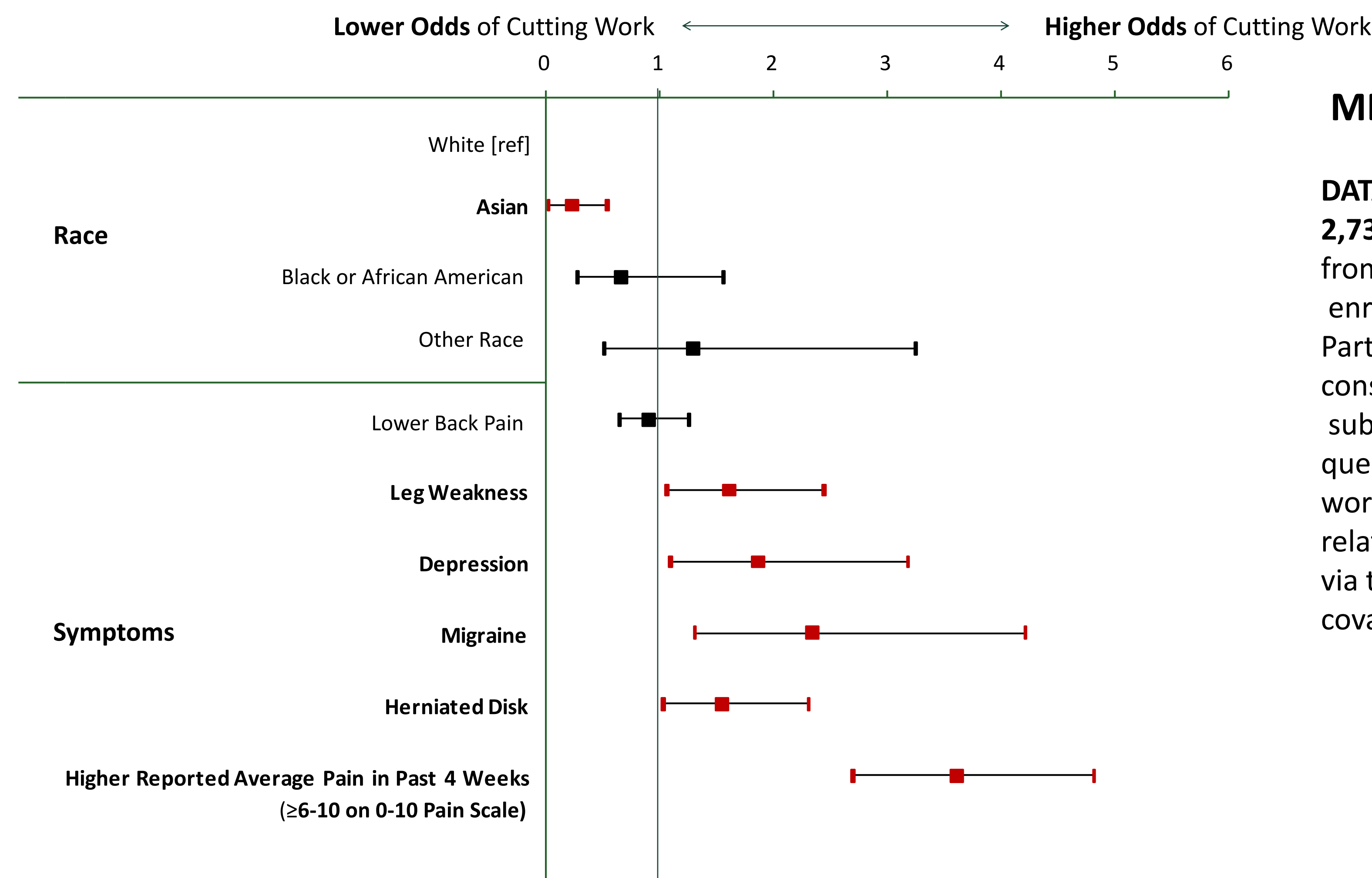
CONCLUSION

Reported pain levels were strongly associated with outcome variables. Several demographic, exposure, and psychosocial variables may lead to cutting work and loss of social time. This is true even after controlling for pain indicators. More data are needed to explore these phenomena.

Study Facts		
	Cut Time at Work	Cut Social Time
Sample Size	1126 employed	2732
Study Design	Cross-Sectional	Cross-Sectional
Study Period	Oct 2009 – Dec 2010	Oct 2009 – Dec 2010
Outcome	Cut Time from Work in past 4 weeks due to pain (Yes/No)	Pain gets in the way of social activities or hobbies (Yes, No)
Related Covariates	Race, leg weakness, depression, migraine, herniated disk, higher than avg. pain experience	Sex, insurance source, leg weakness, depression, irritable bowel syndrome, herniated disk, higher than avg. pain experience
Statistical Methods	Multivariate Logistic Regression	Multivariate Logistic Regression

How does work loss relate to demographics, behaviors and chronic pain symptoms?

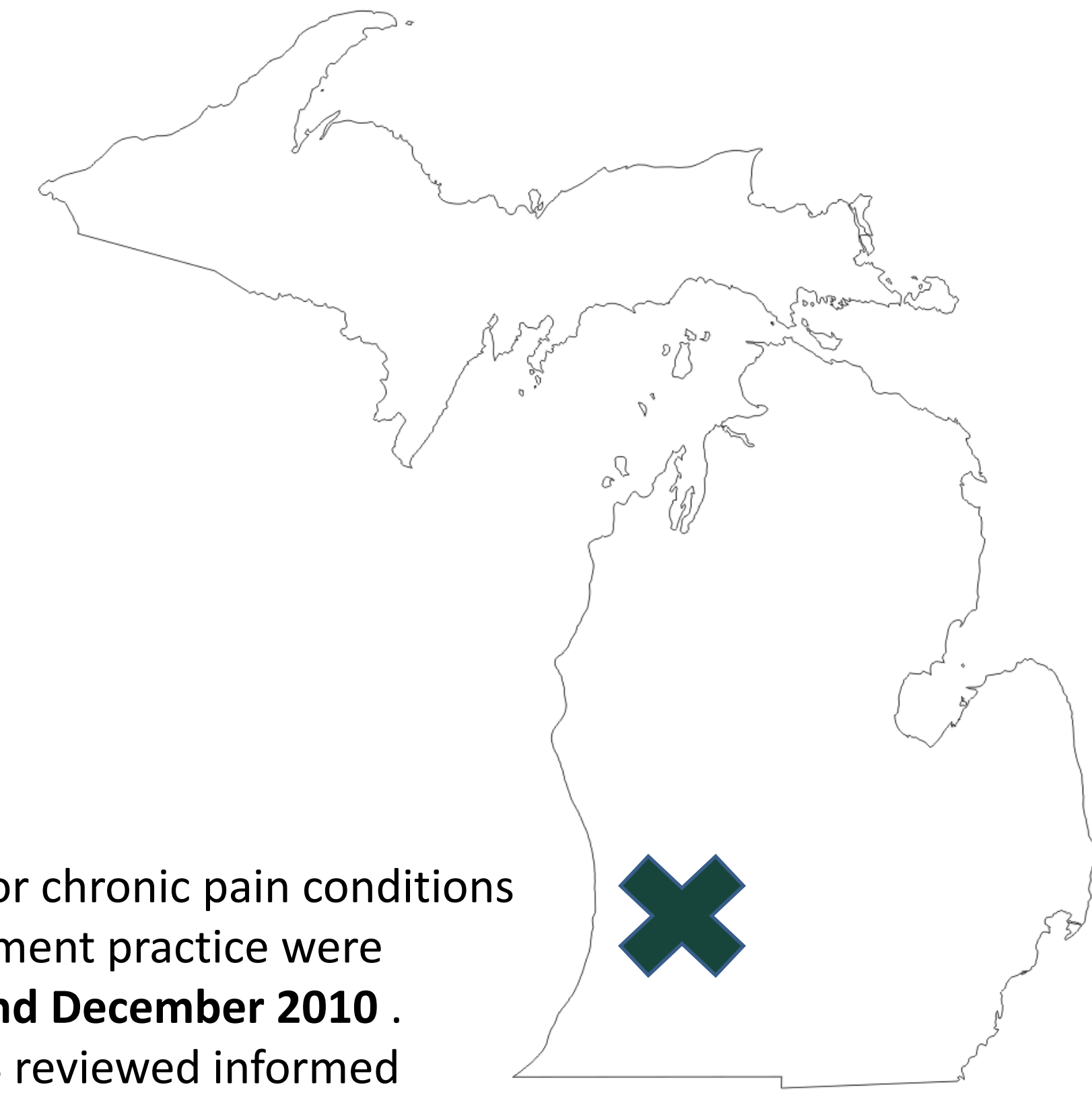
Figure 1: Odds of covariate being associated with cutting work compared with those not cutting work (Odds Ratios and Confidence Intervals)



METHODS

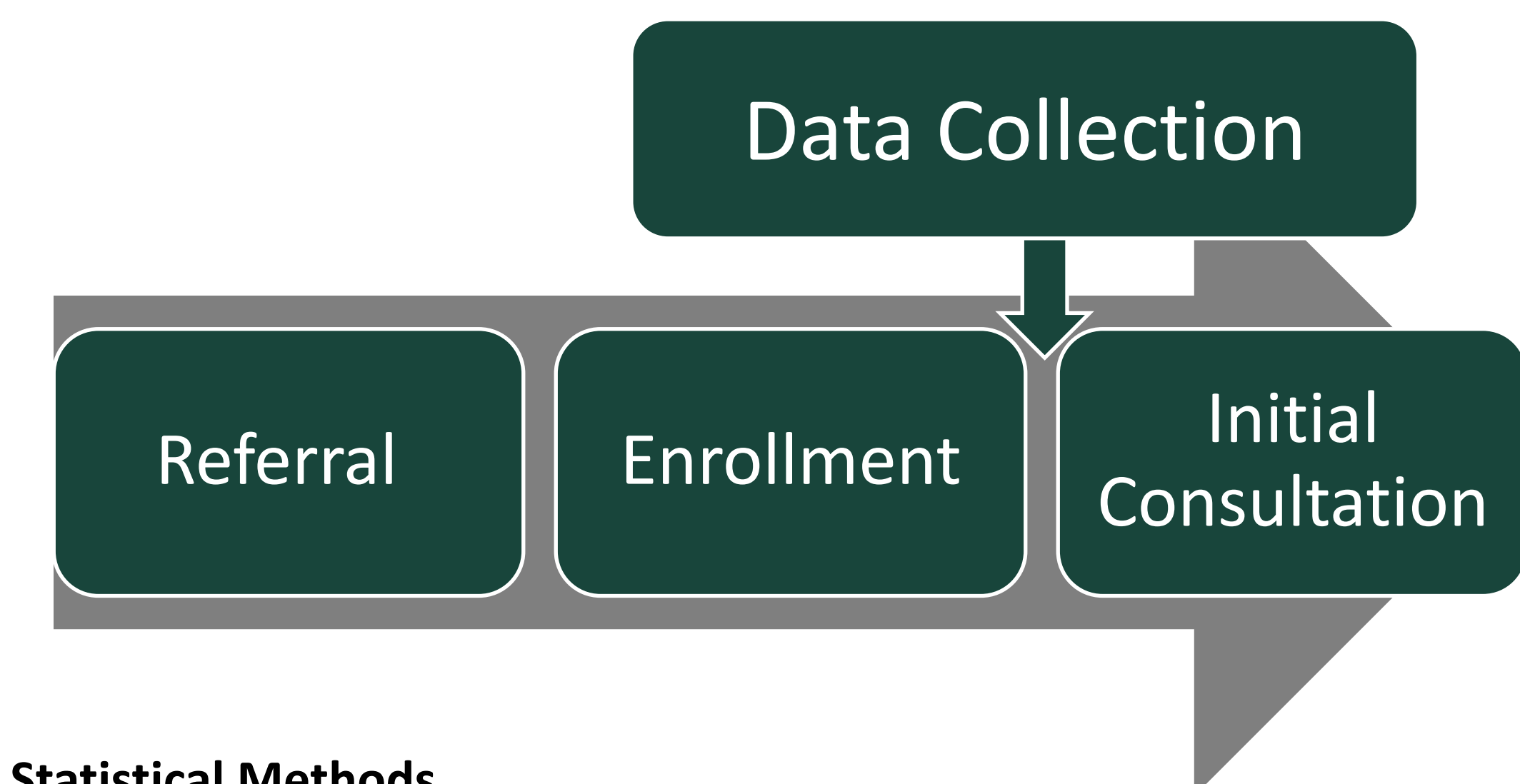
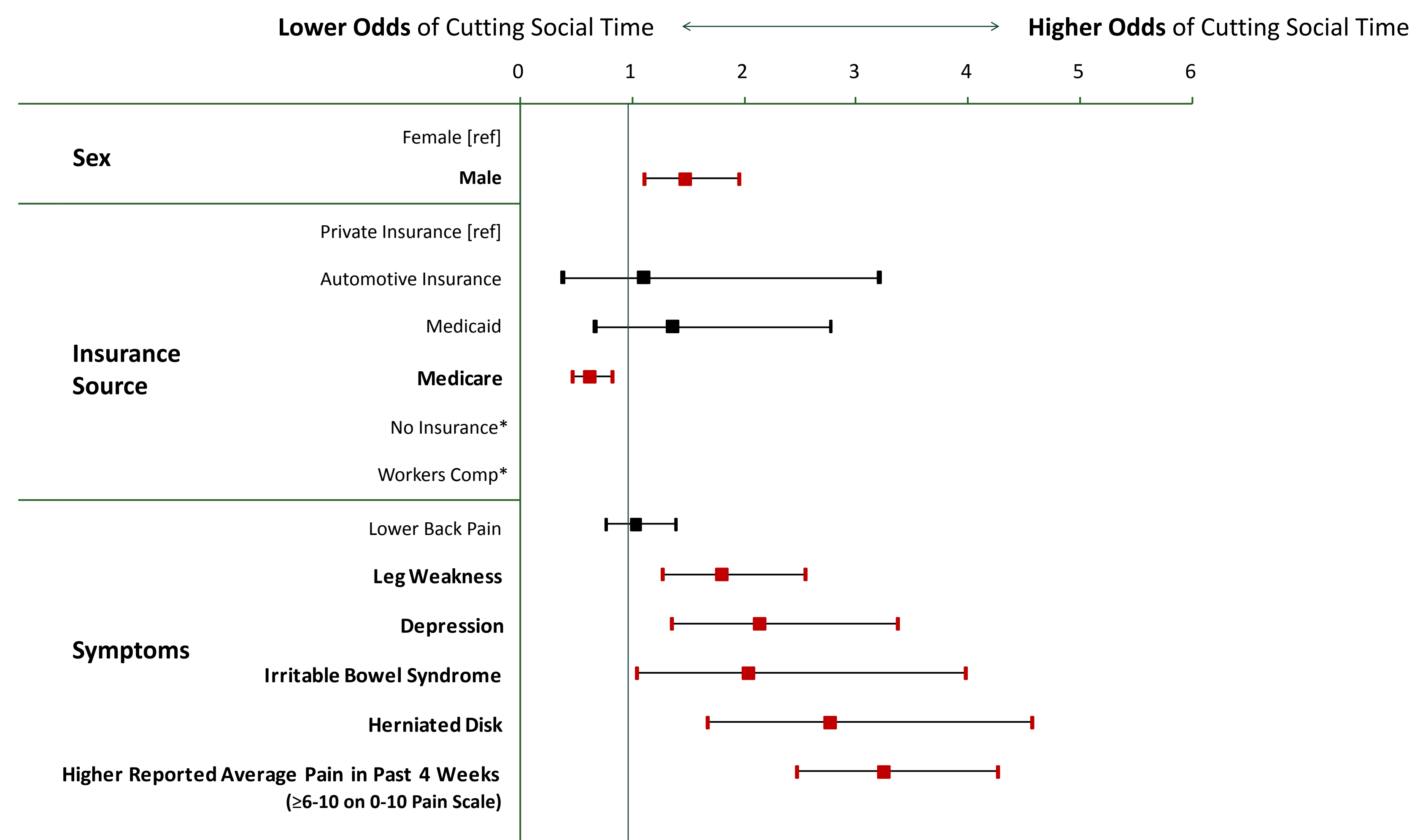
DATA COLLECTION

2,732 patients seeking treatment for chronic pain conditions from a large Midwest pain management practice were enrolled **between October 2009 and December 2010**. Participants consented using an IRB reviewed informed consent protocol. Once consented and enrolled in the study, subjects filled out the PRISM Initial **Pain Health Assessment (PHA)** form and answered questions regarding the relationship between their chronic pain conditions and their work and other daily activities. Additionally, subjects were asked about symptoms related to their **chronic pain, demographic information, and alcohol and tobacco use** via the PHA form. Those who were under 18 years of age or did not fill out all relevant covariate questions in the PRISM PHA were excluded from the study.



How do chronic pain symptoms limit social time?

Figure 2: Odds of covariate being associated with cutting social time compared with those not cutting social time (Odds Ratios and Confidence Intervals)



Statistical Methods

Multiple Logistic Regression techniques were used to determine the odds of affect of demographic and exposure covariates on cutting time from work in the past 4 weeks. SAS PROC LOGISTIC procedure was used to compute the model into log odds and resulting odds ratios. Extraneous variables were removed from the model via backward stepwise elimination techniques.

Model Covariates	
• Sex	• Persons in the Household
• Age	• Smoking
• Race	• Drinking
• Ethnicity	• Education
• Marital Status	• Insurance Source
• Symptoms including Headaches, Arm Pain, Lower Back Pain, Arm Weakness, Knee Pain, Facial Pain, Chest Pain, Abdominal Pain, Leg Pain, Shoulder Pain, Foot Pain, Neck Pain, Pelvic Pain, Leg Weakness, and Hip Pain	
• Syndromes and Diagnoses including Fibromyalgia, Shingles, Sciatica, Depression, Irritable Bowel Syndrome, Spinal Stenosis, Compound Fracture, Bipolar Disorder, Migraine, and Other Psychological Issues	

* - Low Sample Size