**Predictors of Healthcare Utilization and Recovery in Individuals Seeking Physical Therapy for Spine Pain**

**Study Design**. Retrospective, single-cohort study.

**Objective.** To identify variables that predict total cost of care and degree of recovery in a cohort of patients seeking physical therapy treatment for spine pain.

**Summary of Background Data**. Low back and neck related pain are two of the most common musculoskeletal disorders and are associated with high direct and indirect healthcare costs. There exists a large body of evidence investigating factors that predict outcomes in patients seeking treatment for spinal pain, but there is a paucity of research regarding variables that can predict costs associated with the care of this population. Identification of patient characteristics that can predict degree of recovery and amount of healthcare utilization in patients with spinal pain may help inform prognosis and treatment decisions.

**Methods.** The study population consisted of a sample of adults (n=250) seeking treatment for neck or low back pain at an outpatient physical therapy clinic. All patients were treated at the same physical therapy clinic and provided standard care at the discretion of their primary physical therapist. Patients were labeled as low, high, or non-responders to treatment using either the Neck Disability or Oswestry Disability Indexes. Patients were placed in either the lowest, middle, or highest tertile of cost according to the total amount of cost spent on their care. Hierarchical multinomial logistic regression analysis was completed to identify variables that predict recovery and healthcare utilization.

**Results.** Statistically significant predictors for both high and low responders were higher baseline NDI/ODI and being female. Statistically significant predictors for meeting both middle and highest tertile of cost included having no imaging and having a passive approach to treatment.

**Conclusion.** In agreement with other studies, we found that gender and baseline disability are predictive of patient response to treatment. Individuals who receive imaging or passive treatment tend to have a higher total cost of care than those that do not. Future research should continue to examine variables that are predictive of healthcare utilization in patients with neck or low-back pain.

Statistically significant predictors for a low response to treatment included higher baseline NDI (OR=1.15, 95% CI=1.06, 1.24) and being female (OR=2.83, 95% CI=1.23, 6.55).

Statistically significant predictors for both high and low responders were higher baseline NDI/ODI and being female.