The Association of Post-Operative Opioids and Pain Management Scores on the HCAHPS Survey in Patients Following Lumbar Spine Surgery

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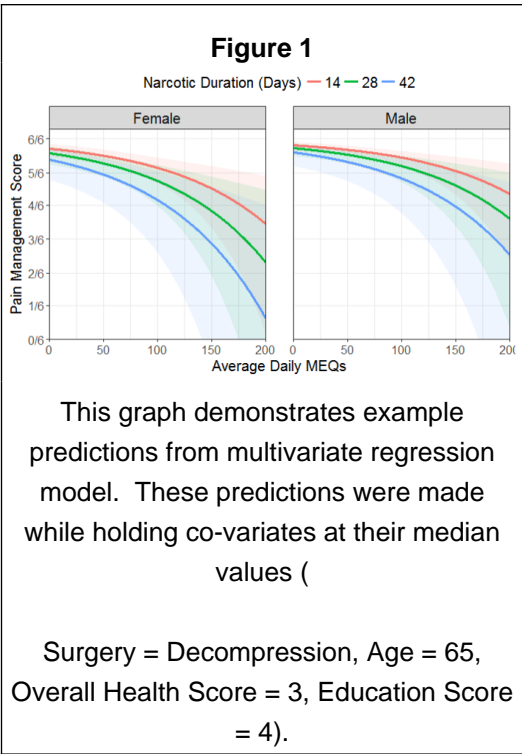
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Introduction

The recent use of patient experience scores as quality metric in healthcare has generated considerable concern amongst healthcare providers. One major concerns is the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey may be incentivizing providers to prescribe opioids more liberally to patient in an effort to improve these scores. Since there are presently no reports in the medical literature linking prescription opioids to HCAHPS scores, the goal of our study was to investigate the relationship of post-operative opioids and HCAHPS pain management scores in lumbar spine surgery patients.

Methods

The present study is a retrospective cohort analysis of 210 patients who underwent lumbar spine surgery at the Cleveland Clinic from 2013-2015 and completed an HCAHPS survey. The primary outcome of interest was a patient's Pain Management score, which is one of nine components of patient experience on the HCAHPS survey. A multi-variable regression model was developed to investigate the association between patient's Pain Management scores and the dose and duration of their post-operative pain medication regimen

Figure 1

This graph demonstrates example predictions from multivariate regression model. These predictions were made while holding co-variates at their median values (

Surgery = Decompression, Age = 65, Overall Health Score = 3, Education Score = 4).

Conclusions

The findings of this analysis suggest that post-operative opioid duration and dosage are negatively correlated with pain management scores on the HCAHPS survey in lumbar spine surgery patients. THis analysis suggests that increasing post-operative opioid prescriptions may not necessarily lead to improved pain management scores.

Results

When all co-variates in the regression model are held constant, an increase of 30 morphine equivalents of pain medication per day is associated with a 38.13% (95% CI:16.38-64.54%) increase in the mean number of Pain Management points lost. Similarly, an increase in 1 week duration of

Learning Objectives

By the end of this session, attendees will be able to...

1. Identify the patient experience dimensions that comprise the HCAHPS survey

2. Recognize patient-level factors associated with lower pain management scores on HCAHPS survey

References