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ABSTRACT TITLE: Orthopaedic Post-Surgical Opioid Prescribing Guidelines: Short Term Success

INTRODUCTION

Many post-surgical patients become addicted to opioid medications as a result of attempting to manage their post-operative pain and this has been recognized and dubbed an “Opioid Epidemic.” Recently the American College of Surgeons released preliminary prescribing guidance in an attempt to mitigate this problem in the United States. Unfortunately very little guidance was developed for the majority of orthopaedic surgical procedures. With much of the opioid prescribing being done by trainees or midlevels, guidance and training has been indicated as a possible intervention to decrease the amount of opioids prescribed. We sought to develop and implement opioid prescribing guidelines within our institution and examine changes in prescribing practice after such an implementation.

METHODS

We performed an institutional quality improvement project at a tertiary referral center with the goal of examining past opioid prescribing trends and defining best practices in terms of initial opioid quantity and number of refills. We aim to study how the implementation of these best practices has affected change on the actual prescribing of opioids to patients undergoing orthopaedic surgery.

Utilizing an electronic database, the most commonly performed outpatient orthopaedic surgeries were first defined. Next, an expert panel convened, consisting of Attending Staff Surgeons in the subspecialties of Foot and Ankle, Joints, Hand, Spine, Sports, and Trauma. Provider and patient education were then given in the form of verbal discussions as to the new standard operating procedure for quantity of opioid medication prescribed. Handouts were also provided to both patients and providers reiterating this information. Implementation of these guidelines occurred in January 2020.

Electronic medical records were then retrospectively reviewed for both the pre guideline and post guideline periods.

RESULTS

A total of 889 surgeries and corresponding opioid regimens were identified fitting our inclusion criteria for the retrospective analysis. Surgeries included Brostrom procedures, ankle fracture open reduction and internal fixation, ankle arthroscopy, Achilles tendon repairs, and hallux valgus correction from Foot and Ankle; carpal tunnel releases, distal radius fracture open reduction and internal fixation, cubital tunnel releases, wrist ganglion cyst excisions, and scaphoid fracture open reduction and internal fixation from Hand; and knee arthroscopy and shoulder arthroscopy from Sports.

After implementation of these guidelines and increased surgeon and patient education, there was a statistically significant decrease in the average number of prescribed opioids during the post-operative period.

DISCUSSION/CONCLUSION:

Patients within the military healthcare system are not immune to America's opioid crisis. It is especially important as providers to the nation's Service Members that we do not contribute to opioid addiction and potentially reduce our readiness for national defense. Implementation of department-wide guidelines requires buy-in from multiple stakeholders within the department and the hospital at large. Guideline implementation can decrease the number of prescribed opioids across the entire course of the postoperative period. While further study is needed on the feasibility of widespread implementation and long term outcomes, guideline implementation has an immediate and significant short term effect.