Establishing an Opioid Stewardship Program to Reduce Opioid Prescriptions

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Background
Opioid prescriptions increased from 76 million in 1991 to 207 million in 2013. In October of 2016, the Surgeon General released a report which stated that 20 million Americans suffer from a form of addiction; opioid use in America is generally recognized as an epidemic with approximately 42,000 deaths from opioid drug overdoses in 2016. In order to address this issue locally, Mayo Clinic formed the Opioid Stewardship Program in 2016, with the goal of decreasing opioid prescriptions.

Objective
The project objectives were to:

- Reduce the overall volume of opioid prescription drugs for patients at Mayo Clinic.
- Update and increase compliance of opioid prescribing guidelines for chronic and acute pain.
- Develop opioid education resources for patients and staff members.
- Establish a patient screening tool to assist care teams in evaluating risk factors for substance abuse and opioid related complications.

Planning/Research Methods
An opioid stewardship team was formed and comprised of: surgeons, multi-specialty provider teams, patient educators, administrators, pharmacists, quality staff, process engineers, and researchers. In order to establish a baseline, the team conducted a research study on opioid consumption by patients undergoing surgical procedures. Data from the baseline study was used to verify current best practice guideline appropriateness and identify variation in prescribing practices.

Implementation Methods
A robust Opioid Stewardship Program was established at all sites across 5 states. Staff tools and patient resources were created and shared via the organization’s internal and external websites. These included: acute, chronic, and specialty prescribing guidelines; opioid risk tools to determine appropriateness of prescribing guidelines; electronic health record (EHR) practice tool for patient screening; training modules to fulfill individual state continuing medical education requirements; opioid action plan tool to assist in recording patient encounters; and patient education materials. A structured roll-out plan was implemented using a variety of tactics to maximize awareness and availability of resources for care teams and patients.

Results
A 2018 study was conducted comparing pre and post-guideline implementation for 25 elective surgical procedures. The pre-implementation data, from 2016, and post-implementation data, from August to December 2017, indicated a reduction in the opioid prescription volume. For total knee and total hip replacement surgeries, there was a 50% reduction in median opioid prescription quantity and a 38% increase in opioid guideline compliance after 6 months.

Lessons Learned
A comprehensive team with a systematic approach proved to be effective. The approach included developing specific opioid prescribing guidelines and a compliance tracking process, and providing education resources to patients and staff.

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