CASE STUDY

Prospective pharmacist review of high-risk patients treated with opioids for chronic pain at a family medicine clinic

Submitted by: *Nicholas Cox, PharmD., BCACP, University of Utah Health, Salt Lake City, UT*

Overview

The project evaluated the impact of a pharmacist's pre-visit review of high-risk patients treated with opioids for chronic pain followed by primary care providers at a family medicine clinic. Pharmacists performed chart reviews, prior to appointment, on adult patients scheduled to be seen for chronic pain management who were prescribed greater than 50 morphine milligram equivalents (MME) per day. Recommendations were subsequently sent electronically to the provider prior to the appointment. For each patient, outcomes were collected before implementation of the pre-visit pharmacist review and again after four months of pre-visit pharmacist recommendations had been provided.

Key Elements of Success

The key element was patient-specific recommendations provided by the pharmacist. Prior to each chronic pain appointment, the physician would receive recommendations tailored to each patient from the clinic pharmacist. For example, recommendations to discontinue benzodiazepines also included a patient-specific taper schedule and patient-appropriate alternatives to treat anxiety or insomnia. The project was designed so that it could be incorporated using existing clinic resources. This prospective auditing service is now continually offered by pharmacists at the family medicine clinic.

Impact on Patient Outcomes

Pharmacist pre-visit recommendations were provided for 45 patients. The pharmacist spent approximately 33 minutes per patient review, and provided 80 reviews over the course of four months. Mean MME per day based on prescribed quantities per month decreased from 135 mg to 116 mg (p less than 0.001) with no statistically significant change in mean pain scores (p equals 0.783). Statistically significant improvements in the following parameters were noted: non-opioid analgesics prescribed; patients concurrently prescribed opioids with benzodiazepines; patients offered an outpatient naloxone prescription; patients with current urine drug screenings; patients with a current prescription drug monitoring program review; referrals to a pain specialist; and patients prescribed a bowel regimen.

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Role of the Pharmacy and Pharmacists

The role of the pharmacist was to prospectively identify high-risk patients on chronic opioid therapy and proactively provide physicians with patient-specific recommendations for pain management. Because the purpose of this study was to evaluate the impact of a pre-visit pharmacist review, and in an attempt to evaluate an intervention that could feasibly be added to current pharmacist responsibilities within the clinic, the pharmacists deferred implementation of therapy recommendations to the prescriber. No CDTMs were implemented. No additional credentialing or training was required beyond those required for ambulatory care pharmacists.

Lessons Learned

Physicians appreciated having help in managing this complicated patient population. Pharmacists are uniquely trained to help manage these patients and provide therapy recommendations. Pharmacist engagement can be as simple as proactively providing recommendations to other members of the patient care team. This engagement can lead to substantial improvement in outcomes. This model may be replicated in other settings by adapting the initiative via the use of standing orders. Additionally, although other team members and computer alert systems may not be able to completely mimic pharmacist involvement, they could be used to supplement and streamline the process to preserve time for pharmacists. The biggest champions of the initiative were physicians due in part to the fact that we initially collaborated about what types of recommendations would provide the most benefit to their practice.

Budget & Resource Allocation

This was a pilot project. The only resource required for the intervention was the time of the pharmacist. The clinic had 1.0 FTE pharmacist at the clinic. The intervention used this existing resource, meaning the intervention was added to other services already being provided by the pharmacist. This project was designed to be manageable within the routine schedule of the pharmacist. Data retrieval and analysis were performed with support from an ASHP Foundation grant of $5000.

Future Goals

Given the results of this project, the pilot site's health system is currently working to implement this intervention in all of its community clinics. We hypothesize that this pharmacist engagement model can be applicable to a wide variety of primary care settings. Future studies should seek to validate the results of this study on a larger-scale. This work has been presented at a national interdisciplinary family medicine meeting and was recently published in *the* *Journal of the American Board of Family Medicine*.