

Analysis of a narcotic and polypharmacy case management program at a health plan

Authors:

Nancy Wong

Denis Ishisaka

Joshua Chua

Jane Nichol

Background

- Adverse drug events (ADEs) account for over 3.5 million physician office visits, 1 million emergency department visits, and 125,000 hospital admissions annually.¹
- Opioids can cause several ADEs that are detrimental to the health and quality of life of patients.²
- Since 2015, Blue Shield of California has increased focus on improving medication safety by reducing overuse of opioids and polypharmacy among its health plan members.
- The Patient Review and Coordination (PRC) Program is a new pharmacist-led case management program that is designed to improve patient safety through multidisciplinary care coordination.

Objective

To describe the number of commercial health plan patients who are enrolled into the PRC program and the resulting action of the cases.

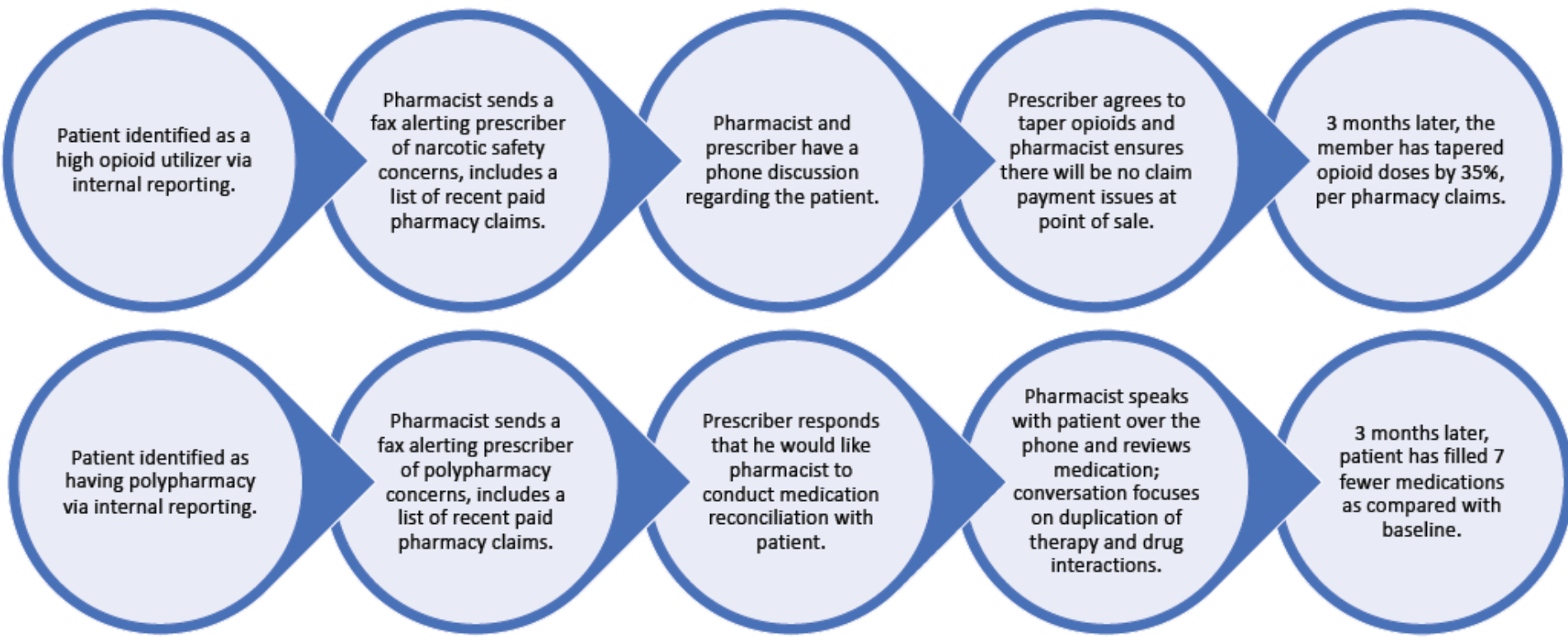
Methods

- The PRC program consists of a retrospective review of pharmacy claims data followed by active case management by health plan pharmacists.
- Patients are identified from outpatient prescription claims data collected from October 1, 2018, to September 30, 2019.
- Patients are eligible if they had persistent high opioid utilization or polypharmacy over a 90-day period and did not meet any exclusion criteria.
 - Inclusion criteria
 - Total opioid daily dose > 500 MME (morphine milligram equivalents)
 - ≥ 7 controlled substance prescriptions
 - ≥ 20 unique generic names for prescriptions
 - ≥ 4 prescribers writing for controlled substances prescriptions
 - ≥ 10 prescribers writing for unique generic names for prescriptions
 - ≥ 4 pharmacies filling for controlled substances
 - ≥ 10 pharmacies filling for all unique generic prescriptions
 - Exclusion criteria
 - Palliative or hospice care
 - Long-term care facility
 - Cancer, HIV, sickle cell anemia, or terminal illness requiring pain management

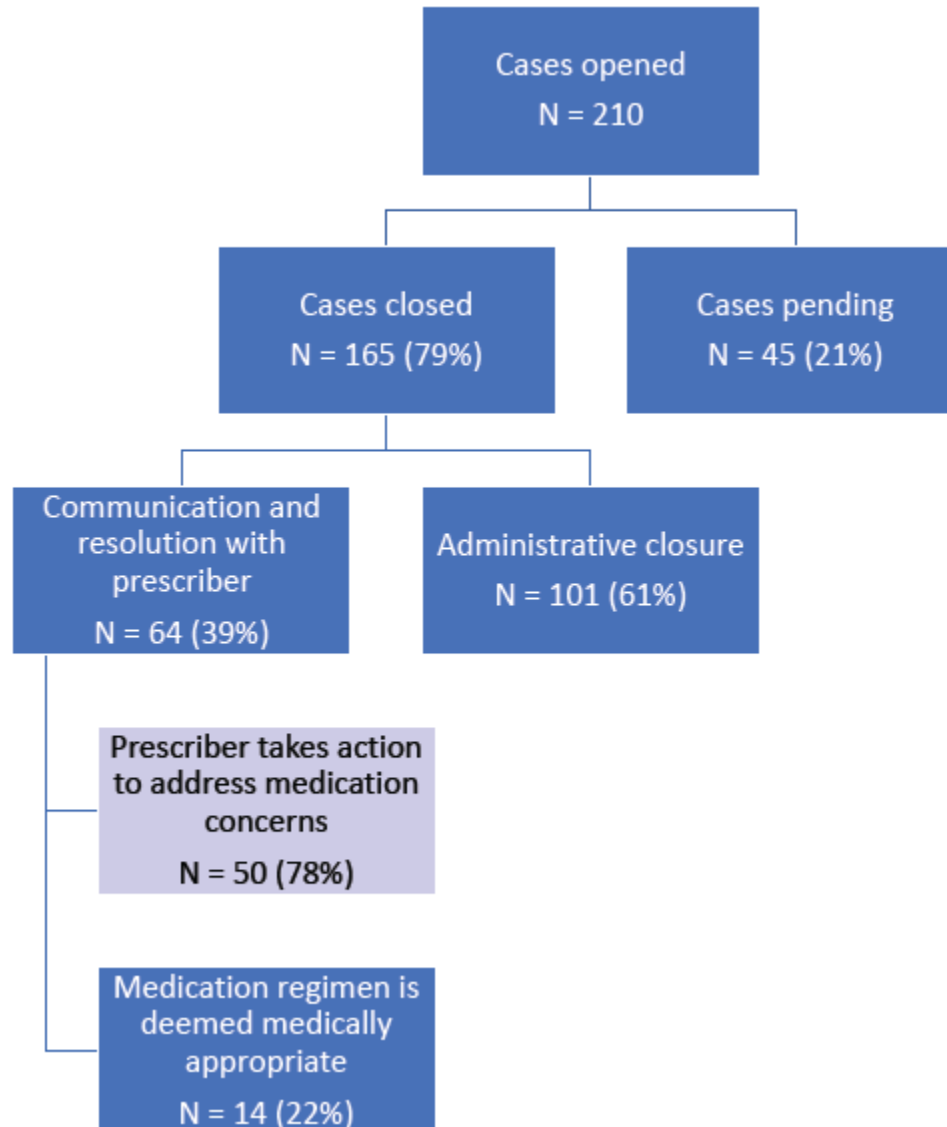
Methods

- Pharmacist interventions include faxing and speaking with prescribers to address medication concerns, counseling patients telephonically, and performing medication reconciliation.
- Pharmacists work with Blue Shield medical directors to engage prescribers in phone conversations to discuss the case. Cases can also be referred to Blue Shield nurse case managers to coordinate care and provide further referrals to behavioral health programs.
- Cases are closed when one of the following is met:
 - The medication concerns are resolved as evident through pharmacy claims.
 - The PRC team determines that the medication regimen is medically appropriate due to the patient's condition.
 - The patient meets an administrative reason for closure, such as being disenrolled for coverage or no longer meeting inclusion criteria.

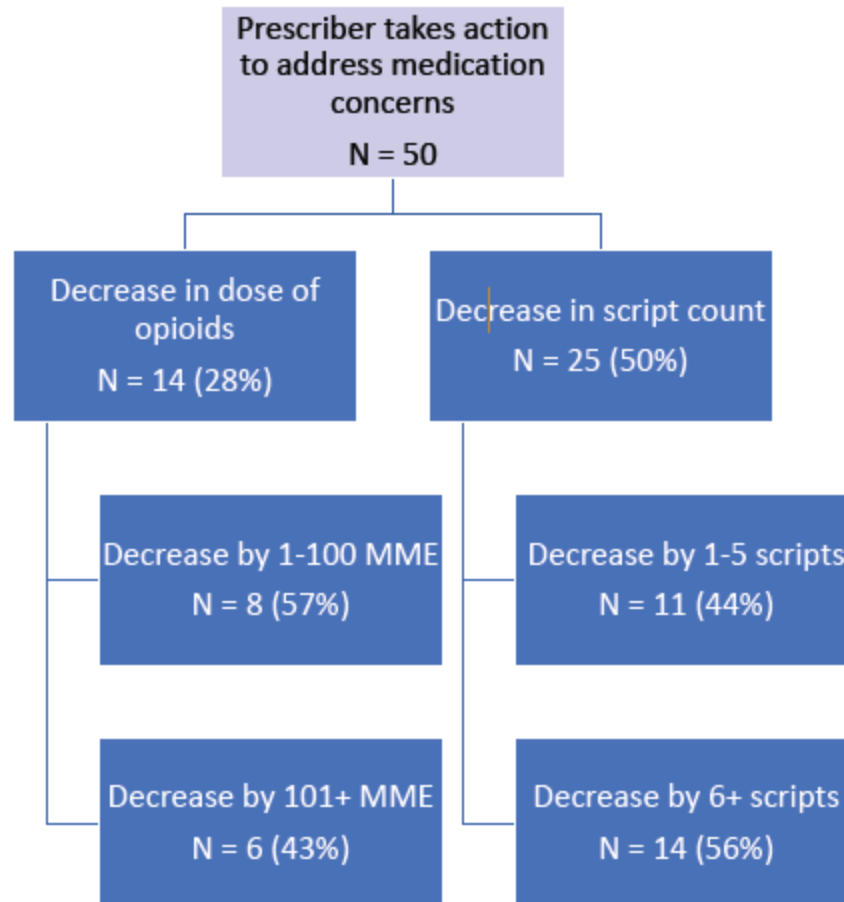
Methods



Results

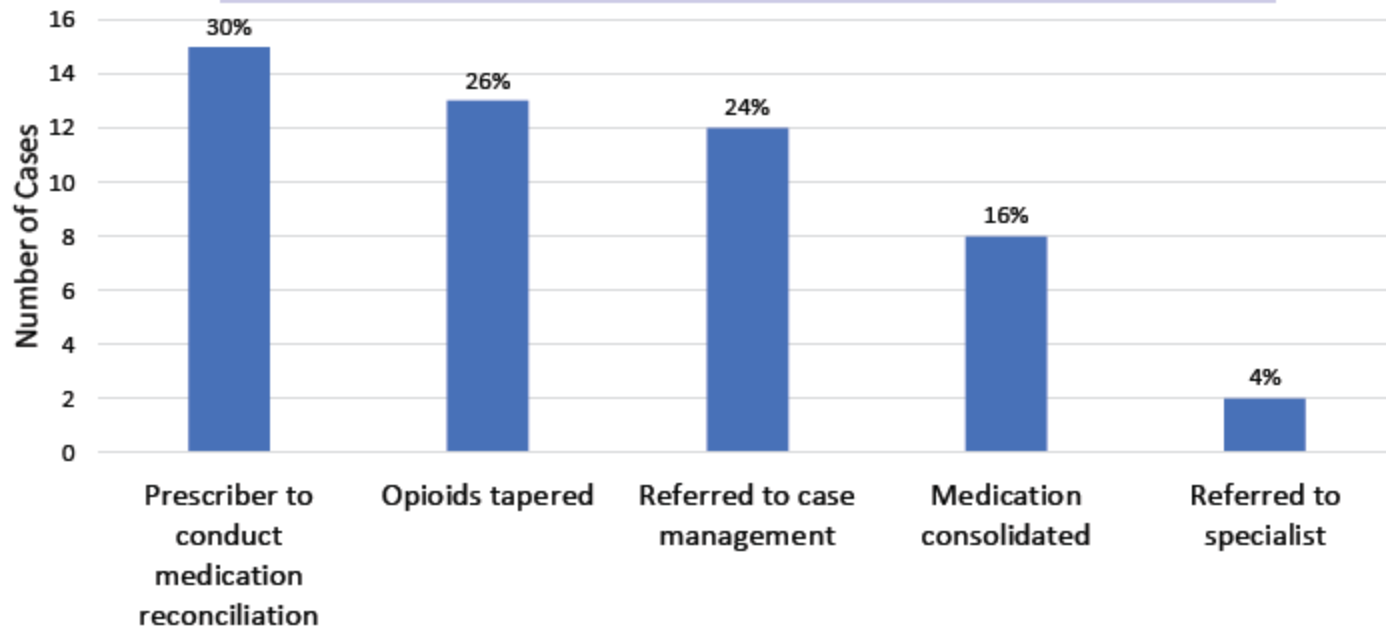


Results



Results

Figure 4. Outcome of cases in which the prescriber takes action to address medication concerns (N = 50)



Discussion

- Health plans and PBMs have reduced prescription volume via opioid safety programs by using mailings to inform prescribers regarding patients' opioid use.^{3,4}
- Our PRC program utilizes similar strategy in notifying prescribers but also includes active case management, in which pharmacists make patient-specific recommendations to physicians. In addition, cases can be referred to internal medical directors and nurse case managers to further engage physicians and members.
- These cases will continue to be monitored by pharmacists as additional intervention may be warranted due to patient medication regimen changes over time.
- Improvements have been made to the PRC case identification and selection process to decrease the number of administrative closures.
- A limitation of the study is that there is no control group comparator to determine the underlying trend in the reduction of MME and script count over time. There is a variety of factors that may influence MME levels due to the notoriety of the opioid epidemic.

Conclusions

- A pharmacist-led case management program at a health plan identifies patients at high risk for ADEs associated with opioid overuse and polypharmacy.
- Pharmacists are able to improve care coordination and drug safety by working with a multidisciplinary team. Pharmacists can facilitate referrals to specialists and nurse case managers as well as engage prescribers and patients in addressing medication concerns.

Questions?

References

- 1 Adverse Drug Events. Office of Disease Prevention and Health Promotion website. <https://health.gov/hcq/ade.asp>. Accessed October 28, 2019.
- 2 Moore RA, McQuay HJ. Prevalence of opioid adverse events in chronic non-malignant pain: systematic review of randomized trials of oral opioids. *Arthritis Res Ther*. 2005;7(5):R1046-51.
- 3 Chen X, Ma Q, Barron J, Devries A, Horn J, Agiro A. Effect of Controlled Substance Use Management on Prescribing Patterns and Health Outcomes Among High-Risk Users. *J Manag Care Spec Pharm*. 2019;25(3):392-401.
- 4 Daubresse M, Gleason PP, Peng Y, Shah ND, Ritter ST, Alexander GC. Impact of a drug utilization review program on high-risk use of prescription controlled substances. *Pharmacoepidemiol Drug Saf*. 2014;23(4):419-27.