



Are We Prescribing More Than 3-Days Worth Opioids' Prescriptions To Our Outpatient Surgical Patients When Discharged On Day Of Surgery? A Quality Improvement Study Worth Exploring

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Background

Since the time when Centers for Disease Control and Prevention (CDC) came up with the guidelines [1] to further responsible attitude towards opioid prescriptions in acute pain settings, we have been wondering the status of awareness among opioid prescribers in our institution as well as their responsiveness to the CDC guidelines. Recently we theoretically proved that 28-day prescription cycle may be better than 30-day prescription cycle to avoid stockpiling of opioid pills with the chronic pain patients [2]. Henceforth, it is time to investigate whether our acute pain settings namely our outpatient surgical services are contributing to stockpiling of opioids with our opioid naive outpatient surgical patients and if it's happening counterintuitive to the CDC recommendations, then whether simple awareness program can limit this stockpiling of opioid pills with our opioid naive outpatient surgical patients. Simplistically, the CDC guidelines [1] recommend that when opioids are started in opioid naive patients in acute settings, the morphine milligram equivalents should be in the dosage of < 50mg/day for a total duration of less than or equal to 3days. Essentially it means hydrocodone (with 1:1 morphine equivalence [3-4]) in the dosage of < 50mg/day for a total duration of less than or equal to 3days and oxycodone (with 1:1.5 morphine equivalence [3-4]) in the dosage of < 33mg/day for a total duration of less than or equal to 3days.

Aims and Objectives

The purpose of this envisaged quality improvement study can be to ascertain how often our outpatient surgical patients are receiving appropriate amounts of opioid prescriptions (for less than or equal to 3days) and whether simple peri-operative awareness program among the outpatient surgical teams' opioid prescribers improves the appropriateness of opioid prescriptions' amounts (for less than or equal to 3days)

in our hospitals.

Methods

Inclusion Criteria

1. All Outpatient Surgical Patients Presenting To Operating Room Complex In The Hospital And Who All Will Be Discharged Home On Day of Surgery.

After Institutional Review Board approval for quality improvement study with WAIVED CONSENT, the study period can be divided into three phases with each phase spanning four weeks wherein each week must be five-workdays-long. The three phases can be: pre-intervention phase, intervention phase and post-intervention phase.

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During pre-intervention phase, all outpatient surgical patients presenting to Operating Room Complex who are being discharged home on the day of surgery can be included. These patients's charts can be accessed to determine whether the patient has been opioid naive per history. Thereafter, only opioid naive patients' charts can be accessed to review which specialty's outpatient surgery they have undergone on that day, whether they have received prescription for opioids at time of discharge and if they have, then which opioid they have been prescribed (dosage, amounts and duration).

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During intervention phase, all outpatient surgical teams' opioid prescribers can be included whose patients regularly present to Operating Room Complex where such patients are routinely getting discharged home on the day of surgery. The intervention can be one page short-succinct information (see data sheet) provided to the outpatient surgical teams' opioid prescribers when they present preoperatively to talk to the patient in regards to performing the history and physical and taking the consents from them about their scheduled outpatient surgeries. Â Â

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The effect of simple awareness of the outpatient surgical teams' opioid prescribers can be presumably reflected in the results from the post-intervention phase. During post-intervention phase, all outpatient surgical patients presenting to Operating Room Complex who are being discharged home on the day of surgery can be included. These patients's charts can be accessed to determine whether the patient has been opioid naive per history. Thereafter, only opioid naive patients' charts can be accessed to review which specialty's outpatient surgery they have undergone on that day, whether they have received prescription for opioids at time of discharge and if they have, then which opioid they have been prescribed (dosage, amounts and duration).

Statistical Analysis and Sample Size

The estimated number of actual personnel educated can be unquantifiable and hence unknown, although the total number of pamphlets distributed to the opioid naive patients' outpatient surgical teams' opioid prescribers can be recorded according to the outpatient surgical specialty departments' names during the 4-weeks intervention phase. The primary outcome can be whether the morphine milligram equivalents prescribed per patient can get reduced in the post-intervention 4-weeks period, as compared to the pre-intervention 4-weeks period. Essentially, morphine milligram equivalents prescribed must more likely to be < 150mg/3-day-prescription as per CDC guidelines' interpretation for opioid naive patients in the acute settings. The secondary outcome can be whether the proportion of opioid naive patients receiving less than or equal to 3days-worth-opioid-prescriptions can be improved in the post-intervention phase as compared to the pre-intervention phase. Comparison of proportions with Chi Square test (Fisher Exact Tests) and comparison of means with analysis of variance can be considered with p-value < 0.05 being significant.

Envisaged Data Sheet

Date

OPIOID NAIVE PATIENTS DURING PRE-INTERVENTION PHASE

Patient's outpatient surgical specialty department's name

Prescription of opioids at time of discharge Yes/No

If yes, then Name of opioid prescribed for home, Dosage type of opioid prescribed for home, Total pills of opioid prescribed for home, Total Duration of opioid prescribed for home

INTERVENTION PHASE AWARENESS PAMPHLET (SEE NEXT PAGE)

Date

OPIOID NAIVE PATIENTS DURING POST-INTERVENTION PHASE

Patient's outpatient surgical specialty department's name

Prescription of opioids at time of discharge Yes/No

If yes, then Name of opioid prescribed for home, Dosage type of opioid prescribed for home, Total pills of opioid prescribed for home, Total Duration of opioid prescribed for home

INTERVENTION PHASE AWARENESS PAMPHLET

Per CDC Recommendations, if your patient is opioid naive and if you are planning to discharge your patient on **NORCO prescriptions**, please consider limiting **HYDROCODONE** dosage < **50mg/day** for total duration **less than or equal to 3days**

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Per CDC Recommendations, if your patient is opioid naive and if you are planning to discharge your patient on **PERCOCET prescriptions**, please consider limiting **OXYCODONE** dosage < **33mg/day** for total duration **less than or equal to 3days**

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