

Abstract:

PA>IN (Prior to Admission > Inpatient Narcotics)

Lead Researcher: Gillenwater, Lane MD

Research Team Members: Jen Altounian, Estefani Marino RN, Steve Gianakopoulos PharmD, Zahra Qasem MD, Vanessa Rose MD, Steffy James DO

Presented by: Steffy James, DO

PGY 3 Resident, Northwestern McGaw Family Medicine at Lake Forest

Background:

At the time of this project, there was no specific protocol guiding the prescription of inpatient opioids for patients with chronic opioid use at Northwestern Lake Forest Hospital. While the palliative care team at Lake Forest Hospital has a system of increasing home opioid use by 25-50% for moderate pain (pain scale 4-7) and by 50-100% for severe pain (pain scale ≥ 8), this was found to not be used system wide. As a result, these patients were at risk for both excessive and inadequate opioid treatment while hospitalized.

Based on previous research for improving opioid management, it was found that using already existing electronic tools and a team-based approach to opioid management would help improve risk assessment and could decrease average daily MME. Unfortunately, there was not much research on how to optimize opioid use with patients who have chronic opioid use on the inpatient setting. This project was used to assess the current process in admitting patients with chronic opioid use at Northwestern Lake Forest Hospital, and to investigate improvements that can be made to ultimately create a standardized process for pain control that will allow these patients to have the relief they need during their admission as well as proper treatment and follow up on discharge.

Methods:

Hospitalists at Northwestern Lake Forest Hospital will complete a pre-assessment survey identifying the preferred method of initial opioid dosing, along with their use of MEDD (Morphine Equivalent Daily Dose) and the IL PMP (Illinois Prescription Monitoring Program) during this process. Once initial data is collected, the areas of concern will be identified and used to create a standardized process for pain control in the hospitalized patient with chronic opioid use. The study will focus on using Failure Mode and Effects Analysis (FMEA) to help identify areas of improvement and the key players that would need to be involved. The main implementations will include educating hospitalists on the role of opioid switching, appropriate dose increases, and MEDD thresholds for serious adverse events (SAE). Other interventions will be more technical, including embedding the home MEDD to the current prescribing window and Pain Monitoring summary page that can be found on the inpatient side. Outcomes that will be measured during this process will include the Hospital Consumer Assessment of Healthcare Providers and Systems surveys from patients (HCAHPS), along with comparing the average MEDD for the first 24 hours of hospitalization.

Results:

Analysis of initial surveys showed that among hospitalists at Lake Forest Hospital, there were varying starting methods for a pain plan for opioid tolerant patients, which generally favored underdosing opioids. This was with consistent reported use of IL PMP. However, while the data is available to identify the use of opioid medications prior to admission on the IL PMP, this functionality in Epic at the time of this project had no link to medication reconciliation and its use is sporadic in the admission process. Furthermore, there was no function in Epic to quantify the inpatient MME prescribed or given, and while a majority of the hospitalists used information from the home MEDD as part of their initial pain control plan, it was found to be time consuming, and few were able to recognize the MEDD thresholds at which risk of adverse events increase.

Conclusion:

The issue of improving pain therapy with opioids in patients with chronic opioid use was found to have many areas of improvement and will be an ongoing project to determine a standardized process for pain control in the acute hospital setting. One of the main issues was that there was not a concrete way in determining how much opioid medication a patient was able to obtain, which became the first goal in the project. We were able to improve the method in which opioids are ordered in the hospital setting by working with the EPIC team, making it easier for the hospital team to review the patient's home opioid MEDD. The next step would be to work with the EPIC team to improve how we are able to use the MEDD in the in-patient side during the discharge process to decrease SAE and make sure the patients have adequate pain control and go home with the appropriate treatment.