TITLE (capital letters)	PREVALENCE AND TREND OF OPIOID USE AFTER TOTAL KNEE ARTHROPLASTY IN ELECTRONIC HEALTH RECORDS
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Abstract (do not indent; must include: OBJECTIVES, METHODS, RESULTS, CONCLUSION Maximum: 300 words).	**OBJECTIVES:** The use of opioids in United States has had a significant impact on both patients and society. This study aims to describe the prevalence of opioid use prior to primary total knee arthroplasty (TKA) and estimate the opioids use trend following TKA. **METHODS:** The electronic medical records (EHR) from the Optum database (2007-2019) were used to identify TKA patients. The EHR data were available for a geographically diverse population of 5.5 million health plan members who have been successfully linked to the Optum EHR database. Preoperative and postoperative opioid use was measured by the number of opioid administration orders. Patients need to have at least three-months baseline and one-year follow-up to be eligibly included. **RESULTS:** A total of 207,065 primary TKA were included in this study. Approximately 88.7% of the population had opioid administration three months prior to surgery. The mean number (± standard deviation (SD)) of opioid administration orders per patient had increased from 4.5±4.3 (median: 4) in 2007 to 8.8±4.8 (median: 9) in 2018. The percentage of patients who had opioids prior to surgery was 70% in 2007, 84% in 2012 and 93% in 2018. Around 10% of the cohort had opioid administration three months to six months after surgery (8% in 2007, mean: 0.58±3.01, 10% in 2018, mean: 0.73±3.06). Around 9% of the cohort had opioid administration nine months to twelve months after surgery (6% in 2007, mean: 0.44±3.35, 11% in 2018, mean: 0.73±2.80). **CONCLUSION:** Over 88% of TKA patients use opioids within the 3 months prior to surgery and this percentage has increased 23% during the study period. From 2007 to 2018, the mean number of opioid administration orders per patient has increased from 4.5 to 8.8 three months prior to surgery and 0.44 to 0.73 nine months to twelve months after surgery.