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Title

Effectiveness of Opioid Policies in 8 Health Systems: Findings from a Mixed-Methods Implementation & Effectiveness Study

Priority 1 (Research Category)

Pain management

Presenters

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Abstract

CONTEXT: To address the opioid overdose epidemic, many health systems implemented evidence-based prescribing guidelines to support improved care for pain and opioid use disorder (OUD). OBJECTIVE: To evaluate the implementation and effectiveness of guidelines on pain management, opioid prescribing, and treatment of OUD on key outcomes. STUDY DESIGN AND ANALYSIS: Mixed-methods design with primary data collection via interviews or surveys with system leaders, clinicians, and patients. Electronic health record (EHR) data (2014-2019) was used to examine each of five system's outcomes before and after guideline implementation using estimated pre-post logistic regression models of key outcome measures, adjusting for patient characteristics (e.g., age, race) for each system. SETTING: Primary care clinics in 8 U.S. health systems. POPULATION STUDIED: Four cohorts of patients i) with chronic pain, ii) on long-term opioid therapy, iii) with new opioid prescriptions, and iv) with OUD. INTERVENTION: All 8 health systems developed and implemented guidelines by 2017 using a range of strategies, including EHRs: clinical decision support, alerts, templates, order sets, and prescribing limits. Health systems also used training/education and measures to monitor progress. OUTCOME MEASURES: Provision of non-opioid, nonpharmacologic treatments; opioid prescribing practices (e.g., initiation with short-acting opioid); co-prescribing of benzodiazepines with opioids; prescription/referral for medications for OUD; opioid risk mitigation (e.g. co-prescribing of naloxone, urine drug testing (UDT)); and healthcare utilization. RESULTS: While there is variation across health systems and cohorts, most measures trended in the intended direction after adjusting for patient characteristics. Most systems had beneficial increases in UDT and naloxone co-prescribing, and decreases in benzodiazepine co-prescribing and opioid-related emergency room visits in association with implemented guidelines. Results regarding non-opioid, non-pharmacologic treatments were mixed. Two of five systems found increased initiation with short-acting opioids. Patient/clinician surveys and interviews with leaders (to be completed June 2023) will be presented to highlight facilitators and barriers to guideline implementation.

CONCLUSIONS: Implemented guidelines on safer opioid prescribing are associated with improved outcomes. Findings on effective implementation strategies can inform future system-level efforts.