

CDC Opioid Quality Improvement Collaborative

The Centers for Disease Control and Prevention (CDC) released the [2016 Guideline for Prescribing Opioids for Chronic Pain](#) (the CDC Prescribing Guideline) to ensure that patients have access to safer, more-effective chronic pain treatment. To encourage uptake and use of the evidence-based CDC Prescribing Guideline, CDC engaged Abt Associates to develop [quality improvement \(QI\) measures](#) aligned with the CDC Prescribing Guideline recommendations, to create an implementation package for healthcare systems, and to support two cohorts of large healthcare systems in the CDC Opioid QI Collaborative. Owensboro Health in Kentucky joined Cohort 2 in April 2019.



Health System Overview

Owensboro Health reaches an 18-county area, serving nearly 500,000 people in western Kentucky and southern Indiana. Owensboro Health provides regional access to patients with three hospitals that house more than 30 specialties. The system includes Owensboro Health Regional Hospital, Owensboro Health Muhlenberg Community Hospital, Owensboro Health Twin Lakes Medical Center, and the Owensboro Health Medical Group which comprises over 250 clinicians at more than 30 locations. The QI team worked with system and local leadership to identify four clinics suited to participate in the CDC Opioid QI Collaborative.

Opioid-Related QI Efforts

Prior to participating in the CDC Opioid QI Collaborative, Owensboro Health relied solely on Kentucky state medical license prescribing statutes for guiding opioid prescribing practices within the health system. At that time, urine drug screens were only recommended annually, and patients were required to sign a controlled substance agreement with their clinician. Clinicians referred patients to a pain management specialist if the patient's pain was not controlled, or if the terms of the controlled substance agreement were not maintained. Prior to the CDC Opioid QI Collaborative, Owensboro Health did not have formal opioid prescribing monitoring initiatives, but encouraged individual physicians to monitor their own opioid prescribing. Owensboro Health set two rounds of achievable goals. The first round of goals focused on creating the systems and processes to implement the QI initiative. The second round of goals focused on improving guideline-concordant care (e.g., decrease total daily dosages in morphine milligram equivalents (MMEs), decrease co-prescribing benzodiazepines and opioids, and increasing the frequency of urine drug screen numbers and follow-up visits).

Strategies Used to Implement the CDC Prescribing Guideline

Owensboro Health used a range of strategies in their QI efforts, which evolved over time to address new goals. Overall strategies are included in the text box, and a selection of these are described in further detail below.

Success Story: Goal-Setting Approach

Owensboro Health chose to select achievable goals to build confidence in the QI process. These goals set the stage for full implementation of the QI intervention and were designed to be achieved early in the implementation process. The initial goals included:

1. Raise community and organizational awareness of the need for opioid management
2. Create CDC QI Opioid Collaborative dashboard
3. Sign all clinicians up for e-prescribing Schedule II–V drugs
4. Establish and refine an opioid prescribing policy
5. Examine prescription drug monitoring program (PDMP) review patterns over time
6. Monitor controlled substance prescribing patterns

Owensboro Health met the first set of goals within eight months of the intervention. The QI team then set new goals focused on measuring and monitoring the intervention.



Policy Change

Owensboro Health created and released a new policy to support safer opioid prescribing. This practice-level policy went through several rounds of administrative revisions, and eventually was expanded to include new components, including a standardized medication agreement and urine toxicology screen requirements.

Opioid Dashboard

Owensboro Health used in-house data experts to develop and implement tools for quality monitoring, including an opioid prescribing dashboard through their electronic health records (EHR). A dashboard was developed to be viewed at the clinician-level by clinicians, physician leads, and the system vice president. The dashboard is also viewable at the department and facility level.

Consolidate and Standardize Medication Agreement

Owensboro Health consolidated the controlled substance agreements in the EHR and developed a best practice alert for clinicians when the agreement was due to expire or had expired for their patients.

Clinic Champions

Owensboro Health identified physician champions at each clinic to lead the initiative and provide insight to the QI team about implementation. The QI team believed this model would work well to share information between the practice and the QI team to aid implementation and dissemination.

Measures Used to Monitor Improvement

The measures selected by Owensboro Health included a combination of those that most aligned with initial objectives for participating in the CDC Opioid QI Collaborative and those that would be easily obtainable through existing system EHR queries or anticipated EHR upgrades to their Epic¹ system. The QI team utilized their EHR system's functionality to create a dashboard to display and track six identified measures. The team increased buy-in from local clinics by allowing the staff to collaborate on additional future focus areas.

QI Measure 3: Urine drug screen before prescribing opioids

QI Measure 5: Three days' supply or less for acute pain

QI Measure 6: Dosage of ≥ 50 MMEs per day

QI Measure 7: Dosage of ≥ 90 MMEs per day

QI Measure 8: Concurrent prescribing of opioids and benzodiazepines

QI Measure 9: Quarterly follow-up visits

Trends in Select QI Measures

Owensboro Health monitored trends for the QI measures over the course of participation in the CDC Opioid QI Collaborative. The following are highlights of select opioid QI measures, each of which indicate an improvement in guideline-concordant care over 12 months:

- QI Measure 5: The percentage of patients who received a new opioid prescription with a shorter duration of three days or less increased by almost 3 percentage points.
- QI Measure 6: The percentage of patients on long term opioid therapy (LTOT) who were prescribed a daily dose of 50 MMEs or more decreased by more than 3 percentage points.
- QI Measure 8: The percentage of patients on LTOT who were co-prescribed a benzodiazepine decreased by more than 3 percentage points.

Learn More about QI Efforts in Opioid Prescribing

To view this full resource and learn more, visit:

- <https://www.cdc.gov/drugoverdose/prescribing/qi-cc.html>
- [Opioid Overdose | Drug Overdose | CDC Injury Center](#)

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