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. East Tennessee State University (ETSU) joined Cohort 2 in April 2019.

Health System Overview

ETSU College of Nursing is the largest nursing program in Tennessee, with over 1500 nursing students in undergraduate, graduate, and doctoral programs. The College of Nursing, along with the Center for Community Outreach at ETSU, operate the Nurse Family Partnership program in nine counties in northeast Tennessee. Seven clinics are run by nurse practitioners (NPs) under the supervision of a physician as mandated by the Tennessee State Nurse Practice Act. These clinics serve mostly patients living in rural areas or who have lower incomes. ETSU selected four clinics to begin implementing the QI initiative through the CDC Opioid QI Collaborative.

Opioid-Related QI Efforts

Prior to the involvement in the CDC Opioid QI Collaborative, QI efforts were initiated and implemented within individual clinics. A standardized controlled substance policy at ETSU was established in 2015, although adherence to the policy was inconsistent. Clinicians who chose to treat existing patients with chronic pain followed Tennessee opioid prescribing laws. New patients were primarily referred out for chronic pain management. Starting in 2017, standard treatment agreements were incorporated into the electronic health record (EHR). However, the clinics used different strategies to monitor opioid risks: all four sites used urine drug screens, but only one routinely reviewed the prescription drug monitoring program (PDMP).

One of the highest priorities was to ensure a structured process across clinics to improve practice. The QI team intended to use some existing tools within their EHR, GE Centricity, to support project implementation, including Crystal Reports and an existing opioid registry. Crystal Reports requires support from IT but provides robust reporting and data visualization. Importantly, ETSU was the only Cohort 2 site that used GE Centricity, and they were paired with the leaders from St. Mary’s/Clearwater Valley Health in Cohort 1 (who also use the GE Centricity EHR) to share information about implementing the QI initiative.

Strategies Used to Implement the CDC Prescribing Guideline

ETSU used a range of strategies in their QI efforts. Overall strategies are included in the text box, and a selection of these are described in further detail below.

1 The content of this document does not necessarily reflect the views or policies of the US Department of Health and Human Services, the Centers for Disease Control and Prevention, the Office of the National Coordinator for Health IT, or the other organizations involved, nor does the mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.
Engaged Clinical Partners

To encourage buy-in and get feedback on the QI project, the QI team engaged clinical partners by surveying clinicians. The survey assessed clinicians’ knowledge of the CDC Prescribing Guideline and Tennessee’s opioid prescribing law, documentation of guideline components, and the definition of pain. It also asked clinicians to rank their preferences for measures to track and for information about their current opioid prescribing practices. The QI team sent out the survey again three months later to measure learning related to the opioid prescribing guidelines.

Assess Readiness and Identify Barriers and Facilitators

The QI team conducted a clinical walk-through to assess readiness and identify barriers and facilitators prior to implementation. The walk-through allowed clinic staff to share their opinions and expertise about clinical needs, which gained buy-in for the intervention.

Consolidated and Standardized EHR Forms

With the help of St. Mary’s/Clearwater Valley Health in the learning collaborative, and their local data experts, ETSU consolidated and standardized EHR forms to create a custom chronic pain form in the GE Centricity EHR. The chronic pain form combined checking the PDMP, reporting on urine drug screens, pain management scores, and other components. By centralizing all the chronic pain components into one form, ETSU intended to improve clinical care and patient management. The QI team reviewed the intake form with clinical staff to identify challenges or opportunities to improve the form.

New Opioid Prescribing Policy

The QI team created a new clinic opioid prescribing policy that defined chronic pain and described nursing roles. The policy required the completion of the intake form as part of standard opioid prescribing practice.

Clinician Education

The ETSU QI team conducted educational outreach visits during which they provided an overview of the survey results, the CDC Prescribing Guideline, and the new chronic pain form. They also provided one-on-one training about the CDC Prescribing Guideline and the newly-developed chronic pain intake form.

Measures Used to Monitor Improvement

ETSU distributed a survey to clinicians at each clinic to rank-order measures and examined preliminary baseline data to identify problem areas. They selected five measures to evaluate practice improvement based on baseline metrics and high rankings by clinicians. ETSU reported a low number of patients taking prescription opioids, making interpretation of the extent of improvement challenging. To assess impact of the clinician education, ETSU conducted a pre- and post-intervention survey, finding improvement in knowledge related to the opioid prescribing policy.

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