DHS-7761A-ENG

DEPARTMENT OF HUMAN SERVICES

Opioid Prescribing Improvement Program

2018 Legislative Report

September 2018

Contact Information

Department of Human Services, Health Care Administration
Office of the Medical Director
540 Cedar Street
St. Paul, MN 55101
651-431-2202
dhs.info@state.mn.us
mn.gov/dhs

For accessible formats of this information or assistance with additional equal access to human services, email DHS.info@state.mn.us, call 651-431-2202, or use your preferred relay service. ADA1 (2-18)

As requested by Minnesota Statute 3.197: This report cost approximately $5,000 to prepare, including staff time, printing and mailing expenses.

Upon request, this material will be made available in an alternative format such as large print, Braille or audio recording. Printed on recycled paper.

Contents

Executive Summary

The Minnesota Legislature established the Opioid Prescribing Improvement Program (OPIP) in 2015. The aim of the OPIP is to reduce opioid dependency and substance use by Minnesotans due to the prescribing of opioid analgesics by health care providers. This will be accomplished by developing statewide guidelines on appropriate opioid prescribing for acute pain, post-acute pain and chronic pain; developing educational resources for providers for communicating to patients about pain; and implementing an opioid prescribing quality improvement program among Minnesota Health Care Program-enrolled providers whose prescribing behaviors are found to be outside of community standards.

In this annual report we:

- Provide a progress updated on the Opioid Prescribing Work Group and the work completed to date;
- Provide a brief summary of activities related to the release of the Minnesota Opioid Prescribing Guidelines in April 2018. The guidelines are available on the DHS web site;
- Provide an overview of the Opioid Prescribing Improvement Program sentinel prescribing measures (Appendix C), and the technical specifications for each of the seven measures (Appendix D);
- Provide an update on the MHCP Quality Improvement Program;
- Provide trend data on opioid prescribing within the MHCP for 2016 and 2017, and data that illustrates the variation in opioid prescribing for two of the sentinel measures; and
- Provide a brief summary of the partnerships developed between DHS and provider organizations to disseminate and implement the OPIP.

Legislation

Minnesota Statutes 2017, section 256B.0638, subdivision 7

Subdivision 7. **Annual report to the legislature.** By September 15, 2016, and annually thereafter, the commissioner of human services shall report to the legislature on the implementation of the opioid prescribing improvement program in the Minnesota health care programs. The report must include data on the utilization of opioids within the Minnesota health care programs.

Introduction

Opioid dependency and abuse continues to be a significant public health concern in Minnesota. Preliminary statewide data for 2017 from the Minnesota Department of Health indicates that drug overdose deaths increased 3 percent from 2016 to 2017.[1] Of the 694 total drug overdose deaths, 188 residents died from an

[1] Minnesota Department of Health. Preliminary 2017 Drug Overdose Deaths Report. May 14, 2018.

overdose related to prescription opioid analgesics, 106 residents died from a heroin overdose, and 172 residents died from an overdose related to a synthetic opioid such as fentanyl.

While the recent increases in opioid overdose deaths are driven by increases in fentanyl deaths, prescription opioid use, misuse and abuse remain a public health concern. Opioid prescribing rates remain significantly higher than they were prior to the onset of this public health crisis, and significant variation in prescribing rates occurs at the national, state, local and provider levels. The prescribing rate was 46.9 prescriptions for every 100 Minnesotans in 2016.[2] However, within the state, there are several counties in which the rate of prescribing is high enough or nearly high enough for each person to receive a prescription each year.

The Opioid Prescribing Improvement Program (OPIP) authorized by Minn. Stat. § 256B.0638 is an initiative to reduce opioid dependency and substance use by Minnesotans enrolled in Minnesota Health Care Programs (MHCP)—dependency and substance abuse that are related to the prescribing of opioid analgesics by health care providers. The Commissioner of Human Services oversees the OPIP in collaboration with the Commissioner of Health. Its core components are grounded in community input via an expert work group: the Opioid Prescribing Work Group (OPWG). The OPWG convened in November 2015 to perform its legislatively set tasks:

- Recommend protocols that address all phases of the opioid prescribing cycle (acute, post-acute, and chronic pain);
- Recommend quality-improvement measures to assess variation and support improvement in clinical practice;
- Recommend two thresholds directed at MHCP-enrolled providers with persistently concerning prescribing practices, one threshold that will trigger quality improvement and the other termination from MHCP; and
- Oversee development of educational resources and messages for providers to use in communicating with patients about pain and the use of opioids to treat pain.

Pursuant to the authorizing statute, the opioid prescribing protocols will not apply to opioids prescribed for patients who are experiencing pain caused by a malignant condition or who are receiving hospice care, or to opioids prescribed as medication-assisted treatment (MAT) to treat opioid dependency and opioid use disorder.

The OPIP is a unique community supported effort to improve prescriber practice via a community wide improvement process tied to Medicaid provider enrollment. The OPIP aims to balance the evidence for the use of opioids to treat certain types of pain with the inherent risks that these medications pose to individuals and communities.

[2] United States Centers for Disease Control and Prevention. National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. U.S. State Prescribing Rates, 2016.

Opioid Prescribing Work Group Update

The Department of Human Services, in collaboration with the Department of Health, convened the Opioid Prescribing Work Group (OPWG) in November 2015, with representation as stipulated in the legislation. Appendix A lists the OPWG membership, including the statutorily set membership categories.

The OPWG completed the following tasks since September 2017:

- Recommended final opioid prescribing protocols for acute pain, post-acute pain and chronic pain phases;
- Developed provider-level opioid prescribing sentinel measures that address the three pain phases; and
- Recommended a quality improvement threshold for five of the seven sentinel measures. MHCP-enrolled providers who exceed the threshold for any of those five measure will be required to submit quality improvement plans.

In October 2017, the commissioner of human services authorized a two-year extension of the OPWG. Minnesota Statute § 15.059 Advisory Councils and Committees, Subdivision 6. Advisory Task Force, provides the commissioner with authority to continue the work of a task force which expires, when there is no expiration date in the enabling legislation or prohibition against creating another task force. The purpose of extending the OPWG term through December 2019 is to reconvene members on an ad hoc basis to accomplish the following three tasks:

- Collect input on the specific components (e.g., use of depression screening, mandatory checking of the Prescription Monitoring Program (PMP)) for the OPIP quality improvement program within the MHCP provider community;
- Develop threshold recommendations for provider disenrollment from the MHCP based on continued aberrant opioid prescribing behavior; and
- Develop special cause exemption criteria for prescribers whose practice warrants prescribing outside of the quality improvement thresholds (e.g., orthopedic surgeons who only perform major joint replacement surgeries).

Upon approval of the two-year extension, the Secretary of State's Office posted a notice of vacancies for the OPWG. Thirty one candidates applied for the 14 voting seats on the OPWG, including all of the 2015-2017 work group members. The review team strongly recommended reappointment of the previous OPWG members to their positions. This group of individuals demonstrated a strong commitment to the work during the first two years. Participation at the monthly meetings was nearly complete, and members were actively engaged in the work. In addition, the members' reappointment was recommended to ensure continuity between the development of the prescription guidelines, measures and MHCP quality improvement program. The commissioner reappointment the 14 voting members in February 2018.

All OPWG meetings are public, and non-members may choose to attend and submit comments in person or by webcast. Community participation in the OPWG meetings has been steady. On average, 10 non-members attend the monthly meetings in person, and the average number of online participants is 36. Non-member participants

include state government employees, health care providers, community members, and pharmaceutical industry representatives.

The OPWG has a dedicated web page and DHS staff maintain a dedicated email address for communications pertaining to the OPIP. Community members may request to be added to the OPWG email distribution list in order to receive information about upcoming meetings, meeting materials, and notification of public comment periods.

Minnesota Opioid Prescribing Guidelines

The complete Minnesota Opioid Prescribing Guidelines are provided in Appendix B.

On December 2, 2017, the Lieutenant Governor's office announced a 30 day public comment period on the draft opioid prescribing recommendations at a press conference at Abbott Northwestern Hospital. In addition to Lt. Governor Smith, DHS Commissioner Emily Piper, Dr. Ruth Linfield, Senator Chris Eaton, Representative Dave Baker, Dr. Chris Johnson (OPWG Chair) and Dr. Rahul Koranne (Minnesota Hospital Association Chief Medical Officer) spoke at the press conference.

DHS received comments from 60 individuals, health care providers and organizations during the comment period, including comments from the following organizations: Mayo Clinic, Allina Health, Minnesota Department of Labor and Industry, Minnesota Board of Dentistry, Minnesota Medical Association, Citizen's Council for Health Freedom and Gillette's Children's Hospital. The OPWG reviewed all public comments received, and discussed modifications to the guidelines at the February 2016 OPWG meeting.

Governor Dayton announced the final Minnesota Opioid Prescribing Guidelines at a press conference on April 4, 2018. The online guidelines are available on the Department of Human Services web site. DHS is working with a variety of partner organizations to disseminate the guidelines across the state. See Partnerships section.

OPIP Sentinel Measures

An overview of the OPIP sentinel measures and quality improvement thresholds is provided in Appendix C. The technical specifications for the OPIP Sentinel Measures, including the quality improvement thresholds, are provided in Appendix D.

The OPIP uses the term "sentinel measure" to signal the need for a consistent and robust response to opioid prescribing patterns that exceed the community agreed-upon standards. A brief description of the seven OPIP sentinel measures are provided below:

1. Index opioid prescription prescribing rate
2. Index opioid prescription: prescribing rate over recommended dose (100 morphine milligram equivalents (MME) or 200 MME)
3. Rate of prescribing 700 cumulative MME or more during an initial opioid prescribing episode
4. Chronic opioid analgesic therapy (COAT) prescribing rate

5. Rate of prescribing high-dose COAT
6. Rate of prescribing concomitant COAT and benzodiazepine therapy
7. Rate of prescribing COAT to patients with multiple opioid prescribers

OPIP Quality Improvement Program

Pursuant to the legislation, DHS is currently developing an opioid prescribing quality improvement program for MHCP-enrolled providers.

Enrolled providers who prescribed at least one opioid prescription to an MHCP-enrollee in either fee for service or managed care in the measurement year (typically the prior calendar year) will receive an individual report of their prescribing behavior across the seven OPIP sentinel measures, compared to their anonymized peers. DHS staff developed provider peer groups based on providers' National Provider Identifier (NPI) numbers and self-reported primary taxonomy codes. The OPWG reviewed these groups and assisted DHS with final peer groupings.

DHS is on track to release the first set of opioid prescribing reports by the end of calendar year 2018. The first set of reports will be for information purposes only, however the reports will indicate whether the provider's prescribing rate is above the quality improvement threshold for any measure. This will provide the medical community with an opportunity to become familiar with the reports, and it will provide the state with an opportunity to address concerns, prior to implementing the quality improvement program. The second set of opioid prescribing reports will be sent in late summer or early fall 2019. Providers who are identified as outliers on any of the OPIP sentinel measures will be required to participate in a quality improvement review with DHS.

DHS is currently developing the reporting mechanism. Data from medical and pharmacy claims support the reporting process. It is expected that individual prescriber reports will be delivered to MHCP-enrolled providers via individual MN.ITS mailboxes. DHS intends to password protect the file in order to deliver the information to providers under peer protected review.

Opioid Prescribing Data

Overall trends in opioid prescribing to MHCP enrollees: Decreases observed from 2016 to 2017

DHS staff continually analyze prescribing data for MHCP-enrolled providers in order to support the OPIP. The major findings from the data analysis conducted to date include:

- Overall opioid prescribing: There was a 17% decrease in the overall number of opioid prescriptions in the MHCP from 2016 to 2017. In 2017, there were 572,955 opioid prescriptions filled for MHCP enrollees (excluding patients with cancer and who receive hospice services).

- Index opioid prescriptions: There was a 9% decrease in the total number of index opioid prescriptions filled by MHCP enrollees from 2016 to 2017. An index opioid prescription is the first opioid prescription filled by an enrollee when the enrollees has not had any active opioid prescriptions for the previous 90 days. In 2017, there were 133,568 index opioid prescriptions filled.

- In 2017, 268,570 opioid prescriptions were filled by enrollees receiving chronic opioid therapy. An individual is considered to receive chronic opioid therapy if he or she had a continuous supply of opioids for 60 days in the calendar year.

- The number and rate of enrollees who became new chronic users decreased nearly 18% from 2015 to 2016 (most recent data available).

Figure 1 below provides the number of New Chronic Users in the MHCP population from 2012 to 2016. New Chronic Use is defined as the number of enrollees who were previously opioid naïve (no opioid prescription in a 90-day look back period) who then receive 45 days or more of opioids in the 90 days following the index opioid prescription. The number of enrollees who were previously opioid naïve who then receive 90 days or more in the 180 days following the index opioid prescription is also provided for comparison.

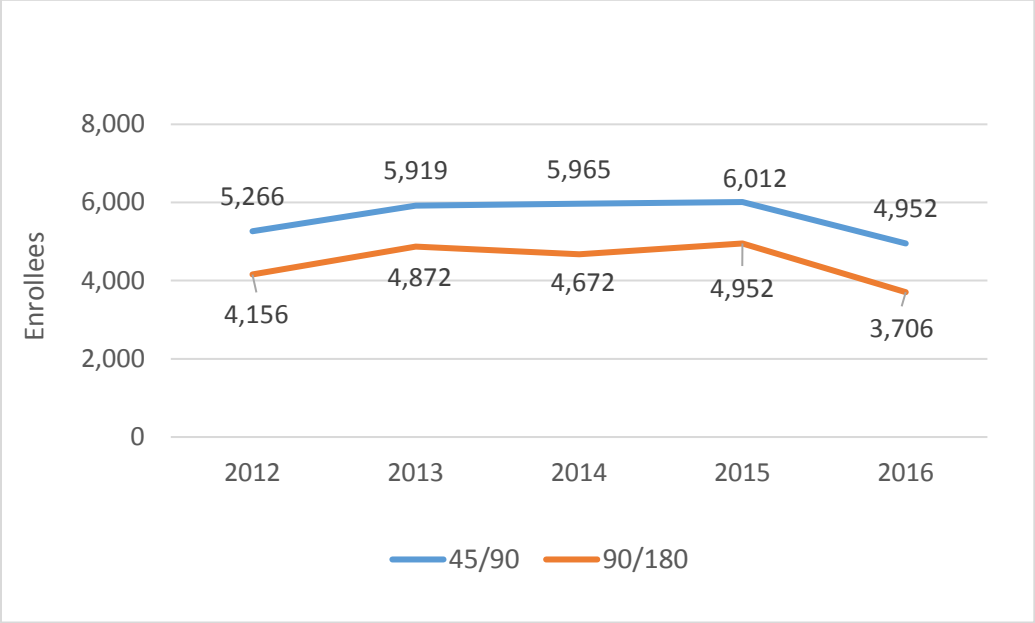
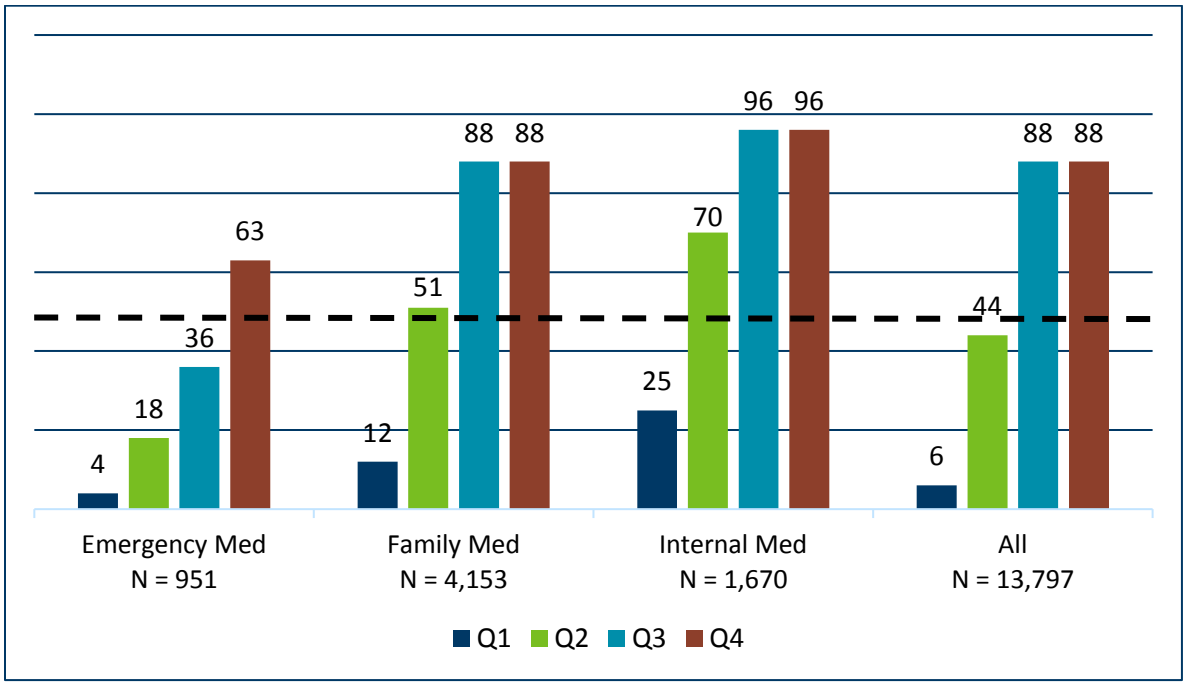


Figure 1. Annual number of new chronic opioid users in the MHCP enrollee population, 2012-2016

Variation in opioid prescribing behavior among MHCP enrolled health care providers

Figures 2 and 3 illustrate the variation found in the amount of opioids prescribed for an index opioid prescription for a select number of provider specialties. The measure is the percent of index opioid prescriptions that exceeded 100 MME or 200 MME in the calendar year. The 100 MME limit is applied to non-surgical provider groups, and the 200 MME limit is applied to surgical specialty groups.

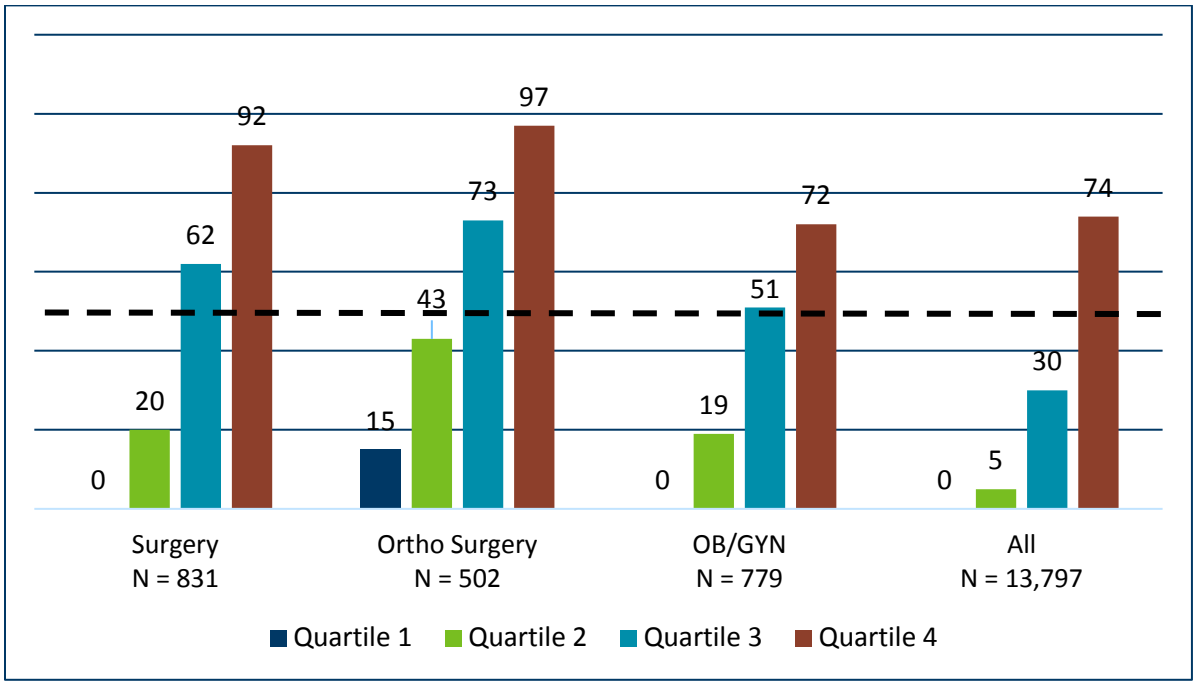
Figure 2. The percent of index opioid prescriptions that exceeded 100 MME, by quartiles within medical specialty, 2016



Example of how to interpret the chart: In 2016, 951 Emergency Medicine providers prescribed an index opioid prescription to at least one MHCP enrollee. The providers are divided into equal groups based on their prescribing rate of index opioid prescriptions greater than 100 MME. Providers in Quartile 1 (Q1) are those with the lowest prescribing rates; providers in quartile 4 (Q4) are those with the highest prescribing rates. The rate of prescribing an index opioid prescription that was greater than 100 MME was calculated for each Emergency Medicine provider. The number displayed above each bar is the average rate of prescribing greater than 100 MME within each quartile.

The dashed line indicates the quality improvement threshold rate (Rate = 50%). Providers whose prescribing rate is above the dash line would have been required to participate in a quality improvement review.

Figure 3. The percent of index opioid prescriptions that exceeded 200 MME, by quartile within surgical specialty, 2016



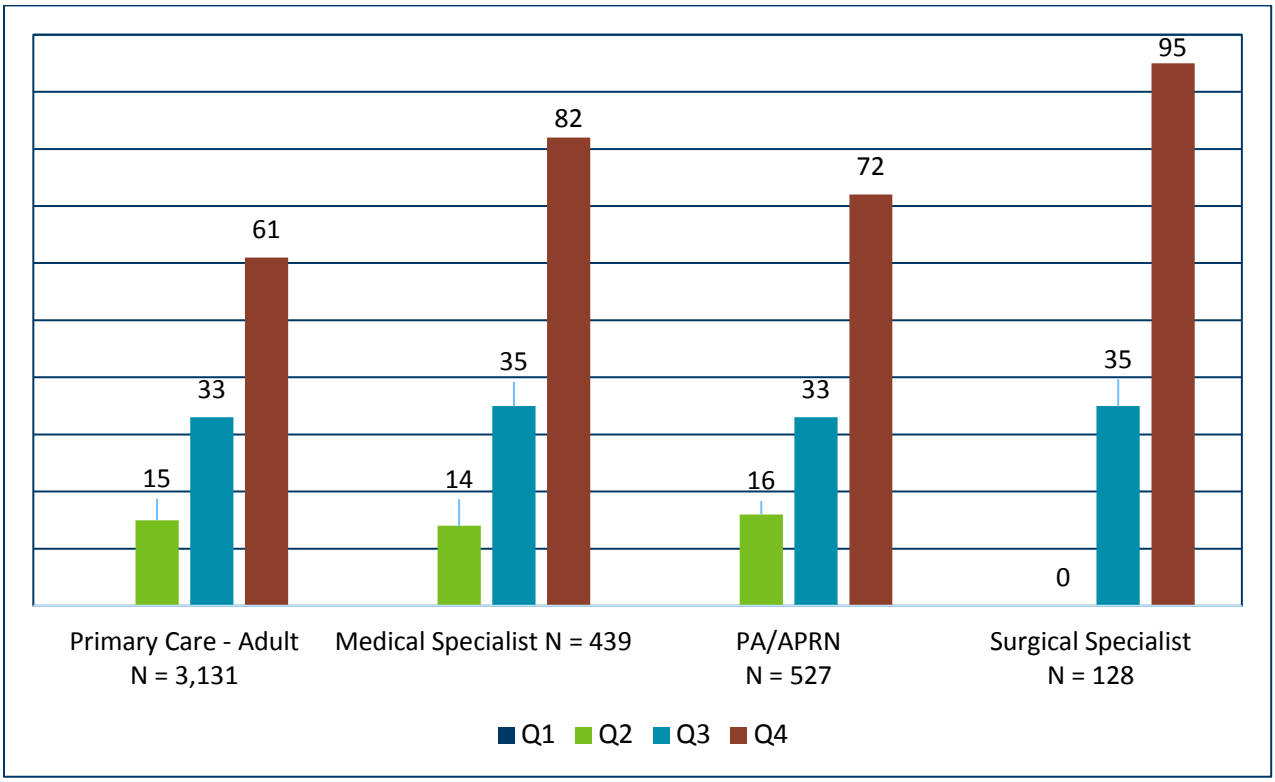
Example of how to interpret the chart: In 2016, 831 general surgeons (Surgery) prescribed an index opioid prescription to at least one MHCP enrollee. The providers are divided into equal groups based on their prescribing rate of index opioid prescriptions greater than 200 MME. Providers in Quartile 1 (Q1) are those with the lowest prescribing rates; providers in quartile 4 (Q4) are those with the highest prescribing rates. The rate of prescribing an index opioid prescription that was greater than 200 MME was calculated for each surgeon. The number displayed above each bar is the average rate of prescribing within each quartile.

The dashed line indicates the quality improvement threshold rate (Rate = 50%). Providers whose prescribing rate is above the dash line would have been required to participate in a quality improvement review.

The quality improvement program will recognize special cause variations for prescribers whose practice warrants prescribing greater than the recommended dose for the initial opioid prescription. For example, orthopedic surgeons who predominately perform major joint replacement surgeries may apply for a special cause variation and may not be required to participate in a quality improvement review.

Figure 4 illustrates the variation in prescribing concomitant chronic opioid therapy and benzodiazepine therapy. Patients receiving concomitant therapy are at high-risk for opioid-related adverse events, including overdose. This high-risk population must be carefully managed. See page 50 of the Opioid Prescribing Guidelines for additional information.

Figure 4. The percent of chronic opioid analgesic therapy patients receiving concomitant benzodiazepine prescriptions, by quartile within specialty; 2016



Example of how to interpret the chart: In 2016, 3,131 primary care (adult) providers prescribed chronic opioid analgesic therapy to at least one enrollee (the denominator). The providers are divided into equal groups based on their prescribing rate of COAT that exceeds 50 MME/day and concomitant benzodiazepine therapy. Providers in Quartile 1 (Q1) are those with the lowest prescribing rates; providers in quartile 4 (Q4) are those with the highest prescribing rates. A provider is considered to prescribe concomitant therapy when he or she prescribed both the opioid and benzodiazepine, or when a different provider prescribed the benzodiazepine. The analysis identifies enrollees receiving chronic opioid analgesic therapy of at least 50 morphine milligram equivalents a day and a benzodiazepine prescription greater than 7 days that overlapped with the opioid prescription(s). The number displayed above each bar is the average rate of prescribing concomitant benzodiazepines and opioids within each quartile.

The dashed line indicates the quality improvement threshold rate (Rate = 10%). Providers whose prescribing rate is above the dash line would have been required to participate in a quality improvement review. Given the high risk of overdose death related to concomitant opioid and benzodiazepine therapy, the OPWG recommended a low quality improvement threshold.

Dissemination and Partnerships

1. Weber Shandwick “Flip the Script” Campaign

DHS contracted with Weber Shandwick—a national communications firm with significant experience working with the Minnesota medical community—to develop educational resources for prescribers. Weber Shandwick completed two rounds of qualitative research in 2017 to test and refine the campaign concept with Minnesota health care providers. Physicians overwhelmingly supported the concept of "Flip the Script". The campaign is currently in design and production, and implementation will begin in fall 2018.

2. University of Minnesota Academic Health Center

   DHS and the University of Minnesota's School of Continuing Development in the Academic Health Center are working together to develop and distribute education about the prescribing guidelines and quality improvement program. This will include a set of podcasts with available continuing education credits for physicians, dentists, and others to be determined. The University piloted the first podcast with the dental school in June 2018, and received positive feedback. The podcast will be available in September 2018.

   DHS is also providing guidance to and participating in a core medical school core entitled "Becoming a Doctor" in which medical students learn about prescribing and about having difficult conversations with patients about the use of these substances.

3. Minnesota Hospital Association

   DHS and the Minnesota Hospital Association are working together to disseminate the Opioid Prescribing Guidelines to Minnesota health care providers. DHS staff presented information about the guidelines to MHA members during the following webinars and in-person presentations:

   - Thursday, April 19, 2019: Quality and Patient Safety Update Webinar
   - Wednesday, June 13, 2018: Webinar on Minnesota Opioid Prescribing Guidelines
   - August 14, Medication Safety Learning and Networking Day

   DHS has also contracted with MHA to assist with disseminating the prescribing protocols and sentinel measures, and incorporating the measures into the workflows of MHA provider organizations, and developing sample quality improvement plans for use by individual providers identified as outliers in the OPIP opioid prescribing reports.

   Work will begin with the MHA by September 2018.

4. Minnesota Medical Association

   DHS staff presented to the Minnesota Medical Association's (MMA) Opioid Task Force twice since January 2017.

The MMA will host a series of three webinars about the Opioid Prescribing Improvement Program, beginning August 15, 2018. The first two webinars will address the opioid prescribing recommendations and sentinel measures. The final webinar will cover the OPIP opioid reports and quality improvement program. The webinars will be recorded and available on the MMA web site.

Appendix A. Opioid Prescribing Work Group Members

Work group members (and their statutorily set membership categories) are:

- Chris Johnson, MD (Chair), Allina Health (Health Services Advisory Council member)
- Julie L. Cunningham, PharmD, BCPP, Mayo Clinic Health System (nonphysician health care professional who treats pain)
- Senator Chris Eaton, RN, Minnesota State Senate (consumer representative)
- Tiffany Elton, PharmD, NCPS, Fond du Lac Human Services Pharmacy (pharmacist)
- Dana Farley, MS, Minnesota Department of Health (nonvoting)
- Rebekah Forrest, RN, CNP, North Point Community Clinic (nurse practitioner)
- Ifeyinwa Nneka Igwe, MD, Essentia Health (physician)
- Bradley Johnson, MD, South Country Health Alliance (health plan medical director)
- Ernest Lampe, MD, Minnesota Department of Labor and Industry (DLI medical consultant; nonvoting)
- Matthew Lewis, MD (not practicing), Medtronic (consumer representative)
- Peter Marshall, PharmD, HealthPartners (health plan pharmacy director)
- Murray McAllister, PsyD, LP, Courage Kenny Rehabilitation Institute (nonphysician health care professional who treats pain)
- Richard Nadeau, DDS, MPH, University of Minnesota School of Dentistry (dentist)
- Mary Beth Reinke, PharmD, MSA, Department of Human Services (DHS pharmacy unit; nonvoting)
- Charles Reznikoff, MD, Hennepin County Medical Center (mental health professional)
- Jeffrey Schiff, MD, MBA, Minnesota Department of Human Services (MHCP medical director; nonvoting)
- Detective Charles Strack, Little Falls Police Department (law enforcement)
- Lindsey Thomas, MD, Hennepin County Medical Examiner's Office, retired (medical examiner)

Appendix B. Minnesota Opioid Prescribing Guidelines

The Minnesota Opioid Prescribing Guidelines are available on the DHS web site.

Appendix C. Opioid Prescribing Improvement Program Sentinel Measure Overview

In 2015, Governor Dayton worked with the Legislature to create the Opioid Prescribing Improvement Program (OPIP). The law tasked a group of experts with developing recommendations on opioid prescribing and use, a set of opioid-prescribing measures to be used for quality improvement, and a quality improvement program for Minnesota Health Care Program-enrolled health care providers who are identified as having excessive opioid prescribing compared to their peers. This document provides:

- The clinical recommendations from the Minnesota Opioid Prescribing Guidelines that support the opioid prescribing sentinel measures;
- Key definitions; and
- A summary of the sentinel measures and the thresholds identified for quality improvement review.

Opioid Prescribing Guidelines

The opioid prescribing guidelines reflect three broad values described below. The clinical recommendations that support the measures are provided under the appropriate value.

1. **Prescribe the lowest effective dose and duration of opioids when used for acute pain.** Clinicians should also reduce variation in opioid prescribing for acute pain.

    - *Avoid prescribing more than 100 morphine milligram equivalents (MME) of low-dose, short-acting opioids.*
    - *Limit the initial prescription for acute pain following extensive surgical procedures or major traumatic injury to no more than 200 MME, unless circumstance clearly warrant additional opioid therapy.*

2. **Monitor the patient closely during the post-acute pain period.** The post-acute pain period is a critical time to prevent chronic opioid use. Increase assessment of the biopsychosocial factors associated with opioid-related harm and chronic opioid use during this period.

    - *Avoid prescribing in excess of 700 MME (cumulatively) in order to reduce the risk of chronic opioid use and other opioid-related harms.*

3. **Avoid initiating chronic opioid therapy and carefully manage any patient who remains on opioid medication.** The evidence to support long-term opioid therapy for chronic pain is insufficient at this time, but the evidence of harm is clear.

    - *Prescribe opioids at the lowest dose, with no more than 50 MME/day. Avoid increasing daily dosage to 90 MME/day or above.*
    - *Actively work to lower risks when prescribing long-term opioids and throughout the therapy. Strategies and frequency should be commensurate with risk factors.*
    - *Avoid prescribing concurrent prescriptions of opioids and benzodiazepines or other sedative-hypnotic medications.*

Measure Definitions

Terms	Definition
Opioid Formulations (Acute Pain)	Only oral tablet formulations are used for the index opioid prescription and initial opioid prescribing episode measures.
Opioid Formulations (Chronic Pain)	All formulations are included in the chronic opioid prescribing measure. Excluded drugs are buprenorphine-naloxone buccal films, fentanyl transdermal device, injectables and opioid cold and cough products.
Index Opioid Prescription	The first opioid prescription in the measurement period after at least 90 days of opioid naiveté.
Opioid Naïve User	A patient prescribed an opioid medication in the measurement year who does not have an active opioid prescription in the 90 day period prior to the measurement year index prescription.
Morphine Milligram Equivalence (MME)	The equianalgesic of a specific dose and formulation of opioids to parenteral morphine. Standard conversion ratios are used to calculate each opioid's equianalgesic dose.
Days' supply	The total days' supply is the sum of the days' supply from all opioid prescriptions prescribed during the measurement period. If two medications have different service dates, but the days' supply overlaps, both days' supply are included in the total.
Chronic opioid analgesic therapy (COAT)	A ≥ 60 consecutive days' supply of opioids from any number of prescriptions. A ≤ 3 day gap is permissible between prescriptions.
Chronic opioid prescriber	A health care provider who prescribes at least 60 consecutive days' supply of opioids to an individual during the measurement period.
Concomitant COAT and benzodiazepine prescriptions	A ≥ 60 consecutive days' supply of opioids and a benzodiazepine prescription which has > 7 days' supply of overlap with the COAT during the measurement year
Elevated dose COAT	A ≥ 60 consecutive days' supply of opioids and the daily dose is ≥ 50 MME. A provider who prescribes ≥ 50 MME/day at any point during a patient's COAT is counted as having prescribed an elevated dose.

Terms	Definition
High dose COAT	A ≥ 60 consecutive days' supply of opioids and the daily dose is ≥ 90 MME. A provider who prescribes ≥ 90 MME/day at any point during a patient's COAT is counted as having prescribed a high dose.

Opioid Prescribing Sentinel Measures

Measure Description	Numerator	Denominator	Quality Improvement Threshold
Index opioid prescribing rate	Distinct number of patients with one or more index opioid prescriptions prescribed in the measurement period	Distinct number of patients seen by the provider in the measurement period	Prescribing rate is > 8% (non-surgical specialties only)
Index opioid prescription: Rate of prescribing over recommended dose	Number of index opioid prescriptions exceeding 100 MME (medical specialty) or 200 MME (surgical specialty) prescribed in the measurement period	Number of index opioid prescriptions prescribed in the measurement period.	Prescribing rate is > 50%
Percent of prescriptions that exceed 700 cumulative MME in the post-acute pain phase	Number of prescriptions which cross the 700 cumulative MME threshold or exceed 700 cumulative MME prescribed in the measurement period	Number of opioid prescriptions prescribed during an initial opioid prescribing episode in the measurement period	Prescribing rate is > 15%
Chronic opioid analgesia therapy (COAT) prescribing rate	Number of patients prescribed COAT in the measurement period	Number of patients prescribed opioids in the measurement period	No quality improvement threshold
Rate of prescribing high-dose COAT	Number of patients prescribed COAT of ≥ 90 MME/day at any point in the measurement period	Number of patients prescribed COAT in the measurement period	Prescribing rate is > 10%

Measure Description	Numerator	Denominator	Quality Improvement Threshold
Rate of concomitant COAT and benzodiazepine prescribing	Number of patients prescribed COAT of ≥ 50 MME/day and an overlapping benzodiazepine prescription > 7 days in the measurement period	Number of patients prescribed COAT in the measurement period	Prescribing rate is > 10%
Percent of COAT patients receiving opioids from multiple prescribers	Number of patients on COAT who received opioids from 2+ additional providers simultaneously while on COAT during the measurement year	Number of patients prescribed COAT during the measurement period	No quality improvement threshold

Note: Sentinel measures are provider-specific for the OPIP, but could be adapted to the group level if desired.

Appendix D. Technical Specifications for OPIP Sentinel Measures

1. Index Opioid Prescription Prescribing Rate

A provider-level measure to evaluate the frequency of prescribing opioids to previously opioid-naïve patients, support quality improvement activities, and provide feedback on individual opioid prescribing behavior.

The Opioid Prescribing Improvement Program (OPIP) sentinel measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The prescribing rate of index opioid prescriptions to enrollees during the measurement year.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Only oral tablet formulations are included in this analysis. Excluded dosage forms include sublingual tablets, lozenges, solutions, films, syringe, cartridges, vials, suppositories, powders, liquids, oral concentrate, oral suppositories, PCA syringe, PCA vial, system PCA, ampul, vial port.
Setting	Outpatient opioid prescriptions
Index opioid prescription	The first opioid prescription in the measurement year after 90 days of opioid naiveté.
Look-back period	90 day period prior to the service date of the index opioid prescription to determine if the enrollee is opioid naïve
Look-forward period	45 day period after the service date of the index opioid prescription

Term	Definition
Opioid naïve user	An enrollee that is prescribed an opioid medication in the measurement year that does not have an active opioid prescription in the 90 day period prior to the measurement year index opioid prescription.
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.
Intake period	A 12-month window that begins on November 17 of the year prior to the measurement year and ends on November 16 of the measurement year.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare); both fee-for-service and managed care enrollees

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period prior to the index opioid prescription even if that period includes days in the previous calendar year. The enrollee must also be continuously enrolled during the 45 day look forward period after the index opioid prescription.

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator: Number of distinct enrollees seen by the provider in the intake period.

Medical exclusion: Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."

Hospice exclusion: Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.

Numerator: Number of distinct enrollees with one or more index opioid prescription claims in the intake period.

Quality Improvement Threshold

Individual providers whose index opioid prescribing rate exceeds 0.08 in the measurement year will participate in a quality improvement review. The quality improvement threshold is only applicable to non-surgical specialties.

2. Prescribing Rate of an Index Opioid Prescription Greater than the Recommended Dose

A provider-level measure to evaluate adherence to the Opioid Prescribing Improvement Program's (OPIP) recommended initial dose limit, support quality improvement activities, and provide feedback on opioid prescribing practices.

The OPIP measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The percentage of index opioid prescriptions prescribed in the measurement year that exceed the recommended 100 or 200 Morphine Milligram Equivalence (MME) dose limit.

- The 100 MME dose limits applies to prescribers identified as a primary care or non-surgical medical specialists.
- The 200 MME dose limit applies to prescribers identified as surgical specialists, including Obstetricians and Gynecologists.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Only oral tablet formulations are included in this analysis. Excluded dosage forms include sublingual tablets, lozenges, solutions, films, syringe, cartridges, vials, suppositories, powders, liquids, oral concentrate, oral suppositories, PCA syringe, PCA vial, system PCA, ampul, vial port.
Setting	Outpatient opioid prescriptions
Index opioid prescription	The first opioid prescription in the measurement year after 90 days of opioid naiveté.
Look-back period	90 day period prior to the service date of the index opioid prescription to determine if the enrollee is opioid naïve

Term	Definition
Look-forward period	45 day period after the service date of the index opioid prescription
Opioid naïve user	An enrollee that is prescribed an opioid medication in the measurement year that does not have an active opioid prescription in the 90 day period prior to the measurement year index opioid prescription.
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.
Intake period	A 12-month window that begins on November 17 of the year prior to the measurement year and ends on November 16 of the measurement year.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare); both fee-for-service and managed care enrollees.

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period prior to the index opioid prescription even if that period includes days in the previous calendar year. Must also be continuously enrolled during the 45 day look forward period after the index opioid prescription.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove day's supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator:	Number of index opioid prescriptions prescribed during the intake period.
Medical exclusion:	Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."
Hospice exclusion:	Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.
Numerator:	Number of index opioid prescriptions exceeding 100 MME prescribed during the intake period for primary care and non-surgical medical specialists; or Number of index opioid prescriptions exceeding 200 MME prescribed during the intake period for surgical specialists, including Obstetricians/Gynecologists.

OPIP Quality Improvement: Measure Threshold

Individual MHCP-enrolled providers whose prescribing rate of index opioid prescriptions greater than the recommended dosage (100 MME for non-surgical specialties; 200 MME for surgical specialties) is greater than 0.50 in the measurement year will participate in a quality improvement review.

3. Prescribing Rate of 700 Cumulative MME or Greater During an Initial Opioid Prescribing Episode

A provider-level measure to evaluate the rate of prescribing over 700 cumulative Morphine Milligram Equivalence (MME) during an initial opioid prescribing episode, support quality improvement activities, and provide feedback on opioid prescribing practices.

The OPIP measures will align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The percentage of opioid prescriptions prescribed during the initial index opioid prescribing episode which expose a patient to 700 cumulative Morphine Milligram Equivalence (MME) or more.

The prescriber of the prescription that meets or exceeds the 700 cumulative MME threshold does not need to be the prescriber of previous prescriptions in the initial opioid prescribing episode.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Only oral tablet formulations are included in this analysis. Excluded dosage forms include sublingual tablets, lozenges, solutions, films, syringe, cartridges, vials, suppositories, powders, liquids, oral concentrate, oral suppositories, PCA syringe, PCA vial, system PCA, ampul, vial port.
Setting	Outpatient opioid prescriptions
Index opioid prescription	The first opioid prescription in the measurement year after 90 days naiveté.
Look-back period	90 day period prior to the service date of the index opioid prescription to determine if the enrollee is opioid naïve
Look-forward period	45 day period after the service date of the index opioid prescription

Term	Definition
Initial opioid prescribing episode	A 45 day period following the service date of the index opioid prescription, including the date of the index opioid prescription.
Opioid naïve user	An enrollee that is prescribed an opioid medication in the measurement year that does not have an active opioid prescription in the 90 day period prior to the measurement year index opioid prescription.
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.
Intake period	A 12-month window that begins on November 17 of the year prior to the measurement year and ends on November 16 of the measurement year.
Cumulative Morphine Milligram Equivalence	The cumulative sum of the MME as of each prescription prescribed to a patient during the initial opioid prescribing episode (including the index opioid prescription MME).

Eligible Population

Product line: Medicaid enrollees in FFS or Minnesota's public health managed care programs (MHCP).

Age: No age limits

Continuous enrollment: Must be continuously enrolled during the 90-day look-back period prior to the index opioid prescription even if that period includes days in the previous calendar year, and during the 45 day initial opioid prescribing episode period.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove day's supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator:	Total number of opioid prescriptions prescribed by the provider that occurred during an initial opioid prescribing episode beginning November 17 of the previous year and December 31 of the measurement year.
Medical Exclusion:	Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."
Hospice Exclusion:	Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.
Numerator:	Total number of prescriptions prescribed by the provider that occurred during an individual opioid prescribing episode, beginning November 17 of the previous year and December 31 of the measurement year, and which satisfy one of two criteria. First, the prescription meets or crosses the 700 cumulative MME threshold; or second, the prescription is prescribed to an enrollee for whom the cumulative MME of the prescribing episode already exceeded 700 MME.

OPIP Quality Improvement: Measure Threshold

The percent of opioid prescriptions prescribed during the initial opioid episode that meet or exceed 700 cumulative MME is greater than 15% during the measurement year. Providers whose prescribing rate exceeds 0.15 will participate in a quality improvement review.

4. Chronic Opioid Analgesic Therapy Prescribing Rate

A provider-level measure to evaluate the frequency of prescribing chronic opioid analgesic therapy and provide feedback on opioid prescribing practices.

The Opioid Prescribing Improvement Program (OPIP) sentinel measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The percent of patients prescribed at least one opioid by the provider who received chronic opioid analgesic therapy (COAT).

Measure Definitions

Term	Definition

Term	Definition
	supply on day 1 and fills another 30 day supply on day 26, the days' supply is 60 not 56. Split dose: If two opioid medications have the same service date, but prescribed for different amounts; count the prescription with the largest days' supply and add the MME amounts together.
Chronic opioid analgesic therapy (COAT)	A ≥ 60 consecutive days' supply of opioids from any number of prescriptions. A ≤ 3 day gap separating the end of one active prescription and the beginning of the next prescription (the service date on the claim) is permissible.
Chronic opioid analgesic therapy (COAT) Span	The period of time between the date the enrollee receives the first prescription which initiates COAT up until the end date of the last prescription that satisfies the COAT criteria. In order to be considered a COAT span two criteria must be met: 1. The enrollee receives at least a total of 60 days' supply of opioids from the same provider; and 2. There are no more than 3 days separating the end date of one prescription and the service date of the next prescription. If more than 3 days separate the end date of a prescription and the service date of the next prescription, a new COAT span will begin if it meets the above criteria. All of the calculations with respect to total MME, total days' supply and MME per day, occur within individual COAT spans.
Chronic opioid prescriber	A health care provider who prescribes at least 60 consecutive days' supply of opioids to an enrollee during the measurement period. (All 60 days need to be attributed to the same provider.)
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare); both fee-for-service and managed care enrollees.

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period from the date of the opioid prescription.

Included Prescriptions

A prescription is included in the analysis if the service date on the claim falls within the measurement period. The total days' supply for the prescription is counted towards the total even if the end date of the prescription extends past the measurement year.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove days' supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Provider Specialties

MHCP-enrolled providers are assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers are assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator: Number of distinct enrollees to whom the provider prescribed at least one opioid during the measurement year.

Medical exclusion: Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."

Hospice exclusion: Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.

Numerator: Number of distinct enrollees to whom the provider prescribed chronic opioid analgesic therapy (COAT) in the measurement year.

OPIP Quality Improvement: Measure Threshold

There is no quality improvement threshold for this measure. The data reported is for informational purposes only.

5. High-Dose Chronic Opioid Analgesic Therapy Prescribing Rate

A provider-level measure to evaluate adherence to the Opioid Prescribing Improvement Program's (OPIP) recommended chronic opioid analgesic therapy upper daily dose limit, support quality improvement activities, and provide feedback on opioid prescribing practices.

The OPIP measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The percentage of enrollees prescribed chronic opioid analgesic therapy (COAT) that met or exceeded the upper dose limit recommendation of 90 Morphine Milligram Equivalence (MME) per day at any point in the measurement year.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Excluded drugs include: 1. Buprenorphine-naloxone buccal films: a. buprenorphine-naloxone 2.1 mg-0.3 mg buccal film b. buprenorphine-naloxone 4.2 mg-0.7 mg buccal film c. buprenorphine-naloxone 6.3 mg-1 mg buccal film 2. fentanyl transdermal device (Ionsys®) 3. Injectables 4. Opioid cold and cough products
Setting	Outpatient opioid prescriptions
Days' supply	Days' supply is calculated cumulatively within the span of COAT prescribing, and includes the days' supply of the current prescription. If a new COAT span begins with either the same or a different prescriber, the days' supply count restarts.

Term	Definition
	If two medications have different service dates, but the days' supply overlaps, both days' supply are included in the total; enrollee fills a 30 day supply on day 1 and fills another 30 day supply on day 26, the days' supply is 60 not 56. Split dose: If two opioid medications have the same service date, but prescribed for different amounts; count the prescription with the largest days' supply and add the MME amounts together.
Chronic opioid analgesic therapy (COAT)	A ≥ 60 consecutive days' supply of opioids from any number of prescriptions. A ≤ 3 day gap separating the end of one active prescription and the beginning of the next prescription (the service date on the claim) is permissible.
Chronic opioid analgesic therapy (COAT) Span	The period of time between the date the enrollee receives the first prescription which initiates COAT up until the end date of the last prescription that satisfies the COAT criteria. In order to be considered a COAT span two criteria must be met: 1. The enrollees receives at least a total of 60 days' supply of opioids from the same provider; and 2. There are no more than 3 days separating the end date of one prescription and the service date of the next prescription. If more than 3 days separate the end date of a prescription and the service date of the next prescription, a new COAT span will begin if it meets the above criteria. All of the calculations with respect to total MME, total days' supply and MME per day, occur within individual COAT spans.
Chronic opioid prescriber	A health care provider who prescribes at least 60 consecutive days' supply of opioids to an enrollee during the measurement period. (All 60 days need to be attributed to the same provider.)
High dose chronic opioid analgesic therapy	A ≥ 60 consecutive days' supply of opioids and the daily dose is ≥ 90 MME. The daily dose is calculated as of each individual prescription within a COAT span.

Term	Definition
	An enrollee who meets this threshold at any point within the COAT span is counted in the numerator of the chronic opioid prescriber, i.e. the dose does not need to be ≥ 90 MME/day for the entire COAT span.
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.
Total morphine milligram equivalence (MME)	The total MME is the cumulative MME as of each prescription that has occurred within the span of COAT prescribing, inclusive of the current prescription. If a new COAT span begins with either the same or a different prescriber, the total MME calculation restarts.
MME per day	The MME per day is the total MME as of the current prescription within the COAT span divided by the total days' supply as of the current prescription within the COAT span.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare); both fee-for-service and managed care enrollees.

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period from the date of the opioid prescription.

Included Prescriptions

A prescription is included in the analysis if the service date on the claim falls within the measurement period. The total days' supply for the prescription is counted towards the total even if the end date of the prescription extends past the measurement year.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove day's supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator: Number of distinct enrollees to whom the provider prescribed at least one span of COAT during the measurement year. If an enrollee has more than one COAT span with an individual provider, that enrollee is only counted once in the provider's denominator.

Medical exclusion: Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."

Hospice exclusion: Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.

Numerator: Number of distinct enrollees to whom the provider prescribed high-dose COAT during a COAT span during the measurement year. If an enrollee is prescribed high-dose COAT more than once during a single COAT span or across multiple COAT spans, that enrollee is only counted once in the provider's numerator.

OPIP Quality Improvement: Measure Threshold

Individual MHCP-enrolled providers whose prescribing rate of high-dose chronic opioid analgesic therapy (≥ 90 MME/day at any point) is greater than 0.10 in the measurement year will participate in a quality improvement review.

6. Concomitant Chronic Opioid Analgesic Therapy and Benzodiazepines Prescribing Rate

A provider-level measure to evaluate adherence to the Opioid Prescribing Improvement Program's (OPIP) recommendation to avoid prescribing concomitant chronic opioid analgesic therapy and benzodiazepine therapy. The measure evaluates the opioid prescriber's behavior. In addition, the measure includes only patients whose daily opioid dose is at least 50 Morphine Milligram Equivalence (MME).

The OPIP sentinel measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The number of patients prescribed an elevated dose (≥ 50 MME per day) of chronic opioid analgesic therapy (COAT) who have greater than 7 days of overlapping benzodiazepine therapy in the measurement year. The overlapping benzodiazepine therapy days must be from one prescription in order to meet the inclusion criteria.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Excluded drugs include: 1. Buprenorphine-naloxone buccal films: a. buprenorphine-naloxone 2.1 mg-0.3 mg buccal film b. buprenorphine-naloxone 4.2 mg-0.7 mg buccal film c. buprenorphine-naloxone 6.3 mg-1 mg buccal film 2. fentanyl transdermal device (Ionsys®) 3. Injectables 4. Opioid cold and cough products
Benzodiazepine medications	Alpraxolam, Chlordiazepoxide HCL, Clobazam, Clonazepam, Clorazepate Dipotassium, Diazepam, Estazolam, Flurazepam HCL, Lorazepam, Midazolam HCL, Midazolam HCL/PF, Oxazepam, Temazepam, Triazolam
Setting	Outpatient opioid prescriptions.

Term	Definition
Days' supply	Days' supply is calculated cumulatively within the span of COAT prescribing, and includes the days' supply of the current prescription. If a new COAT span begins with either the same or a different prescriber, the days' supply count restarts. If two medications have different service dates, but the days' supply overlaps, both days' supply are included in the total; enrollee fills a 30 day supply on day 1 and fills another 30 day supply on day 26, the days' supply is 60 not 56. Split dose: If two opioid medications have the same service date, but prescribed for different amounts; count the prescription with the largest days' supply and add the MME amounts together.
Chronic opioid analgesic therapy (COAT)	A ≥ 60 consecutive days' supply of opioids from any number of prescriptions. A ≤ 3 day gap separating the end of one active prescription and the beginning of the next prescription (the service date on the claim) is permissible.
Chronic opioid analgesic therapy (COAT) Span	The period of time between the date the enrollee receives the first prescription which initiates COAT up until the end date of the last prescription that satisfies the COAT criteria. In order to be considered a COAT span two criteria must be met: 1. The enrollee receives at least a total of 60 days' supply of opioids from the same provider; and 2. There are no more than 3 days separating the end date of one prescription and the service date of the next prescription. If more than 3 days separate the end date of a prescription and the service date of the next prescription, a new COAT span will begin if it meets the above criteria. All of the calculations with respect to total MME, total days' supply and MME per day, occur within individual COAT spans.

Term	Definition
Chronic opioid prescriber	A health care provider who prescribes at least 60 consecutive days' supply of opioids to an enrollee during the measurement period. (All 60 days need to be attributed to the same provider.)
Elevated dose chronic opioid analgesic therapy	A ≥ 60 consecutive days' supply of opioids and the daily dose is ≥ 50 MME.
Elevated dose COAT span	A COAT span during which an enrollee's daily dose is at or above 50 MME/day for the entire span.
Concomitant elevated dose COAT span and benzodiazepine therapy	A ≥ 60 consecutive days' supply of opioids where the daily dose is ≥ 50 MME and a benzodiazepine prescription which has > 7 days' supply of overlap with the COAT during the measurement year.
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.
Total morphine milligram equivalence (MME)	The total MME is the cumulative MME as of each prescription that has occurred within the span of COAT prescribing, inclusive of the current prescription. If a new COAT span begins with either the same or a different prescriber, the total MME calculation restarts.
MME per day	The MME per day is the total MME as of the current prescription within the COAT span divided by the total days' supply as of the current prescription within the COAT span.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare), both fee-for-service and enrollees in managed care programs.

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period from the date of the opioid prescription.

Included Prescriptions

A prescription is included in the analysis if the service date on the claim falls within the measurement period. The total days' supply for the prescription is counted towards the total even if the end date of the prescription extends past the measurement year.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove day's supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Identifying Concomitant Use

1. Identify the COAT span and the opioid prescriptions included in the span.
2. Calculate the cumulative MME/day as of each prescription.
3. Identify the prescriptions which meet or exceed the 50 MME/day threshold.
4. Collapse those prescriptions into elevated COAT span(s) prescribed by one provider
5. Compare the dates of the elevated dose COAT span(s) with the dates of the benzodiazepine prescription(s).

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator:	Number of distinct enrollees to whom the provider prescribed COAT during the measurement year.
Medical Exclusion:	Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."
Hospice Exclusion:	Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.

Numerator: Number of distinct enrollees to whom the provider prescribed elevated dose COAT of ≥ 50 MME/day and had an overlapping benzodiazepine prescription > 7 days in the measurement year. If an enrollee is prescribed concomitant elevated dose COAT and benzodiazepine therapy more than once across a single COAT span or across multiple COAT spans for the same provider, the enrollee is only counted once in the provider's numerator.

OPIP Quality Improvement: Measure Threshold

Individual MHCP-enrolled providers whose opioid prescribing rate of COAT ≥ 50 MME/day to enrollees with > 7 days of overlapping benzodiazepine is greater than 0.10 in the measurement year will participate in a quality improvement review. When the opioid prescriber is not the same person who prescribed the benzodiazepines, only the opioid prescriber is required to participate in the quality improvement review (if his or her prescribing rate is greater than 0.10).

7. Percent of Chronic Opioid Analgesic Therapy Enrollees Receiving Opioids from Multiple Providers

A provider-level measure to evaluate how frequently enrollees prescribed chronic opioid analgesic therapy receive additional opioids from other prescribers. The data will be used to provide feedback to the chronic opioid prescriber.

The Opioid Prescribing Improvement Program (OPIP) sentinel measures align with the following HEDIS 2018 Use of Opioids at High Dosage (UOD) technical criteria:

- *Use of the HEDIS 2018 UOD opioid medication value set,*
- *Use of the HEDIS 2018 UOD cancer value sets, and*
- *Hospice exclusion - Medicare place of service code 34.*

Measure Description

The percent of patients receiving chronic opioid analgesic therapy (COAT) from a chronic opioid prescriber who received opioid prescriptions from 2 or more additional prescribers during the time span in which they received COAT.

Measure Definitions

Term	Definition
Opioid medications	The NDC codes used to identify opioid medications from the "HEDIS 2018 UOD measure opioid medication value set." Excluded drugs include: 1. Buprenorphine-naloxone buccal films: a. buprenorphine-naloxone 2.1 mg-0.3 mg buccal film b. buprenorphine-naloxone 4.2 mg-0.7 mg buccal film c. buprenorphine-naloxone 6.3 mg-1 mg buccal film 2. fentanyl transdermal device (Ionsys®) 3. Injectables 4. Opioid cold and cough products
Setting	Outpatient opioid prescriptions
Days' supply	Days' supply is calculated cumulatively within the span of COAT prescribing, and includes the days' supply of the current

Term	Definition
	prescription. If a new COAT span begins with either the same or a different prescriber, the days' supply count restarts. If two medications have different service dates, but the days' supply overlaps, both days' supply are included in the total; enrollee fills a 30 day supply on day 1 and fills another 30 day supply on day 26, the days' supply is 60 not 56. Split dose: If two opioid medications have the same service date, but prescribed for different amounts; count the prescription with the largest days' supply and add the MME amounts together.
Chronic opioid analgesic therapy (COAT)	A ≥ 60 consecutive days' supply of opioids from any number of prescriptions. A ≤ 3 day gap separating the end of one active prescription and the beginning of the next prescription (the service date on the claim) is permissible.
Chronic opioid analgesic therapy (COAT) Span	The period of time between the date the enrollee receives the first prescription which initiates COAT up until the end date of the last prescription that satisfies the COAT criteria. In order to be considered a COAT span two criteria must be met: 1. The enrollee receives at least a total of 60 days' supply of opioids from the same provider; and 2. There are no more than 3 days separating the end date of one prescription and the service date of the next prescription. If more than 3 days separate the end date of a prescription and the service date of the next prescription, a new COAT span will begin if it meets the above criteria. All of the calculations with respect to total MME, total days' supply and MME per day, occur within individual COAT spans.

Term	Definition
Chronic opioid prescriber	A health care provider who prescribes at least 60 consecutive days' supply of opioids to an enrollee during the measurement period. (All 60 days need to be attributed to the same provider.)
Active opioid prescription	An opioid prescription for which the days' supply has not been exhausted.

Eligible Population

Product line: Minnesota Health Care Programs (MHCP) enrollees (includes Medical Assistance and MinnesotaCare; both fee-for-service and managed care enrollees.

Age: No age limits

Continuous enrollment: The enrollee must be continuously enrolled during the 90 day look-back period from the date of the opioid prescription.

Provider attribution: Enrollees are counted in a COAT provider's numerator if that provider prescribed COAT to the enrollee, and the enrollee received opioid prescriptions from 2 or more other providers. Opioid prescriptions received from other providers must have overlapped at least 2 days with the COAT span. The opioid prescriptions from the 2 or more additional providers do not need to overlap with each other, but the prescriptions must be within the same COAT span prescribed by the COAT provider.

Enrollees are counted in the provider's numerator only once even if they meet the multiple provider threshold for multiple spans with the same provider.

Included Prescriptions

A prescription is included in the analysis if the service date on the claim falls within the measurement period. The total days' supply for the prescription is counted towards the total even if the end date of the prescription extends past the measurement year.

Morphine Milligram Equivalence

Morphine Milligram Equivalence (MME) conversion ratios were calculated using the National Center for Injury Prevention and Control, Center for Disease Control and Prevention (CDC) compilation of opioid analgesic formulations with morphine milligram equivalent conversion factors. This file includes a list of opioid analgesics by National Drug Code and the relevant conversion code. The conversion formula in the CDC file is for a daily

MME amount, so the conversion must be adjusted to reflect the total MME of prescription (remove day's supply from conversion formula).

Total MME Conversion formula: (Drug Strength) * (Drug Quantity) * (MME Conversion Factor)

Provider Specialties

MHCP-enrolled providers were assigned to a specialty group based on data obtained through the CMS National Plan and Provider Enumeration System (NPPES). Providers were assigned to a specialty based on their National Provider Identifier (NPI) primary taxonomy code.

Administrative Specification

Denominator: Number of distinct enrollees prescribed COAT during the measurement year.

Medical exclusion: Enrollees are excluded if they had a diagnosis code for cancer within the measurement year. See the "HEDIS 2018 UOD measure malignant neoplasm or other neoplasm value sets."

Hospice exclusion: Enrollees are excluded if they have a claim with a Medicare hospice place of service code 34, or a DHS hospice care provider type code of 02 during the measurement year.

Numerator: Number of distinct enrollees receiving COAT who received opioids from at least 2 additional providers simultaneously while on COAT (at least 3 total opioid prescribers) during the measurement year.

OPIP Quality Improvement: Measure Threshold

There is no quality improvement threshold for this measure. Data will be shared with enrolled providers for informational purposes only.