DEPARTMENT OF HUMAN SERVICES

Opioid Prescribing Improvement Program

Population Health Innovation Team

September 2021

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Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is $4,000.

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I. 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 Minnesota Medicaid and MinnesotaCare enrollees due to the prescribing of opioid analgesics by health care providers. This goal is to 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 a clinical quality improvement program among Minnesota Health Care Program (MHCP)-enrolled providers whose prescribing behaviors are found to be outside of community standards.

In this annual report we:

- Introduce the Opioid Prescribing Improvement Program;
- Provide a status update on the Opioid Prescribing Work Group;
- Revisit program milestones featured in previous legislative reports;
- Review work completed by the Opioid Prescribing Improvement Program since the publication of the last report to the legislature;
- Share trend data on opioid prescribing within the MHCP for 2016 through 2020, as well as data that illustrate the variation in opioid prescribing; and
- Briefly describe the workplan for the upcoming state fiscal year.

II. 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.

III. Introduction

The Opioid Prescribing Improvement Program (OPIP), authorized by Minn. Stat. § 256B.0638 in 2015, is an initiative to reduce opioid dependency and substance use related to the prescribing of opioid analgesics by health care providers. The clinical population is Minnesotans enrolled in Minnesota Health Care Programs (MHCP), also referred to as Medicaid and MinnesotaCare. The OPIP is a unique effort to improve prescriber practice via a community wide improvement process tied to MHCP providers. Its stated goals are to:

1) Reduce inappropriate or excessive opioid prescribing for acute and post-acute pain;
2) Reduce inappropriate variation in opioid prescribing for acute and post-acute pain; and
3) Manage patients who remain on chronic opioid analgesic therapy carefully through multimodal treatment approaches, improved monitoring of safety and harm reduction strategies.

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 legislature charged the OPWG to:

- Develop protocols to address all phases of the opioid prescribing cycle (acute, post-acute and chronic pain);
- Develop sentinel measures centered on evidence-based practices;
- 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;
- Recommend quality-improvement measures to assess variation and support improvement in clinical practice; and
- Recommend two sets of thresholds directed at MHCP-enrolled providers with persistently concerning prescribing practices, one threshold that will trigger mandatory quality improvement and the other termination from MHCP.

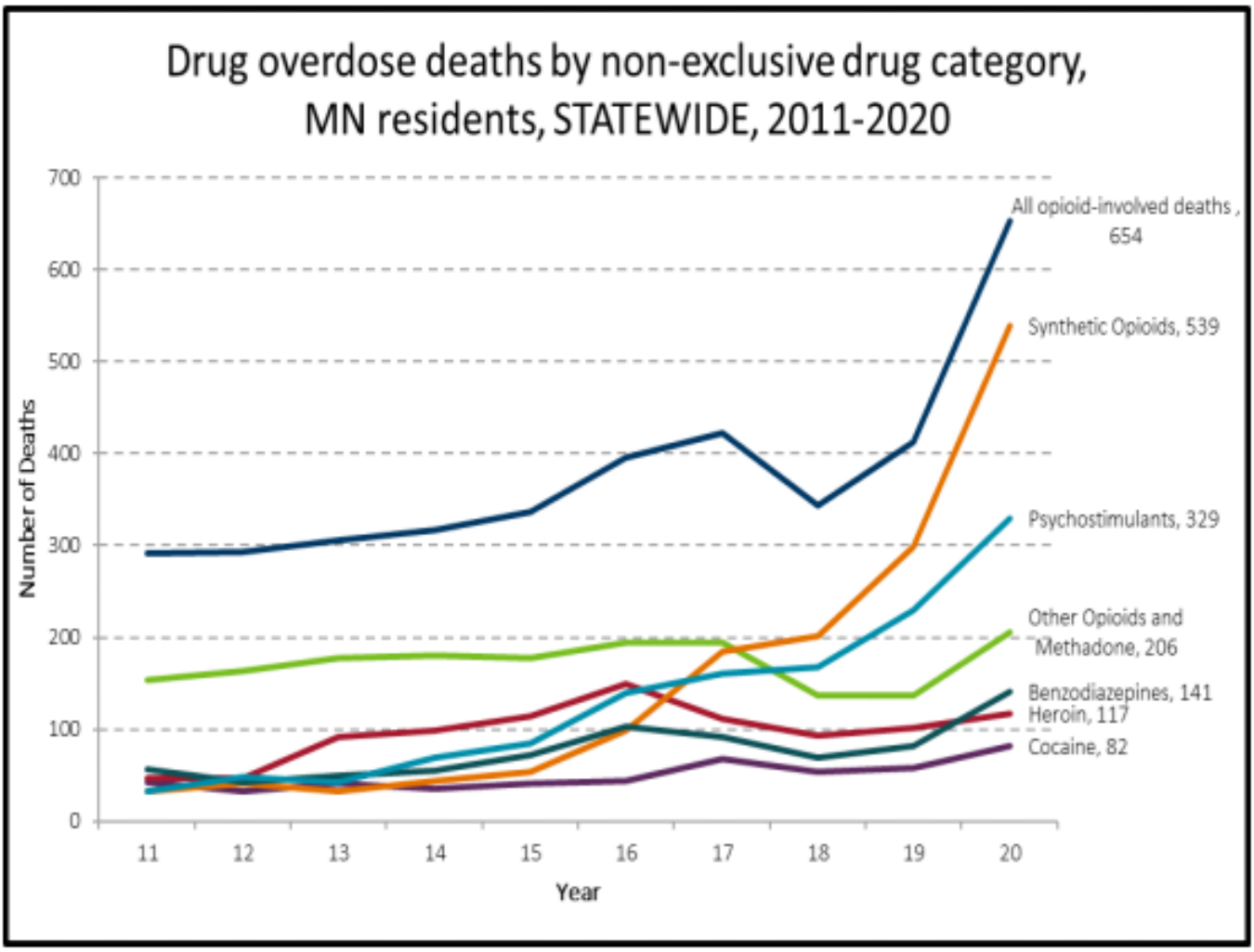
Opioid dependency and abuse are significant public health concerns both in Minnesota and nationally. The primary public health concern remains the rising rates of opioid-related overdose deaths. The Minnesota Department of Health tracks data related to opioid-related deaths and Figure 1 below references the trends over the past decade. Opioid-involved deaths are divided into three categories: a) synthetic opioids, such as fentanyl, b) other opioids and methadone—this includes prescription opioids—and c) heroin. According to preliminary data, opioids were responsible for 654 overdose deaths in 2020, which represents a 58% increase from 413 in 2019 (and up 98% from 2018). The significant increase in overdose deaths since 2018 is driven primarily by illicitly manufactured fentanyl, fentanyl analogs and stimulants. Available data indicate the vast majority of those who use opioids illicitly started by taking opioids prescribed for themselves or others.[1]

The number of opioid overdose deaths involving prescription opioids and methadone declined between 2017 and 2019. This progress can be attributed to a number of opioid initiatives across Minnesota, including state-led efforts, health-system and community-based efforts. DHS analyzed opioid prescribing trends within Minnesota Medicaid and

[1] Muhuri PK, Gfroerer JC, Davies MC. *Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.

MinnesotaCare throughout the COVID-19 response and found outpatient opioid prescriptions decreased in the early months of the pandemic but returned to expected numbers in summer 2020.

Figure 1: Opioid-involved overdose deaths increased, with a significant increase in synthetic opioid-involved deaths



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2020
**NOTE: 2020 data are preliminary and likely to change when finalized.*
NOTE: Drug categories are non-exclusive.

IV. The Opioid Prescribing Improvement Program

A. Opioid Prescribing Work Group Update

The Department of Human Services, in collaboration with the Department of Health, first convened the Opioid Prescribing Work Group (OPWG) in November 2015, with representation as stipulated in the statute. In December 2019, the Commissioner of Human Services authorized a second two-year extension of the OPWG, pursuant to Minnesota Statute § 15.059, Subdivision 6.

During the 2021 legislative session, the legislature approved a slight change to the OPWG membership; Two OPWG seats previously designated as non-voting were moved to voting status. These seats are for public members who use or who have used opioid therapy to manage chronic pain. These members have held voting status since July 1, 2021. Due to attrition, there were three additional changes to the membership since the last legislative report. An updated membership roster with statutorily set membership categories is available in Appendix A.

All OPWG meetings are public, and non-members may choose to attend and submit comments in writing or in person. Community participation in the OPWG meetings has been consistent. Non-member participants include state government employees, health care providers, community members and pharmaceutical industry representatives. Due to the COVID-19 pandemic, all OPWG meetings in the last year have been hosted using video-conferencing software that allows all attendees to participate virtually.

B. Opioid Prescribing Improvement Program Updates

Summary of program highlights between 2016 and 2019

The OPIP has achieved many important milestones since its launch in 2016. Access to previous legislative reports is available at the Minnesota Legislative Reference Library. The summary below briefly describes key OPIP milestones featured in previous legislative reports:

- **April 2018:** The OPWG finalized the Minnesota Opioid Prescribing Guidelines. A summary of the guidelines is provided in Appendix B.
- **July 2018:** DHS and the OPWG developed the OPIP sentinel measures. These seven measures support the quality improvement arm of the program. The measures assess individual prescribing behavior in the acute, post-acute and chronic pain phases. Each measure is associated with an evidence-based risk factor for opioid-related harm. An overview of the OPIP sentinel measures and quality improvement thresholds is provided in Appendix C.
    - In conjunction with development of the OPIP sentinel measures, the OPWG recommended quality improvement thresholds for five of the seven sentinel measures. Providers whose prescribing rates are over the threshold on any given measure will participate in the QI program.
- **November 2018:** DHS' New Chronic Use measure was reviewed by the National Committee for Quality Assurance (NCQA) and adapted to be a Healthcare Effectiveness Data and Information Set (HEDIS) 2019 measure, *Risk of Continued Opioid Use*.

- **June 2019:** In collaboration with the healthcare community, DHS launched a provider awareness campaign named "Flip the Script." The campaign aimed to change the narrative around prescription opioid therapy, pain management and prescription opioid misuse in Minnesota. Flip the Script materials can be found on the OPIP website and in Appendix E.
- **Summer 2019:** DHS issued roughly 16,000 individualized opioid prescribing reports to MHCP providers. The purpose of the reports was to establish a baseline for quality improvement efforts that were slated to begin in 2020. A sample report is included in Appendix D. Baseline reports were provided to help providers self-identify potentially problematic prescribing behaviors.
- **Late Fall/Early Winter 2019:** DHS conducted extensive stakeholder engagement following the release of the first opioid prescribing reports. DHS gathered feedback on the report dissemination process and identify improvement opportunities for subsequent reports. Outreach efforts included:
    - Two provider webinars about the prescribing reports, one hosted by the Institute of Clinical Systems Improvement (ICSI), and the other by the Minnesota Hospital Association (MHA). Over 100 stakeholders attended each webinar.
    - On November 22, 2019, DHS staff convened a meeting of health systems across the state. The Minnesota Hospital Association (MHA) and DHS co-hosted the event with the Institute for Clinical Systems Improvement (ICSI) and the Minnesota Medical Association (MMA). Health systems shared concerns and feedback about OPIP, specifically the report dissemination process, communication from DHS and various aspects related to quality improvement.
    - On December 2, 2019, DHS hosted a listening session for patients experiencing chronic pain.
- **January 2020:** DHS mailed updated opioid prescribing reports to ensure ongoing provider engagement with the project.

  Spring 2020: In light of the COVID-19 response, DHS revised the quality improvement timeline and focused instead on creating resources and building relationships to support the quality improvement program. DHS contracted with both the Institute for Clinical Systems Improvement (ICSI) and the Minnesota Hospital Association (MHA) to develop resources for prescribers and their employers.

Fiscal Year 2021 activities and accomplishments

Completed Revision of Opioid Taper Guidance

A growing concern related to the use of opioid analgesia is the impact of collective efforts to reduce opioid use among patients who experience chronic pain. Specifically, there is both a growing body of literature as well as patient accounts of abrupt opioid tapers. Rapid tapers can result in adverse opioid-related events, patients seeking pain relief from illicit opioids, and significant declines in patient quality of life.

A recent study of Vermont Medicaid data between 2013 and 2017 found among long-term opioid recipients undergoing a taper, the median length of time to discontinuation was 1 day. Almost half of patients undergoing a taper had an opioid related hospitalization or emergency room visit after abrupt cessation *(Mark, 2019)*[2].

[2] Tami L. Mark and William Parish. *Opioid Medication Discontinuation and risk of adverse opioid-related health care events*. May 1, 2019. Journal of Substance Abuse Treatment; 2019.

A study of Oregon Medicaid enrollees found similar evidence of abrupt discontinuation of opioid therapy without a taper *(Hallvik, 2021)*[3].

As the opioid crisis evolves and the medical community addresses its role in improving the culture of opioid prescribing, it has become clear additional efforts are needed to ensure patients who use opioid therapy for chronic pain are managed safely and compassionately. In early 2020, the OPWG voted to update Section V of the Minnesota Opioid Prescribing Guidelines, Tapering and Discontinuing Opioid Use. A draft version of the revised guidance was completed in early fall 2020, and an official public comment period occurred from November through December 2020.

Noteworthy revisions to the taper guidance focus on a shared decision-making model emphasizing patient voluntariness and a slow, tolerable taper pace. The guidance stresses that prescribers initiating an opioid taper should do so only when a reduction improves the patient's risk profile or quality of life and engages the patient in shared decision-making to the extent possible. Appropriate tapers are based on an individualized taper plan with incremental dose changes informed by reassessment of pain, function and safety, rather than a plan with a predetermined timeline and specific target dose. A summary of the 2021 revisions to the taper guidance are provided in Appendix G of this report and the complete taper guidance can be found online.

Finalized Clinical Quality Improvement Resources with Partners

In 2020 DHS leveraged federal State Opioid Response (SOR) dollars to contract with the Institute for Clinical Systems Improvement (ICSI) and the Minnesota Hospital Association (MHA), both experts in clinical quality improvement. Each organization engaged their clinical advisory bodies to help develop critical quality improvement tools now available at no cost to providers, clinics, and health care leaders across the state. A description of each tool is as follows:

- Institute for Clinical Systems Improvement (ICSI) – under a DHS contract, ICSI developed two clinical tools designed for use by individual providers:

    - **ICSI Opioid Prescribing Improvement Guide:** Based on improvement and implementation science, the guide is designed to help individual prescribers build safer opioid prescribing habits. It is also helpful for health care organizations as they build systems in support of opioid prescribing practices that will decrease harms from acute and long-term opioid use. The Opioid Prescribing Improvement Guide helps individual providers and organizations walk through a step-by-step guide to improve opioid prescribing. The ICSI Improvement Guide can be found online.

      ICSI Postoperative Toolkit: ICSI convened a group of Minnesota surgeons who worked over a three-year period to develop more patient-centered, procedure-specific guidance for postoperative opioid prescriptions. Recommendations are based on the procedure, patient history, current evidence-based research and other proven practices. This work was supported and tested within Minnesota health care organizations. DHS contracted with ICSI to create a toolkit associated with this work that is available on ICSI's website.

[3] Hallvik SE, Johnston K, Geddes J,Leichtling G, Korthuis PT, Hartung DM. Identifying opioid dose reductions and discontinuation among patients with chronic opioid therapy. Pharmacoepidemiol Drug Saf. 2020; 1–5. https://doi.org/10.1002/pds.5096

- Minnesota Hospital Association (MHA) - under a DHS contract, MHA developed clinical roadmaps for use by individual clinicians as well as organizations:

    - **Opioid Prescribing Roadmaps**: MHA and DHS created three roadmaps linked to prescribing guidance for acute pain, post-acute pain and chronic pain. These three roadmaps are directed towards prescribers, and provide an online, accessible overview of the MN Opioid Prescribing Guidelines. Roadmaps are available to MHA members via the member portal.

    - **Opioid Stewardship Roadmap**: This roadmap provides clinics, hospitals and health systems with evidence-based recommendations and standards for the development of prevention and quality improvement programs and are intended to align process improvements with outcome data. Road maps reflect published literature and guidance from relevant professional organizations and regulatory agencies, as well as identified proven practices. This roadmap is also available to MHA members via the member portal on MHA's website.

Launched Statewide Quality Improvement (QI) Program

QI Program Overview

Considering the COVID-19 response and other factors, DHS—with input from the Opioid Prescribing Work Group—adjusted the quality improvement program timeline. DHS launched the QI program in summer 2021 instead of January 2021. This modest delay allowed DHS to:

- Align prescribing reports to reflect data that fell within a calendar year range.
- Mail the 2020 opioid prescribing reports after the November-December 2020 COVID-19 surge subsided; and
- Create greater capacity for health systems and individual prescribers to engage in the project.

In addition to adapting the timeline, DHS focused the first year of quality improvement on only three of the five OPIP sentinel measures with quality improvement thresholds. The narrowed focus ensured the roll-out was tenable for both OPIP staff as well as providers. The measures prioritized were:

- Measure 2: Rate of prescribing over the recommended dose for an index opioid prescription. This measure is intended to measure the dose of a prescription provided following an acute event, e.g., an injury or post-operative prescribing.
- Measure 5: Rate of prescribing high dose (>90 MME/day) chronic opioid analgesic therapy
- Measure 6: Rate of prescribing concomitant benzodiazepines and chronic opioid analgesic therapy > 50 MME/day.

DHS included Measure 2 to support statewide, collaborative work on procedure-specific dosing guidelines led by ICSI. Measures 5 and 6 were included because of the potential for morbidity and mortality linked to high dose opioid therapy and concomitant opioid and benzodiazepine therapy.

In April 2021, DHS mailed prescribing reports to 15,500 health care providers enrolled in Medical Assistance and MinnesotaCare. Clinicians, including physicians, dentists, physician assistants, advance practice nurses, and podiatrists, received a report if they prescribed at least one opioid in an outpatient setting to a MHCP enrollee in 2020. The reports and corresponding cover letters clearly indicated to providers whether they were or were not identified to participate in

quality improvement with DHS. There are 240 health care providers required to participate in the quality improvement program in 2021. Table 1 provides an overview of the number of participating clinicians by specialty type and participation by measure.

Table 1 lists the specialty designations and QI focus area for 240 providers identified to participate in the DHS quality improvement program in 2021.

Specialty	#	QI Measures	#
Family Medicine	92	Measure 2 (Acute)	181
Physician Assistant and APN's	40	Measures 5, 6 (Chronic)	39
Surgery	20	Measures 2, 5 and 6 (Acute + Chronic)	20
Orthopedic Surgery	18		
Internal Medicine	14		
Medical Specialty	13		
Pain Medicine	13		
All Others	30		

Providers identified to participate in quality improvement must complete the following requirements by November 24, 2021:

- Complete and submit an OPIP Attestation Form
- Complete two units or hours of continuing medical education on opioid-prescribing best practices; and
- Complete a quality improvement project related to corresponding sentinel measures and submit the OPIP Quality Improvement Report form

The DHS quality improvement framework is designed to be individualized and manageable and guides prescribers through a basic PDSA cycle (Plan, Do, Study, Act). Specifically, clinicians are encouraged to leverage available data to:

a) Better understand their prescribing behaviors;
b) Identify possible gaps in care;
c) Observe specific barriers to change; and
d) Seek resources to support change.

Prescribers whose practices reflect unique clinical circumstances may request a Special Cause for Clinical Review. The review process allows prescribers to provide additional information and data to demonstrate why their prescribing exceeds community standards. A panel of clinical experts then completes a blinded review of the special cause requests and recommends whether a provider can be exempted from quality improvement requirements.

Program support and stakeholder engagement

Three major efforts took place in late 2020 and early 2021 to develop resources and support for the quality improvement program. First, DHS leveraged federal State Opioid Response (SOR) funding to secure expertise in clinical quality improvement for years one and two of the QI program. Applicants were asked to demonstrate quality improvement expertise, as well as the ability to provide guidance and support to the OPIP. DHS awarded the two-year contract to the Institute for Clinical Systems Improvement (ICSI) in spring 2021.

Second, DHS reached out to health systems and clinics whose providers were required to complete quality improvement. Minn. Stat. § 256B.0638 requires DHS to notify the provider groups that employ, contract with or are affiliated with health care providers who have been identified to participate in the QI program. Correctly identifying specific individuals at the clinic and system level was a critical step to ensure confidential transmission of sensitive program data.

In addition to fulfilling the statutory requirement, OPIP also engaged with systems and clinics to identify "QI liaisons." QI liaisons are individuals at the health system and clinic level who serve as communications conduits between DHS, QI participants and health system leadership. Liaisons also offer subject matter expertise and general support to providers required to participate in QI. DHS identified over 50 QI liaisons who have proven to be key to the success of the QI project.

The third project supporting the QI effort involved implementation of a technology tool. DHS and MN—IT staff customized an existing DHS product that serves as the system of record for the quality improvement program. Microsoft CRM helps manage direct communication between DHS, QI participants and their respective health care systems. Given the potential for the QI program to escalate into increased provider requirements and scrutiny of prescribing patterns, it was important that DHS have a communications tool to support the work.

Legislative Changes

In 2021, the legislature approved a change to the OPIP statute adding language that allows DHS to distribute annual opioid prescribing reports via any provider group with which a prescriber is affiliated, contracted, or employed. DHS will implement this change with the 2022 provider report distribution. Health system partners, including some prescribers employed by the systems, requested this change. To date, DHS has mailed the reports to providers via the United States Postal Service, and securely emailed a small number of reports at the request of individual providers when they did not receive a mailed copy. Despite these options, there are providers who did not received their reports in a timely manner, or at all. Distributing reports via clinics, health systems and employers will be more efficient, affordable and convenient for providers. In addition, prescribers and their affiliated health systems have noted that many quality improvement initiatives are developed at the clinic and/or system level, so health systems can more effectively assist with targeted development and support of quality improvement efforts if they have information about opioid prescribing in their system. As previously noted, in 2021, the legislature also modified the OWPG membership.

Define Disenrollment Criteria

The final statutory task for the OPWG is to recommend criteria by which a provider would be disenrolled as a MHCP provider. The focus of disenrollment is to be directed towards those providers with persistent, egregious opioid prescribing practices. Work on the disenrollment criteria began in SFY 2020 and is scheduled to be completed in late 2021.

Health equity

In Minnesota, American Indians and African Americans using opioids have significantly worse health outcomes than white, Asian or Hispanic Americans. For example, according to data from the Minnesota Department of Health, American Indians are six times as likely to die from a drug overdose as whites, and African Americans are twice as likely to die from a drug overdose as white Americans. At the same time, the clinical literature clearly shows acute pain is

under-treated among African Americans, Hispanic Americans and American Indians. These disparities result from deeply embedded systemic racism.

Because OPIP focuses on providers and their global prescribing habits, the ability to target racial inequities is limited. However, a component of the ICSI contract is to garner stakeholder input from patients who experience chronic pain or their caregivers. Using a human-centered design approach, ICSI has worked intentionally to engage those who have not been part of this conversation in the past. The cohort reflects males and females, individuals from greater Minnesota and persons of color and other minoritized groups. The chronic pain work will conclude in late summer 2021 and findings will be summarized in the 2022 legislative report.

COVID-19 pandemic

The COVID-19 pandemic has placed exorbitant stress on the healthcare system. Hospitals, clinics, health care professionals, patients and their caregivers face a novel set of challenges. Healthcare professionals now work in environments that are more dangerous and chronically stressful than ever before. Likewise, patients with conditions such as pain, anxiety, depression, and substance use disorder may experience exacerbation of symptoms resulting from stay-at-home orders and social distancing. Chronic pain patients may also be more disadvantaged due to interrupted access to multi-modal treatments such as acupuncture, cognitive behavioral therapy, and physical therapy. DHS staff continue to consult with the OPWG, clinical experts and the community to determine an appropriate implementation of state-mandated quality improvement. Striking a balance between the different, but important, priorities of two public health crises is an important challenge facing OPIP.

Figure 1 depicts a sharp increase in opioid-related deaths that coincide with the pandemic. Research and time are necessary to understand fully the impacts of COVID-19 on the opioid epidemic. Within the context of COVID-19, the core principles of OPIP (to prevent opioid dependency and opioid-related harm) remain critically important.

C. Opioid Prescribing Data

Appendix F offers an overview of DHS opioid prescribing data with notable highlights and trends summarized below.

Noteworthy year-over-year changes (2019 to 2020)

- MHCP population: The number of MHCP enrollees increased by 4.1% between calendar year from 1,191,422 in 2019 to 1,240,050 in 2020. Generally, this number remains steady year to year. Plausible reasons for the 2020 uptick is the enactment of continuous enrollment for MHCP enrollees during the COVID-19 pandemic and the increase in people applying for coverage under public health care programs that generally accompany economic downturns and higher unemployment.

- Opioid prescriptions: The total number of opioid prescriptions written to the entire MHCP population increased by 14% between 2019 and 2020. This increase from 393,495 prescriptions to 449,491 is the only increase in this metric over a five-year period. In addition, the number of MHCP enrollees receiving opioids increased by 7% during this same period.

- Dose decreases: Despite an increase in the number of prescriptions, year-over-year trends show a drop in high-dose prescribing. Index opioid prescriptions exceeding 100 total MME dropped by 17% between 2019 and 2020. Similarly, the number of patients on high dose, long-term opioid therapy decreased by 14.4%.

- New chronic use: There was a 17% increase in the number of MHCP enrollees who went from being opioid naïve to having at least 45 days of opioid use in the calendar year (New Chronic Users). See Figure 2. Although the new chronic use measure is not an OPIP sentinel measure, DHS uses the measure to monitor overall progress on preventing new chronic use by reducing the number of opioids prescribed for acute pain.

It is suspected that the COVID-19 pandemic created many clinical scenarios where enrollees could not access other forms of treatment and, therefore, were prescribed opioids to manage pain.

Five-year trends (2016-2020)

A review of the data over five years demonstrates overall progress towards the goals of OPIP, described in the executive summary of this report. Trend highlights are summarized here.

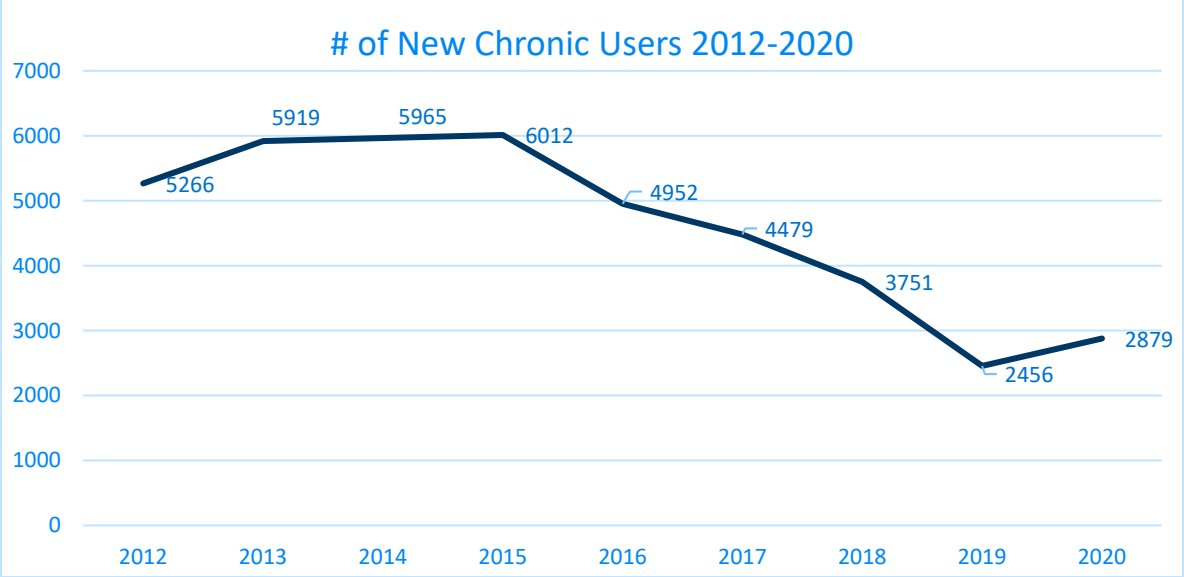
- Overall opioid prescribing: There was a 43% decrease in the overall number of opioid prescriptions in the MHCP between 2016 and 2020. In 2020, there were 449,491 opioid prescriptions filled for MHCP enrollees (excluding patients with cancer and patients receiving hospice services), down from 788,383 in 2016. Similarly, the number of MHCP enrollees receiving opioids decreased by almost 40% during the same five-year span.

- New opioid prescriptions for acute pain: There was a 40% decrease in the total number of index opioid prescriptions filled by MHCP enrollees from 2016 to 2020. An index opioid prescription is the first opioid prescription filled by an enrollee when the enrollee has not had any active opioid prescriptions for the previous 90 days. In 2020, there were 91,356 index opioid prescriptions filled down from 152,132 in 2016.

- Chronic Opioid Analgesic Therapy (COAT): In 2020 there were 21,287 COAT recipients, marking a 43% decrease from 2016 when there were 12,667 COAT recipients. 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.

Figure 2: Annual number of new chronic opioid users in the Minnesota Health Care Programs enrollee population, 2012-2020

Figure 2 shows the number of new chronic users in the MHCP population from 2012 to 2020. 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.



Variation among health care providers

Variation in opioid prescribing can indicate problematic prescribing behaviors. When providers are grouped by specialty with their clinical peers, variation should be minimal unless explained by factors such as distinct differences in patient populations and severity of disease. DHS and the OPWG identified significant variation in opioid prescribing practices among specialties in 2016. These data were used to support development of the sentinel measures and quality improvement program.

DHS continues to analyze the variation in prescribing behavior across the seven OPIP sentinel measures to gauge progress within the project. The goal is not to eliminate variation entirely, given appropriate patient-centered care requires some level of variability. However, successful implementation of evidence-based prescribing guidance should result in a reduction in variation by reducing the number of outliers in any given specialty.

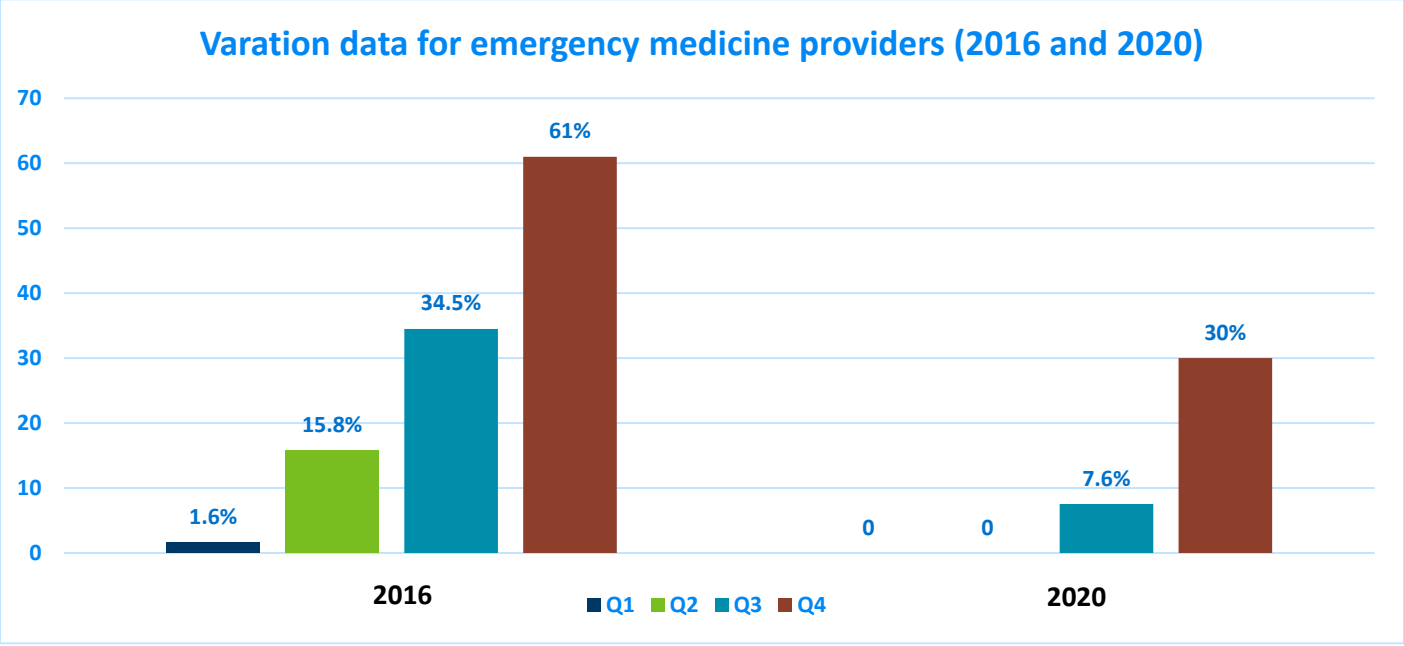
Comparisons of 2016 and 2020 opioid prescribing data within the MHCP show that variation within specialties is decreasing, yet there remains a population of providers who consistently prescribe above the community standards. Figure 3 below illustrates the changes in data using emergency medicine as an example. These data analyze how often a prescriber writes a prescription over the recommended dose to someone who was previously not on opioid therapy. State and federal guidance recommends that initial opioid prescriptions for acute pain be limited to 100 morphine milligram equivalence (MME). MME is a term used to describe the dose of an opioid.

Emergency medicine providers are uniquely suited for analyses of variation because their outpatient practices do not significantly differ based on factors such as geographic location or health system characteristics. (Trauma centers might see patients with more severe injuries, but OPIP excludes inpatient and procedurally administered opioids from its data. When looking only at patients who are well enough to leave the ED with or without an outpatient opioid prescription, differences among emergency departments should fall away.) In 2020, the data indicate significant reduction in the variation between the first three quartiles, demonstrating clear alignment with state and federal prescribing guidance in roughly three quarters of emergency medicine providers. However, the average prescribing rate in the fourth quartile remains significantly higher than the others. When writing an index prescription, providers in the highest quartile exceed the recommended dose 30% of the time, while half of emergency medicine providers never exceed the recommended dose.

The overall decline in prescribing rates is important, but there remain providers who are either prescribing too frequently and/or with initial doses that are too high. The OPIP quality improvement program engages these providers.

Figure 3: The rate of prescribing above the recommended dose (100 MME for the initial prescription) among emergency medicine providers, 2016 and 2020 (OPIP Measure 2)

How to interpret the chart: There were 1064 emergency medicine providers who prescribed an index opioid prescription to at least one MHCP enrollee in 2016 (N = 1061 in 2020). Those 1064 providers were divided into four equal quartiles (Q1-Q4) based on the rate at which they prescribed an index opioid greater than 100 MME. Thus, the numbers displayed above each bar indicate the average rate emergency medicine providers exceed 100 MME within each quartile. Providers in Q1 are those with the lowest prescribing rates (0%), and providers in Q4 are those with the highest prescribing rates (30%).



V. Recommendations

The statewide launch of quality improvement in SFY 2021 created numerous opportunities for learning. Through direct engagement with providers, clinics, community members and other experts, DHS envisions making improvements to the program going forward including development of potential statutory changes for approval in the 2023 session.

The workplan for SFY 2022 focuses on the following tasks:

- Determine whether administrative claims data can support the development of a new measure identifying abrupt opioid tapers
- Establish and communicate recommended OPIP disenrollment criteria to provider community
- Summarize and leverage findings from human-centered design work around chronic pain
- Process 200+ quality improvement reports
- Establish a new delivery method for 15,000 prescribing reports
- Refine the quality improvement program in year two based upon year one learnings

VI. Appendices

Appendix A. Opioid Prescribing Work Group Members

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

- Nathan Chomilo, MD, Minnesota Department of Human Services (Minnesota Health Care Programs medical director; nonvoting)
- Kurtis Couch, Waterville, (public member who uses or who has used opioid therapy to manage chronic pain)
- Julie L. Cunningham, PharmD, BCPP, Mayo Clinic Health System (non-physician health care professional who treats pain)
- Sen. Chris Eaton, RN, Minnesota State Senate (consumer representative who has personal or familial experience with opioid use disorder)
- Tiffany Elton, PharmD, NCPS, Consultant (pharmacist)
- Dana Farley, MS, Minnesota Department of Health (MDH representative, nonvoting)
- Rebekah Forrest, RN, CNP, NorthPoint Community Clinic (nurse practitioner)
- Kurt DeVine, MD, MEnD Correctional Care (licensed physician)
- Bret Haake , MD, HealthPartners (health plan medical director)
- Chris Johnson, MD, Allina Health (Health Services Advisory Council member)
- Emily Bannister, MD, Minnesota Department of Labor and Industry (DLI medical consultant; nonvoting)
- Matthew Lewis, MD (not practicing), Winona (consumer representative who has personal or familial experience with opioid use disorder)
- Adam Nelson, PharmD, CSP, UCare (health plan pharmacy director)
- Murray McAllister, PsyD, LP, Courage Kenny Rehabilitation Institute (non-physician health care professional who treats pain)
- Richard Nadeau, DDS, MPH, University of Minnesota School of Dentistry (dentist)
- Chad Hope, PharmD, Department of Human Services (DHS pharmacy unit; nonvoting)
- Charles Reznikoff, MD, Hennepin County Medical Center (mental health professional)
- Saudade SammuelSon, Richfield, (public member who uses or who has used opioid therapy to manage chronic pain)
- Detective Charles Strack, Little Falls Police Department, retired (law enforcement)
- Lindsey Thomas, MD, Midwest Medical Examiner's Office, retired (medical examiner)

Appendix B. Minnesota Opioid Prescribing Guidelines

The complete Minnesota Opioid Prescribing Guidelines are available on the DHS website. A summary of the prescribing guidelines reflect three broad values described below. Definitions of clinical terminology are also provided.

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 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.*

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.

Terms	Definition
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.
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.

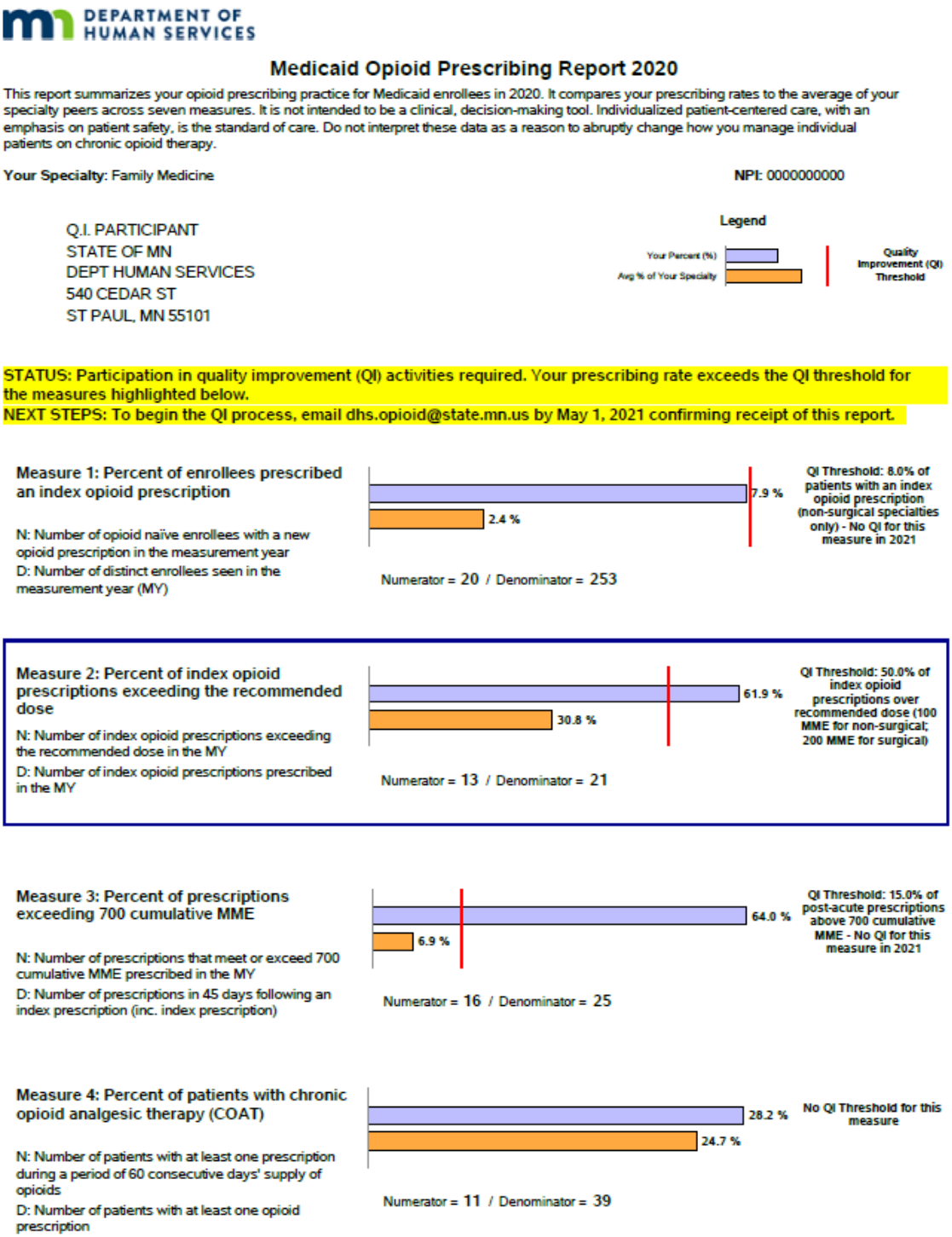
Appendix C. Sentinel Measure Overview

The sentinel measures support the quality improvement arm of the program. DHS and the Opioid Prescribing Work Group developed the measures by analyzing Minnesota Medicaid and MinnesotaCare prescription data and considering national measures across acute, post-acute and chronic pain stages.

Percent of enrollees prescribed an index opioid prescription	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)
Percent of index opioid prescriptions exceeding the 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 exceeding 700 cumulative MME in the post-acute pain phase	Number of prescriptions that 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%
Percent of patients with chronic opioid analgesic therapy (COAT)	Number of patients with a prescription during a COAT period (≥ 60 consecutive days' supply of opioids) during the measurement period.*	Number of patients with at least one opioid prescription prescribed during the measurement period.	No quality improvement threshold
Percent of COAT enrollees exceeding 90 MME/day (High-dose COAT)	Number of patients prescribed COAT of > 90 MME/day in the measurement period.**	Number of patients with a prescription during a COAT period during the measurement period.*	Prescribing rate is > 10%
Percent of enrollees receiving elevated dose COAT who received a concomitant benzodiazepine	Number of patients prescribed COAT of > 50 MME/day and an overlapping benzodiazepine prescription > 7 days in the measurement period.**	Number of patients with a prescription during a COAT period during 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 while on COAT during the measurement period.	Number of patients with a prescription during a COAT period during the measurement period.*	No quality improvement threshold

Appendix D. Sample Prescriber Report

The sample below is a snapshot of the 2020 DHS Opioid Prescribing Report. Actual reports were printed two-sided with measures five through seven displayed on the back page. For brevity, only the front page of the sample is shown here.



DEPARTMENT OF HUMAN SERVICES

Medicaid Opioid Prescribing Report 2020

This report summarizes your opioid prescribing practice for Medicaid enrollees in 2020. It compares your prescribing rates to the average of your specialty peers across seven measures. It is not intended to be a clinical, decision-making tool. Individualized patient-centered care, with an emphasis on patient safety, is the standard of care. Do not interpret these data as a reason to abruptly change how you manage individual patients on chronic opioid therapy.

Your Specialty: Family Medicine

NPI: 0000000000

Q.I. PARTICIPANT
STATE OF MN
DEPT HUMAN SERVICES
540 CEDAR ST
ST PAUL, MN 55101

Legend
Your Percent (%)
Avg % of Your Specialty
Quality Improvement (QI) Threshold

STATUS: Participation in quality improvement (QI) activities required. Your prescribing rate exceeds the QI threshold for the measures highlighted below.
NEXT STEPS: To begin the QI process, email dhs.opioid@state.mn.us by May 1, 2021 confirming receipt of this report.

Measure 1: Percent of enrollees prescribed an index opioid prescription

N: Number of opioid naïve enrollees with a new opioid prescription in the measurement year
D: Number of distinct enrollees seen in the measurement year (MY)

7.9 %
2.4 %
QI Threshold: 8.0% of patients with an index opioid prescription (non-surgical specialties only) - No QI for this measure in 2021

Numerator = 20 / Denominator = 253

Measure 2: Percent of index opioid prescriptions exceeding the recommended dose

N: Number of index opioid prescriptions exceeding the recommended dose in the MY
D: Number of index opioid prescriptions prescribed in the MY

61.9 %
30.8 %
QI Threshold: 50.0% of index opioid prescriptions over recommended dose (100 MME for non-surgical; 200 MME for surgical)

Numerator = 13 / Denominator = 21

Measure 3: Percent of prescriptions exceeding 700 cumulative MME

N: Number of prescriptions that meet or exceed 700 cumulative MME prescribed in the MY
D: Number of prescriptions in 45 days following an index prescription (inc. index prescription)

64.0 %
6.9 %
QI Threshold: 15.0% of post-acute prescriptions above 700 cumulative MME - No QI for this measure in 2021

Numerator = 16 / Denominator = 25

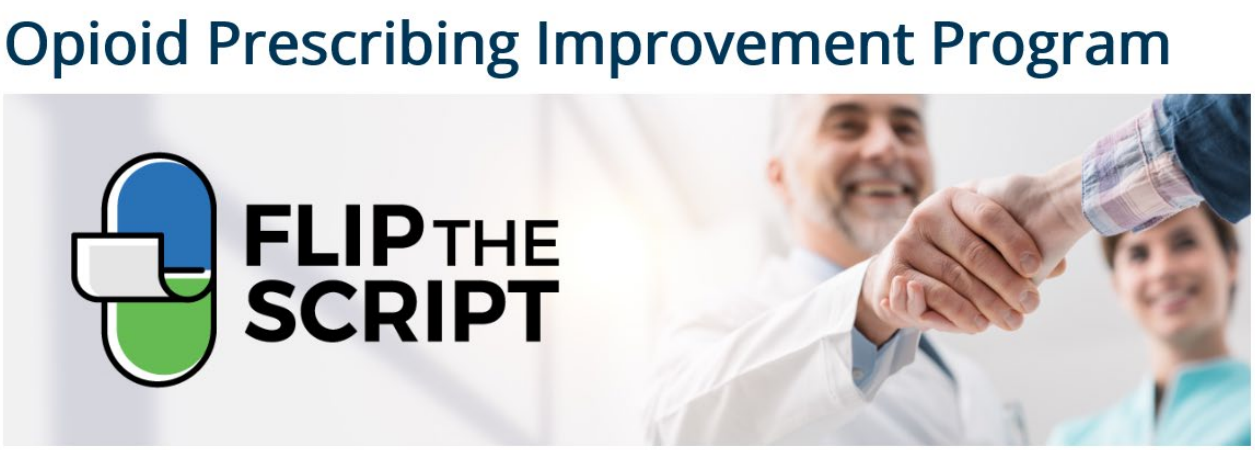
Measure 4: Percent of patients with chronic opioid analgesic therapy (COAT)

N: Number of patients with at least one prescription during a period of 60 consecutive days' supply of opioids
D: Number of patients with at least one opioid prescription

28.2 %
24.7 %
No QI Threshold for this measure

Numerator = 11 / Denominator = 39

Appendix E. “Flip the Script” Provider Materials



Many provider resources can be accessed via the Minnesota Opioid Prescribing Program website. including the following discussion guides:

- Discussion guide for health care providers who prescribe opioids (PDF)
- Discussion guide for health care providers who do not prescribe opioids (PDF)
- Difficult conversations (PDF): suggestions for responses to common questions about opioid use and pain management (PDF)

Appendix F. Minnesota Health Care Programs Opioid Prescribing Trends, 2016-2020

Table 2 represents data trends for opioid prescribing in the acute, post-acute, and chronic pain phases for MHCP enrollees between 2016 and 2020 along with the percent change over the five-year period.

	2016	2017	2018	2019	2020	% Change over 5 Years
General Data						
MHCP Enrollees	1,224,566	1,218,898	1,232,690	1,191,442	1,240,050	1.3%
Opioid Prescriptions	788,383	684,334	565,877	393,495	449,491	-43.0%
Enrollees receiving opioids	192,785	172,284	151,204	110,358	118,445	-38.6%
Opioid Prescribers	16,975	16,589	16,397	15,820	15,481	-8.8%
Acute Prescribing						
Index Opioids	152,132	132,664	117,877	98,126	91,356	-39.9%
Index Opioids > 100 MME	78,354	64,943	51,910	33,810	28,173	-64.0%
% Index Opioids > 100 MME	51.50%	49.00%	44.00%	34.46%	30.84%	-40.1%
Opioid Rx in initial prescribing episode	224,441	194,257	169,537	141,294	134,164	-40.2%
Post-Acute Prescribing						
Opioid Rx in initial episode > 700 MME	26,055	21,428	16,824	9,350	8,862	-66.0%
% opioid Rx in initial episode > 700 MME	11.60%	11.00%	9.90%	6.62%	6.61%	-43.0%
Chronic Prescribing						
COAT Recipients	21,667	19,001	16,252	13,429	12,287	-43.3%
High-dose COAT Recipients	3,020	2,461	1,812	1,257	1,076	-64.4%
% high-dose COAT recipients	13.90%	13.00%	11.10%	9.36%	8.76%	-37.0%
COAT recipients with concomitant benzos	2,541	1,978	1,446	968	800	-68.5%
% COAT recipients with concomitant benzos	11.70%	10.40%	8.90%	7.21%	6.51%	-44.4%
COAT recipients with 2 additional prescribers	2,194	2,481	1,914	1,582	1,736	-20.9%
% COAT recipients with 2 additional Prescribers	10.10%	13.10%	11.80%	11.78%	14.13%	39.9%

Appendix G: 2021 Revisions to DHS Opioid Tapering Guidance

In 2021, DHS, with guidance from the Opioid Prescribing Work Group, revised Part V of the Minnesota Opioid Prescribing Guidelines. DHS's taper guidance focuses on outpatient opioid tapers that are guided by the clinician who provides the patient's pain management. The following points represent important revisions made to the initial guidance which was published in 2018.

- Perform and document a thorough risk benefit analysis of initiating an opioid taper when the risk of ongoing opioid therapy at the current dose outweighs the benefit of continued use.
- Reduce opioid dosage only when it improves the patients risk profile or quality of life, engaging the patient in shared decision making to the extent possible. Providers should not taper a patient for their own convenience or solely to comply with a pharmacy benefit manager, health insurance company, health system or state policy.
- Use motivational interviewing (MI) techniques to discuss tapering opioids. This may help the patient identify a willingness to change their opioid treatment regimen. Patient voluntariness and understanding should be the goal (but not an absolute requirement) prior to initiating a taper. Engage the patient in shared decision-making to establish a patient-centered plan.
- Evaluate patients for opioid use disorder (OUD) and depression or suicidal thoughts prior to a taper, and throughout the taper process. Treat or refer patients to treatment of OUD or any active mental health crisis if present.
- Urgently refer patients to an addiction medicine specialist if they are at imminent risk for an overdose or experience a non-fatal overdose. This must be a warm hand-off from clinician to clinician.

Patients who are willing to attempt a taper

- Develop a taper plan using shared-decision making that focuses on making incremental changes informed by reassessment of pain, function and safety, rather than a plan with a predetermined timeline and specific target dose.
- Consider consulting with a pharmacist to understand available medication formulations to optimize increments of dosage change.
- Increase the frequency of clinic visits or remote visits during dose reductions. Encourage the patient to contact the clinic if problems arise during dose reductions.
- Support the patient throughout the taper, and especially during dose reductions. Patient support may include any or all of the following: withdrawal symptom education and management; non-opioid and non-pharmacological pain management; and behavioral health therapy. Patients will likely benefit from enhanced behavioral health treatment during the taper process [assist the patient in locating these resources].
- Ensure that a patient's pain remains well-controlled during a taper, a referral for OUD treatment, and in cases of proven diversion. Take extreme caution to ensure dose reductions are not accompanied by increased pain, reductions in activities of daily living, or other adverse effects.

- Educate patients on the increased risk of overdose when tapering, supply a naloxone prescription, and encourage the patient to ask family and friends to become educated about rescue use. Naloxone training is available in clinic settings, at pharmacies and through online education.

Patients who are not willing to taper

- Do not abruptly discontinue chronic opioid analgesic therapy, unless there is proven diversion confirmed by a urine drug screen.

- Clinical conditions that may warrant a dramatic dose reduction (~50%) include acute encephalopathy, acute respiratory failure, or a sudden change in medication clearance resulting in medication build-up. These conditions are likely to be treated in an inpatient setting, where clinicians can closely monitor the patient and the opioid dose taper.

- Clinicians who determine continuing opioid therapy at the current dose is unsafe and a dose reduction is the appropriate clinical course of action--yet are unable develop the patient's willingness to attempt a taper after multiple discussions--may consider a very modest dose reduction with extremely close follow-up. The intent of this dose reduction is to develop the patient's confidence to attempt reducing their dosage, while very gradually moving towards a safer dosage. Encourage the patient to contact the clinic if there are problems, ensure that the patient has a naloxone prescription, and schedule a follow-up visit in the near future.