DEPARTMENT OF HUMAN SERVICES

Final Report

Opioid Prescribing Improvement Program

Population Health Innovation Team

December 2025

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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 $5,000.

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I. Executive Summary

The Opioid Prescribing Improvement Program (OPIP), established by the Minnesota Legislature in 2015, aimed to reduce opioid dependency and substance use among Minnesota Medicaid and MinnesotaCare enrollees by promoting safe and appropriate opioid prescribing practices. The program focused on developing clinical guidelines, sentinel data measures, provider education, and a quality improvement framework.

Over its duration, between 2016 and 2024, the program adapted to evolving clinical evidence and policy changes. The program successfully completed its four legislatively mandated deliverables, resulting in measurable improvements in significant reductions in variant opioid prescribing. Program metrics are available in the Appendices – highlights include:

- Excessive opioid prescribing for acute and post-acute pain decreased by more than 40%
- Variation in prescribing for acute and post-acute pain decreased by more than 60%
- Use of opioid analgesics for the treatment of chronic pain decreased by over 40%

Despite these successes, OPIP acknowledge persistent challenges that include barriers to patient access, stigma and striking a balance between provider autonomy and community standards. This final program report provides a comprehensive overview of OPIP's background, policy context, program components, outcomes, and final recommendations which include:

1. Ensure clinical support and advocacy pathways for patients who have been forced to taper, abandoned from care, or who are unable to access treatment
2. Socialize and promote the utilization of buprenorphine products for the treatment of chronic pain
3. Develop and maintain a centralized, state-led chronic pain resource/website that includes up-to-date practice guidelines, clinical tools and resources, provider and patient education materials and a care-finder
4. Promote grants, education and incentives to strengthen the clinical workforce for the treatment of chronic pain
5. Conduct ongoing surveillance and analysis of state prescribing data

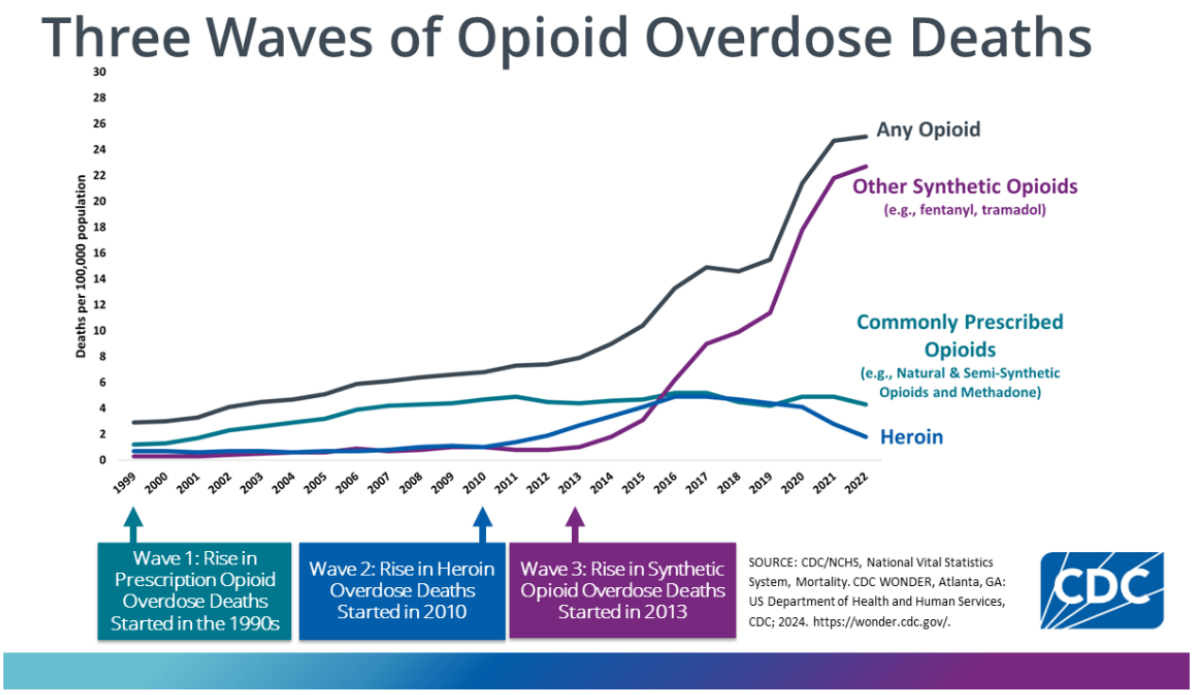
By considering these pragmatic public health interventions, DHS, state policymakers and Minnesota health care community members, can continue making progress to support the safety and well-being of Minnesota's 300,000+ individuals whose lives are significantly affected by high-impact chronic pain.

II. OPIP Background

A. Policy Context

The historical context under which the Opioid Prescribing Improvement Program was enacted is important to understand. Minnesota, and the nation at large, was grappling with a scourge of opioid overdose deaths, and the third wave of the opioid epidemic was well underway (Figure 1). In response to these rising deaths, state agencies organized to establish priorities and build a series of statewide responses.

Figure 1 depicts three succinct waves of the opioid overdoses driven first by prescription opioids, next by heroin, and finally synthetic opioids such as fentanyl.



The rise in opioid overdose deaths is shown in three waves.

2012: Minnesota State Substance Abuse Strategy

The Minnesota State Substance Abuse Strategy (SSAS) was developed in late 2012 to address substance abuse in our communities through collaboration within state government. The strategy aligned resources with approaches proven to prevent and reduce alcohol and prescription and illicit drug abuse. The SSAS executive leadership included agency commissioners or their designees. The SSAS focused heavily on decreasing prescription drug abuse and the incidence of unintentional neonatal abstinence syndrome.

2014: DHS Uniform Pharmacy Policy Work Group

In 2014, DHS formed the Uniform Pharmacy Policy Work Group (UPPW), consisting of experts from DHS and managed care organizations. The UPPW implemented common quantity limits and utilization management criteria for high-impact and high-cost drugs of potential misuse and abuse (including opioids). DHS gathered utilization data to measure the impact of these common policies.

2014: National Governor's Association Prescription Drug Abuse Academy

Minnesota was selected to participate in the National Governor's Association year-long policy academy on reducing prescription drug abuse. Membership in the academy provided Minnesota a unique opportunity to engage diverse stakeholders, learn from other states, measure the success of existing programs, and implement best practices to reduce and prevent prescription drug abuse. Through the academy, Minnesota developed its strategic plan for reducing prescription drug abuse, referred to as the State Opioid Oversight Project.

2015: The State Opioid Oversight Project

The State Opioid Oversight Project (SOOP) was established as the organizational structure across Minnesota's executive and legislative branches to reduce the impact of prescription opioid dependence and its societal consequences. SOOP members encompassed representatives of the departments of Human Services, Health, Education, Public Safety, Labor & Industry and Corrections, and the boards of Medical Practice, Nursing, Pharmacy, Dentistry, Veterinary Medicine and Podiatry. The State Opioid Oversight Project was a first step in creating a coordinated state government response to the consequences of the opioid epidemic across its continuum. SOOP focus areas included:

- Neonatal abstinence syndrome
- Medication assisted treatment
- Opioid prescribing practices
- Prescription monitoring program
- Increasing access to naloxone
- Prevention
- Increasing prescription take-back opportunities

2015: Identification of New Chronic Users (NCU's)

Between 2014 and 2016, the DHS Medical Director, Pharmacy Director and other key staff began analyzing Minnesota Health Care Programs (MHCP) pharmacy claims data with a particularly novel lens: to identify the inflection point at which the use of opioids prescribed for acute pain would likely evolve into long-term use and/or opioid dependence. At that time, most efforts to understand opioid overprescribing focused only on the chronic pain phase; relatively little had been researched about the use of opioids after an acute event, surgical or traumatic, and how prescribing opioids for acute pain develops into chronic use.

This analysis identified an alarming trend: approximately 80% of MHCP patients receiving opioids on the 45th day following a new prescription, were still receiving opioids on 90th day (and beyond). This data point, termed New Chronic Use(r) served as a reliable predictor of chronic opioid use. As Figure 2 depicts, upwards of 5,000 MHCP members became users of chronic opioid therapy *each year* between 2012 and 2016.

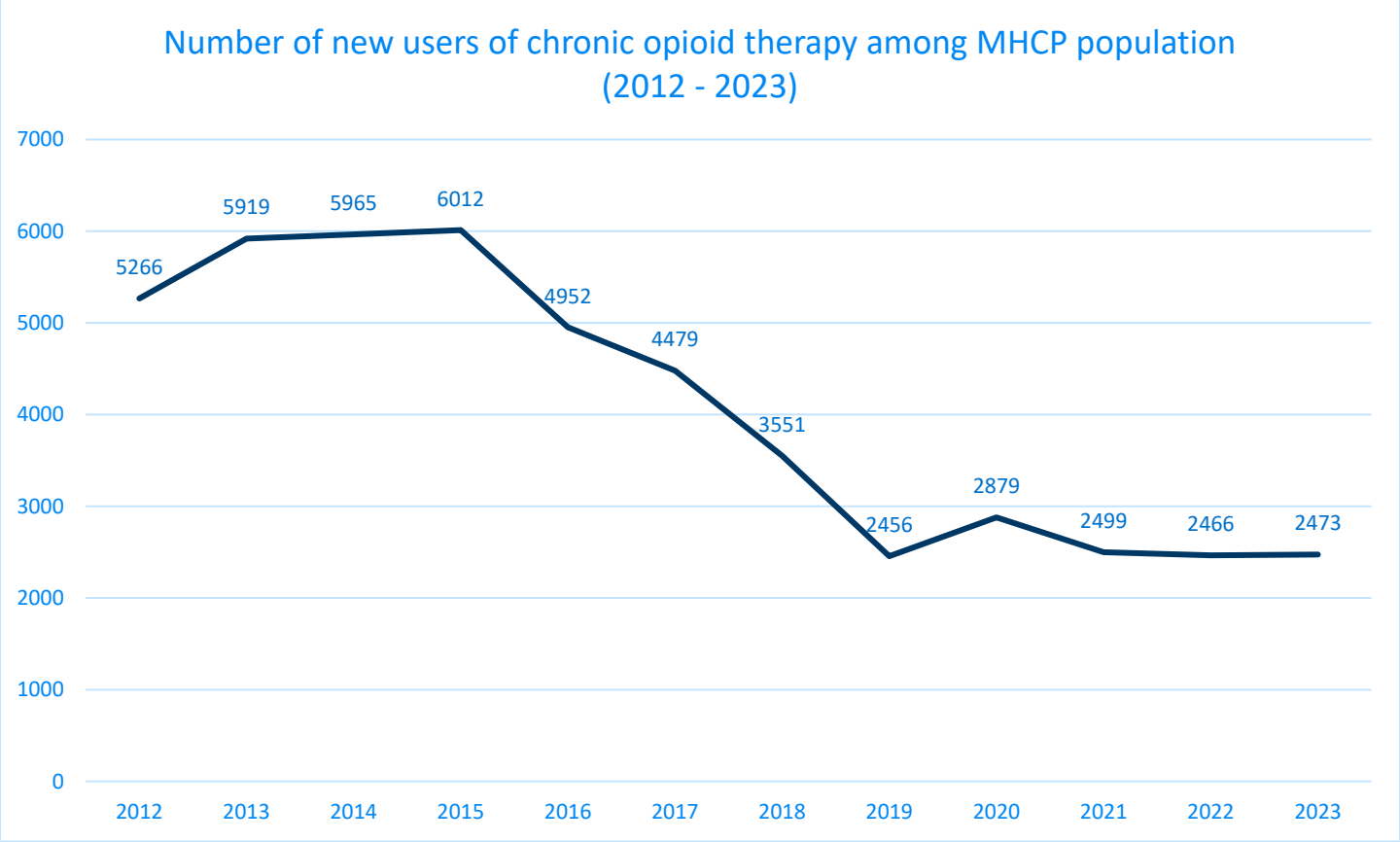


Figure 2 depicts the number of new users of chronic opioid analgesic therapy amongst the MHCP patient population. The line represents patients who were still using opioids 45 days following their first prescription.

Simultaneous, a landmark study published by the CDC linked certain characteristics of an initial episode of opioid use to the risk of long-term use.[1] This study found that the probability of long-term use increases significantly after any of the following:

- Patient remains on opioid analgesic therapy at day 5 and day 30 of an acute episode;
- Patient receives a second prescription following an index/initial prescription;
- Patient's cumulative doses exceed 700 morphine milligram equivalents (MME);
- Patient's first prescription exceeds a 10-day supply

After identifying the trend around transition to chronic use and the publication of the Shah study, DHS refined their methodology and developed a novel, population-based method to quantify the transition from acute to chronic use of opioid analgesic therapy. DHS officially named the measure New Chronic User measure (NCU). The NCU measure served as a critical tool in helping the medical community identify and prevent progression to chronic use of opioids among people being treated for acute pain.

In November 2018, the National Committee for Quality Assurance (NCQA) reviewed and adapted DHS' New Chronic Use as an official Health Effectiveness Data and Information Set (HEDIS) measure, *Risk of Continued Opioid Use*. The Shah study and NCU findings were foundational to the creation of OPIP.

[1] Shah A, Hayes CJ, Martin BC, et al. Characteristics of initial prescription episodes and likelihood of long-term opioid use--United States, 2006--2015. *CDC Mort Morb Wkly Rpt* 2017;66:265-69.

B. Health disparities and prescription opioids

In Minnesota, there were and continue to be evident health disparities driven by deeply embedded systemic racism. Specific to opioids, American Indians and African Americans have significantly worse rates of opioid-related harms than white, Asian or Hispanic Americans. 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 Minnesotans[2] At the same time, the clinical literature clearly shows that acute and chronic pain are *under-treated* among racial and ethnic minorities compared to their white counterparts.[3]

Because OPIP focuses on providers and their global prescribing habits, the ability to address and evaluate racial inequities was not a stated goal of the program; however, an operating assumption was that in standardizing prescribing practices, rates of opioid-related harms would improve across all racial categories.

C. OPIP Statute

The original statutory language for OPIP is available under Minnesota Statutes, 256B.0638. There were three key legislative changes in the OPIP statutory language. They are summarized here:

2020

In response to feedback from people who experience chronic pain and their advocates, DHS initiated a statute change to add people with lived experience to the Opioid Prescribing Work Group (OPWG). In 2021, the Opioid Prescribing Work Group added two consumer members who had used or were using opioids to manage chronic pain.

Additionally, in response to requests from health care partners, DHS initiated a statute change to permit the exchange of prescribing data and reports between DHS and health systems. The initial language defined prescribing reports as confidential which only permitted direct communication between DHS and over 15,000 individual prescribers. Communicating directly with clinicians, however, proved onerous and ineffective for DHS and health systems alike. The 2021 statutory changes are available at the Office of the Revisor of Statutes.[4]

2022

In 2022, state lawmakers changed Minnesota Statutes, 152.125, subdivision 2, paragraph (b), adding protections for clinicians who prescribe beyond dose guidelines[5]. While the language was not within the OPIP statute, it directly impacted programmatic elements of OPIP. The statute states, "*No physician, advanced practice registered nurse, or physician assistant, acting in good faith and based on the needs of the patient, shall be subject to disenrollment or*

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[2] Race Rate Disparity in Drug Overdose Deaths: 2019 Preliminary Data

[3] Mossey JM. Defining racial and ethnic disparities in pain management. Clin Orthop Relat Res. 2011 Jul;469(7):1859-70. doi: 10.1007/s11999-011-1770-9. PMID: 21249483; PMCID: PMC3111792.

[4] https://www.revisor.mn.gov/laws/2021/0/30/#laws.1.12.0

[5] Chapter 98 - MN Laws

termination by the commissioner of health solely for prescribing a dosage that equates to an upward deviation from morphine milligram equivalent dosage recommendations or thresholds specified in state or federal opioid prescribing guidelines or policies, including but not limited to the Guideline for Prescribing Opioids for Chronic Pain issued by the Centers for Disease Control and Prevention and Minnesota opioid prescribing guidelines." The programmatic implication of this policy change for OPIP was that DHS lost the authority to leverage consequences for MCHP providers who knowingly and consistently ignored clinical practice guidelines.

2023

In response to requests made by the Minnesota Society of Interventional Pain Physicians, members of the State legislature added subdivision 6(a) to the original OPIP statute. The new language waived quality improvement requirements for certain clinicians treating chronic pain[6]. This policy change provided an alternative to participating in OPIP quality improvement activities, for pain management specialist who consistently exceeded quality thresholds. DHS referred to this alternative as the 'pain waiver'. In the final months of 2023, a small workgroup of clinical experts in chronic pain management developed the waiver. This report further describes the pain waiver, or refer to Opioid Stewardship Waiver Request (DHS-8455) (PDF).

Also in 2023, the legislature called upon the Commissioner of DHS to establish objective criteria that would signal the sunset of the opioid prescribing improvement program, codifying that the program shall expire when the recommended criteria were met, or on Dec. 31, 2024, whichever was sooner[7]. This report references program sunset in further detail on Page 17.

Refer to the final iteration of OPIP statute, Minnesota Statutes, 256B.0638. Access to previous legislative reports is available at the Minnesota Legislative Reference Library.

D. Opioid Prescribing Work Group

Pursuant to statute, the Department of Human Services, in collaboration with the Department of Health, convened the Opioid Prescribing Work Group (OPWG). A complete membership roster of the Opioid Prescribing Work Group is available in Appendix A. The Opioid Prescribing Work Group actively met for six years between November 2015 and December 2021. Twice during that period, the Commissioner of Human Services authorized a two-year extension to ensure the OPWG could complete all program components.

For six years, members of the Opioid Prescribing Work Group upheld a strong commitment to public service and collaboration ensuring DHS fulfilled its statutory requirements. More importantly, the OPWG worked towards a shared vision that all Minnesotans could expect safe, evidence-based treatment of pain. Over the course of approximately 50 meetings, members contributed their time and expertise, with hours of work outside those meetings.

The OPWG provided leadership and guidance to DHS as they implemented the program components described in Section III of this report. Additionally, all OPWG meeting materials including agendas and minutes are available on the OPIP webpage.

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[6] https://www.revisor.mn.gov/laws/2023/0/61/#laws.6.1.0
[7] https://www.revisor.mn.gov/laws/2023/0/61/#laws.6.1.0.

III. OPIP Components

There were four statutorily defined program components for the OPWG to oversee and develop: (1) opioid prescribing guidelines (2) sentinel data measures, (3) educational resources for opioid prescribers about communicating with patients, and (4) quality improvement thresholds and disenrollment standards for opioid prescribers and provider groups.

A. Minnesota Opioid Prescribing Guidelines

Importantly at the time the state legislature enacted OPIP, there was no national guidance for outpatient opioid prescribing. As such, the OPIP statute called for the OPWG to develop Minnesota criteria for opioid prescribing protocols, including:

- prescribing for acute pain - the interval of up to four days immediately after an acute painful event;
- prescribing for post-acute pain - the interval of up to 45 days after an acute painful event; and
- prescribing for chronic pain - pain lasting longer than 45 days after an acute painful event

The OPWG began the development of Minnesota's Opioid Prescribing Guidance at their first meeting in November 2015. Roughly 30 months later, Governor Mark Dayton announced the publication of the Minnesota Opioid Prescribing Guidelines. Refer to the complete version of Minnesota's Opioid Prescribing Guidelines (PDF). An abbreviated summary of Minnesota's community standards is available in Appendix B.

Of note, the CDC published the first edition of its Guideline for Prescribing Opioids for Chronic Pain in 2016. The OPWG closely evaluated the national guidelines to ensure there were no clinical contradictions while they worked to complete the Minnesota guidance.

Updating the guidance to address opioid tapers

In November 2019, the OPWG called for DHS to review its original guidance around opioid tapers, basing their request on a growing body of evidence that included patient harms associated with poorly managed tapers, patient abandonment and abrupt discontinuation of opioids. DHS proposed several changes to its original tapering guidance which the OPWG evaluated and approved in early 2021. The OPWG's final updates to DHS's tapering guidance are available on the Tapering and discontinuing opioid use webpage[8]. Key themes in the tapering revisions emphasized the following clinical practices:

- Patient-centered care and shared decision-making
- Gradual and individualized dose reductions
- Ongoing assessment and monitoring throughout a taper process
- Multidisciplinary support for patients as they taper
- Management of withdrawal symptoms

[8] https://mn.gov/dhs/opip/opioid-guidelines/tapering-opioids/

- Thorough documentation and regulatory compliance

Updates to CDC and VA opioid prescribing guidance

In 2022, both the Veterans Administration and the Centers for Disease Control issued updates to their existing opioid prescribing guidance. The rationale for these updates was driven by emerging evidence around the benefits and risks of prescription opioids for both acute and chronic pain, comparisons with nonopioid pain treatments, dosing strategies, opioid dose-dependent effects, risk mitigation strategies, and opioid tapering and discontinuation. The CDC update was also driven by the misapplication of their 2016 Opioid Prescribing Guidance, which resulted in unintended patient harm.

Features of both the CDC and VA updates include the following:

- Person-centered care and shared decision-making
- Broader and more flexible applicability across settings and patient populations
- Multimodal, multidisciplinary pain management strategies
- Behavioral and psychosocial risk assessments
- Enhanced patient education and tools
- Robust risk-mitigation strategies

These parallel shifts reflect a move away from one-size-fits-all dosing thresholds and toward a flexible, person-centered, team-based care—grounded in robust risk assessment, patient education, and non-opioid support. The complete and most current clinical practice guidelines from both the VA and the CDC are available online[9],[10]. DHS and the OPWG opted to not to formally update its 2018 Minnesota Opioid Prescribing Guidance in response to the federal updates because it would slow completion of the remaining program deliverables. While still salient, Minnesota's 2018 guidance is no longer considered most current, and deference is given to the CDC and VA guidance.

B. Provider awareness campaign for safer opioid prescribing

Before the creation of OPIP, the community had an urgent need for consistent, consolidated provider education. As such, the OPIP statute called for a state-sponsored provider awareness campaign. DHS leveraged federal State Opioid Response (SOR) funding to contract with Webber-Shandwick, who developed materials and publicized the campaign.

DHS launched the campaign, named "Flip the Script", in 2019. The campaign aimed to change the narrative around prescription opioid therapy, pain management and prescription opioid misuse in Minnesota. Campaign materials included:

- Continuing Medical Education podcast hosted by the University of Minnesota
- A video testimonial from a Minnesota doctor who changed his opioid prescribing practices
- A discussion guide for health care providers who prescribe opioids (PDF)
- A discussion guide for health care providers who do not prescribe opioids (PDF)
- Difficult conversations (PDF)

[9] https://www.healthquality.va.gov/guidelines/Pain/cot/VADODOpioidsCPG.pdf
[10] CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022

Worth noting is that the medical community, at large, made extensive contributions to provider and patient education, and DHS was just one of numerous entities that developed and disseminated provider education materials. Individual health systems and clinics, medical schools, quality assurance organizations, specialty associations, accreditation bodies and state licensing boards all played important roles in ensuring providers could access timely, evidence-based educational resources to address safer opioid prescribing.

C. Opioid prescribing measures and individualized prescribing reports

Sentinel measures

DHS utilized the term "sentinel measure" to signal data points at which opioid prescribing patterns in acute, post-acute and chronic pain phases exceeded the community standards (clinical practice guidelines). To devise the sentinel measures, DHS enlisted its Health Research and Quality (HRQ) team. The team served as consummate, trusted partners and the OPIP would not have been feasible without their expertise.

HRQ worked in close concert with OPIP staff and the OPWG throughout the duration of the OPIP program, but most intensively during the development of the measures and prescribing reports. HRQ data scientists analyzed Medicaid pharmacy claims at key inflection points in each succinct pain phase. HRQ's analysis evolved into the creation of seven sentinel measures that were also linked to evidence-based risk factors in each pain phase.

The OPWG approved the sentinel measures in July 2018. The following are the seven OPIP sentinel measures, and an overview of each measure is available in Appendix C. The complete technical specifications, including the quality improvement thresholds, are available on the Opioid Prescribing Improvement Program Sentinel Measures (DHS-7902B) (PDF)[11].

Sentinel Opioid Prescribing Measures

1. Rate at which patients receive an index/initial opioid prescription
2. Rate at which index opioid prescription exceeds 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. Rate at which patients receive chronic opioid analgesic therapy (COAT)
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

DHS opioid prescribing reports

After issuing the Minnesota Opioid Prescribing Guidelines and developing the sentinel measures, HRQ next analyzed opioid prescribing data for all MHCP-enrolled providers who prescribed opioids. Coupled with the sentinel measures, HRQ used pharmacy claims data to create individualized prescribing reports for over 15,000 individual prescribers. The

[11] https://edocs.dhs.state.mn.us/lfserver/public/dhs-7902b-eng

opioid prescriber reports served as a cornerstone for quality improvement, educating providers about their own prescribing trends in relation to their same-specialty peers.

DHS issued its first round of opioid prescribing reports in June 2019. Both the 2019 and 2020 reports provided an opportunity for clinicians to identify and correct potentially problematic prescribing behaviors. This two-year "grace period" was offered in hopes that clinicians would use the information to self-correct prescribing practices through education, peer review and internal quality improvement practices.

The first prescribing reports also provided ample opportunity for DHS to learn and make many important improvements. During this trial, OPIP staff learned that DHS did not have a reliable way to communicate directly with individual medical providers (because historically, communication from DHS occurred at an organizational versus individual level). OPIP staff also discovered that certain aspects of the prescribing reports were confusing and generally difficult to interpret. Additionally, they learned that the prescribing reports should be considered a blunt instrument – an indicator – but not a definitive judgement that a clinician is a "bad" or "good" opioid prescriber. Finally, DHS learned that for some providers and health systems, the DHS reports and corresponding communications felt threatening, instilling a fear and anxiety among opioid prescribers.

In response to such feedback, DHS made several adjustments reflecting more supportive messaging and a clarified report format. The report cycle occurred annually between 2020 and 2024. A sample of the final DHS Opioid Prescribing Report is available in Appendix E.

D. Quality improvement program and disenrollment standards

As mentioned, the DHS opioid prescribing reports served as the preface to a state-led quality improvement effort. Quality improvement (QI) is defined as, "a systematic and continuous approach to enhancing health care delivery and outcomes by identifying and addressing needed improvement within clinical processes and systems. It involves using data to analyze current practices, implementing changes, and monitoring the results to achieve measurable improvements in patient care, safety, and efficiency."

The quality improvement component of OPIP was a particularly novel strategy, because DHS had not directly engaged with the Minnesota medical community around clinical practice improvements. However, the endemic nature and origin of the opioid crisis necessitated an innovative approach like OPIP. Through its quality improvement framework, DHS focused on providing a supportive and positive-change environment for prescribers by emphasizing data review, team-based care and adaptive change to support improved patient outcomes.

Quality improvement

Quality improvement efforts began in 2020 and ended in 2024. Several key elements comprised the quality improvement aspects of the OPIP program; a summary of each key element follows:

Quality Improvement expertise - Before implementing the quality improvement program, DHS leveraged federal State Opioid Response (SOR) dollars to contract with both the Institute for Clinical Systems Improvement (ICSI) and the Minnesota Hospital Association (MHA) who developed quality improvement tools for prescribers and health systems. Each organization engaged their clinical advisory bodies to aid in the development of quality improvement tools that are still available at no cost to providers, clinics and health care leaders across the state. The clinical tools that are still

salient are posted on the Resources for Providers webpage. (Note: mid-contract, the Institute of Clinical System Improvement closed and DHS hired Stratis Health to carry out the remainder of the initial contract).

Plan-Do-Study-Act (PDSA) Framework – Clinical experts at ICSI and Stratis helped DHS adopt a PDSA improvement framework, which is a widely accepted approach to clinical quality improvement. The framework led prescribers through a simplified PDSA process which included the following steps:

- Review of individual prescribing reports and data to better understand personal prescribing behaviors
- Identification of possible gaps in knowledge or practice standards
- Targeting specific barriers to change
- Leveraging tools and resources to support sustainable change

For a significant majority of Minnesota clinicians, one PDSA cycle resulted in measurable improvements in their opioid prescribing data.

System-level prescribing data – Leaders of health systems expressed that in addition to prescribing data for individual clinicians, aggregated, system-level prescribing data was also a valuable tool. The initial OPIP statute permitted DHS to share prescribing data only for those individual clinicians who were prescribing beyond community standards. Thus, to accommodate the expressed need of health systems, DHS made statutory changes that allowed for health systems to receive prescribing data for all their affiliated prescribers. DHS is now able to share data files, annually, that support health systems in their overall opioid stewardship efforts.

Lived experience expertise – DHS also contracted with ICSI to understand the perspectives of people who use/used opioids for the management of chronic pain. ICSI employed a human-centered design framework to iteratively explore, prioritize and develop improvement opportunities rooted in the experiences and values of both chronic pain patients and their treating clinicians. ICSI identified seven system redesign principles and published them in a 2021 report entitled Chronic Pain and Long-term Opioid Medication: Building a New Culture (PDF).[12]

Clinical expertise – In addition to the contracts with ICSI, MHA and Stratis Health, DHS also used federal State Opioid Response (SOR) funds to contract with a physician who is board certified in Physical Medicine & Rehab and Pain Management. The contract was awarded to Dr. Isaac Marsolek of HealthPartners who worked directly with individual clinicians to provide consultative services. These interactions were informal and conversational in nature, focusing on unique aspects of an individual's practice and patient panel. Dr. Marsolek's clinical expertise provided legitimacy, credibility and validation that the OPIP program would have otherwise lacked.

Health system expertise – Another critical component of the QI effort was to identify a liaison at each health system/clinic. Liaisons were key to the state's QI effort, championing the program, facilitating communication, supporting clinicians, connecting with their organizational leadership, and maintaining an ongoing feedback loop with DHS. OPIP staff established relationships with over 50 health system liaisons. OPIP liaisons did not receive DHS reimbursement for their time and services but were truly the cornerstone of QI successes at the system level.

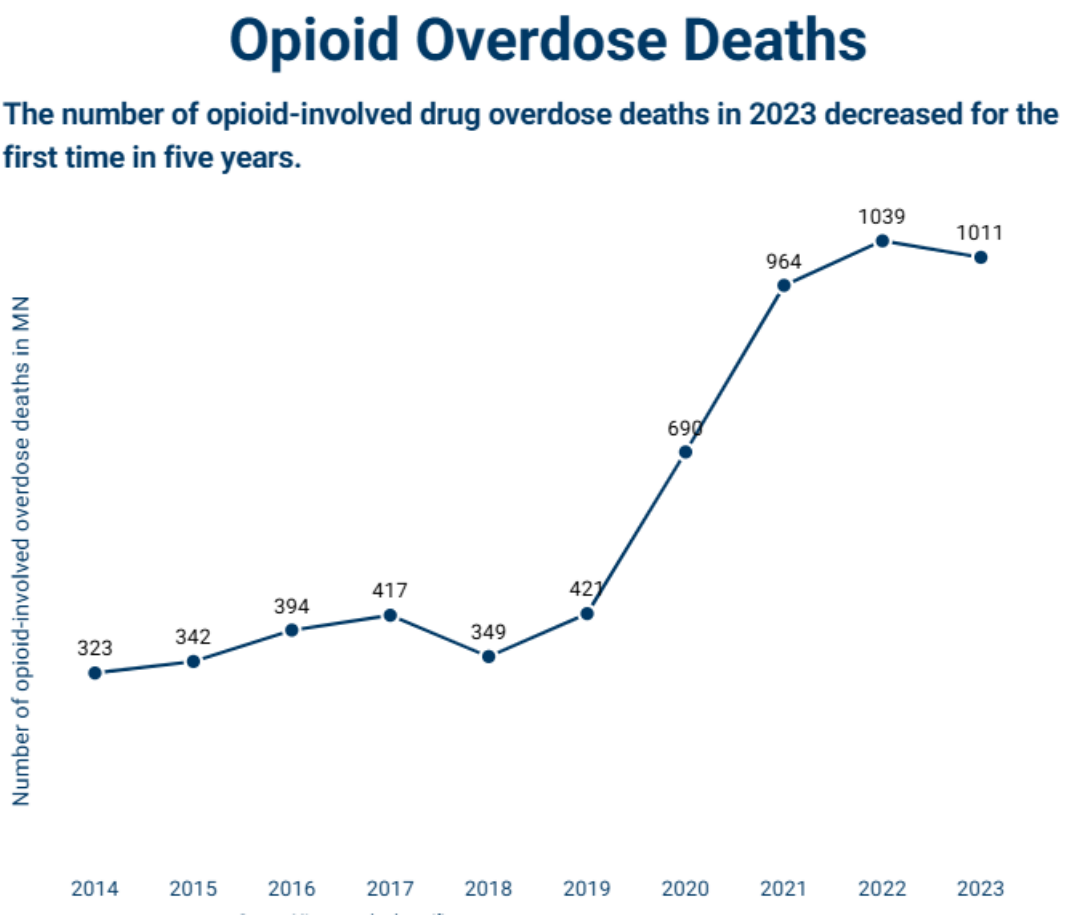
[12] Dvorkin J, Hansen A, Hemmila T, Neely C, Roberts J. Chronic Pain and Long-Term Opioid Medication:Building a New Culture. Institute for Clinical Systems Improvement (ICSI) December 2021.

COVID-19 Pandemic

DHS intended to begin targeted quality improvement efforts in 2020. However, the COVID-19 pandemic placed exorbitant stress on local, state, national and global health infrastructures. The pandemic created a health care environment that was far more challenging, dangerous and chronically stressful than previously known. For patients with chronic health conditions such as pain, anxiety, depression and substance use disorder, the pandemic caused wide-spread exacerbation of these conditions.

COVID-19 rendered chronic pain patients particularly vulnerable, due to interrupted, delayed or restricted access to multi-modal treatments such as acupuncture, physical therapy and chiropractic care. While the impacts of COVID-19 on the opioid epidemic are still not fully known, a drastic increase in overdose deaths associated with prescription opioids occurred during the pandemic. Refer to Figure 3.

Figure 3: Depicts the number of opioid-involved overdose deaths between 2014 and 2023. Notably, 2020 marked the largest percentage increase in overdose deaths during that time frame. Source: Minnesota Department of Health, Minnesota death certificates.



Because of the immense strain COVID-19 had on the healthcare community, DHS adjusted the project timeline and leaned towards a more manageable, less-demanding approach to quality improvement. Striking a balance between the different, but important, priorities of two public health crises became an important challenge for DHS.

Alternatives to quality improvement for specialty pain clinics

Due to the complexity of treating patients on long-term chronic opioid therapy, specialty pain clinics across the state typically carry large panels of patients on higher doses of chronic opioid analgesic therapy. This concentration of patients leads to a situation where some pain management specialists perpetually exceed DHS quality thresholds, despite best intentions of upholding clinical practice guidelines and patient-centered care. In 2022, the Minnesota Society of Interventional Pain Physicians successfully lobbied for an alternative to quality improvement requirements for Minnesota clinicians who specialize in the treatment of chronic pain.

DHS responded to this request by convening a panel of medical experts who specialize in the treatment of chronic pain. The expert panel developed a brief checklist by which specialty pain clinics could attest to basic set of clinical practice guidelines. The checklist, informally referred to as a 'pain waiver', offered specialists in chronic pain management an alternative to completing DHS quality improvement efforts. The waiver application/checklist is available on the Quality and Patient Safety Checklist for Pain Practices (PDF).

Quality Improvement Program Feedback

Upon completion of the QI program in 2024, OPIP staff surveyed liaisons from health systems and clinics that engaged with the program. High-level feedback from health system liaisons suggests overall program effectiveness:

- 91.7% agreed or strongly agreed the OPIP program contributed to safer opioid prescribing in their organization
- 75% agreed or strongly agreed the DHS prescribing reports helped clinicians at their organization recognize variation in their opioid prescribing
- 91.7% agreed or strongly agreed DHS involvement in a health system's quality efforts was appropriate

The OPIP quality improvement intervention points to measurable improvements in opioid prescribing, which will be described in section VII of this report.

Disenrollment standards

The original OPIP statute called on the OPWG to develop "opioid disenrollment standards for opioid prescribers and provider groups. In developing opioid disenrollment standards, the standards may be described in terms of the length of time in which prescribing practices fall outside community standards and the nature and amount of opioid prescribing that fall outside community standards".

Under the guidance of the Office of Inspector General (OIG) Surveillance and Integrity Review Unit, DHS and the OPWG worked to define extreme opioid prescribing practices that would subject a clinician to sanctions with DHS. Developing objective definitions of prescribing practices that would subject a clinician to sanctions was deemed a more tenable approach than establishing 'disenrollment criteria' for clinicians enrolled with Medicaid.

The OPWG defined four extreme opioid prescribing practices that would subject a clinician to sanctions with DHS, due to the high likelihood of patient harm. They are:

1. Discontinuation of chronic opioid analgesic therapy from daily doses greater or equal to 50 morphine milligram equivalents a day without providing patient support. Discontinuation may be abrupt or in the form of a rapid taper.
2. Continuing chronic opioid analgesic therapy without a safety plan when specific red flags for Opioid Use Disorder are present.

3. Prescribing greater than 400 morphine milligram equivalents per day without assessment of the risk for opioid-induced respiratory depression, without responding to evidence of opioid-related harm and without mitigating the risk of opioid-induced respiratory depression.
4. Continuing chronic opioid analgesic therapy at the same dose without a safety plan when risk factors for serious opioid induced respiratory depression are present.

The OPWG added that failure to participate in quality improvement requirements for two consecutive years would also be grounds for sanctions.

DHS and the OPWG hoped these definitions would protect chronic pain patients from unsafe prescribing practices such as over-prescribing, abrupt tapers, abandonment and inadequate analysis of clinical risks. However, in 2022 the state legislature discarded this proposed language in exchange for language providing legal protections for high-volume opioid prescribers (referenced in this report).

IV. OPIP Program Sunset and Evaluation

Program Sunset

During the 2023 session, the state legislature directed DHS to convene a panel of experts to establish criteria for sunsetting the OPIP program. The legislature also required that the OPIP program must sunset on Dec. 31, 2024, even if program objectives were not met.

A panel of experts worked through the fall of 2023 and submitted a report to the legislature recommending how the state should define successful program completion. The full sunset report to the legislature with recommendations and a list of panel members is available at Sunset Recommendations for the Opioid Prescribing Improvement Program (OPIP) (PDF).[13]

The following benchmarks summarize the panel's criteria for OPIP program sunset:

- Inappropriate or excessive opioid prescribing for acute and post-acute pain is reduced by 40%
- Inappropriate variation in opioid prescribing for acute and post-acute pain is reduced by 50%
- Patients who remain on chronic opioid analgesic therapy are supported through patient-centered, multimodal treatment approaches, improved monitoring of safety and harm reduction strategies.

Quantitative evaluation of program goals

DHS Health Research and Quality (HRQ) staff evaluated progress towards OPIP's goals and correlative sunset criteria by analyzing year-over-year trends for the seven sentinel measures.

[13] https://www.lrl.mn.gov/docs/2024/mandated/240361.pdf

Goal 1 Analysis

The first program goal was 'to reduce inappropriate or excessive opioid prescribing for acute and post-acute pain by 40%.' Figure 5 compares 2016 and 2024 rates for all seven measures and the percent change over that nine-year period, demonstrating the first OPIP goal was attained.

- Inappropriate or excessive opioid prescribing for acute pain (Measure 2) decreased by 48.5%, and
- Inappropriate or excessive prescribing for post-acute pain (Measure 3) decreased by 42.4%

Figure 5 is a table that reflects the seven sentinel measures and how they changed between 2016 and 2024.

	Measure Description	**2016**	**2024**	**% Change**
Measure 1	Number of Index Opioid prescriptions	152,132	87,972	-57.8%
Measure 2	Percent of Index Opioids > 100 MME	51.5%	24.9%	-48.5%
Measure 3	Percent of opioid Rx in initial episode > 700 MME	11.6%	4.9%	-42.4%
Measure 4	Number of COAT Recipients	21,667	9,028	-41.7%
Measure 5	Percent of high-dose COAT recipients	13.9%	6.9%	-49.3%
Measure 6	Percent of COAT recipients with concomitant benzos	11.7%	5.4%	-46.1%
Measure 7	Percent of COAT recipients with >2 prescribers	10.1%	13.4%	32.5%

Goal 2 Analysis

The second program goal was to 'reduce inappropriate *variation* in opioid prescribing for acute and post-acute pain by 50%.' Variation is a statistical tool that examines how individual elements compare to each other within a data set. OPIP used variation because it identified the presence of outliers in the data. When providers are grouped by specialty with their clinical peers, variation should be minimal. Notably, appropriate patient-centered care requires some degree of variability, so the goal of OPIP was never to eliminate variation entirely. An expected outcome of successful QI implementation is a measurable reduction, versus total elimination, of variation.

Figure 6 is a column graph comparing four quartiles of emergency medicine providers' prescribing rates in 2016 and 2024. The variation between the lowest and highest prescribers decreases significantly over time.

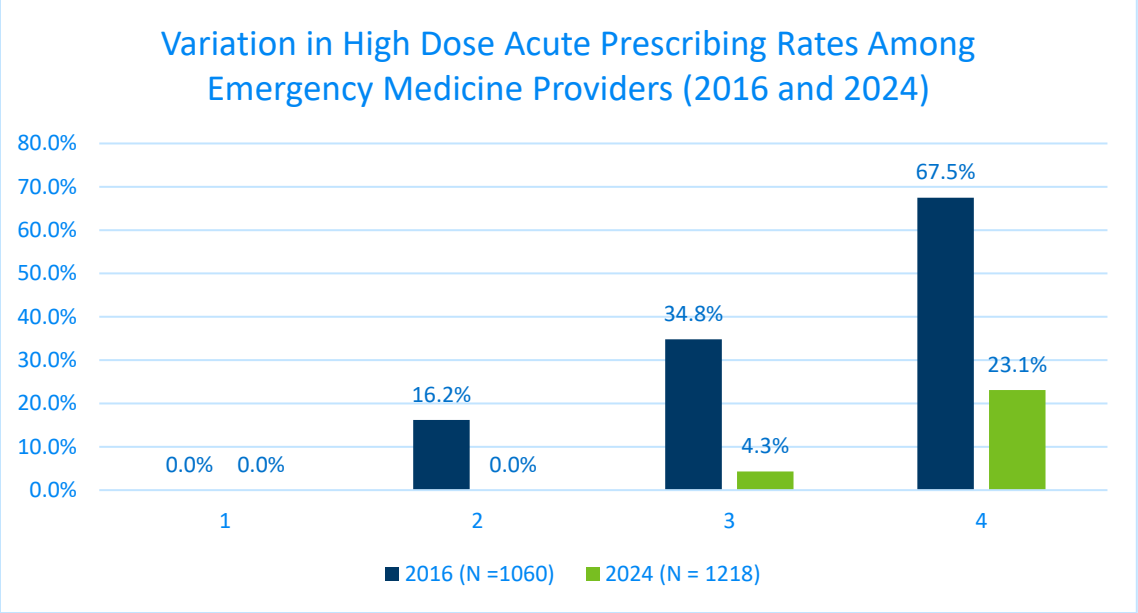
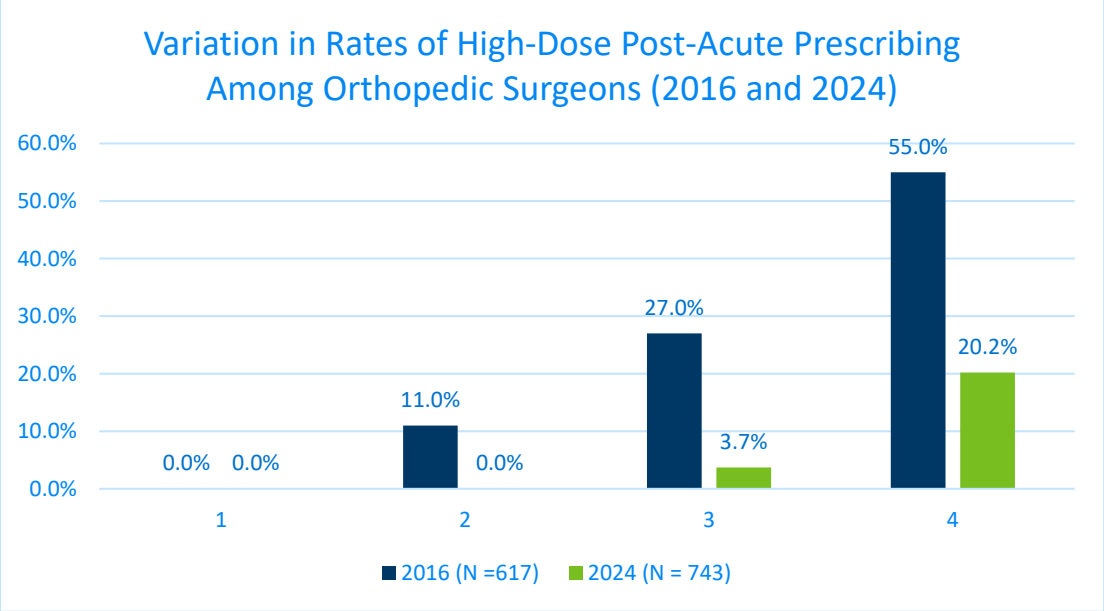


Figure 6 depicts variation in high dose acute prescribing among all Emergency Medicine providers enrolled in MHCP. In 2016, there were 1,060 emergency medicine providers enrolled in MHCP. The bottom quartile of Emergency Medicine providers prescribed more than 100 total MME 0% of the time, while the top quartile of prescribers exceeded 100 total MME 67.5% of the time. This difference suggests significant variance in prescribing among clinicians practicing the same type of medicine. As Figure 6 depicts, by 2024, variation between lowest and highest ED prescribers decreased substantially.

Similarly, Figure 7 offers a depiction of variation in post-acute prescribing patterns among orthopedic surgeons. In 2016, there were 617 orthopedic surgeons enrolled in MHCP. The lowest quartile of prescribers had 0% of their patients exceed 700 MME exposure post-operatively. Conversely, the top quartile exceeded 700 total MME exposure 55% of the time, suggesting a significant variance in post-acute prescribing. Notably, variation in post-acute prescribing decreased significantly between 2016 and 2024.

Figure 7 is a column graph comparing four quartiles of orthopedic surgeons' prescribing rates in 2016 and 2024. The variation between the lowest and highest prescribers decreases significantly over time.



These data demonstrates that OPIP Goal 2, to reduce inappropriate variation in opioid prescribing for both acute and post-acute pain by 50%, was met.

Goal 3 Analysis

The third and final OPIP goal necessitates both qualitative and quantitative analysis. It states, "patients who remain on chronic opioid analgesic therapy are supported through patient-centered, multimodal treatment approaches, improved monitoring of safety and harm reduction strategies". The objective analysis demonstrates that between 2016 and 2024, important reductions related to chronic opioid analgesic therapy occurred. For example, the numbers of new users of chronic opioid analgesic therapy decreased by nearly 50% between 2016 and 2023, as shown in Figure 2.

In addition, Figure 5 depicts important reductions in chronic opioid prescribing:

- The number of patients receiving chronic opioid therapy decreased by 41.7%
- The number of patients receiving daily doses of 90 MME or higher decreased by 49.3%
- The number of patients receiving chronic opioid analgesic therapy and concurrent benzodiazepines decreased by 46.1%

Indeed, these numbers reflect positive trajectory towards safer chronic pain management. Yet, they do not necessarily indicate alignment with clinical practice guidelines or the intent of OPIP's third goal. For example, these metrics do not point to whether patients receive proper assessments, care coordination, treatment planning and multi-modal care. Hence, the sunset panel spent a significant amount of time deliberating OPIP's third goal and ultimately decided not to make a definitive recommendation as to whether it was met.

Qualitative Feedback

Due to the lack of a definitive criteria for the third OPIP goal, the sunset panel emphasized the need for qualitative feedback. The following is a summary of the qualitative information DHS gathered from a panel of clinicians who specialize in the treatment of chronic pain.

Chronic pain patients experience common challenges

- **Access -** Barriers to multi-modal therapies persist for chronic pain patients. The access issue is confounded by geography, the number of licensed providers, therapies and treatments that are not covered by insurance, and providers available or willing to accept new patients, which is particularly challenging for mental health care.

- **Stigma -** Patients who experience chronic pain, especially those who use opioids, experience high degrees of stigma. There are certain health conditions that warrant use of chronic opioid analgesic therapy. Yet, persons diagnosed with chronically painful conditions consistently report their pain is not 'believed' and their plight for pain relief is erroneously labeled as drug-seeking behavior. This stigma significantly impedes patient access to person-centered care.

- **Medical racism -** Closely related, racism and bias permeate the treatment of pain, an adverse phenomenon repeatedly proven in medical literature. This exacerbates the fact that Minnesotans of color face some of the most significant health disparities in the country.

- **Limited advocacy -** Chronic pain patients have minimal, if any, means to address the harms they experience seeking healthcare. Whether they are abandoned by providers, victimized by racism, or turned away from care, they have limited means for self-advocacy. An unfortunate and prevalent concern for chronic pain patients is seeking health care within a structure where they do not have a voice.

Notably, similar concerns were also prioritized in ICSI's 2021 work with chronic pain patients previously referenced in this report.

Clinicians who treat chronic pain experience challenges

DHS also asked the panel to prioritize the challenges that providers and health systems encounter when providing multi-modal pain treatment. Panel members agreed our systems are not sufficiently equipped to appropriately support the thousands of Minnesotans who experience chronic pain. They identified two system-level issues for providers treating chronic pain in Minnesota:

- **Insufficient infrastructure -** Minnesota lacks a robust, collaborative framework to socialize and standardize clinical practice guidelines for multi-modal pain treatment. For example, the panel identified the need for a centralized resource for up-to-date clinical guidelines, tools, and literature supporting multi-modal pain treatment. A Minnesota-specific resource does not currently exist and would be an asset for providers and patients alike. Similarly, the panel expressed need for an expanded, comprehensive and centralized referral source for multi-modal pain providers.

- **Workforce issues -** The nation's health care workforce is in peril. And anecdotal feedback from panel members suggests that workforce shortages are perhaps even more dire in chronic pain management, a specialty that has become increasingly more complicated. Panel members pointed to rising labor costs, diminishing reimbursement rates, insurance requirements, and other regulatory impediments as contributing factors. They are deeply concerned that Minnesota's infrastructure for chronic pain treatment is ill-equipped to serve this complex patient population.

Lingering issues identified by OPIP program staff

After considering expert feedback, medical evidence, public health data, and program feedback, OPIP program staff also identified key lingering issues related to opioids and chronic pain management:

- **Buprenorphine for the treatment of chronic pain is an underutilized tool –** Emerging evidence and national guidance support buprenorphine as a safer and equally efficacious alternative for long-term pain control. Buprenorphine offers the pain control of a full-agonist without the increased risks of overdose, dependence, and adverse physiological effects. Yet, many patients do not access this medication because they are not aware it is an option or fear switching from a full-agonist. Similarly, many clinicians are still not familiar, trained or adept at utilizing buprenorphine as a pain management tool.

- **Legacy opioid patients face continued barriers –** An unfortunate and lingering reality of the prescription opioid crisis is the population of patients, sometimes referred to as 'legacy opioid patients', who have been on chronic opioid analgesic therapy for years - even decades. Despite using medications exactly as prescribed, many of these legacy patients developed a dependence on prescription opioids. Legacy opioid patients are commonly dropped from care and passed from clinician to clinician[14]. These patients are very vulnerable to falling through the cracks of our health systems.

- **Abrupt tapers and involuntary tapers persist –** A persistent concern of the OPWG throughout the duration of the OPIP project was that the state's involvement would lead to unintended consequence of abrupt or forced tapering of patients on chronic opioid analgesic therapy. The risks of rapid tapering or sudden discontinuation of opioids in physically dependent patients include acute withdrawal symptoms, exacerbation of pain, serious psychological distress, suicidal ideation and even death.[15] Despite the known risks, repeated reports of patient abandonment and forced tapers, patients across the state continue to report abrupt tapers.

- **Unsafe opioid prescribing persists –** A small fraction of Minnesota clinicians continues to prescribe opioids in a manner that is well outside community standards, as evidenced by prescribing reports and variation analysis described in this report. Additionally, the Minnesota Prescription Drug Monitoring Program reports that 26.1% of all schedule II-V controlled substances are prescribed by 1% of the state's prescribers[16].

  These patterns are not likely attributed to lack of training, education, and support, but rather a lack of accountability. Year-over-year patterns indicate that health systems are generally well-equipped to identify and address outliers. When persistently errant opioid prescribing is observed, it is almost exclusively in smaller clinics or private practice. Yet, DHS has extremely limited legislative authority to address prescribers who perpetuate patient harms through unsafe prescribing practices.

[14] Matthew Carrillo, Jessica Yingst, Wen-Jan Tuan, David Giampetro, Jennifer E. Nyland & Aleksandra E. Zgierska (2025) Problems accessing pain care, and the adverse outcomes among adults with chronic pain: a cross-sectional survey study, Pain Management, 15:2, 81-91, DOI: 10.1080/17581869.2025.2463865.

[15] Opioid-Tampering-DSC-final.pdf

[16] https://mn.gov/boards/assets/2023%20Annual%20Report2_tcm21-638297.pdf

V. Recommendations and conclusion

Recommendations

As a community, Minnesota has made great strides in preventing patient harms associated with prescription opioids. There are significant improvements in our collective knowledge, resources and tools for chronic pain management. And yet, despite this progress, a staggering 8.4% of American adults still experience high-impact chronic pain that limits their ability to participate in work and life activities[17]. This is why DHS should maintain a sightline on this public health topic.

Section IV of this report references a few key interventions DHS might consider to support people with chronic pain and the professionals who treat them. These recommendations, in order of importance are:

1. Ensure clinical support and advocacy for patients who have been forced to taper, abandoned from care, or unable to access treatment
2. Socialize and promote the utilization of buprenorphine products for the treatment of chronic pain
3. Develop and maintain a centralized, state-led chronic pain resource or website that includes up-to-date practice guidelines, clinical tools and resources, provider and patient education materials and a care-finder
4. Promote grants, education and incentives to strengthen the clinical workforce surrounding chronic pain management
5. Conduct ongoing surveillance and analysis of pharmacy data at various levels including individual, clinic and regional.

Conclusion

The Opioid Prescribing Improvement Program has been a pivotal initiative in Minnesota's response to the opioid crisis, successfully reducing excessive and variant opioid prescribing while promoting safer, evidence-based pain management practices. Throughout its operation, OPIP has demonstrated the power of coordinated policy, data-driven interventions, and collaborative stakeholder engagement in addressing complex public health challenges.

As the program concludes, it is essential to recognize both its achievements and the challenges that remain. Persistent barriers such as patient access to care, stigma, and the need for balanced clinical autonomy highlight the importance of continued vigilance and innovation in opioid prescribing and chronic pain management. Looking forward, the recommendations outlined in this report provide pragmatic interventions for sustaining progress.

The legacy of OPIP underscores the value of state-led initiatives grounded in evidence-based policy and collaboration. By replicating innovative models like OPIP, DHS can meaningfully impact the complex public health challenges of our day.

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[17] Lucas JW, Sohi I. Chronic pain and high-impact chronic pain in U.S. adults, 2023. NCHS Data Brief, no 518. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: https://dx.doi.org/10.15620/cdc/169630

VI. Appendices

Appendix A. Opioid Prescribing Work Group Members

- Minnesota Health Care Programs medical director (nonvoting)
  - Jeffrey Schiff, MD, Minnesota Department of Human Services
  - Nathan Chomilo, MD, Minnesota Department of Human Services
- Public member who uses or who has used opioid therapy to manage chronic pain
  - Kurtis Couch, Waterville, MN
  - Saudade SammuelSon, Richfield MN
- Non physician health care professional who treats pain
  - Julie L. Cunningham, PharmD, BCPP, Mayo Clinic Health System
- Consumer representative
  - Sen. Chris Eaton, RN, Minnesota State Senate
- Pharmacist
  - Tiffany Elton, PharmD, NCPS
- Minnesota Department of Health (nonvoting)
  - Dana Farley, MS
- Nurse Practitioner
  - Rebekah Forrest, RN, CNP, NorthPoint Community Clinic
- Licensed Physician
  - Kurt DeVine, MD, MEnD Correctional Care
- Health plan medical director
  - Bret Haake , MD, HealthPartners
- Health Services Advisory Council member
  - Chris Johnson, MD, Allina Health
- Minnesota Department of Labor and Industry (non-voting)
  - Ernest Lampe, MD
  - Emily Bannister, MD
- Consumer representative
  - Matthew Lewis, MD (not practicing), Winona
- Health plan pharmacy director
  - Adam Nelson, PharmD, CSP, UCare
- Non physician health care professional who treats pain)
  - Murray McAllister, PsyD, LP, Courage Kenny Rehabilitation Institute
- Dentist
  - Richard Nadeau, DDS, MPH, University of Minnesota School of Dentistry (dentist)
- Minnesota Health Care Programs Pharmacy Director (nonvoting)
  - Chad Hope, PharmD
- Mental Health Professional
  - Charles Reznikoff, MD, Hennepin County Medical Center
- Law Enforcement
  - Detective Charles Strack, Little Falls Police Department, retired
- Medical Examiner
  - Lindsey Thomas, MD, Midwest Medical Examiner's Office

Appendix B. Summary of Minnesota Opioid Prescribing Guidelines

Opioid prescribing community standards

Universal Actions

- Communicate realistic expectations about anticipated pain
- Start with non-opioid options
- Consider using a risk assessment tool
- Weigh risks versus benefits
- Educate patient/family about opioid risks, safe use and disposal
- Check the PMP
- Use the lowest strength, short acting dose for shortest duration
- Offer naloxone to patients at risk of overdose
- Avoid "PRN" instructions, clearly explain how to take and stop opioids

Risks for chronicity

- Second prescription or refill
- 700 cumulative MME
- Initial 10-30 day supply
- Long-acting opioids
- Tramadol
- Drug use disorder
- Mental health diagnosis
- Opioid prescription before age 18

Red Flags for Opioid Use Disorder

- Signs of impaired control
- Signs of social impairment
- Risky use of opioids
- Predisposition to addiction
- Multiple prescribers
- Signs of tolerance or withdrawal

When treating acute pain

- Avoid opioids if possible.
- Use scheduled acetaminophen and/or NSAIDS unless contraindicated
- Use the lowest strength, short-acting dose for the shortest duration in the initial opioid prescription, usually up to 100 MME
- For post-surgical pain, a prescription of 200 MME or less is often sufficient, using procedure-specific benchmarks.
- Provide patient with follow-up instructions, if the pain does not resolve as expected

When treating post-acute or episodic pain

- Assess for risk of transition to chronic use, or risk of harm
- Assess for opioid use disorder
- Assess for biopsychosocial concerns influencing pain
- Verify patient understanding of how to use opioids
- Start and transition to non-opioid medications, as tolerated
- Support consistent messages about pain from all staff
- Limit the number of prescribers where possible.

Additional considerations for postoperative pain

- Use patient-centered, procedure specific dosing
- Communicate plans during transitions to other facilities and across prescriber transitions (emergency department, primary care, rehabilitation, etc…)

When treating chronic pain

- DO NOT ABRUPTLY STOP OPIOIDS without a clear plan
- Avoid initiating opioids for chronic pain
- Avoid prescribing opioids and benzodiazepines together
- Increase intensity of management commensurate with risks/comorbidities
- Limit the number of prescribers
- Screen for Red Flags for Opioid Use Disorder more frequently and provide immediate referral for intervention if treatment is needed.
- Regularly offer and discuss tapering options with patients
- Use chronic condition management tools and care plans to support patients
- Conduct routine case reviews

The complete Minnesota Opioid Prescribing Guidelines are available on the DHS Minnesota Opioid Prescribing Guidelines (PDF). A summary of the prescribing guidelines explain the following three broad values. Definitions of clinical terminology is 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 more than 700 MME (cumulatively) 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.
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.

Terms	Definition
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.

M1: 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% (nonsurgical specialties only)**
M2: 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%
M3: 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%
M4: 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
M5: 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%
M6: 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%
M7: 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

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

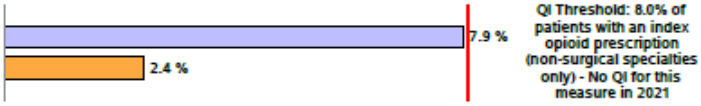
NPI: 0000000000

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

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

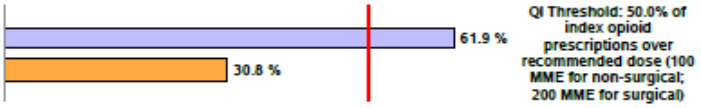
N: Number of opioid naïve enrollees with a new opioid prescription in the measurement year
D: Number of distinct enrollees seen in the measurement year (MY)



Numerator = 20 / Denominator = 253

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

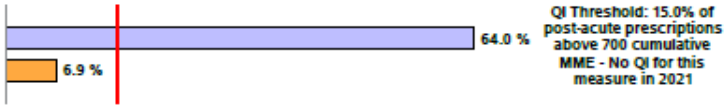
N: Number of index opioid prescriptions exceeding the recommended dose in the MY
D: Number of index opioid prescriptions prescribed in the MY



Numerator = 13 / Denominator = 21

Measure 3: Percent of prescriptions exceeding 700 cumulative MME

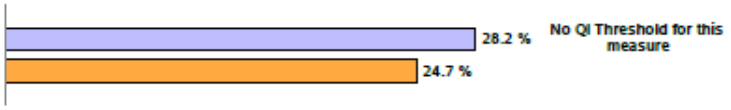
N: Number of prescriptions that meet or exceed 700 cumulative MME prescribed in the MY
D: Number of prescriptions in 45 days following an index prescription (inc. index prescription)



Numerator = 16 / Denominator = 25

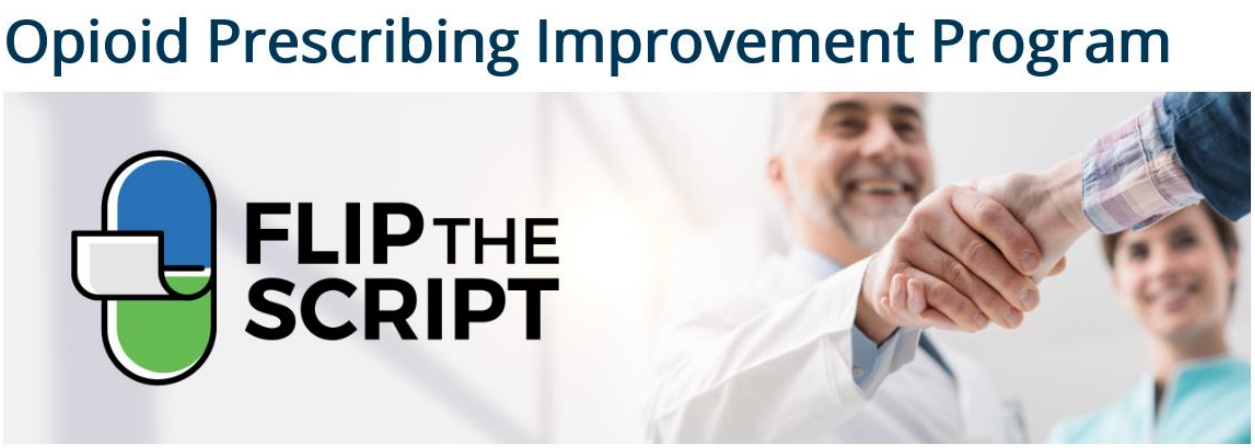
Measure 4: Percent of patients with chronic opioid analgesic therapy (COAT)

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



Numerator = 11 / Denominator = 39

Appendix E. “Flip the Script” Provider Materials



Many provider resources can be accessed via the OPIP webpages, 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 (MHCP) opioid prescribing metrics (2016 – 2023)

The following table depicts out-patient opioid prescribing data from MHCP between the years of 2016 and 2023. The table includes the seven sentinel measures and other data elements used to compile the DHS opioid prescribing reports. The data trends reflect notable and significant improvements over the duration of the OPIP program.

Population data	2016	2017	2018	2019	2020	2021	2022	2023
MHCP Enrollees (million)	1.22	1.22	1.23	1.19	1.24	1.39	1.49	1.55
Opioid Prescriptions	788,383	684,334	565,877	393,495	449,491	452,544	439,027	428,393
Enrollees receiving opioids	192,785	172,284	151,204	110,358	118,445	128,844	128,523	130,117
Opioid Prescribers	16,975	16,589	16,397	15,820	15,481	15,626	15,867	16,137
Acute Prescribing								
Index Opioids	152,132	132,664	117,877	98,126	91,356	105,442	106,470	107,948
Index Opioids > 100 MME	78,354	64,943	51,910	33,810	28,173	30,084	28,251	28,116
% Index Opioids > 100 MME	51.50%	49.00%	44.00%	34.46%	30.84%	28.53%	26.53%	26.05%
Post-Acute prescribing								
Opioid Rx in initial episode > 700 MME	26,055	21,428	16,824	9,350	8,862	7,745	6,935	7,054
% opioid Rx in initial episode > 700 MME	11.60%	11.00%	9.90%	6.62%	6.61%	5.17%	4.63%	4.68%
Chronic Opioid Analgesic Therapy (COAT)								
COAT Patients	21,667	19,001	16,252	13,429	12,287	11,911	11,488	11,382
High-dose COAT patients	3,020	2,461	1,812	1,257	1,076	900	885	827
% high-dose COAT recipients	13.90%	13.00%	11.10%	9.36%	8.76%	7.56%	7.70%	7.27%
COAT w/benzodiazapines	2,541	1,978	1,446	968	800	658	620	600
% COAT w/benzodiazepines	11.70%	10.40%	8.90%	7.21%	6.51%	5.52%	5.40%	5.27%
COAT patients w/ 3+ prescribers	2,194	2,481	1,914	1,582	1,736	1,403	1,737	1,570
% COAT patients w/ 3+ prescribers	10.10%	13.10%	11.80%	11.78%	14.13%	11.78%	15.12%	13.79%