

Reducing Opioid Availability with Improved Prescribing Practices




EXECUTIVE SUMMARY

Historical approaches to the use of opioids in pain management have been associated with overprescribing and have inadvertently contributed to the opioid abuse crisis. Optimizing the use of opioids can help reduce the number of excess pills circulating in the community.

Allina Health, a not-for-profit health system serving Minnesota and western Wisconsin, achieved previous success in reducing opioid prescriptions in outpatient settings through the adoption of standard practices. Though Allina Health had initial success with its opioid prescription reduction efforts, providers still lacked visibility into prescribing practices, leading to variability that made further sustainable improvements challenging. With the help of analytics, Allina Health leveraged its data to develop prescription standards aimed at reducing the oversupply of opioids in the community, while still effectively managing patients' acute pain after procedures.

HEALTHCARE ORGANIZATION

Integrated Delivery System

PRODUCTS

- Health Catalyst® Data Operating System (DOS™) Platform

SERVICES

- Professional Services
- Installation Services

RESULTS

- 15,730 fewer opioid pills prescribed at discharge in one year.
- 16 percent relative reduction in the number of opioid pills prescribed per patient.
- 95 percent of patients that delivered a baby via cesarean section and received opioids at discharge received fewer than 30 opioid pills.

PRESCRIBING PRACTICES LINKED TO OPIOID ABUSE

Over the past twenty years, the U.S. has experienced a national opioid abuse crisis. Healthcare providers have unintentionally contributed to the crisis through prescribing practices; however, providers are poised to directly contribute to the reduction of the availability of opioids in the community.¹



Having data to support the improvement effort has been impactful and contributed to the adoption of standard opioid prescribing practices.

Keith Olson, DO, MHA, FACHE
Regional Medical Director
Allina Health

Current evidence supports prescribing practices that limit the number of opioid pills for acute pain after a procedure, mitigating the availability of surplus opioid medications that may be diverted from intended use and distributed illegally within the community.² The end goal is to reduce opioid dependency through reducing opioid availability.

Allina Health, a not-for-profit healthcare system, is dedicated to the prevention and treatment of illness and enhancing the greater health of individuals, families, and communities throughout Minnesota and western Wisconsin. In support of this mission, Allina Health looked to reduce opioid prescriptions in order to curb potential abuse in the community. Allina Health cares for patients from birth to end-of-life through its over 90 clinics, 12 hospitals with over 109,000 inpatient admissions and 336,000 emergency department visits annually.

EVIDENCE-BASED PRACTICE CHANGES IMPACT PAIN MANAGEMENT EFFORTS

Previously, Allina Health reduced the number of opioids prescribed in the outpatient setting by implementing the Institute for Clinical Systems Improvements (ICSI) [evidence-based prescribing guidelines for the management of chronic non-cancer pain in adults](#). However, the number of opioids prescribed after procedures remained higher than desired.

While providers were aware of the negative impact of prescribing high numbers of opioids for acute pain after a procedure, some were not aware of the ICSI guideline recommendations, leading to unintended variation in prescribing practices. Providers did not have data about how their prescribing practices compared to the prescribing practices of their peers.

To further combat opioid abuse, Allina Health needed to expand its work and ensure providers were knowledgeable on the ICSI guidelines, in addition to being given details on their prescribing practices and those of their peers.

DATA-DRIVEN APPROACH TO REDUCING OPIOID AVAILABILITY

Allina Health formed a pain steering committee whose membership includes physician leadership, nursing leadership, pharmacists, quality specialists, and data analysts. The committee is tasked with coordinating and providing oversight for the opioid prescription reduction improvement efforts.



“Our providers were actively engaged in this improvement effort, readily changing their prescribing practices to improve the consistency of care and patient safety.”

Kathleen Keller, MAN, CNE
Quality Project Management
Coordinator, Allina Health

To further improve safe opioid prescribing practices for acute pain, improve the consistency of care, and reduce the number of opioids remaining after care to prevent opioid misuse within the community, the pain steering committee took a data-driven approach, using data from the Health Catalyst® Data Operating System (DOS™) Platform to obtain data regarding prescribing practices.

This data informed the improvement plan and strategy for the provider engagement required to effectively change prescribing practices for the management of acute pain. The pain steering committee used the ISCI guidelines and other best practices to develop and implement acute pain order sets.

To support implementation, the committee engaged providers who perform procedures in the development of the acute pain order sets. The physician champion from the pain steering committee sent an email to providers that included the ICSI template used to develop the order set. Providers were asked to confirm if their procedures fit the guidelines, indicate their agreement or suggested edits to the order set, and identify if any procedures were missing.

The order sets were built in the EMR and include prescribing recommendations to:

- Limit the number of opioid pills for a single acute pain prescription to a three-day supply or twenty pills.
- Limit the morphine milligram equivalents (MME) for a single acute pain prescription to 200 MME total.
- Standard MME ranges by procedure type.

Following the development of the acute pain standard order sets, the pain steering committee provided education for providers and nursing staff. Providers received education on the ISCI guidelines for acute pain, including the recommendations to:

- Begin initial pain management with non-opioid prescriptions and alternative treatments, such as physical therapy, massage, or acupuncture.
- Perform a risk assessment for opioid misuse before prescribing opioids.
- Limit the number of opioids to a three-day supply, or twenty pills, when prescribing short-acting opioids.

- Review the prescription drug monitoring program (PDMP) before prescribing opioids.
- Use a shared decision-making process when discussing pain management options with patients and families.

Education provided to nursing staff incorporated strategies for alternate, non-opioid interventions to relieve pain. The education also included a review of the talking points that should be used for requests from patients for opioid prescription refills. When patients with acute pain call requesting a refill of an opioid prescription, the registered nurse facilitates a follow-up visit with the prescriber to evaluate potential reasons for continued, unexpected pain after the procedure.

Using the analytics platform, analysts at Allina Health obtained data regarding prescribing patterns, identifying the top five procedures with the highest volume of opioid prescriptions at discharge. The top five procedures were shared with service line leaders, who partnered with physician leaders to provide education on the need to utilize the standard order sets, decreasing variability in prescribing practices and decreasing the number of opioids prescribed. Service line leaders and members of the pain steering committee use the analytics platform to monitor the number of opioids prescribed for acute pain and monitor the use of the standard order sets, providing regular feedback to providers.

By providing readily available prescribing tools and near real-time insight into prescribing patterns, providers embraced the improvement efforts and readily adopted the evidence-based guidelines. Prior to procedures, providers proactively engage patients in shared decision-making conversations, helping to set expectations and increase understanding about the amount of pain expected to occur after the procedure. These conversations also inform patients about the various options available to manage acute pain, the risks associated with taking opioids, and the need to avoid excessive opioid use.

RESULTS

Having already reduced the number of opioid pills prescribed for chronic pain in the outpatient setting by nearly one-million pills, Allina Health's data-driven, evidence-based approach to prescribing opioids for patients with acute pain has further reduced the number of opioids prescribed for acute pain. Results include:

- 15,730 fewer opioid pills prescribed at discharge in one year.
- 16 percent relative reduction in the number of opioid pills prescribed per patient.
- 95 percent of patients that delivered a baby via cesarean section and received opioids at discharge received fewer than 30 opioid pills.

Since the implementation of the acute pain guidelines, the obstetric clinics report that they have not had an increase in request for additional opioids at the two-week post-discharge follow-up appointment, nor have the clinics received reports of inadequate pain management.

WHAT'S NEXT

Having successfully implemented opioid prescribing guidelines in outpatient and ambulatory care settings, Allina Health plans to further improve its evidence-based prescribing practice across the organization. 📌

REFERENCES

1. The Advisory Board. (2018). *Confronting the opioid epidemic - Nine imperatives for hospital and health system executives*. Retrieved from <https://www.advisory.com/research/health-care-advisory-board/research-reports/2018/confronting-the-opioid-epidemic>
2. Hooten M., Thorson, D., Bianco, J., Bonte, B., Clavel, A., Hora, J., . . . Walker, N. (2017). Pain: Assessment, non-opioid treatment approaches and opioid management. *Institute for Clinical Systems Improvement*. Retrieved from https://www.icsi.org/guidelines_more/catalog_guidelines_and_more/catalog_guidelines/catalog_neurological_guidelines/pain/

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