

# Pain and Opioid Data Collection Recommendations

The intent of this guide is to inform stakeholders of OPEN recommended data collection for opioid prescribing at discharge and patient reported outcomes (PROs) related to pain management for surgical patients. This comprehensive data can be used to create and monitor data-driven opioid prescribing recommendations, multimodal pain management strategies, and evaluate the impact on the opioid epidemic.

Of note, if you already collect pain and opioid patient reported outcomes and plan to make changes to the data elements you collect based on this guide, OPEN is available for consultation to help map previously collected data.

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## The OPEN Mission

The effects of chronic opioid use have touched millions of lives in countless communities. We launched the Opioid Prescribing Engagement Network (OPEN) in 2016 to change the trajectory of the opioid epidemic by developing new approaches to an exceedingly complex problem.

We began with the understanding that effectively addressing opioid addiction requires intensive collaboration with the many stakeholders in this crisis. We work to find evidence-based solutions by bringing together the best minds and deeply engaging with the medical establishment, community workers, patients, and the greater public.

Disrupting the cycle of dependency where it begins — most commonly with a prescription to manage acute pain after surgery — has been our focus. Since we established our [Opioid Prescribing Recommendations](#), which tailor prescriptions to meet the needs of specific procedures, opioid prescribing after surgery has declined by 72% in Michigan. Removing unused medication from homes is also part of the puzzle, so we partner with communities to host take-back events, where opioids can be safely disposed of to keep them out of circulation and help reduce misuse.

We continue to build on these successes through research, engagement, and evidence-based actions. As we move forward, we strive to increase our understanding of the challenges of the opioid crisis and dramatically expand our reach, providing effective resources to those on the frontlines and transformative solutions that make a positive difference.

OPEN works with support from the Michigan Department of Health and Human Services, Blue Cross Blue Shield of Michigan (BCBSM) Value Partnerships, and the Institute for Healthcare Policy and Innovation (IHPI) at the University of Michigan.

# Data Collection

## Standard Pain and Opioid Data Collection

Standard pain and opioid data collection allows for data-driven opioid prescribing guidelines to be developed based upon the opioid discharge prescription, patient consumption, and monitoring for continued pain management and patient satisfaction. Hospitals can also monitor their opioid prescribing patterns in comparison to the OPEN prescribing recommendations. The data elements are collected via the EMR and also through patient reported outcomes (PROs). The important domains are opioid prescription, opioid consumption, pain intensity, and patient satisfaction.

## Additional Pain and Opioid Data Collection

Advanced pain and opioid data collection includes all of the domains mentioned above in addition to implementation of multimodal pain management strategies, non-pharmacological pain management strategies, a review of other medications prescribed, long-term opioid use, and opioid disposal.

## Discharge Opioid Prescription

Both standard and advanced pain and opioid data collection needs to be supported by abstraction of the discharge opioid prescription for the EMR. To ensure accuracy and because of the availability within medical records, OPEN highly recommends that these data elements be directly collected via the patient chart and not via PROs. If this is not possible, other alternatives, such as collection through patient reported outcomes can be explored.

## Patient Reported Outcomes (PROs) Data Collection Timeframe

PROs data collection can be added to any patient reported follow up that is already happening. There is no need to create a specific follow up for PROs unless your organization does not currently collect patient-reported follow up. When determining a timeframe, consider when patient reported follow up is currently collected and clinical relevance. For example, in some organizations, PROs are collected at least 30 after surgery since that is what aligns within their existing follow up structure.

# Standard Pain and Opioid Data Collection Elements

## Discharge Opioid Prescription Data Elements - Collected via EMR

Data Element	Question	Options	Display Logic for Data Element
Type of Opioid	What type of opioid was prescribed at discharge?	<ul style="list-style-type: none"> <li>- Hydrocodone(Norco, Vicodin, Lortab, Lorcet)</li> <li>- Oxycodone (OxyContin, Percocet, Roxicodone)</li> <li>- Tramadol (Ultram, Ultram ER)</li> <li>- Codeine (Tylenol 2, 3, or 4)</li> <li>- Hydromorphone (Dilaudid)</li> <li>- Morphine (MS Contin)</li> <li>- Fentanyl patch (Duragesic)</li> <li>- Other</li> <li>- No opioid was prescribed at discharge</li> </ul>	
Opioid Unit Prescribed	What was the opioid unit prescribed?	<ul style="list-style-type: none"> <li>- mg (pill)</li> <li>- mg/mL (liquid)</li> <li>- mcg/hr (patch)</li> <li>- Not Documented</li> </ul>	Display if Type of Opioid = hydrocodone, oxycodone, tramadol, codeine, hydromorphone, morphine, fentanyl patch, or other
Opioid Dose Prescribed	What was the opioid dose prescribed?	Numerical Field	Display Opioid Unit Prescribed = mg, mg/mL, or mcg/hr is selected
Quantity Prescribed	What was the quantity of opioid prescribed?	Numerical field	Display Opioid Unit Prescribed = mg, mg/mL, or mcg/hr is selected

## Preoperative Opioid Use - Collected via EMR

Data Element	Question	Options
Preoperative Opioid Use	Did the patient take an opioid medication within the 30 days prior to surgery?	- Yes - No

## PRO Questionnaire Data Elements - Collected via Patient

Data Element	Question	Options	Display Logic for Data Element
Patient Satisfaction	Overall how would you rate your satisfaction with your experience following surgery, with 0 being extremely dissatisfied, and 10 being extremely satisfied?	Likert scale 0 = Extremely Dissatisfied 10 = Extremely Satisfied	
Pain Intensity	Thinking back, how would you rate your pain at the site of surgery during the first week after surgery?	- No pain - Minimal pain - Moderate pain - Severe pain	
Opioid Prescription Fill	Did you fill a prescription for an opioid medication as prescribed by your surgical team? (Examples: Vicodin, Norco, Oxycodone, Tramadol, Ultram, Tylenol#3)	- Yes - No - I did not receive an opioid prescription from my surgical team	
Opioid Pill Consumption	What is the total number of opioid pills (or amount of liquid), that you have taken	Numerical Value OR I do not know	Display if Opioid Prescription Fill = Yes

	since your surgery? (examples: 5 pills, 90 mL, 2 patches)		
Prior Opioid Use in 1 year	Did you take any opioid medications in the year before your surgery?	- Yes - No	

# Additional Pain and Opioid Data Collection

## Opioid Pain Medications - Collected via EMR

Data Element	Question	Options	Display Logic for Data Element
Opioid Use within 24 hours before D/C	Was an opioid medication administered within 24 hours before discharge?	- Yes - No	Display if admission date does ≠ discharge date Note: this exact logic will need to be organization specific.

## Non-Opioid Pain Medications - Collected via EMR

Data Element	Question	Options	Display Logic for Data Element
Non-Opioid Pain Medications	Was the patient discharged with a prescription or directive to take any of the following medications?	Select all that apply: - NSAIDs - Acetaminophen OR - None	

## PRO Questionnaire Data Elements - Collected via Patient

Data Element	Question	Options	Display Logic for Data Element
Opioid Prescription Refills	How many times did you refill this opioid prescription?	Numerical value	Display if Opioid Prescription Fill = Yes
Opioid Prescription Continuation	Are you still taking this opioid medication?	- Yes - No	Display if Opioid Prescription Fill = Yes
Opioid Prescription	What is the average		Display if Opioid Prescription

Continuation - # of pills	number of pills per day?		Continuation - # of Pills = Yes
Opioid Disposal	Did you dispose of any unused opioids?	<ul style="list-style-type: none"> <li>- Yes - used disposal bag</li> <li>- Yes - flushed down toilet</li> <li>- Yes - put in trash</li> <li>- Yes - used other method</li> <li>- No - finished the prescription</li> <li>- No - lost bag</li> <li>- No - kept opioids for later</li> <li>- Other reason</li> </ul>	Display if Opioid Prescription Continuation = No
Other Pain Medication	Did you fill any of the following medications as prescribed by your surgical team?	<p>Select all that apply:</p> <ul style="list-style-type: none"> <li>- Gabapentin: [Common names: Neurontin, Gralise, Horizant, Neuraptine]</li> <li>- Muscle relaxant: [Common names: Flexeril, Soma, Skelaxin, Baclofen, Robaxin)</li> <li>- Benzodiazepine: [Common names: Valium, Xanax, Ativan]</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>- I did not receive a prescription for any of these medications from my surgical team</li> </ul>	
Non-Opioid Pain Medication Education	Did you receive instructions to take non-opioid medications, like Tylenol or Motrin, for surgical pain?	<ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- I do not remember</li> </ul>	

Medication Use	Did you take any of the following medications to relieve pain in the first week after your surgery?	Select all that apply: - Ibuprofen: [Common brands: Advil, Motrin, Advil Migraine, NeoProfen] - Acetaminophen: [Common brands: Tylenol] - Naproxen: [Common brands = Aleve, Anaprox DS, Naprosyn] - Gabapentin: [Common brands: Neurontin, Gralise, Horizant, Neuraptine] - Celecoxib [Common brands: Celebrex] OR - I did not take any of the above medications in the first week after surgery	
Medication Duration	How many total days in the first week after surgery did you take it?	Numerical field (allowable values 1-7) OR I do not remember	Display individual question for each of the options, 1-5, selected for Medication Use
Medication Quantity	How many doses per DAY did you take on average?	- 1 dose - 2 doses - 3 doses - 4 or more doses OR - I do not remember	Display individual question for each of the options, 1-5, selected for Medication Use

Other Pain Control Strategies	What other things have you done to control your pain after surgery?	Select all that apply: - Ice or other cold therapy - Heat or other heat therapy - Stretching, exercise, or movement - Meditation, prayer, relaxation, or guided imagery - Aromatherapy - Distractions - watching TV, reading, music - THC, CBD, or Marijuana - Topical drugs like Salonpas or Icy Hot OR - None	
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