



Statewide Opioid Stewardship

Encyclopedia of Measures

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Table of Contents

KY SOS Metric #1 – Safe Opioid Prescribing is an Organizational Priority.....	2
KY SOS Metric #2 – Prescribers of Opioids within the organization are aware of best practices and legal ramifications surrounding safe opioid use.....	3
Metric #2a Opioid Related Harm	3
Metric #2b Concurrent e-Prescribing.....	4
KY SOS Metric #3 – The organization uses evidence-based non-opioid analgesic regimens in the emergency department (e.g. ALTO).....	5
Metric #3a Emergency Department Opioid Use for Acute Ankle Sprain.....	5
Metric #3b Emergency Department Opioid Use for Migraine.....	6
Metric #3c Emergency Department Opioid Use for Renal Colic.....	7
KY SOS Metric #4 – The organization uses evidence-based opioid-sparing analgesic regimens for select procedures (e.g. ERAS).....	8
Metric #4a Opioid Use for Select Procedures (less than three days).....	8
- Appendectomy - Arthroscopic partial meniscectomy - Breast biopsy/lumpectomy - Cholecystectomy - Prostatectomy - Thyroidectomy - Unilateral inguinal hernia repair	
Metric #4b Opioid Use for Select Procedures (zero days).....	10
- Cardiac catheterization - Dental Extraction - Uncomplicated vaginal delivery	
KY SOS Metric #5 – The organization offers compassionate care to patients with opioid use disorder (OUD).....	11
KY SOS Metric #6 – The organization provides non-pharmacologic analgesia.....	12
KY SOS Metric #7 – The organization promotes safe opioid use by patients.....	13
KY SOS Metric #8 – The organization collaborates with community partners to promote appropriate use of opioids within the community.....	14



KY SOS Metric #1

Safe opioid prescribing is an organizational priority.

Measure Type: Process

Rationale: To ensure success, opioid stewardship programs must have support from senior hospital leadership.

Reporting Metric: A signed commitment letter to Kentucky Statewide Opioid Stewardship (KY SOS) Program.

Frequency of Reporting: Once



KY SOS Metric #2

Prescribers of opioids within the organization are aware of best practices and legal ramifications surrounding safe opioid use.

Measure Type: Outcome

Metric 2a – Opioid Related Harm:

Description: This measure will assess opioid related adverse respiratory events (ORARE) in the hospital setting. The goal for this measure is to assess the rate at which naloxone is given for opioid related adverse respiratory events that occur in the hospital setting, using a valid method that reliably allows comparison across hospitals.

Numerator: Number of adults (age on admission 18 years or older) admitted (inpatient or emergency department, including observation stays) with documentation of any of the following criteria for defining ORARE: administration of narcotic antagonist (i.e. naloxone), OR respiratory stimulant (i.e., doxapram), all within 24 hours of schedule II opioid** administration by the admitting facility.

Denominator: All discharges of adult patients (age on admission 18 years or older) occurring in the past one month observation period.

Denominator Exclusions: None

Frequency of Reporting: Monthly

Clarifying Statement: With this metric, the goal is for the numerator to be zero.

Clarifying example:

Count each treatment episode where naloxone is given for reversal of a schedule II opioid due to ORARE if the opioid was administered by your facility and naloxone was administered within 24 hours of the opioid.

For example: a patient receives naloxone 3 times during the admission, this would be counted as long as the administration of naloxone occurred within 24 hours of administration of a schedule II opioid by your facility. (If your facility administers a schedule II opioid and then must give naloxone within 24 hours of the opioid, this is counted.)

If multiple doses of naloxone are needed for reversal of one treatment episode, this is counted



KY SOS Metric #2

ONCE. If during the same admission, the patient must be given naloxone for a different treatment episode, this would be counted as well (again if naloxone is given within 24 hours of administration of schedule II opioid administration by your facility.)

** Schedule II opioids, such as fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, opium, oxycodone, oxymorphone, tapentadol, codeine, cocaine.

Source: https://cmit.cms.gov/CMIT_public/ViewMeasure?MeasureId=6032



KY SOS Metric #2

Metric 2b – Concurrent e-Prescribing

Description: Patients, age 18 years or older, prescribed via electronic means (unless exempt per KRS 218A.182) two or more schedule II opioids** or a schedule II opioid and benzodiazepine concurrently at discharge from a hospital-based encounter (e.g. inpatient or emergency department, including observation stays).

Numerator: Patients, age 18 years or older, prescribed via electronic means (unless exempt per KRS 218A.182) two or more schedule II opioids or a schedule II opioid and benzodiazepine at discharge.

Denominator: Patients, age 18 years or older, prescribed via electronic means (unless exempt per KRS 218A.182) a schedule II opioid or a benzodiazepine at discharge from a hospital-based encounter (inpatient stay less than or equal to 120 days or emergency department encounters, including observation stays) during the measurement period.

Denominator Inclusions: The following encounters should be included in the denominator:

- Patients with ICD codes for personal history of cancer (Z85 codes) should be included in the analysis (do not exclude).

Denominator Exclusions: The following encounters should be excluded from the denominator:

- Encounters for patients with an active diagnosis of cancer during the encounter. This should be identified using patients with active cancer ICD codes (Codes C00-D49).
- Encounters for patients, who are ordered for palliative care during the encounter, as identified by the reporting institution.
- Encounters for patients, who are ordered for hospice care during the encounter, as identified by the reporting institution.
- Continued home medications
- Encounters for patients with a length of stay greater than 120 days.

Frequency of Reporting: Monthly

Clarifying Statement: With this metric, the goal is for the numerator to be zero.

** Schedule II opioids, such as fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, opium, oxycodone, oxymorphone, tapentadol, codeine, cocaine.

Source: https://cmit.cms.gov/CMIT_public/ViewMeasure?MeasureId=3341



KY SOS Metric #3

The organization uses evidence-based non-opioid analgesic regimens in the emergency department (e.g., ALTO).

Measure Type: Outcome

Metric 3a – Emergency Department Opioid Use for Acute Ankle Sprain

Description: Patients, age 18 years or older, prescribed no opioids during an emergency department encounter for a specific pain-related condition.

Numerator: Patients, age 18 years or older, who receive no opioids prior to discharge from the emergency department after initial encounter for dislocation or sprain of the ankle (ICD-10 Code S93.0xx, S93.4xx).

Denominator: Patients, age 18 years or older, discharged from the emergency department after initial encounter for dislocation or sprain of the ankle (ICD-10 Code S93.0xx, S93.4xx).

Denominator Exclusions: The following encounters should be excluded from the denominator:

- Encounters for patients with a 7th character modifier of D or S (e.g. S93.401D).

Frequency of Reporting: Monthly

Clarifying Statement: With this metric, the goal is for the numerator to match the denominator.

Source:

Kosik KB, Hoch MC, Humphries RL, et al. Medications use in U.S. emergency departments for an ankle sprain: an analysis of the National Hospital Ambulatory Medical Care Survey. J Emerg Med 2019;57(5):662-670.

Moore RA, Derry S, Wiffen PJ, et al. Overview review: comparative efficacy of oral and paracetamol (acetaminophen) across acute and chronic pain conditions. Eur J Pain 2015;19(9):1213-1223.



KY SOS Metric #3

Metric 3b – Emergency Department Opioid Use for Migraine

Measure Type: Outcome

Description: Patients, age 18 years or older, prescribed no opioids during an emergency department encounter for a specific pain-related condition.

Numerator: Patients, age 18 years or older, who receive no opioids prior to discharge from the emergency department after encounter for migraine (ICD-10 Code G43.xxx).

Denominator: Patients, age 18 years or older, discharged from the emergency department after initial encounter for migraine (ICD-10 Code G43.xxx).

Denominator Exclusions: None

Frequency of Reporting: Monthly

Clarifying Statement: With this metric, the goal is for the numerator to match the denominator.

Source:

Ahmed ZA, Nacapoulos DA, John S, et al. An algorithm for opioid and barbiturate reduction in the acute management of headache in the emergency department. Headache 2017;57(1):71-79.

Friedman BW, West J, Vinson DR, et al. Current management of migraine in US emergency departments: an analysis of the National Hospital Ambulatory Medical Care Survey. Cephalgia 2015;35(4):301-309.

Gelfand AA, Goadsby PJ. A neurologist's guide to acute migraine therapy in the emergency room. The Neurohospitalist 2012;2(2):51-59.



KY SOS Metric #3

Metric 3c – Emergency Department Opioid Use for Renal Colic

Measure Type: Outcome

Description: Patients, 18 years or older, prescribed no opioids during an emergency department encounter for a specific pain-related condition.

Numerator: Patients, 18 years or older, who receive no opioids prior to discharge from the emergency department after encounter for renal colic (ICD-10 code N20, N21, N22, N23 and N13.2).

Denominator: Patients, 18 years or older, discharged from the emergency department after initial encounter for renal colic (ICD-10 code N20, N21, N22, N23 and N13.2).

Denominator Exclusions: None

Frequency of Reporting: Monthly

Clarifying Statement: With this metric, the goal is for the numerator to match the denominator.

Source:

Motov S, Drapkin J, Butt M, et al. Analgesic administration for patients with renal colic in the emergency department before and after implementation of an opioid reduction initiative. West J Emerg Med 2018;19(6):1028-1035.

Pathan SA, Mitra B, Cameron PA. A systematic review and meta-analysis comparing the efficacy of nonsteroidal anti-inflammatory drugs, opioids, and paracetamol in the treatment of acute renal colic. Eur Urol 2018;73(4):583-595.

Pathan SA, Mitra B, Straney LD, et al. Delivering safe and effective analgesia for management of renal colic in the emergency department: a double-blind, multigroup, randomized controlled trial. Lancet 2016;387(10032):1999-2007.



KY SOS Metric #4

The organization uses evidence-based opioid-sparing analgesic regimens for select procedures (e.g., ERAS).

Measure Type: Outcome

Metric 4a – Opioid Use for Select Procedures (≤ 3 days*)

Description: Patients, 18 years or older, prescribed three days' supply or less of a schedule II opioid** after select surgical procedures.***

Numerator: Patients, 18 years or older, undergoing the selected procedures, who are prescribed via electronic means (unless exempt per KRS 218A.182) three days' supply or less of a schedule II opioid.

Denominator: Patients, 18 years or older, undergoing the selected procedure.

Denominator Exclusions: None

Frequency of Reporting: Monthly

* **Three days or less** will be defined as the following for KY SOS:

1. Mandate complete days' supply in electronic prescription template.
2. If #1 is not feasible, identify MAXIMUM units that can be taken per day, divide total quantity provided by this number, and round DOWN to the nearest whole day.
 1. For example: oxycodone 5mg tablet, take 1-2 every 4-6 hours as needed for pain, #30. This prescription should be counted as a 2 days' supply (2 units every 4 hours = 12 units per day; $30/12 = 2.5$, rounded to 2 days).

Reporting Requirement: _At least three procedures total between metric 4a and 4b should be reported unless the organization performs less than three procedures listed in metrics 4a and 4b. Reporting of all ten measures is strongly encouraged.



Procedures for Metric 4a:

Procedure	Applicable Codes
Appendectomy	CPT 44950, 44960, 44970, 44979
Arthroscopic partial meniscectomy	CPT 29881
Breast biopsy/lumpectomy	CPT 19081, 19083, 19085, 19100, 19101, 19120, 19301
Cholecystectomy	CPT 47562, 47563, 47564, 47600, 47605, 47610, 47612, 47620
Prostatectomy	CPT 55801, 55810, 55812, 55815, 55821, 55831, 55840, 55842, 55845, 55866
Thyroidectomy	CPT 60210, 60220, 60225, 60240, 60260
Unilateral inguinal hernia repair	CPT 49520, 49521, 49525, 49650, 49651

** Schedule II opioids, such as fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, opium, oxycodone, oxymorphone, tapentadol, codeine, cocaine.

***Procedure threshold definition: Should a facility perform 5 or less of any procedure in a calendar year for a selected surgical procedure, the specific procedure will not be reported for KY SOS data collection.

Clarifying Statement: With this metric, the goal is for the numerator to match the denominator.

Source:

Reports of improper, inappropriate, or illegal prescribing or dispensing of controlled substances – Administrative regulations for prescribing and dispensing protocols and licensure actions and requirements – Presumption of medical necessity – Compliant procedure – Criminal record check. KRS 218A.205.

Bicket MC, Long JJ, Pronovost PJ, et al. Prescription opioid analgesics commonly unused after surgery: a systematic review. JAMA Surg 2017;152(11):1066-1071.

Michigan Opioid Prescribing Engagement Network (OPEN). Opioid prescribing recommendations after surgery. Available at: <https://michigan-open.org/prescribing-recommendations/>

Overton HN, Hanna MN, Bruhn WE, et al. Opioid-prescribing guidelines for common surgical procedures: an expert panel consensus. J Am Coll Surg 2018;227:411-418.



KY SOS Metric #4

Metric 4b – Opioid Use for Select Procedures (zero days)

Description: Patients, 18 years or older, prescribed no schedule II opioid after select surgical procedures.

Numerator: Patients, 18 years or older, undergoing the selected procedure who are not prescribed via electronic means (unless exempt per KRS 218A.182) a schedule II opioid.

Denominator: Patients, 18 years or older, undergoing the selected procedure.

Denominator Exclusions: None

Frequency of Reporting: Monthly

Reporting Requirement: At least three procedures total between metric 4a and 4b should be reported unless the organization performs less than three procedures listed in metrics 4a and 4b. Reporting of all ten measures is strongly encouraged.

Procedures for Metric 4b:

Procedure	Applicable Codes
Cardiac catheterization	CPT 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461
Dental extraction	CPT 41899 ICD-10 K00.1, K00.6, K01.0, K01.1, K03.5, R68.84, S02.5xx
Uncomplicated vaginal delivery	ICD-10 O80

Clarifying Statement: With this metric, the goal is for the numerator to match the denominator.

Source:

Bicket MC, Long JJ, Pronovost PJ, et al. Prescription opioid analgesics commonly unused after surgery: a systematic review. JAMA Surg 2017;152(11):1066-1071.

Michigan Opioid Prescribing Engagement Network (OPEN). Opioid prescribing recommendations after surgery. Available at: <https://michigan-open.org/prescribing-recommendations/>

Overton HN, Hanna MN, Bruhn WE, et al. Opioid-prescribing guidelines for common surgical procedures: an expert panel consensus. J Am Coll Surg 2018;227:411-418.



KY SOS Metric #5

The organization offers compassionate care to patients with opioid use disorder (OUD).

Measure Type: Process

Rationale: Patients with opioid use disorder should be identified and have comprehensive care offered or arranged when accessing the health system.

Reporting Metric: Presence of referral process, availability of medication assisted therapy on hospital formulary.

Frequency Reporting: Quarterly as needed.



KY SOS Metric #6

The organization provides non-pharmacologic analgesia.

Measure Type: Process

Rationale: Non-pharmacologic analgesia is recommended by multiple agencies, including CDC, as first line therapy for many painful conditions.

Reporting Metric: Presence of non-pharmacologic therapies.

Frequency Reporting: Quarterly as needed.



KY SOS Metric #7

The organization promotes safe opioid use by patients.

Measure Type: Process

Rationale: Safe opioid use begins with management of expectations, patient empowerment and patient education.

Reporting Metric: Educational materials designed for patients receiving opioids in the hospital and/or upon discharge.

Frequency Reporting: Quarterly as needed.



KY SOS Metric #8

The organization collaborates with community partners (e.g. clinics, home-based care, pharmacies, law enforcement, religious organizations, and government agencies) to promote appropriate use of opioids within the community.

Measure Type: Process

Rationale: In many settings, health care facilities are community leaders for education, outreach and awareness.

Reporting Metric: Presence of community outreach.

Frequency Reporting: Quarterly as needed.