2022 Emergency-Clinical Performance Registry (E-CPR)
Measure Specifications Manual

Measure #	Measure Title
ECPR39	Avoid Head CT for Patients with Uncomplicated Syncope
ECPR41	Rh Status Evaluation and Treatment of Pregnant Women at Risk of Fetal Blood Exposure
ECPR46	Avoidance of Opiate Prescriptions for Low Back Pain or Migraines
ECPR55	Avoidance of Long-Acting (LA) or Extended-Release (ER) Opiate Prescriptions and Opiate Prescriptions for Greater Than 3 Days Duration for Acute Pain
ECPR50	Door to Diagnostic Evaluation by a Provider – Urgent Care Patients
ECPR51	Discharge Prescription of Naloxone after Opioid Poisoning or Overdose
ECPR52	Appropriate Treatment of Psychosis and Agitation in the Emergency Department
ECPR57	Clinician Reporting of Loss of Consciousness to State Department of Public Health or Department of Motor Vehicles
ECPR56	Opioid Withdrawal: Initiation of Medication-Assisted Treatment (MAT) and Referral to Outpatient Opioid Treatment
HCPR24	Appropriate Utilization of Vancomycin for Cellulitis

E-CPR (Emergency – Clinical Performance Registry) Measure #39
Referenced Choosing Wisely, Emergency Medicine Campaign Measure #6

Measure Title: Avoid Head CT for Patients with Uncomplicated Syncope

Inverse Measure: No

Measure Description: Percentage of Adult Syncope Patients Who Did Not Receive a Head CT Scan Ordered by the Provider

National Quality Strategy Domain: Efficiency and Cost Reduction

Care Setting: Emergency Department and Services; Ambulatory Care: Urgent Care

Published Specialty: Emergency Medicine; Urgent Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Appropriate Use

Meaningful Measure Area: Appropriate use of Healthcare

Current Clinical Guideline: This measure reflects the best practice cited by the Choosing Wisely Campaign (American Board of Internal Medicine Foundation)

Clinical Category: Syncope

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Syncope Patients Who Did Not Have a Head CT Ordered by the Provider
Numerator Options
- **Performance Met** (**VE250)**: Patients who did not have a head CT ordered
- **Medical Performance Exclusion (Denominator Exception) (VE251)**: Patients who did have a head CT ordered for medical reason documented by the eligible professional (i.e., Seizure; alcohol/drug intoxication; vomiting; altered mental status; abnormal neurologic exam; concern for intracranial injury/hemorrhage, stroke, or mass lesion)
- **Performance Not Met (VE252)**: Patients who did have a head CT ordered, reason not given

Numerator Exclusions: None

Denominator:

- Any patient ≥18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic (E/M Codes 99202-99205, 99212-99215, 99281-99285, & 99291-99292 AND Place of Service Indicator: 02, 11, 19, 20, 22 or 23) PLUS
- Diagnosis of Syncope:
    - **ICD-10:** R55
- Transferred, eloped or AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Risk Adjustment: No

Rationale:
(Referenced Choosing Wisely, Emergency Medicine Campaign Measure #6)
Syncope (passing out or fainting) or near syncope (lightheadedness or almost passing out) is a common reason for visiting an emergency department or urgent care clinic and most episodes are not serious. Many tests may be ordered to identify the cause of such episodes. However, some diagnostic tests for syncope should not be routinely ordered, and the decision to order any tests should be guided by information obtained from the patient's history or physical examination. CT scans are expensive, and may unnecessarily expose patients to radiation. If a head injury is associated with a syncopal episode, then a CT scan of the brain may be indicated. In addition, if there were symptoms of a stroke (i.e., headache, garbled speech, weakness in one arm or leg, trouble walking or confusion) before or after a syncopal episode, a CT scan may be indicated. However, in the absence of head injury or signs of a stroke, a CT scan of the brain should not be routinely ordered. Recent studies show that there continues to be overutilization of neurological studies such as CT scans for patients with syncope, with little clinical benefit. In one study, only 6.4% of syncope patients who received head CTs had acutely abnormal findings (Mitsunaga, 2015). In a systematic review of studies on imaging for syncope, head CTs were the most common imaging test performed, and of those CTs performed, only 1.2% provided new diagnostic information. (Pournazari, 2017)

"The 2009 ESC guidelines recommended neurologic referral in patients in whom transient loss of consciousness is suspected to be epilepsy rather than syncope. In addition, neurologic referral to evaluate the underlying disease is indicated when syncope is due to autonomic failure. An EEG or carotid Doppler ultrasound study, computed tomography, or magnetic resonance imaging is not recommended unless a non-syncopal cause of transient loss of consciousness is suspected."

"Neurologic tests, including electroencephalogram (EEG), brain computed tomography scan, brain magnetic resonance imaging, and carotid Doppler ultrasound, are frequently obtained in patients with syncope. In one review of 649 patients, 53 percent had at least one neurologic test. However, such testing was rarely useful."

Selected References:

- American College of Emergency Physicians (ACEP) and Choosing Wisely Campaign

- Task Force for the Diagnosis and Management of Syncope, European Society of Cardiology (ESC), European Heart Rhythm Association (EHRA), Heart Failure Association (HFA), Heart Rhythm Society (HRS), Moya A, et al. Guidelines for the diagnosis and management of syncope. *Eur Heart J.* 2009;30(21):2631
- Mitsunaga M, Cho G. Head CT scans in the emergency department for syncope and dizziness. *Am Roentgen*. 2015;204:24-28.
- Pournazari P, Oqab Z, Sheldon R. Diagnostic value of neurological studies in diagnosing syncope: A systematic review. *Can J Cardiology.* 2017;33(12):1604-1610.
- Gallagher EJ. Hospitalization for fainting: high stakes, low yield. *Ann Emerg Med.* 1997 Apr;29(4):540-2.
- Pires LA, Ganji JR, Jarandila R, Steele R. Diagnostic patterns and temporal trends in the evaluation of adult patients hospitalized with syncope. *Arch Intern Med.* 2001Aug 13-27;161:1889-95.
- Giglio P, Bednarczyk EM, Weiss K, Bakshi R. Syncope and head CT scans in the emergency department. *Emerg Radiol.* 2005 Dec;12(1-2):44-6.
- Shukla GJ. Cardiology patient page. Syncope. Circulation. 2006 Apr 25;113(16):e715-7.
- Grossman SA, Fischer C, Bar JL, Lipsitz LA, Mottley L, Sands K, Thompson S, Zimetbaum P, Shapiro NI. The yield of head CT in syncope: a pilot study. *Intern Emerg Med*. 2007 Mar;2(1):46-9.
- Mendu ML, McAvay G, Lampert R, Stoehr J, Tinetti ME. Yield of diagnostic tests in evaluating syncopal episodes in older patients. *Arch Intern Med*. 2009 Jul 27;169(14):1299-305.

E-CPR (Emergency – Clinical Performance Registry) Measure #41

Measure Title: Rh Status Evaluation and Treatment of Pregnant Women at Risk of Fetal Blood Exposure

Inverse Measure: No

Measure Description: Percentage of Women Aged 14-50 Years at Risk of Fetal Blood Exposure Who Had Their Rh Status Evaluated in the Emergency Department (ED) and Received Rh-Immunoglobulin (Rhogam) if Rh-negative

National Quality Strategy Domain: Effective Clinical Care

Care Setting: Emergency Department and Services

Published Specialty: Emergency Medicine

Telehealth?: Yes

Type of Measure: Process

Meaningful Measure Area: Preventive Care

Current Clinical Guideline: This measure is derived from PQRS/MIPS measure #255 which referenced ACOG recommendations

Clinical Category: High-risk Pregnancy

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Women at Risk of Fetal Blood Exposure Who Had Their Rh Status Evaluated in the ED and Received Rh-Immunoglobulin (Rhogam) if Rh-negative

Numerator Options

- **Performance Met (VE257):** Patients who had their Rh status evaluated and were confirmed Rh-positive OR Patients who had Rh status evaluated AND received an order for Rh-Immunoglobulin (Rhogam) if Rh-negative
    - Definition of Rh status evaluated: Laboratory testing of Rh status or documented Rh status (e.g., "Patient known Rh+")
- **Medical Performance Exclusion (Denominator Exception) (VE258):** Patients who did not have Rh status evaluated or did not receive an order of Rh-Immunoglobulin (Rhogam) if Rh-negative for documented medical reasons
- **Patient Performance Exclusion (Denominator Exception) (VE259):** Patients who did not have Rh status evaluated or did not receive an order of Rh-Immunoglobulin (Rhogam) if Rh-negative for documented patient reason(s) (e.g., patient refused Rh testing or Rhogam)
- **Performance Not Met (VE260):** Patients who did not have Rh status evaluated or

did not receive Rh-Immunoglobulin (Rhogam) if Rh-negative, reason not given

Numerator Exclusions: None

Denominator:

- Any Female Patient ≥ 14 Years of Age and < 51 Years of Age Evaluated by the Eligible Professional in the ED (E/M Codes 99281-99285 & 99291-99292) PLUS
- ED Diagnosis of high risk pregnancy complication:
    - **ICD-10:** O00.80, O00.81, O00.90, O00.91, O02.1, O03.1, O03.6, O04.6, O07.1, O08.1, O20.0, O20.8, O20.9, O43.011, O43.019, O44.10, O44.11, O45.001, O45.009, O45.011, O45.019, O45.021, O45.029, O45.091, O45.099, O45.8X1, O45.8X9, O45.90, O45.91, O46.001, O46.011, O46.021, O46.8X1, O46.8X9, O46.90, O46.91
- Transferred, eloped or AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Risk Adjustment: No

Rationale: (Referenced CMS PQRS Measure #255 Specifications)
The potential for maternal exposure to fetal blood is a concern among pregnant patients presenting to the emergency department with a number of common complaints or diagnoses including abdominal pain, blunt abdominal trauma, vaginal bleeding, ectopic pregnancy, threatened or spontaneous abortion, or pelvic instrumentation. This concern increases after the first trimester as fetal RBC mass increases.

Exposure to less than 0.1 ml of fetal blood of a different rhesus (Rh) antigenicity among Rh negative has been shown to increase the risk of maternal alloimmunization. Alloimmunization can result in hemolytic disease of the fetus or newborn including spontaneous abortion, fetal hemolytic anemia, hydrops fetalis and severe neonatal jaundice in subsequent pregnancies.

Administration of Rh-Immunoglobulin (Rhogam) is recommended by the American College of Obstetricians and Gynecologists (ACOG) as prophylaxis for alloimmunization.

E-CPR (Emergency – Clinical Performance Registry) Measure #46

Measure Title: Avoidance of Opiate Prescriptions for Low Back Pain or Migraines

Inverse Measure: No

Measure Description: Percentage of Patients with Low Back Pain and/or Migraines Who Were Not Prescribed an Opiate

National Quality Strategy Domain: Effective Clinical Care

Care Setting: Clinician Office/Clinic; Urgent Care; Emergency Department and Services; Hospital

Published Specialty: Emergency Medicine; Family Medicine; Internal Medicine; Primary Care; Urgent Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Opioid-Related

Meaningful Measure Area: Prevention and Treatment of Opioid and Substance Use Disorders

Current Clinical Guideline: This measure is derived from recommendations for safe opioid prescribing from the CDC, American College of Emergency Physicians, and multiple other medical and state agencies

Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients who were not prescribed an opiate (see Appendix A for list of opioid medications)

Numerator Options:

- **Performance Met (VE263):** Opiate not prescribed
- **Medical Performance Exclusion (Denominator Exception) (VE264):** Opiate prescribed for medical reason documented by the Eligible Professional (i.e., suspected or diagnosed herniated disk, fracture, sciatica, radiculopathy)
- **Performance Not Met (VE265):** Opiate prescribed, reason not specified

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional (E/M Codes 99202-99205, 99212-99215, 99281-99285, 99291-99292 AND Place of Service Indicator: 02,11, 19, 20, 22 or 23) PLUS
- Diagnosis of low back pain OR
  - ICD-10: M54.50, M54.51, M54.59
- Diagnosis of migraine PLUS
  - ICD-10: G43.001, G43.009, G43.011, G43.019, G43.101, G43.109, G43.111, G43.119, G43.401, G43.409, G43.411, G43.419, G43.501, G43.509, G43.511, G43.519, G43.601, G43.609, G43.611, G43.619, G43.701, G43.709, G43.711, G43.719, G43.A0, G43.A1, G43.B0, G43.B1, G43.C0, G43.C1, G43.D0, G43.D1, G43.801, G43.809, G43.811, G43.819, G43.821, G43.829, G43.831, G43.839, G43.901, G43.909, G43.911, G43.919
- Disposition of Discharged

Denominator Exclusions: Patients with active cancer, palliative care, end-of-life care.

Risk Adjustment: No

Rationale:
Low back pain and migraine headaches are two conditions that frequently present to the hospital for acute care and are conditions for which narcotic pain medication is not indicated according to national guidelines.

Low back pain
Acute low back pain is a common chief complaint in the Emergency Department. Opioids are frequently prescribed, expected, or requested for such presentations. (Friedman 2012, Friedman 2010) The opioid analgesics most commonly prescribed for low back pain, hydrocodone and oxycodone products, are also those most prevalent in a Government Accountability Office study of frequently abused drugs.(GAO 2011) Low back pain as a presenting complaint was also observed in a recent study to be associated with patients at higher risk for opioid abuse. (Sullivan 2010) Two meta-analyses have demonstrated no superiority for opioids over other therapies for treatment of acute low back pain, (MacIntosh 2011, Roelofs 2008) and several groups have recommended against use of opioids as first-line therapy for treatment of this problem. (Chou 2007, ACOEM 2007) A retrospective study found that workers with acute low back injury and worker's compensation claims who were treated with prescription opioids within 6 weeks of acute injury for more than 7 days had a significantly higher risk for long-term disability. (Franklin 2008)

Several non-opioid pharmacologic therapies (including acetaminophen, NSAIDs, and selected antidepressants and anticonvulsants) are effective for chronic pain. In particular, acetaminophen and NSAIDs can be useful for arthritis and low back pain. (Dowell 2016) Non-opioid pharmacologic therapies are not generally associated with substance use disorder. (Jones 2013)

Many non-pharmacologic therapies, including physical therapy, weight loss and certain

interventional procedures can ameliorate low back pain. There is high-quality evidence that exercise therapy (a prominent modality in physical therapy) reduces pain and improves function. (Hayden 2005) Multimodal therapies and multidisciplinary biopsychosocial rehabilitation approaches can reduce long-term pain and disability compared with usual care and compared with physical treatments (e.g., exercise) alone. Non-pharmacologic therapy and non-opioid pharmacologic therapy can be combined, as appropriate, to provide greater benefits to patients in improving pain and function.

Migraine headaches

According to guidelines released by the American Academy of Neurology and the American Headache Society, narcotic pain medications are not included as first-line treatments for migraine headaches. Instead, the following medications are established as effective and should be offered for migraine treatment prevention: (Silberstein 2012, Holland 2012)

- Antiepileptic drugs (AEDs): divalproex sodium, sodium valproate, topiramate
- β-Blockers: metoprolol, propranolol, timolol, atenolol, and nadolol
- Triptans: frovatriptan, naratriptan, and zolmitriptan for short-term MAMs prevention
- Antidepressants: amitriptyline, venlafaxine (but not SSRIs)
- NSAIDS: fenoprofen, ibuprofen, ketoprofen, naproxen, naproxen sodium

In 2016, the American Headache Society released guidelines for the management of adults with acute migraine in the emergency department .(Orr 2016, Silberstein 2016) They recommend intravenous metoclopramide, intravenous prochlorperazine, and subcutaneous sumatriptan to treat these patients. Dexamethasone should be offered to these patients to prevent recurrence of headache, and they noted that opioids should be avoided (Orr 2016, Silberstein 2016). Although narcotics remain the most frequently administered medication for patients with migraine and for ED patients with headache, evidence suggests that they are potentially ineffective, and their use may lead to more prolonged ED stays. (Sahai-Srivastava 2008, Tornabene 2009)

In 2017, HHS declared the opioid crisis a national public health emergency, in no small part due to misuse of opioid prescription drugs. (GAO, 2018) Reducing unnecessary opioid prescriptions is one key strategy for limiting potential of misuse. Overprescribing continues to be an opportunity for improvement. One research survey assessed headache types, comorbid conditions, and whether they had ever been prescribed opioids. (Minen 2015) With a predominant diagnosis of migraine (83.9%), more than half of the patients reported having been prescribed an opioid (54.8%). About one fifth were taking opioids (19.4%) at the time of completing the survey, and one quarter of patients reported taking opioids for more than 2 years (24.6%). The reason most frequently cited for stopping opioids was that they saw a new doctor who would not prescribe them (29.4%). The physician specialty most frequently cited as being the first prescriber for opioids was emergency medicine (20.2%), followed by family doctors and neurologists at 17.7% each. (Minen 2015)

To assess the extent of and factors associated with geographic variation in early opioid prescribing for acute, work-related, low back pain (LBP), national workers compensation administrative data filed from 2002-2003 was analyzed in a study. Of over 8,000 low back

pain claimants, 21.3% received at least one early opioid prescription. Significant variation in prescribing practices was found between states was found, from 6% to 53%. Individual-level patient factors, including severity, explained only a small portion of the geographic variability. (Webster 2009)

Selected References:

- American College of Occupational and Environmental Medicine. Low Back Disorders. Occupational Medicine Practice Guidelines: Evaluation and Management of Common Health Problems and Functional Recovery in Workers. 2nd ed. Elk Grove Village, IL; 2007.
- American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. Pharmacological management of persistent pain in older persons. J Am Geriatr Soc 2009;57:1331–46.
- Chaparro LE, Furlan AD, Deshpande A, Mailis-Gagnon A, Atlas S, Turk DC. Opioids compared with placebo or other treatments for chronic low back pain: an update of the Cochrane Review. Spine 2014;39:556–63.
- Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. Ann Intern Med. 2007;147:478-491.
- Chou R, Qaseem A, Snow V, et al.; Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. Ann Intern Med 2007;147:478–91.
- Dowell, Deborah, MD, Tamara M. Haegerich, PhD, and Roger Chou, MD. "CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016." Centers for Disease Control and Prevention, 15 Mar. 2016. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
- Food and Drug Administration. FDA drug safety communication: FDA strengthens warning that non-aspirin nonsteroidal anti-inflammatory drugs (NSAIDs) can cause heart attacks or strokes. Silver Spring, MD: US Department of Health and Human Services, Food and Drug Administration; 2015. http://www.fda.gov/Drugs/ DrugSafety/ucm451800.htm
- Franklin GM, Stover BD, Turner JA, et al. Early opioid prescription and subsequent disability among workers with back injuries. Spine. 2008;33:199-204.
- Friedman BW, Chilstrom M, Bijur PE, et al. Diagnostic testing and treatment of low back pain in US emergency departments. A national perspective. Spine. 2010;35:E1406-E1411.
- Friedman BW, O'Mahony S, Mulvey L, et al. One-week and 3-month outcomes after an emergency department visit for undifferentiated musculoskeletal low back pain. Ann Emerg Med. 2012;59:128-133.
- Friedman BW, Solorzano C, Esses D, Xia S, Hochberg M, Dua N, et al. Treating headache recurrence after emergency department discharge: a randomized controlled trial of naproxen versus sumatriptan. Ann Emerg Med. 2010 Jul. 56(1):7-17.
- Hayden JA, van Tulder MW, Malmivaara A, Koes BW. Exercise therapy for treatment of non-specific low back pain. Cochrane Database Syst Rev 2005;3:CD000335.
- Hochberg MC, Altman RD, April KT, et al. ; American College of Rheumatology.

American College of Rheumatology 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip, and knee. Arthritis Care Res (Hoboken) 2012;64:465–74.
- Holland S, Silberstein SD, Freitag F, Dodick DW, Argoff C, Ashman E, et al. Evidence-based guideline update: NSAIDs and other complementary treatments for episodic migraine prevention in adults: report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*. 2012 Apr 24. 78 (17):1346-53.
- Hooten WM, Timming R, Belgrade M, et al. Assessment and management of chronic pain. Bloomington, MN: Institute for Clinical Systems Improvement; 2013. https://www.icsi.org/_asset/bw798b/ ChronicPain.pdf
- Jones CM, Mack KA, Paulozzi LJ. Pharmaceutical overdose deaths, United States, 2010. JAMA 2013;309:657–9. http://dx.doi. org/10.1001/jama.2013.272
- Mannion AF, Müntener M, Taimela S, Dvorak J. A randomized clinical trial of three active therapies for chronic low back pain. Spine (Phila Pa 1976) 1999;24:2435–48. http://dx.doi.org/10.1097/00007632-199912010-00004
- McIntosh G, Hall H. Low back pain (acute). Clin Evid (Online). 2011;05:1102.
- Minen MT, Lindberg K, Wells RE, Suzuki J, Grudzen C, Balcer L, Loder E. Survey of Opioid and Barbiturate Prescriptions in Patients Attending a Tertiary Care Headache Center. Headache. 2015 Oct;55(9):1183-91. Epub 2015 Aug 28.
- Orr SL, Friedman BW, Christie S, Minen MT, Bamford C, Kelley NE, et al. Management of Adults With Acute Migraine in the Emergency Department: The American Headache Society Evidence Assessment of Parenteral Pharmacotherapies. *Headache*. 2016 Jun. 56 (6):911-40.
- Roelofs PDDM, Deyo RA, Koes BW, et al. Non-steroidal anti-inflammatory drugs for low back pain. Cochrane Database Syst Rev. 2008;(1):CD000396. doi:10.1002/14651858. CD000396.pub3.
- Sahai-Srivastava S, Desai P, Zheng L. Analysis of headache management in a busy emergency room in the United States. Headache. 2008 Jun. 48(6):931-8.
- Silberstein S. The Management of Adults With Acute Migraine in the Emergency Department. Headache. 2016 Jun. 56 (6):907-8.
- Silberstein SD, Holland S, Freitag F, Dodick DW, Argoff C, Ashman E, et al. Evidence-based guideline update: pharmacologic treatment for episodic migraine prevention in adults: report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*. 2012 Apr 24. 78 (17):1337-45.
- Sullivan MD, Edlund MJ, Fan MY, et al. Risks for possible and probable opioid misuse among recipients of chronic opioid therapy in commercial and Medicaid insurance plans: the TROUP Study. Pain. 2010;150:332-339.
- Tornabene SV, Deutsch R, Davis DP, Chan TC, Vilke GM. Evaluating the use and timing of opioids for the treatment of migraine headaches in the emergency department. J Emerg Med. 2009 May. 36(4):333-7.
- Trelle S, Reichenbach S, Wandel S, et al. Cardiovascular safety of non-steroidal anti-inflammatory drugs: network meta-analysis. BMJ 2011;342:c7086.
- United States Government Accountability Office. Instances of Questionable Access to Prescription Drugs. GAO-11-699. Washington, DC: Government Accountability Office;2011.

- United States Government Accountability Office. Opioid Crisis: Status of Public Health Emergency Authorities;2018.
- Volinn E, Fargo JD, Fine PG. Opioid therapy for nonspecific low back pain and the outcome of chronic work loss. Pain. 2009; 142:194-201.
- Webster BS, Cifuentes M, Verma S, Pransky G. Geographic variation in opioid prescribing for acute, work-related, low back pain and associated factors: a multilevel analysis. Am J Ind Med. 2009 Feb;52(2):162-71.

E-CPR (Emergency – Clinical Performance Registry) Measure #55

Measure Title: Avoidance of Long-Acting (LA) or Extended-Release (ER) Opiate Prescriptions and Opiate Prescriptions for Greater Than 3 Days Duration for Acute Pain

Inverse Measure: No

Measure Description: Percentage of Adult Patients Who Were Prescribed an Opiate Who Were Not Prescribed a Long-Acting (LA) or Extended-Release (ER) Formulation and for Whom the Prescription Duration Was Not Greater than 3 days for Acute Pain

National Quality Strategy Domain: Effective Clinical Care

Care Setting: Multiple Care Settings

Published Specialty: Emergency Medicine; Family Medicine; Internal Medicine; Primary Care; Urgent Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Opioid-Related

Meaningful Measure Area: Prevention and Treatment of Opioid and Substance Use Disorders

Current Clinical Guideline: The CDC, American Academy of Emergency Medicine, Medical Board of California, Emergency Medicine Patient Safety Foundation, and multiple other organizations recommend against the use of long-acting opioids in the acute care setting and recommend opioids only if the severity of the pain warrants their use and only for short durations or in small quantities.

Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients who were not prescribed a long-acting (LA) or extended-release (ER) opiate, and not prescribed an opiate (see Appendix A for list of opioid medications) and any opiate prescription for greater than 3 days duration

Definition:

Long-Acting Opioid Drugs
• Arymo ER (morphine sulfate) • Belbuca (buprenorphine) • buprenorphine

- Butrans (transdermal buprenorphine)
- Dolophine (methadone hydrochloride)
- Duragesic (fentanyl transdermal system)
- Embeda (morphine sulfate and naltrexone hydrochloride)
- Exalgo (hydromorphone hydrochloride)
- fentanyl transdermal system
- hydrocodone bitartrate extended-release
- hydromorphone hydrochloride extended-release
- Hysingla ER (hydrocodone bitartrate)
- Kadian (morphine sulfate)
- methadone hydrochloride
- Methadose (methadone hydrochloride)
- Morphabond (morphine sulfate)
- morphine sulfate extended release
- MS Contin (morphine sulfate)
- Nucynta ER (tapentadol)
- Opana ER (oxymorphone hydrochloride)
- Opana ER (oxymorphone hydrochloride)
- OxyContin (oxycodone hydrochloride)
- oxymorphone hydrochloride extended release
- Targiniq ER (oxycodone and naloxone hydrochloride)
- Troxyca ER (oxycodone hydrochloride and naloxone hydrochloride)
- Vantrela ER (hydrocodone bitartrate)
- Xtampza ER (oxycodone)
- Zohydro ER (hydrocodone)

Source: Adapted from FDA Approved Risk Evaluation and Mitigation Strategies (REMS) for Extended-Release and Long-Acting (ER/LA) Opioid Analgesics
https://www.accessdata.fda.gov/scripts/cder/rems/index.cfm?event=RemsDetails.page&REMS=17

Numerator Options:

- **Performance Met (VE266):** LA/ER formulation opiate not prescribed AND opiate not prescribed for greater than 3 days duration
- **Medical Performance Exclusion (Denominator Exception) (VE267):** LA/ER formulation opiate or opiate prescribed for greater than 3 days duration due to terminal (late-stage) cancer, comfort care measures, palliative care, or coordinated plan of care for Medication Assisted Treatment (MAT)
- **Performance Not Met (VE268):** LA/ER formulation opiate prescribed OR opiate prescribed for greater than 3 days, reason not specified

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional (E/M Codes 99201-99205, 99212-99215, 99281-99285,& 99291-99292 AND Place of Service Indicator: 02, 11, 19, 20, 22 or 23) PLUS
- Opiate prescribed PLUS
- ICD-10 diagnosis codes for pain, strains, sprains, lacerations, open wounds and fractures (see Appendix B for codes) PLUS
- Disposition of Discharged

Denominator Exclusions: None

Risk Adjustment: No

Rationale:
Drug overdose is now the leading cause of accidental deaths in the US, exceeding deaths due to motor vehicle accidents. A majority of those deaths involve prescription drugs. The diversion of opioid medications to non-medical uses has also contributed to the increased number of deaths. In 2015, prescription opioids and heroin killed over 33,000 people. The Centers for Disease Control and Prevention (CDC) estimates that, on average, 91 U. S. citizens die from an opioid overdose every day, and nearly half of these overdoses are caused by prescription drugs. Since 1999, the number of prescription opioids sold in the US and the number of prescription opioid-related deaths has quadrupled. The majority of prescription opioids used for nonmedical reasons are diverted from prescriptions originally written for therapeutic use. (Dowell CDC 2016) Injuries related to opioid medications are also occurring among general patient populations, and with some risk groups, such as those suffering from depression (Brown 2014). Of the estimated 1.2 million emergency department (ED) visits involving nonmedical use of pharmaceuticals in 2011, nearly 30% involved narcotic pain relievers. (Crane 2015) ED visits involving nonmedical use of narcotic pain relievers increased 117 percent from 2005 to 2011. (Crane 2015)

The Centers for Disease Control and Prevention (CDC), the American College of Emergency Physicians (ACEP), the American Academy of Emergency Medicine (AAEM), the Emergency Medicine Patient Safety Foundation (Papa 2013), Washington State (Neven 2012), the Medical Board of California (Brown 2013), the Maryland Hospital Association (MHA 2014) and the New York City Department of Health and Mental Hygiene (Chu 2013) are among the organizations that recommend opioids only if the severity of the pain is reasonably assumed to warrant their use, or if the pain is refractory to other analgesics, and even then only for short durations or in small quantities. According to the CDC, “Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.” (Dowell CDC 2016)

A study of opioid use among over 1 million commercially-insured, opioid-naïve, cancer-free adults demonstrated that an increase in the probability of long-term opioid use increases most sharply in the first days of therapy, particularly after 5 days have been prescribed (Shah 2017). Few acutely painful conditions treated in the emergency department require more than a short 3-day course of opioid therapy. (Rodgers 2012) Longer courses of opioid treatment are associated with increased risk of physical dependence, abuse (Logan 2013) and disability. (Franklin 2008) In addition, opioid use beyond 3 days results in diminished efficacy and potential increased pain sensitivity (Brush 2012).

A recent report from the Office of the Inspector General (OIG) noted that 5 million Medicare Part D beneficiaries received opioids for 3 months or more in 2016, thus substantially increasing their risk of opioid dependence. Of these 5 million beneficiaries, 3.6 million received opioids for 6 or more months and nearly 610,000 received opioids for the entire

year. More concerning is that nearly 90,000 Medicare Part D beneficiaries are at serious risk of opioid misuse or overdose. In total, over 115,000 clinicians ordered opioids for at least one beneficiary at serious risk of opioid misuse or overdose. (OIG 2017)

Studies have shown that there is wide variation in opioid prescribing practices, which includes numbers of pills and prescription duration in addition to choice of pain medication. In one study, prescribing rates ranged from 33 to 332 prescriptions per 1000 visits. In another study, the median days of supply for acute pain was 5 days but 10% of prescriptions were written for 30 days or more. (Smulowitz 2016, Liu 2013)

Statistics from the OIG report and studies demonstrate a significant performance gap in the duration of opioid prescriptions as they differ from that recommended by national guidelines. (OIG 2017, Smulowitz 2016, Liu 2013)

In addition, extended-release (ER) and long-acting (LA) opioids include methadone, transdermal fentanyl, and extended-release versions of opioids such as oxycodone, oxymorphone, hydrocodone, and morphine. For those patients prescribed opioids, even for short durations, the Centers for Disease Control and Prevention (CDC), the American Academy of Emergency Medicine (AAEM), the Emergency Medicine Patient Safety Foundation (Papa 2013), Washington State (Neven 2012), the Medical Board of California (Brown 2013), the Maryland Hospital Association (MHA 2014) and the New York City Department of Health and Mental Hygiene (Chu 2013) all recommend against the use of long-acting opioids. In addition, the American College of Emergency Physicians (ACEP) notes that LA/ER products such as oxycodone ER (OxyContin), methadone, fentanyl patches, or morphine extended-release (MS Contin) should not be used for acute pain (Cantrill 2012). “The administration or prescription of long-acting opioid analgesics requires the capability for long-term monitoring for both pain relief and for signs of dependence and addiction.” (Pappa EMPSF 2013) “Given longer half-lives and longer duration of effects [as well as risk for respiratory depression] with ER/LA opioids such as methadone, fentanyl patches, or extended release versions of opioids such as oxycodone, oxymorphone, or morphine, clinicians should not prescribe ER/LA opioids for the treatment of acute pain.” (Dowell CDC 2016)

Long-acting opioids are associated with higher risk for detrimental and potentially life-threatening side effects of opiate medications and do not have a role in the treatment of acute pain syndromes (Keuhn 2012, Nelson 2012). The pharmacokinetics of these medications result in an unpredictable peak effect and increase the risk of respiratory depression. Additionally, prescriptions for long-acting and extended-release opiates are more susceptible to diversion and non-medical opioid use (Nelson 2012) and raise the risk of opioid overdose death. (Garg 2017)

A recent cohort study of Veterans Affairs patients found initiation of therapy with an ER/LA opioid associated with greater risk for unintentional, nonfatal overdose than initiation with an immediate-release opioid (hazard ratio [HR], 2.33; 95% CI, 1.26-4.32), with risk greatest in the first two weeks after initiation of treatment (HR, 5.25; 1.88-14.72) (Miller 2015). In a retrospective cohort study between 1999 and 2012 of Tennessee Medicaid patients with chronic non-cancer pain and no palliative or end-of-life care, the mortality risk was four times greater for the long acting cohort during the first month of therapy. (Ray 2016).

Given the serious risks associated with ER/LA opioids, this class of medications is indicated specifically for management of pain severe enough to require daily, around-the-clock, long-term opioid treatment in patients for whom other treatment options (e.g., non-opioid analgesics or immediate-release opioids) are ineffective, not tolerated, or would be otherwise inadequate to provide sufficient management of pain (FDA 2013). Methadone has been associated with disproportionate numbers of overdose deaths relative to the frequency with which it is prescribed for pain. (Paulozzi 2012).

In a large, commercially-insured adult population, greater than 3 million eligible enrollees who received at least one opioid prescription were analyzed for indicators of potential opioid misuse (Liu 2013). Among those prescribed LA/ER opioids, a quarter of patients were treated for acute pain, despite guideline recommendations highlighting the risks of initiating patients on LA/ER therapy, and nearly a quarter of prescriptions overlapped with other existing LA/ER opioid prescriptions, which is a recognized indicator for opioid misuse (Liu 2013) and nearly doubles the risk of overdose and mortality. (Miller 2015, Ray 2016)

Selected References:

- Brown EG. Guidelines for Prescribing Controlled Substances for Pain. Dec. 2014. http://www.mbc.ca.gov/licensees/prescribing/pain_guidelines.pdf
- Brush DE. Complications of long-term opioid therapy for management of chronic pain: the paradox of opioid-induced hyperalgesia. J Med Toxicol;Dec 2012;8:387-92.
- Cantrill SV, Brown MD, Carlisle RJ, et al.; American College of Emergency Physicians (ACEP) Opioid Guideline Writing Panel. Clinical policy: critical issues in the prescribing of opioids for adult patients in the emergency department. Ann Emerg Med 2012;60:499–525.
- Centers for Medicare and Medicaid Services (CMS). Announcement of Calendar Year (CY) 2018 Medicare Advantage Capitation Rates and Medicare Advantage and Part D Payment Policies and Final Call Letter and Request for Information. April 3, 2017. https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Announcement2018.pdf
- Chu J, Farmer B, Ginsburg B, Hernandez S, Kenny J, Majlesi N. New York City emergency department discharge opioid prescribing guidelines. New York, NY: New York City Department of Health and Mental Hygiene; 2013. http://www.orangecountygov.com/filestorage/124/1348/16688/NYC_ER_opioid-prescribing-guidelines.pdf
- Cheng D, Majlesi N. Clinical practice statement: emergency department opioid prescribing guidelines for the treatment of non-cancer related pain. Milwaukee, WI: American Academy of Emergency Medicine; 2013.
- Crane, E. H. (2015). The CBHSQ Report: Emergency Department Visits Involving Narcotic Pain Relievers. Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. https://www.samhsa.gov/data/sites/default/files/report_2083/ShortReport-2083.html
- Dowell, Deborah, MD, Tamara M. Haegerich, PhD, and Roger Chou, MD. "CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016." Centers for Disease Control and Prevention, 15 Mar. 2016. Web. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm

- FDA Approved Risk Evaluation and Mitigation Strategies (REMS) for Extended-Release and Long-Acting (ER/LA) Opioid Analgesics https://www.accessdata.fda.gov/scripts/cder/rems/index.cfm?event=RemsDetails.page&REMS=17
- Franklin GM, Stover BD, Turner JA, Fulton-Kehoe D, Wickizer TM. Early opioid prescription and subsequent disability among workers with back injuries: the Disability Risk Identification Study Cohort. Spine (Phila Pa 1976) 2008;33:199-204.
- Garg RK, Fulton-Kehoe D, Franklin GM. Patterns of Opioid Use and Risk of Opioid Overdose Death Among Medicaid Patients. Med Care. 2017 Jul;55(7):661-668. https://www.ncbi.nlm.nih.gov/pubmed/28614178
- Hartung DM, Middleton L, Haxby DG, Koder M, Ketchum KL, Chou R. Rates of adverse events of long-acting opioids in a state Medicaid program. Ann Pharmacother 2007;41:921–8. http://dx.doi. org/10.1345/aph.1K066
- Jamison RN, Raymond SA, Slawsby EA, Nedeljkovic SS, Katz NP. Opioid therapy for chronic noncancer back pain. A randomized prospective study. Spine (Phila Pa 1976) 1998;23:2591–600. http:// dx.doi.org/10.1097/00007632-199812010-00014
- Kuehn BM. Methadone overdose deaths rise with increased prescribing for pain. JAMA;2012; 308:749-50.
- Liu Y, Logan JE, Paulozzi LJ, Zhang K, Jones CM. Potential misuse and inappropriate prescription practices involving opioid analgesics. Am J Manag Care. 2013 Aug;19(8):648-65.
- Logan J, Liu Y, Paulozzi L, Zhang K, Jones C. Opioid Prescribing in Emergency Departments: The Prevalence of Potentially Inappropriate Prescribing and Misuse. Med Care. Apr 2013.
- Maryland Hospital Association (MHA). Maryland emergency department opioid prescribing guidelines. 2014 http://www.mhaonline.org/docs/default-source/Resources/Opioid-Resources-for-Hospitals/maryland-emergency-department-opioid-prescribing-guidelines.pdf
- Miller M, Barber CW, Leatherman S, et al. Prescription opioid duration of action and the risk of unintentional overdose among patients receiving opioid therapy. JAMA Intern Med 2015;175:608–15. http:// dx.doi.org/10.1001/jamainternmed.2014.8071
- Nelson LS, Perrone J. Curbing the opioid epidemic in the United States: the risk evaluation and mitigation strategy (REMS). JAMA;2012; 308:457-8.
- Neven DE, Sabel JC, Howell DN, Carlisle RJ. The development of the Washington State emergency department opioid prescribing guidelines. J Med Toxicol. 2012 Dec;8(4):353-9. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3550252/
- Office of the Inspector General (OIG). Opioids in Medicare Part D: Concerns about Extreme Use and Questionable Prescribing. HHS OIG Data Brief: OEI-02-17-00250. 2017 https://oig.hhs.gov/oei/reports/oei-02-17-00250.pdf
- Pappa A. Emergency Medicine Patient Safety Foundation (EMPSF) Prescribing and dispensing opioids in the emergency department. January 2013. http://www.premiersafetyinstitute.org/wp-content/uploads/Prescribing-Dispensing-Opioids-ER-Hallam-Final.pdf
- Paulozzi L, Mack KA, Jones CM. Vital signs: Risk for overdose from methadone used for pain relief—United States, 1999–2010. MMWR Morb Mortal Wkly Rep 2012;61:493–7.

- Ray WA, Chung CP, Murray KT, Hall K, Stein CM. Prescription of Long-Acting Opioids and Mortality in Patients With Chronic Noncancer Pain. JAMA. 2016 Jun 14;315(22):2415-23.
- Rodgers J, Cunningham K, Fitzgerald K, Finnerty E. Opioid consumption following outpatient upper extremity surgery. J Hand Surg Am; Apr 2012;37:645-50.
- Salzman RT, Roberts MS, Wild J, Fabian C, Reder RF, Goldenheim PD. Can a controlled-release oral dose form of oxycodone be used as readily as an immediate-release form for the purpose of titrating to stable pain control? J Pain Symptom Manage 1999;18:271–9. http:// dx.doi.org/10.1016/S0885-3924(99)00079-2
- Shah A, Hayes CJ, Martin BC. Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. MMWR Morb Mortal Wkly Rep 2017;66:265–269. DOI: http://dx.doi.org/10.15585/mmwr.mm6610a1
- Smulowitz PB, Cary C, Boyle KL, Novack V, Jagminas L. Variation in opioid prescribing patterns between ED providers. Intern Emerg Med. 2016 Dec;11(8):1121-1124. Epub 2016 Jul 16. https://www.ncbi.nlm.nih.gov/pubmed/27424280
- Volkow ND, McLellan TA, Cotto JH. Characteristics of opioid prescriptions in 2009. JAMA. 2011;305:1299-1301.

Von Korff M, Merrill JO, Rutter CM, Sullivan M, Campbell CI, Weisner C. Time-scheduled vs. pain-contingent opioid dosing in chronic opioid therapy. Pain 2011;152:1256–62. http://dx.doi. org/10.1016/j.pain.2011.01.005

E-CPR (Emergency – Clinical Performance Registry) Measure #50

Measure Title: Door to Diagnostic Evaluation by a Provider Within 30 Minutes – Urgent Care Patients

Inverse Measure: No

Measure Description: Percentage of Urgent Care Patients Who Made Provider Contact Within 30 Minutes of Urgent Care Clinic (UCC) Arrival

National Quality Strategy Domain: Patient Safety

Care Setting: Ambulatory Care: Urgent Care – Ambulatory

Published Specialty: Urgent Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Patient Safety

Meaningful Measure Area: Preventable Healthcare Harm

Current Clinical Guideline: This measure is derived from the CMS OQR OP-20 measure and extrapolated to the urgent care setting

Clinical Category: Urgent Care Efficiency

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Numerator: Urgent Care Patients Who Made Provider (MD/DO/PA/NP) Contact Within 30 Minutes of Urgent Care Clinic Arrival

- Definition of Arrival Time: The earliest documented time the patient arrived at the Urgent Care Clinic
- Definition of Provider Contact Time: The time of the first direct, personal exchange between an Urgent Care patient and the Eligible Professional

Numerator Exclusions: None

Denominator: Any Patient Evaluated by the Eligible Professional (MD/DO/PA/NP) in the Urgent Care Clinic (E/M Codes 99202-99205 & 99212-99215 AND Place of Service Indicator: 02, 11, 19, 20 or 22)

Denominator Exclusions: None

Rationale:
In recent years, patients are increasingly accessing urgent care centers for urgent or episodic care, and the number of urgent care centers has markedly increased in the past several years. With continued growth, increased clinician focus on wait times in the urgent care setting improves access to treatment and increase quality of care. Reducing this time improves access to care tailored to patient needs, increases the capability to provide additional treatment or divert patients quickly to emergency departments (EDs) as necessary, and improves patient satisfaction.

Timely access to urgent care is especially pertinent as EDs have continued to experience significant overcrowding and prolonged wait times in recent times, and an estimated 27% of ED visits could be treated in the urgent care setting. With the increased number of urgent care clinics in recent years, urgent care clinics have become an increasingly viable option for patients seeking immediate treatment, imaging and testing for lower-acuity conditions who have traditionally sought care at emergency departments.

Selected References:

- Urgent Care Association of America. 2017 Urgent Care Benchmarking Report Summary. 2017.
- Urgent Care Association of America. 2016 Urgent Care Benchmarking Report Summary. 2016.
- Weinick RM, Burns RM, Mehrotra A. Many Emergency Department Visits Could Be Managed At Urgent Care Centers And Retail Clinics. *Health Aff.* 2010; 29(9):1630-1636.
- Derlet RW, Richards JR. Emergency department overcrowding in Florida, New York, and Texas. *South Med J*. 2002; 95:846-9.
- Derlet RW, Richards JR. Overcrowding in the nation's emergency departments: complex causes and disturbing effects. *Ann Emerg Med*. 2000; 35:63-8.
- Fatovich DM, Hirsch RL. Entry overload, emergency department overcrowding, and ambulance bypass. *Emerg Med J*. 2003; 20:406-9.
- Institute of Medicine of the National Academies. Future of emergency care: Hospital-based emergency care at the breaking point. *The National Academies Press* 2006.
- Kyriacou DN, Ricketts V, Dyne PL, McCollough MD, Talan DA. A 5-year time study analysis of emergency department patient care efficiency. *Ann Emerg Med*. 1999; 34:326-35.
- Pines JM, et al. Emergency department crowding is associated with poor care for patients with severe pain. *Ann Emerg Med*. 2008; 51:6-7.
- Siegel B, et al. Enhancing work flow to reduce crowding. *Jt Comm J Qual Patient Saf*. 2007; 33 (11 Suppl):57-67.
- Trzeciak S, Rivers EP. Emergency department overcrowding in the United States: an emerging threat to patient safety and public health. *Emerg Med J*. 2003; 20:402-5.

E-CPR (Emergency – Clinical Performance Registry) Measure #51

Measure Title: Discharge Prescription of Naloxone after Opioid Poisoning or Overdose

Inverse Measure: No

Measure Description: Percentage of Opioid Poisoning or Overdose Patients Presenting to An Acute Care Facility Who Were Prescribed Naloxone at Discharge

National Quality Strategy Domain: Effective Clinical Care

Care Setting: Multiple Care Settings – Emergency Department and Services, Inpatient/Hospital

Published Specialty: Emergency Medicine; Hospitalist

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Opioid-Related

Meaningful Measure Area: Prevention and Treatment of Opioid and Substance Use Disorders

Current Clinical Guideline: Numerous organizations, including the American Medical Association and American Society of Addiction Medicine, recommend increased access to Naloxone for patients who are at high risk to reverse the effects and reduce the chance of death in the event of an opioid overdose, which includes expanded prescribing practices by clinicians

Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients Who Were Prescribed Naloxone AND Educated About Utilization at Discharge

- **Performance Met (VE269):** Naloxone was prescribed at discharge AND patient was educated about use
- **Medical Performance Exclusion (Denominator Exception) (VE270):** Naloxone was not prescribed at discharge due to medical reasons such as allergy
- **Performance Not Met (VE271):** Naloxone medication was not prescribed at discharge OR patient was not educated about use
- **NOTE: Distribution of Naloxone to patient at discharge is also acceptable in lieu of Naloxone prescription**

Numerator Exclusions: None

Denominator:

- Any patient evaluated by the Eligible Professional (E/M Codes 99217, 99234-99236, 99238-99239, 99281-99285, 99291-99292) PLUS
- Diagnosis of opioid poisoning from heroin, methadone, morphine, opium, codeine, hydrocodone, or another opioid substance
    - ICD-10: T40.0X1A, T40.0X1D, T40.0X1S, T40.0X2A, T40.0X2D, T40.0X2S, T40.0X3A, T40.0X3D, T40.0X3S, T40.0X4A, T40.0X4D, T40.0X4S, T40.1X1A, T40.1X1D, T40.1X1S, T40.1X2A, T40.1X2D, T40.1X2S, T40.1X3A, T40.1X3D, T40.1X3S, T40.1X4A, T40.1X4D, T40.1X4S, T40.2X1A, T40.2X1D, T40.2X1S, T40.2X2A, T40.2X2D, T40.2X2S, T40.2X3A, T40.2X3D, T40.2X3S, T40.2X4A, T40.2X4D, T40.2X4S, T40.3X1A, T40.3X1D, T40.3X1S, T40.3X2A, T40.3X2D, T40.3X2S, T40.3X3A, T40.3X3D, T40.3X3S, T40.3X4A, T40.3X4D, T40.3X4S, , T40.411A, T40.411D, T40.411S, T40.412A, T40.412D, T40.412S, T40.413A, T40.413D, T40.413S, T40.414A, T40.414D, T40.414S, T40.421A, T40.421D, T40.421S, T40.422A, T40.422D, T40.422S, T40.423A, T40.423D, T40.423S, T40.424A, T40.424D, T40.424S, T40.491A, T40.491D, T40.491S, T40.492A, T40.492D, T40.492S, T40.493A, T40.493D, T40.493S, T40.494A, T40.494D, T40.494S, T40.601A, T40.601D, T40.601S, T40.602A, T40.602D, T40.602S, T40.603A, T40.603D, T40.603S, T40.604A, T40.604D, T40.604S, T40.691A, T40.691D, T40.691S, T40.692A, T40.692D, T40.692S, T40.693A, T40.693D, T40.693S, T40.694A, T40.694D, T40.694S
- Disposition of Discharged
- Transferred, eloped or AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Risk Adjustment: No

Rationale:
The opioid epidemic in the United States claims hundreds of lives every day. One of medicine's best tools against this epidemic is Naloxone. Naloxone has proven to be the most effective method for reversing an opioid overdose in patients of all characteristics and has been shown to greatly reduce the chance of fatality. Naloxone is a non-selective, short-acting opioid receptor antagonist used to treat opioid induced respiratory depression. It is safe, has no addictive potential, and has mild side effects. The use of naloxone has been consistently recommended and promoted by numerous health organizations including the American Medical Association. Increasing the availability of Naloxone among the public, law enforcement, and community organizations is advocated by many organizations including the American Society of Addiction Medicine and is a priority of numerous states and federal health agencies. Despite these recommendations, a survey of opioid-related policies in New England emergency departments found that only 12% of departments would prescribe naloxone for patients at risk of opioid overdose after discharge. Promoting the prescription of Naloxone for patients discharged after an opioid overdose will ensure that the chance of fatality across all patient populations is significantly reduced.

Selected References:

- Bird, S. M., McAuley, A., Perry, S., & Hunter, C. (2016). Effectiveness of Scotland's National Naloxone Programme for reducing opioid-related deaths: a before (2006–10) versus after (2011–13) comparison. Addiction, 111(5), 883-891.
- CMS finalizes measures to help combat opioid crisis. (2018, April 16). Retrieved from https://www.the-hospitalist.org/hospitalist/article/162747/pain/cms-finalizes-measures-help-combat-opioid-crisis/page/0/3
- Dorp, E. L., Yassen, A., & Dahan, A. (2007). Naloxone treatment in opioid addiction: The risks and benefits. Expert Opinion on Drug Safety, 6(2), 125-132. doi:10.1517/14740338.6.2.125
- Dunne, R. B. (2018). Prescribing naloxone for opioid overdose intervention. Pain Management, 8(3).
- Dwyer, K., Walley, A. Y., Langlois, B. K., Mitchell, P. M., Nelson, K. P., Cromwell, J., & Bernstein, E. (2015). Opioid education and nasal naloxone rescue kits in the emergency department. Western Journal of Emergency Medicine, 16(3), 381.
- Help save lives: Co-prescribe naloxone to patients at risk of overdose. (2017). AMA Opioid Task Force. Retrieved from https://www.end-opioid-epidemic.org/wp-content/uploads/2017/08/AMA-Opioid-Task-Force-naloxone-one-pager-updated-August-2017-FINAL-1.pdf
- Kestler, A., Buxton, J., Meckling, G., Giesler, A., Lee, M., Fuller, K., Scheuermeyer, F. (2017). Factors associated with participation in an emergency department–based take-home naloxone program for at-risk opioid users. *Annals of emergency medicine*, *69*(3), 340-346.
- Kmeic, J., DO. (n.d.). Module 4: Special Aspects of the Treatment of Substance Use Disorders. Retrieved June 13, 2018, from http://pcssnow.org/wp-content/uploads/2016/08/Prescribing-Nalxone-to-Patients-for-Overdose-Reversal.pdf
- Kounang, N. (2017, October 30). Naloxone reverses 93% of overdoses. Retrieved from https://www.cnn.com/2017/10/30/health/naloxone-reversal-success-study/index.html
- Public Policy Statement on the Use of Naloxone for the Prevention of Opioid Overdose Deaths. (n.d.). Retrieved June 13, 2018, from https://www.asam.org/docs/default-source/public-policy-statements/use-of-naloxone-for-the-prevention-of-opioid-overdose-deaths-final.pdf?sfvrsn=4 American Society of Addiction Medicine
- Reardon, J. M., Harmon, K. J., Schult, G. C., Staton, C. A., & Waller, A. E. (2016). Use of diagnosis codes for detection of clinically significant opioid poisoning in the emergency department: A retrospective analysis of a surveillance case definition. BMC emergency medicine, 16(1), 11.
- Wong, F., Edwards, C. J., Jarrell, D. H., & Patanwala, A. E. (2018). Comparison of lower-dose versus higher-dose intravenous naloxone on time to recurrence of opioid toxicity in the emergency department. Clinical Toxicology, 1-6.

E-CPR (Emergency – Clinical Performance Registry) Measure #52

Measure Title: Appropriate Treatment of Psychosis and Agitation in the Emergency Department

Inverse Measure: No

Measure Description: Percentage of Adult Patients With Psychosis or Agitation Who Were Ordered an Oral Antipsychotic Medication in the Emergency Department

National Quality Strategy Domain: Effective Clinical Care

Care Setting: Emergency Department and Services

Published Specialty: Emergency Medicine

Telehealth?: Yes

Type of Measure: Process

Meaningful Measure Area: Prevention, Treatment and Management of Mental Health

Current Clinical Guideline: There is no specific clinical guideline; however, there is a growing body of evidence in the emergency psychiatry literature supporting early administration of antipsychotics for agitation and psychosis

Clinical Category: Mental/Behavior Disorders

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients who were ordered at least one oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication

Definition (Qualifying Medications):

- First Generation Antipsychotics
    - Chlorpromazine
    - Fluphenazine
    - Haloperidol
    - Loxapine
    - Molindone
    - Perphenazine
    - Pimozide
    - Prochlorperazine
    - Thioridazine
    - Thiothixene
    - Trifluoperazine
- Second Generation Antipsychotics

    - Aripiprazole
    - Asenapine
    - Clozapine
    - Olanzapine
    - Iloperidone
    - Lurasidone
    - Paliperidone
    - Quetiapine
    - Risperidone
    - Ziprasidone
    - Brexpiprazole (Rexulti)
    - Olanzapine and samidorphan (Lybalvi)
    - Lumateperone
    - Cariprazine

- Combination Antipsychotics
    - Olanzapine-Fluoxetine
    - Perphenazine-Amitriptyline

Numerator Options:

- **Performance Met (VE272):** Oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication ordered
- **Medical Performance Exclusion (Denominator Exception) (VE273):** Oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication not ordered for medical reason documented by the eligible professional (e.g., patient refusal, inability to tolerate, allergy, intramuscular/intravenous route chosen due to aggressive behavior, or other documented medical reason)
- **Performance Not Met (VE274):** Oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication not ordered, reason not specified

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional in the Emergency Department (99281-99285 & 99291-99292 AND Place of Service Indicator: 02, 23) PLUS
- Emergency department length of stay of 4 hours or more PLUS
- Diagnosis of psychosis, psychotic disorder NOS, psychotic features, hallucinations, schizophrenia, schizoaffective disorder, agitation due to psychosis
    - ICD10: F06.0, F06.2, F20.0, F20.1, F20.2, F20.3, F20.5, F20.81, F20.89, F20.9, F21, F23, F24, F25.0, F25.1, F25.8, F25.9, F30.2, F31.2, F31.5, F31.64, F32.3, F32A, F33.3 F53.1
- Eloped or AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Risk Adjustment: No

Rationale:
In the United States, there has been increased demand for Emergency Department (ED) psychiatric care but decreased availability of psychiatric resources and inpatient psychiatric beds. As a result, a national ED psychiatric boarding crisis has developed (Nolan et al, 2015; Parwani et al, 2018). Psychiatric patients are known to board in the ED for more prolonged periods of time relative to medical patients with averages of 7 to 34 hours (Zeller et al, 2014).

Patients that are boarded in Emergency Departments and awaiting definitive psychiatric evaluation suffer from delays in care and potential progression of their symptoms. The patients at greatest risk are those with acute agitation and psychosis, which are potentially dangerous conditions for the patients and the physicians and staff caring for them. Often, these patients eventually require chemical or physical restraints which may contribute to morbidity and mortality and further prolong their boarding stay (Gomez & Dopheide, 2016). Oral antipsychotic medications are known to be effective in treating active psychosis without the more profound sedating effects of parenteral (IM or IV) antipsychotics. Recent literature supports that ED patients would benefit from earlier administration of PO antipsychotics to promote earlier healing and recovery. Studies have indicated that the oral administration of antipsychotics is preferable and equally effective when compared to intravenous or intramuscular administration (Mullinax et al, 2017; Wilson et al, 2012; Yildiz et al, 2003). This practice would help to initiate earlier therapy for psychiatric patients and prevent unnecessary morbidity and mortality.

Selected References:

- Gomez S, Dopheide J. Antipsychotic Selection for Acute Agitation and Time to Repeat Use in a Psychiatric Emergency Department. J Psychiatr Pract. 2016 Nov; 22(6): 450-458.
- Mullinax S, Shokraneh F, Wilson MP, et al. Oral Medication for Agitation of Psychiatric Origin: A Scoping Review of Randomized Controlled Trials. J Emerg Med. 2017 Oct; 53(4): 524-529.
- Nolan JM, Fee C, Cooper BA, Rankin SH, Blegen MA. Psychiatric boarding incidence, duration, and associated factors in United States emergency departments. J Emerg Nurs 2015;41:57– 64.
- Parwani V, Tinloy B, Ulrich A. Opening of Psychiatric Observation Unit Eases Boarding Crisis. Acad Emerg Med. 2018 Apr;25(4):456-460.
- Wilson MP, Pepper D, Currier GW, et al. The psychopharmacology of agitation: consensus statement of the American association of emergency psychiatry project Beta psychopharmacology workgroup. West J Emerg Med. 2012 Feb; 13(1): 26-34.
- Yildiz A, Sachs GS, Turgay A. Pharmacological management of agitation in emergency setting. Emerg Med J. 2003 Jul; 20(4): 339-46.
- Zeller S, Calma N, Stone A. Effects of a dedicated regional psychiatric emergency service on boarding of psychiatric patients in area emergency departments. West J Emerg Med 2014;15:1– 6.

E-CPR (Emergency – Clinical Performance Registry) Measure #57

Measure Title: Clinician Reporting of Loss of Consciousness to State Department of Public Health or Department of Motor Vehicles

Inverse Measure: No

Measure Description: Percentage of Patients At Risk for Recurrent Loss of Consciousness For Whom Loss of Consciousness Information Was Submitted to Department of Public Health or Department of Motor Vehicles

National Quality Strategy Domain: Communication and Care Coordination

Care Setting: Emergency Department and Services

Published Specialty: Emergency Medicine

Telehealth?: Yes

Type of Measure: Process, High Priority

Meaningful Measure Area: Transfer of Health Information and Interoperability

Current Clinical Guideline: Several states including California, Oregon, and New Jersey have already mandated, as law, that healthcare providers must report medical conditions that may result in recurrent lapse of consciousness; other states allow for voluntary reporting

Clinical Category: Loss of Consciousness

Published Specialty:

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients For Whom Loss of Consciousness Information Was Submitted to the State Department of Public Health (DPH) or Department of Motor Vehicles (DMV)

Numerator Options:

- **Performance Met (VE275):** Patients for whom loss of consciousness information was submitted to DPH or DMV
- **Medical Performance Exclusion (VE276):** Information was previously reported, patient does not drive, condition not recurrent or other medical exclusion
- **Performance Not Met (VE277):** Patients for whom loss of consciousness information was not submitted to DPH or DMV, reason not specified

Numerator Exclusions: None

Denominator:

- Any patient ≥ 14 years of age evaluated by the Eligible Professional in the Emergency Department (E/M Codes 99281-99285,99291-99292 AND Place of Service Indicator: 02,23) PLUS
- Diagnosis of Loss of Consciousness PLUS:
    - ICD10: R55
- Diagnosis of seizure disorder, narcolepsy, hyperglycemia due to diabetes, hypoglycemia due to diabetes PLUS:
    - ICD10: E08.641, E08.649, E10.641, E10.649 E10.65, E11.641, E11.649, E11.65, E13.641, E13.649, E13.65, F44.5, G40.001, G40.009, G40.011, G40.019, G40.101, G40.109, G40.111, G40.119, G40.201, G40.209, G40.211, G40.219, G40.301, G40.309, G40.311, G40.319, G40.401, G40.409, G40.411, G40.419, G40.42, G40.501, G40.509, G40.801 G40.802, G40.803, G40.804, G40.811, G40.812, G40.813, G40.814, G40.821 G40.822 G40.823, G40.824, G40.833, G40.834, G40.89, G40.901, G40.909, G40.911, G40.919 G40.A01 G40.A09 G40.A11, G40.A19, G40.B01, G40.B09, G40.B11, G40.B19, G47.411, G47.419, G47.421, G47.429, R56.00, R56.01, R56.1, R56.9

Denominator Exclusions: None

Risk Adjustment: No

Rationale:

Patients who sustain lapse of consciousness while operating a motor vehicle pose a significant public health problem as they have significant potential to cause serious injury or even death to others and themselves. Medical conditions that place patients at risk for recurrent lapse of consciousness and impaired driving ability include but are not limited to: seizure disorders, narcolepsy, and abnormal metabolic states, including hypo and hyperglycemia associated with diabetes. Healthcare provider reporting of medical conditions that could lead to recurrent lapse of consciousness and associated impaired driving ability helps to minimize potential morbidity and mortality. By reporting these conditions to the Department of Public Health or the Department of Motor Vehicles, healthcare providers are able to alert the appropriate authorities to investigate the safe driving ability of at-risk individuals. Several states including California, Oregon, and New Jersey have already mandated, as law, that healthcare providers must report medical conditions that may result in recurrent lapse of consciousness. This practice, however, is not consistent across the country, and major disability and death continue to result from motor vehicle accidents due to lapse of consciousness. Per a survey of 207 California emergency physicians, 89% indicated that they “nearly always” reported new onset seizure; however, 86% indicated that they “rarely” or “never” reported other conditions leading to lapse of consciousness including hypoglycemia and hyperglycemia. The intent of this measure is to promote the best practice of appropriate reporting to prevent potentially avoidable injuries and deaths.

Selected References:

- Clark, Cheryl. "When Doctors and the DMV Decide It's Time for You to Stop Driving." San Diego News from inewsource. October 25, 2016. https://inewsource.org/2016/10/24/alzheimers-dementia-driving/.
- CMA Legal Counsel. “DMV Reports: Epilepsy/Lapses of Consciousness (+ Visual Impairments).” *CMA On-Call: Online Health Law Library,* January 2015 California Physician’s Legal Handbook
- Turnipseed SD, Vierra D, DeCarlo D, et al. Reporting Patterns for “Lapses of Consciousness” by California Emergency Physicians. J Emerg Med. 2008; 35(1): 15-21.
- Sorajia, Dan, Gillian C. Nesbitt, David O. Hodge, Phillip A. Low, Stephen C. Hammill, Bernard J. Gersh, and Win-Kuang Shen. "Syncope While Driving: Clinical Characteristics, Causes, and Prognosis." *US National Library of Medicine, National Institutes of Health*, September 15, 2009.

E-CPR (Emergency – Clinical Performance Registry) Measure #56

Measure Title: Opioid Withdrawal: Initiation of Medication-Assisted Treatment (MAT) and Referral to Outpatient Opioid Treatment

Inverse Measure: No

Measure Description: Percentage of Patients Presenting with Opioid Withdrawal Who Were Given Medication-Assisted Treatment and Referred to Outpatient Opioid Treatment

National Quality Strategy Domain: Patient Safety

Care Setting: Multiple Care Settings

Published Specialty: Emergency Medicine; Family Medicine; Hospitalist; Internal Medicine; Primary Care; Urgent Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Opioid-Related

Meaningful Measure Area: Prevention and Treatment of Opioid and Substance Use Disorders

Current Clinical Guideline: U.S.Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (HHS SAMHSA)

Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Numerator: Patients Who Were Given Medication-Assisted Treatment (MAT) and, at Time of Discharge to Home or Home Health, Referred to Outpatient Opioid Treatment

- Performance Met**:** Buprenorphine or Methadone ordered AND, at time of discharge to home or home health, outpatient opioid treatment referral made
- Medical Performance Exclusion (Denominator Exception): Refusal of care, allergy to medicine, altered mental status, Buprenorphine or Methadone not clinically indicated
- Performance Not Met: Buprenorphine or Methadone not ordered OR Buprenorphine or Methadone ordered BUT outpatient opioid treatment referral not made at time of discharge to home or home health
- Note: Combination therapies ordered that include Buprenorphine or Methadone (such as Suboxone) are also acceptable
- Note: For patients who are not discharged in an encounter, an order of Buprenorphine or Methadone is sufficient to meet the Numerator criteria

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional (E/M Codes 99217, 99234-99236, 99238-99239, 99281-99285, 99291-99292, 99201-99205, 99212-99215) PLUS
- Diagnosis of opioid abuse or dependence with withdrawal
    - ICD-10: F11.13, F11.23
- Transferred to another acute care facility, eloped, AMA or expired patients are excluded

Denominator Exclusions: None

Risk Adjustment: No

Rationale:

According to the 2019 National Survey on Drug Use and Health, 2 million people in the United States had an opioid use disorder in 2018. In 2018, 47,600 people died from overdosing on opioids – that means that more than 130 deaths occurred every day from opioid-related drug overdoses.

Patients with opioid use disorder represent a vulnerable population that often seeks care in Emergency Departments and acute care hospitals. Often, they seek care due to withdrawal symptoms which may include abdominal cramping, nausea, vomiting, diarrhea, anxiety, restlessness, tremor, and muscle aches. Without appropriate treatment, these individuals may seek continued use of prescription opioids and/or illegal opioids such as heroin to transiently alleviate their symptoms. Medication Assisted Treatment (MAT) with opioid agonist treatment including Buprenorphine and Methadone has been shown to be effective in treating these individuals. These medications decrease withdrawal, craving, and opioid use.

A randomized clinical trial performed involving 329 opioid-dependent patients from 2009-2013 demonstrated superiority of buprenorphine treatment compared to brief intervention and referral. Treatment led to increased engagement in addiction treatment, reduced self-reported illicit opioid use, and decreased use of inpatient addiction treatment services.

Selected References:

1. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial.
2. Emergency Department-Initiated Buprenorphine for Opioid Dependence with Continuation in Primary Care: Outcomes During and After Intervention.
3. A Quality Framework for Emergency Department Treatment of Opioid Use Disorder.

a. This is a good review that includes recommendations for opioid-related quality measures (including an MAT measure)

4. Emergency Departments — A 24/7/365 Option for Combating the Opioid Crisis
5. https://www.hhs.gov/opioids/sites/default/files/2019-11/Opioids%20Infographic_letterSizePDF_10-02-19.pdf
6. https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions#opioid-dependency-medications

APPENDIX A. Opioid Medications

Generic	Brand Name
alfentanil	Alfenta®
buprenorphine	Belbuca®, Buprenex®, Butrans®
butorphanol	No brand name currently marketed
codeine	Fioricet® w/ codeine, Fiorinal® w/ codeine, Soma® Compound w/ codeine, Tylenol w/ codeine, Prometh® VC w/ codeine (cough), Triacin®-C (cough), Tuzistra®-XR (cough)
dihydrocodeine	Synalgos-DC
fentanyl	Abstral®, Actiq®, Duragesic®, Fentora®, Ionsys®, Lazanda®, Onsolis®, Sublimaze®, Subsys®
hydrocodone	Anexsia®, Hysingla® ER, Lortab®, Lorcet®, Norco®, Reprexain®, Vicodin®, Vicoprofen®, Zohydro® ER, Flowtuss® (cough), Hycofenix® (cough), Obredon® (cough), Rezira® (cough), Tussicaps® (cough), Tussigon® (cough), Tussionex® Pennkinetic® (cough), Vituz® (cough), Zutripro® (cough)
hydromorphone	Dilaudid®, Dilaudid®-HP, Exalgo®
meperidine	Demerol®
methadone	Dolophine®, Methadose®
morphine	Astramorph ®PF, Avinza® Duramorph® PF, Embeda®, Infumorph®, Kadian®, Morphabond®, MS Contin®, Roxanol®
oxycodone	Oxaydo®, Oxycet®, Oxycontin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, Tylox® Xartemis® XR
oxymorphone	Opana®, Opana ER
pentazocine	Talwin®
remifentanil	Ultiva®
sufentanil	Sufenta®
tapentadol	Palexia®, Nucynta®, Nucynta ER
tramadol	Conzip®, Ultracet®, Ultram®, Ultram ER