

**2020 Emergency-Clinical Performance Registry (E-CPR)  
Measure Specifications Manual**

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**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

**Type of Measure:** Process, High Priority

**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 99201-99205, 99212-99215, 99281-99285, & 99291-99292 AND Place of Service Indicator: 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
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- Gallagher EJ. Hospitalization for fainting: high stakes, low yield. *Ann Emerg Med.* 1997 Apr;29(4):540-2.
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- 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 #40**

*Adopted from the Surviving Sepsis Campaign*

**Measure Title:** Initiation of the Initial Sepsis Bundle

**Inverse Measure:** No

**Measure Description:** Percentage of Adult Emergency Department Patients Diagnosed with Severe Sepsis or Septic Shock That Have Initiation of the Initial Sepsis Bundle

**National Quality Strategy Domain:** Effective Clinical Care

**Type of Measure:** Process

**Meaningful Measure Area:** Preventable Healthcare Harm

**Current Clinical Guideline:** This measure is derived from the CMS IQR SEP-1 measure and the Surviving Sepsis Campaign

**Clinical Category:** Sepsis

**Number of Performance Rates:** 1

**Measure Scoring:** Proportion

**Risk Adjustment:** No

**Numerator:** Emergency Department Patients Diagnosed with Severe Sepsis or Septic Shock Who Have Initiation of the Initial Sepsis Bundle

Definition of initiation of initial sepsis bundle: Provider order for (or protocol resulting in order for) ALL of the following:

- Lactate (venous or arterial)
- Blood cultures
- IV antibiotics
- IV fluid bolus

### Numerator Options

- **Performance Met (VE253):** Patients who did have initiation of initial sepsis bundle (must include all components)
- **Medical Performance Exclusion (Denominator Exception (VE254):** Patients who did not have initiation of the initial sepsis bundle for documented medical reason(s) (i.e. IV fluids not ordered given patient is in congestive heart failure, or other medical reason)
- **Patient Performance Exclusion (Denominator Exception) (VE255):** Patients who did not have initiation of the initial sepsis bundle for documented patient reason(s) (i.e. blood cultures not ordered because patient refused or other patient reason)
- **Performance Not Met (VE256):** Patients who did not have initiation of the initial sepsis bundle, reason not given

**Numerator Exclusions:** None

**Denominator:**

- Any patient  $\geq$  18 years of age evaluated by the Eligible Professional in the Emergency Department (E/M Codes 99281-99285 & 99291-99292 AND Place of Service Indicator: 23) PLUS
- ED diagnosis of either of below:
  - Severe Sepsis:
    - **ICD-10:** A41.9 AND R65.20
  - Septic Shock:
    - **ICD-10:** A41.9 AND R65.21
- Transferred, eloped or AMA patients are excluded (**V0700**)
- Patients with Advanced Directives indicating preference for limited intervention are excluded (**V0701**)

**Denominator Exclusions:** None

**Rationale:**

There are more than 750,000 cases of severe sepsis and septic shock in the United States each year. Most patients who present with sepsis receive initial care in the emergency department, and the short-term mortality is 20% or more. In 2001, Rivers et al. reported that among patients with severe sepsis or septic shock, mortality was significantly lower among those who were treated according to a sepsis bundle with protocol than among those who were given standard therapy (30.5% vs. 46.5%). This premise predicates that usual care lacked aggressive, timely assessment and treatment. There have been many changes in the specific management of sepsis as to whether certain aspects of a protocol are necessary (e.g. blood transfusion parameters, vasoactive agent initiation, mandated central line placement). Overall, there is strong evidence that an initial order bundle involving IVF bolus, Blood cultures, IV antibiotics, and lactate to support its broad applicability.

In their 2017 submission to the National Quality Forum, Henry Ford Hospital presented a detailed analysis of Q4 2015 through Q2 2016 data on the SEP-1 measure from the first three quarters of SEP-1 measure implementation in the Inpatient Quality Reporting (IQR) program, highlighting performance gaps for each of the three hour bundle elements which align with those captured in the E-CPR sepsis measure. Specifically, that patients with severe sepsis failed to receive recommended treatment in 32.7% of eligible cases, and of those failures 48.5% failed to obtain an initial lactate level, 38.4% failed to receive broad spectrum antibiotics, 34.4% failed to have blood cultures drawn, and 45.5% failed to be administered fluids within the three hour time window, which is the time that patients are most likely to still be in the emergency department (Henry Ford 2017).

These results are consistent with performance gaps previously reported in the literature. For example, in a large-scale, multicenter study of compliance with the Surviving Sepsis Campaign guidelines, only 61% of patients had an initial lactate value measured in the first quarter of the study. In the final quarter, only 78.7% of patients had an initial lactate measurement. (Levy 2010) A prospective multi-center observational study found that compliance with the Surviving Sepsis Campaign 2012 guidelines recommendation to draw blood cultures before antibiotics were administered was only in the range of 54.4 to 64.5%. (Bloos 2014, Angus 2001) Results from a multicenter observational study including 15,022 patients from 165 hospitals demonstrated that patients with septic shock were given broad spectrum antibiotics 60.4% in the first quarter of the study. At the final quarter, the increase of compliance on providing

antibiotics only increased 7.5% to 67.9%. Clearly, the opportunity to provide comprehensive and timely care to septic shock patients exists. (Levy 2010) A multi-center randomized controlled trial of early sepsis resuscitation found mortality was significantly increased in patients who received initial antibiotics after septic shock recognition compared with before septic shock recognition. Only 59% of patients received the initial dose of antibiotics after recognition of septic shock. This demonstrates that delay to antibiotics is harmful and persists. (Puskarich 2011) A prospective observational study on over one hundred consecutive adult patients with severe sepsis or septic shock found that only 84% of patients with documented hypotension received immediate fluid administration (0.5L). (Gao 2005) The amount considered adequate in this study is lower than the threshold outlined in this measure (greater than or equal to 1 liter of crystalloids), which may indicate critically ill patients with septic shock receive appropriate fluids at an even lower rate.

### Selected References:

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## **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

**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 Aged 14-50 Years 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  $\geq$  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 #45**

**Measure Title:** Avoidance of Creatine Kinase-MB (CK-MB) Testing for Non-traumatic Chest Pain

**Inverse Measure:** No

**Measure Description:** Percentage of Adult Patients with a Diagnosis of Non-traumatic Chest Pain Who Did Not Have CK-MB Lab Testing Ordered

**National Quality Strategy Domain:** Efficiency and Cost Reduction

**Type of Measure:** Process, High Priority

**Meaningful Measure Area:** Appropriate Use of Healthcare

**Current Clinical Guideline:** There is no specific clinical guideline; however, the European Society of Cardiology and the American College of Cardiology have acknowledged that cardiac troponin has supplanted CK-MB as the analyte of choice for diagnosis

**Clinical Category:** Chest Pain

**Reporting Measure:** Percentage of Adult Patients with a Diagnosis of Non-traumatic Chest Pain Who Did Not Have CK-MB Lab Testing Ordered

**Number of Performance Rates:** 1

**Measure Scoring:** Proportion

**Numerator:** Patients who did not have CK-MB lab testing ordered  
Numerator Options:

- **Performance Met (VE260):** CK-MB testing was not ordered
- **Medical Performance Exclusion (Denominator Exception) (VE261):** CK-MB testing was ordered for medical reason documented by Eligible Professional (e.g., suspected acute myocardial re-infarction)
- **Performance Not Met (VE262):** CK-MB testing was ordered, reason not specified

**Denominator:**

- Any patient  $\geq$  18 years of age evaluated by the Eligible Professional in the Emergency Department (E/M Codes 99281-99285, 99291, 99292 AND Place of Service Indicator: 23) PLUS
- Diagnosis of Non-traumatic Chest Pain: ICD-10: I20.0, I20.1, I20.8, I20.9, I25.110, I25.111, I25.118, I25.119, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, R07.1, R07.2, R07.81, R07.82, R07.89, R07.9
- Transferred, eloped or AMA patients are excluded (**V0700**)
- Patients with trauma are excluded (**V0702**)

**Denominator Exclusions:** None

**Risk Adjustment:** No

**Rationale:**

Since 2000, the European Society of Cardiology (ESC) and the American College of Cardiology (ACC) recognized the pivotal role of biomarkers in diagnosis of acute myocardial infarction (AMI). At that time, they also acknowledged that cardiac troponin had supplanted CK-MB as the analyte of choice for diagnosis. More recent guidelines from the ESC, ACC, American Heart Association (AHA), the American College of Emergency Physicians (ACEP), the Society for Cardiovascular Angiography and Interventions (SCAI) continue to recommend measurement of cardiac biomarkers at presentation in patients with suspected myocardial infarction (MI), and the only biomarker that is recommended to be used for the diagnosis of acute MI is cardiac troponin due to its superior sensitivity and accuracy (Amsterdam 2014, ACEP/SCAI/ACC/AHA 2013, Roffi 2016). The American Society for Clinical Pathology also recommends against testing for myoglobin or CK-MB in the diagnosis of acute myocardial infarction (AMI). Troponin is released before CK-MB and appears in the blood as early as, if not earlier than, myoglobin after AMI. Approximately 30% of patients experiencing chest discomfort at rest with a normal CK-MB will be diagnosed with AMI when evaluated using troponins. Accordingly, there is much support for relying solely on troponin and discontinuing the use of CK-MB and other markers. (Eggers 2004, Macrae 2006, Kavsak 2007, Saenger 2008, Reichlin 2009)

For example, patients with elevated troponin levels but negative creatine kinase-MB (CK-MB) values who were formerly diagnosed with unstable angina or minor myocardial injury are now reclassified as non-ST-elevation MI (NSTEMI), even in the absence of diagnostic electrocardiogram (ECG) changes. Similarly, only one elevated troponin level above the established cutoff is required to establish the diagnosis of acute MI, according to the ACC guidelines for NSTEMI. (ACEP/SCAI/ACC/AHA 2013, Anderson 2007, Anderson 2013) These changes were instituted following the introduction of increasingly sensitive and precise troponin assays. Up to 80% of patients with acute MI will have an elevated troponin level within 2-3 hours of emergency department (ED) arrival, compared to 6 or more hours for detection of elevated levels of CK-MB and other cardiac markers.

Cardiac troponin (cTn) assays are now considered the biomarkers of choice in the early diagnosis of AMI, especially in patients with a recent onset of chest pain. (Denese 2016, Reichlin 2009, Weber 2011, Keller 2009, Keller 2011) Most patients with an AMI can be reliably identified within 3 hours, with nearly 100% sensitivity and 100% negative predictive value using a cTn assay, which also reduces observation time in the ED to rule out of AMI. (Lippi 2016)

CK-MB testing is still ordered in many hospitals and emergency departments. (Alvin 2017) Despite the fact that the first ESC/ACC guideline came out defining AMI via troponin tests in 2000, an analysis of trends in Medicare Part B laboratory test volumes from 2000-2010 noted that CK-MB tests nearly doubled in volume during this same time frame. (Shahangian 2014)

**Selected References:**

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## **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

**Type of Measure:** Process, High Priority

**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 (e.g., headache pain refractory to other medications, severe headache, suspected or diagnosed herniated disk, fracture, sciatica, radiculopathy)
- **Performance Not Met (VE265):** Opiate prescribed, reason not specified

**Numerator Exclusions:** None

**Denominator:**

- Any patient  $\geq$  18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic (E/M Codes 99201-99205, 99212-99215, 99281-99285, 99291-99292 AND Place of Service Indicator: 11, 19, 20, 22 or 23) PLUS
- Diagnosis of low back pain OR
  - ICD-10: M54.5
- 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:** None

**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
- $\beta$ -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)

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## **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

**Type of Measure:** Process, High Priority

**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:

<b>Long-Acting Opioid Drugs</b>
<ul style="list-style-type: none"><li>• Arymo ER (morphine sulfate)</li><li>• Belbuca (buprenorphine)</li><li>• buprenorphine</li><li>• Butrans (transdermal buprenorphine)</li><li>• Dolophine (methadone hydrochloride)</li><li>• Duragesic (fentanyl transdermal system)</li><li>• Embeda (morphine sulfate and naltrexone hydrochloride)</li><li>• Exalgo (hydromorphone hydrochloride)</li><li>• fentanyl transdermal system</li><li>• hydrocodone bitartrate extended-release</li><li>• hydromorphone hydrochloride extended-release</li><li>• Hysingla ER (hydrocodone bitartrate)</li><li>• Kadian (morphine sulfate)</li><li>• methadone hydrochloride</li><li>• Methadose (methadone hydrochloride)</li><li>• Morphabond (morphine sulfate)</li><li>• morphine sulfate extended release</li></ul>

- 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/remis/index.cfm?event=RemisDetails.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  $\geq$  18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic (E/M Codes 99201-99205, 99212-99215, 99281-99285, & 99291-99292 AND Place of Service Indicator: 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)

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## **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

**Type of Measure:** Process, High Priority

**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 99201-99205 & 99212-99215 AND Place of Service Indicator: 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.

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## **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

**Type of Measure:** Process, High Priority

**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

**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, T40.4X1A, T40.4X1D, T40.4X1S, T40.4X2A, T40.4X2D, T40.4X2S, T40.4X3A, T40.4X3D, T40.4X3S, T40.4X4A, T40.4X4D, T40.4X4S, 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

- 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.

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## **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

**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 Health

**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
- Combination Antipsychotics
  - Olanzapine-Fluoxetine
  - Perphenazine-Amitriptyline

Numerator Options:

- **Performance Met (VE272):** Oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication prescribed
- **Medical Performance Exclusion (Denominator Exception) (VE273):** Oral dose of a typical or atypical antipsychotic or an antipsychotic combination medication not prescribed 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 prescribed, 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: 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, 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:**

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## **E-CPR (Emergency – Clinical Performance Registry) Measure #53**

**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

**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

**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  $\geq$  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: 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, G40.501, 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, G40.89, 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

- Resides in a state without mandatory reporting to DPH/DMV; residents of the following states are excluded from reporting of this measure: CA, NV, NJ, OR, PA (**V0703**)

**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:**

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## **E-CPR (Emergency – Clinical Performance Registry) Measure #54**

**Measure Title:** Avoidance of Co-Prescribing of Opioid Analgesic and Benzodiazepine

**Inverse Measure:** No

**Measure Description:** Percentage of Patients Who Were Not Concurrently Prescribed Opioid Analgesic and Benzodiazepine Medications

**National Quality Strategy Domain:** Patient Safety

**Type of Measure:** Process, High Priority

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

**Current Clinical Guideline:** Numerous organizations, including the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare and Medicaid Services (CMS), recommend against the co-prescription of Opiate Analgesic Medications and Benzodiazepines due to increased risk of overdose and death.

**Clinical Category:** Opioids

**Number of Performance Rates:** 1

**Measure Scoring:** Proportion

**Numerator:** Patients Who Were NOT Concurrently Prescribed Opioid Analgesic and Benzodiazepine Medications

- **Performance Met (VE278):** Opioid Analgesic AND Benzodiazepine NOT concurrently prescribed during same encounter
- **Medical Performance Exclusion (Denominator Exception) (VE279):** Patients chronically managed on both benzodiazepines and/or opioids and at risk for withdrawal; cancer patients; patients on hospice care; patients receiving Medically-Assisted Therapy (MAT) with Buprenorphine, Methadone, etc.
- **Performance Not Met (VE280):** Opioid Analgesic AND Benzodiazepine concurrently prescribed during same encounter, reason not specified
- **Numerator Exclusions:** None

**Denominator:**

- Any patient  $\geq 18$  years of age evaluated by the Eligible Professional
- Transferred, eloped or AMA patients are excluded (**V0700**)

**Denominator Exclusions:** None

**Risk Adjustment:** No

**Rationale:**

Drug overdose is now a of leading cause of accidental deaths in the US, exceeding deaths due to motor vehicle accidents. A majority of those deaths involve prescription drugs. In 2013, drug

overdoses killed 43,982 people in the United States. Opioid analgesics alone or in conjunction with benzodiazepines accounted for nearly half of these deaths. (Mack) 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. In its guidelines for prescribing opioids for chronic pain, the CDC recommends avoidance of concurrent opioid and benzodiazepine prescribing because epidemiologic studies suggest that concurrent use of benzodiazepines and opioids might put patients at greater risk for potentially fatal overdose. (Dowell)

In a study of US Veterans receiving opioid analgesics from 2004-2009, 2400 veterans died of a drug overdose, and nearly half of those deaths occurred in veterans concurrently prescribed benzodiazepines and opioids. This study demonstrates the association between increased risk of death from drug overdose and individuals receiving both opioid analgesic and benzodiazepine medications. (Park)

The co-prescription of opioid analgesics and benzodiazepines may also have unanticipated consequences. The diversion of opioid medications to non-medical uses has largely contributed to the increased number of deaths. Most prescription opioids used for nonmedical reasons are diverted from prescriptions originally written for therapeutic use. (Dowell). Indicators of potential inappropriate use of prescriptions include overlapping opioid and benzodiazepine medications. (Mack) In a study to review potential misuse and inappropriate opioid prescription practices, Liu et al. writes: "Simultaneous prescribing of opioids and benzodiazepines [...] has been associated with multiple-provider episodes, also known as doctor shopping." (Liu)

CMS acknowledges the potential health risks of co-prescription of opioid and benzodiazepine and already has a facility-based measure to monitor prescriptions – NQF 3316e. This QCDR measure models the NQF-endorsed measure but focuses on holding the individual clinician accountable for their prescribing.

### **Selected References:**

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