2023 Emergency-Clinical Performance Registry (E-CPR)
Measure Specifications Manual

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; Hospital Inpatient

Published Specialty: Emergency Medicine; Urgent Care; Hospitalist

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)

Published Clinical Category: Syncope

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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,Urgent Care Clinic, Inpatient and Observation Status settings (E/M Codes 99202-99205, 99212-99215, 99217-99220, 99221-99223, 99224-99226, 99231-99233, 99234-99236, 99238, 99239, 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

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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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

Published Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS; MIPS Value Pathway

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

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)

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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

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.

Published Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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 99202-99205, 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

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 Outpatient Medicine 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

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

Published Clinical Category: Urgent Care Efficiency

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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:

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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

Care Setting: Multiple Care Settings

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

Published Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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) 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

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:

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- 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

Published Clinical Category: Mental/Behavior Disorders

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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
- Primary 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, F28, F29, 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

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 #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)

Published Clinical Category: Opioids

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

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 **(VE281):** Buprenorphine or Methadone ordered AND, at time of discharge to home or home health, outpatient opioid treatment referral made
- Medical Performance Exclusion (Denominator Exception)**(VE282):** Refusal of care, allergy to medicine, altered mental status, Buprenorphine or Methadone not clinically indicated
- Performance Not Met **(VE283):** 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, 99202-99205, 99212-99215) PLUS
- Diagnosis of opioid abuse or dependence with withdrawal
    - ICD-10: F11.13, F11.23
- Transferred to another acute care facility (same or higher level of care), eloped, AMA or expired patients are excluded **(V0704)**

Denominator Exclusions: None

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

E-CPR (Emergency – Clinical Performance Registry) Measure 58

Measure Title: Patient-Reported Understanding of Discharge Diagnosis and Plan of Care after Emergency Department Visit

Inverse Measure: No

Measure Description: Percentage of Adult Patients Who Completed a Survey Regarding Their Emergency Department Visit Who Reported Understanding of Their Discharge Diagnosis and Plan of Care

National Quality Strategy Domain: Person and Caregiver-Centered Experience and Outcomes

Care Setting: Emergency Department and Services

Published Specialty: Emergency Medicine

Telehealth?: Yes

Type of Measure: Patient-Reported Outcome-Based Performance Measure; High Priority

High Priority Type: Patient Experience

Meaningful Measures Area: Patient's Experience of Care

Published Clinical Category: Patient-Reported Outcome

Reporting Measure: Percentage of adult patients who completed a survey regarding their Emergency Department visit who reported understanding of their discharge diagnosis and plan of care.

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Reported Understanding of Their Discharge Diagnosis and Plan of Care from the Emergency Department

Definitions: Understanding of the discharge diagnosis and plan of care is defined as a response of (4) "Yes, strongly agree" or (3) "Yes, mostly" on the following survey prompt:

"I understood my diagnosis and plan of care" with response options of (1) "No," (2) "Yes, somewhat," (3) "Yes, mostly," and (4) "Yes, strongly agree"

Numerator Options:

- Performance Met: Patient reported understanding of their discharge diagnosis and plan of care (i.e., 3 or 4 on the survey response)
- Performance Not Met: Patient did NOT report understanding of their discharge diagnosis and plan of care (i.e., 1 or 2 on the survey response)

Numerator Exclusions: None

Denominator:

- Any patient ≥18 years of age evaluated by the Eligible Professional in the Emergency Department PLUS
- Completed a survey regarding their Emergency Department visit after discharge
- Disposition of Discharged
- Transferred, eloped, AMA, or expired patients are excluded

Denominator Exclusions: None

Rationale:

Patient-reported outcomes are a high priority for CMS and other organizations. The purpose of these measures is to obtain the perspectives of patients and to engage patients and their families in their care. Patient-reported outcomes are particularly limited in Emergency Medicine.

Communication between the clinician and the patient is a key component of high quality care delivery. However, due to the complicated and sometimes chaotic environment in the Emergency Department (ED), communication with patients can be challenging. Communication with patients is particularly important during transitions of care such as the time of discharge. Without adequate communication, particularly regarding the discharge diagnosis, there can be downstream repercussions such as ED bounce backs, lack of adherence to treatment or recommendations, or delays in appropriate follow-up.

The purpose of this patient-reported outcome measure is to promote communication between the clinician and the patient to ensure adequate understanding of the discharge diagnosis.

H-CPR (Hospitalist – Clinical Performance Registry) Measure #24

Measure Title: Appropriate Utilization of Vancomycin for Cellulitis

Inverse Measure: No

Measure Description: Percentage of Patients with Cellulitis Who Did Not Receive Vancomycin Unless MRSA Infection or Risk for MRSA Infection Was Identified

National Quality Strategy Domain: Efficiency and Cost Reduction

Care Setting: Emergency Department and Services, Hospital; Hospital Inpatient

Published Specialty: Acute Care; Critical Care; Emergency Medicine; Hospitalist

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Appropriate Use

Meaningful Measure Area: Appropriate Use of Healthcare

Current Clinical Guideline: IDSA Guidelines

Published Clinical Category: Cellulitis

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Did NOT have Vancomycin (IV) Ordered Unless Known MRSA Infection Was Identified or Specific Risk for MRSA Infection Was Indicated

- Performance Met **(VH271):**
    - Vancomycin NOT ordered OR Vancomycin discontinued at admission
    OR
    - Vancomycin ordered AND MRSA infection identified or risk for MRSA infection documented (i.e., nasal colonization, prior MRSA infection, recent hospitalization, recent antibiotics, penetrating injury, IVDU, purulent cellulitis, SIRS criteria, sepsis, impaired host defense)
- Medical Performance Exclusion (Denominator Exception): None
- Performance Not Met **(VH272)**: Vancomycin ordered AND no MRSA infection identified OR no risk for MRSA infection documented

Numerator Exclusions: None

Denominator:

- Any patient greater than or equal to 18 years of age evaluated by the Eligible Professional PLUS
- Admitted or Placed in Observation Status **(V0717)** PLUS (E/M Codes 99218-23, 99234-36, 99281-85, 99291-92) PLUS
- Diagnosis of Cellulitis
    - A48.0, H05.011, H05.012, H05.013, H05.019, H60.10, H60.11, H60.12, H60.13, J34.0, J36, J38.3, J38.7, J39.1, K12.2, K13.0, K61.0, K61.1, L03.011, L03.012, L03.019, L03.031, L03.032, L03.039, L03.111, L03.112, L03.113, L03.114, L03.115, L03.116, L03.119, L03.211, L03.212, L03.213, L03.221, L03.311, L03.312, L03.313, L03.314, L03.315, L03.316, L03.317, L03.319, L03.811, L03.818, L03.90, L98.3, N48.22, N49.9, N61.0, N73.0, N73.1, N73.2
- Transferred, eloped, AMA or expired patients are excluded

Denominator Exclusions: None

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Rationale:

The emergence of community-associated Methicillin-Resistant Staphylococcus Aureus (CA-MRSA) contributed to a significant increase in the incidence and severity of skin and soft tissue infections (SSTIs). A nearly 30% increase in hospital admissions for SSTIs occurred between 2000 and 2004. Annually, over 6 million visits to physician's offices are attributable to SSTIs. From 1993 to 2005, the number of annual emergency department visits for SSTIs increased from 1.2 million to 3.4 million. (Stevens) As a result of the emergence of community-associated MRSA, clinicians increased use of antibiotics targeted at MRSA. According to data from the National Hospital Ambulatory Medical Care Survey (NHAMCS), by 2010, 74% of all antibiotic regimens prescribed at emergency department visits for skin infections included an agent typically active against CA-MRSA. (Pallin)

Despite the drastic increase in use of antibiotics active against CA-MRSA, beta-hemolytic streptococci are still thought to be the predominant cause for non-purulent SSTIs. A large prospective investigation performed in the current era of CA-MRSA found that beta hemolytic streptococci remain the primary cause of diffuse, nonculturable cellulitis. Additionally, the use of antibiotic polypharmacy including vancomycin, if unnecessary, leads to increased drug reactions, risk for renal toxicity, increased medication costs, and emergence of antibiotic resistant bacteria. (Jeng)

In 2014, the Infectious Diseases Society of America (IDSA) updated practice guidelines regarding management of SSTIs and addressed the appropriate use of antibiotics active against CA-MRSA. According to the guidelines, non-purulent cellulitis due to MRSA is uncommon and treatment for MRSA is typically not necessary. The indications for MRSA coverage include penetrating trauma, injection drug use, purulent drainage, evidence of MRSA infection elsewhere, nasal colonization with MRSA, prior MRSA infection, recent hospitalization, recent antibiotic use, markedly impaired host defenses, and patients with SIRS. (Stevens)

Per a multicenter, double-blind, randomized superiority trial conducted by Moran et al., for patients with uncomplicated cellulitis, the addition of an antibiotic for CA-MRSA coverage did not result in higher rates of clinical resolution of cellulitis as compared to coverage for beta-hemolytic streptococcus alone. (Moran)

Despite the emergency of CA-MRSA, beta-hemolytic streptococci remain the predominant cause of non-purulent SSTIs (e.g. cellulitis) and universal treatment for these infections with an antibiotic active against CA-MRSA, such as vancomycin, is not necessary and may contribute to adverse drug reactions, increased medical costs, and the further emergence of antibiotic resistance.

Selected References:

Haran JP, Goulding M, Campion M, et al. Reduction of Inappropriate Antibiotic Use and Improved Outcomes by Implementation of an Algorithm-Based Clinical Guideline for Nonpurulent Skin and Soft Tissue Infections. Annals of Emergency Medicine. 2020 July; 76(1): 56-66.

Jeng A, Beheshti M, Li J, et al. The Role of Beta-Hemolytic Streptococci in Causing Diffuse, Nonculturable Cellulitis. Medicine (Baltimore). 2010 Jul; 89(4):217-226.

Moran GJ, Krishnadasan A, Mower WR, et al. Effect of Cephalexin Plus Trimethoprim-Sulfamethoxazole vs Cephalexin Alone on Clinical Cure of Uncomplicated Cellulitis. JAMA. 2017 May 23; 317(20): 2088-2096.

Pallin DJ, Binder WD, Allen MB, et al. Clinical Trial: Comparative Effectiveness of Cephalexin Plus Trimethoprim-Sulfamethoxazole Versus Cephalexin Alone for Treatment of Uncomplicated Cellulitis: A Randomized Controlled Trial. Clinical Infectious Diseases. 2013 June; 56(12): 1754-1762.

Shuman EK, Malani PN. Empirical MRSA Coverage for Nonpurulent Cellulitis; Swinging the Pendulum Away From Routine Use. JAMA. 2017 May 23/30; 317(20). 2070.

Stevens DL, Bisno AL, Chambers HF, et al. Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. Clinical Infectious Diseases. 2014; 59(2):e10-52.

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