2025 Emergency-Clinical Performance Registry (E-CPR) and Hospital-Clinical Performance Registry (H-CPR) Measure Specifications Manual

Appendix B-E provided upon request

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

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

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: Opioid Management

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

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional in Emergency Department, Urgent Care Clinic, or Outpatient Clinic settings (E/M Codes 99202-99205, 99212-99215, 99281-99285, 99291-99292 AND Place of Service Indicator: 02,10, 11, 19, 20, 22 or 23 or equivalent in standardized code sets) 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, G43.E01, G43.E09, G43.E11, G43.E19
- Disposition of Discharged

Denominator Exclusions: Patients with active cancer or end-of-life care **(V0709)**

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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APPENDIX A. Opioid Medications

Generic	Brand Name
alfentanil	Alfenta®
buprenorphine	Belbuca®, Bunavail, 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, Trezix
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®
levorphanol	Levo-Dromoran
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, Qdolo

Source: Adapted from FDA Approved Risk Evaluation and Mitigation Strategies (REMS) *https://www.accessdata.fda.gov/scripts/cder/rems/index.cfm?event=RemsDetails.page&REMS=17*

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

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 OR equivalent in standardized code sets)

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

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

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: Opioid Management

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 in acute care setting (E/M Codes 99234-99236, 99238-99239, 99281-99285 AND Place of Service indicator 02, 21, 22 or 23 OR equivalent in standardized code sets) 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. According to Jones et. al (2024), only 6.2% of Medicare beneficiaries who experienced an index nonfatal drug overdose received medications for opioid use disorder (MOUD) filled a naloxone prescription in the 12 months after the index overdose, and 17.4% experienced at least 1 subsequent nonfatal drug overdose with 1% dying due to overdose. A significant gap remains.

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

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
  - Droperidol
  - Fluphenazine
  - Haloperidol
  - Loxapine
  - Molindone
  - Perphenazine
  - Pimozide

    - Prochlorperazine
    - Thioridazine
    - Thiothixene
    - Trifluoperazine
- Second Generation Antipsychotics
    - Aripiprazole
    - Asenapine
    - Brexpiprazole (Rexulti)
    - Cariprazine
    - Clozapine
    - Olanzapine
    - Iloperidone
    - Lumateperone
    - Lurasidone
    - Paliperidone
    - Quetiapine
    - Risperidone
    - Ziprasidone

- Combination Antipsychotics
    - Olanzapine-Fluoxetine
    - Olanzapine and samidorphan (Lybalvi)
    - 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 OR equivalent in standardized code sets) 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, F10.150, F10.151, F10.159, F10.250, F10.251, F10.259, F10.950, F10.951, F10.959, F11.150, F11.151 F11.159, F11.250, F11.251, F11.259, F11.950, F11.951, F11.959, F12.150, F12.151, F12.159, F12.250, F12.251, F12.259, F12.950, F12.951, F12.959, F13.150, F13.151, F13.159, F13.250, F13.251, F13.259, F13.950, F13.951, F13.959, F14.150, F14.151, F14.159, F14.250, F14.251, F14.259, F14.950, F14.951, F14.959, F15.150, F15.151, F15.159, F15.250, F15.251, F15.259, F15.950, F15.951, F15.959, F16.150, F16.151, F16.159, F16.250, F16.251, F16.259, F16.950, F16.951, F16.959, F18.150, F18.151, F18.159, F18.250, F18.251, F18.259, F18.950, F18.951, F18.959, F19.150, F19.151, F19.159, F19.250, F19.251, F19.259, F19.950, F19.951, F19.959, 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, F33.3 F53.1
- Eloped or AMA patients are excluded **(V0712)**

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.

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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

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

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: Opioid Management

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 any opiate (see Appendix A for list of opioid medications) 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) • 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)

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, hospice 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 in Emergency Department, Urgent Care Clinic, or Outpatient Clinic settings (E/M Codes 99202-99205, 99212-99215, 99281-99285, 99291-99292 AND Place of Service Indicator: 02, 10, 11, 19, 20, 22 or 23 or equivalent in standardized code sets) PLUS
- Opiate prescribed (VE284) 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 #56

Measure Title: Opioid Withdrawal: Initiation of Medication for Opioid Use Disorder (MOUD) and Referral to Outpatient Opioid Treatment

Inverse Measure: No

Measure Description: Percentage of Patients Presenting with Opioid Withdrawal Who Were Given Medication for Opioid Use Disorder (MOUD) and Referred to Outpatient Opioid Treatment

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

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: Opioid Management

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Were Given Medication for Opioid Use Disorder (MOUD) and, at Time of Discharge to Home or Home Health, Referred to Outpatient Opioid Treatment

- **Performance Met (VE281):** Buprenorphine, Naltrexone 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, or risk for precipitated withdrawal.
- **Performance Not Met (VE283):** Buprenorphine, Naltrexone or Methadone not ordered OR Buprenorphine, Naltrexone 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 evaluated by the Eligible Professional in the Emergency Department, Urgent Care, Clinic, Inpatient, or Observation Status settings (E/M Codes 99234-99236, 99238-99239, 99281-99285, 99291-99292, 99202-99205, 99212-99215 AND Place of Service Indicator: 02, 11, 19, 20, 21, 22, 23 OR equivalent in standardized code sets) 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 2022 National Survey on Drug Use and Health, 6.1 million people in the United States had an opioid use disorder in 2021. 18.3 percent (or 1.1 million people) of those with opioid use disorder, received medications in the past year for their opioid use (SAMHSA, 2023). In 2019, 70,630 people died from overdosing on opioids – that means that more than 193 deaths occurred every day from opioid-related drug overdoses (HHS, 2022).

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. Medications for opioid use disorder(MOUD) with opioid agonist treatment including Buprenorphine, Naltrexone 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.

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

Measure Title: Patient-Reported Understanding of Discharge Diagnosis and Plan of Care

Inverse Measure: No

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

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

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

Telehealth: Yes

Type of Measure: Patient-Reported Outcome-Based Performance Measure (PRO-PM); High Priority

High Priority Type: Patient-Reported Outcome

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 care 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 their care visit

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

"I understood my diagnosis and plan of care" with response options of (D) "No," (C) "Yes, somewhat," (B) "Yes, mostly," and (A) "Yes, strongly agree"

Numerator Options:

- **Performance Met: (VE286)** Patient reported understanding of their discharge diagnosis and plan of care (i.e., A or B on the survey response)
- **Performance Not Met: (VE287)** Patient did NOT report understanding of their discharge diagnosis and plan of care (i.e., C or D on the survey response)

Numerator Exclusions: None

Denominator:

- Any patient ≥18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic PLUS
- Completed a survey regarding their care visit after discharge **(VE285).**
- Disposition of Discharged
- Transferred, eloped, AMA, or expired patients are excluded **(V0704)**

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 acute care settings, 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/readmissions, 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.

E-CPR (Emergency – Clinical Performance Registry) Measure #59

Measure Title: Patient Reported Trust in Provider

Inverse Measure: No

Measure Description: Percentage of Adult Patients Who Completed a Survey Regarding Their Care Visit Who Reported They Would Trust the Doctor/Provider to Care for their Friends/Family

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

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

Telehealth: Yes

Type of Measure: Patient Experience of Care; High Priority

High Priority Type: Patient Experience

Published Clinical Category: Patient Experience

Reporting Measure: Percentage of adult patients who completed a survey regarding their care visit who reported they would trust the doctor/provider to care for their friends/family.

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Reported they would trust the Doctor/Provider to care for their friends/family

Definitions: Trust the Doctor/Provider to care for their friends/family is defined as a response of (A) “Yes, strongly agree” or (B) “Yes, mostly” on the following survey prompt:
“I would trust the doctor/provider to care for my friends/family.” with response options of (D) “No,” (C) “Yes, somewhat,” (B) “Yes, mostly,” and (A) “Yes, strongly agree”

Numerator Options:

- **Performance Met (VE288)**: Patient reported they would trust the doctor/provider to care for their friends/family (i.e., A or B on the survey response)

- **Performance Not Met (VE289)**: Patient did NOT report they would trust the doctor/provider to care for their friends/family (i.e., C or D on the survey response)

Numerator Exclusions: None

Denominator:

- Any patient ≥18 years of age evaluated by the Eligible Professional in Emergency Department, Urgent Care Center, or Inpatient setting PLUS
- Completed a survey regarding their care visit **(VE290).**

Denominator Exclusions: None

Rationale:

Patient experience, in this case trust in their provider, is a high priority for CMS and other organizations. The literature identifies the "attitude" of patient empowerment leads to "behaviors" of patient involvement, patient engagement, and patient participation (Hickmann, Richter, & Schlieter, 2022). Patient engagement thus improves quality of care, the likelihood of achieving treatment results and patient satisfaction (Marzban, Najafi, Agolli, & Ashrafi, 2022). CAHPS is a robust measure including multiple questions targeted to patient experience but does not incorporate trust in the provider. While there are existing patient & physician trust measurement tools, all are robust with 10-51 questions. This measure aims to simplify into a reliable, feasible, valid measurement based on a singular question to quantify trust extending to loved ones. A meta-analysis to identify association between trust and health outcome in various care settings and diagnoses found a "small to moderate correlation between trust and health outcome (r = 0.24, 95% CI: 0.19 to 0.29) based on 47 studies" (Birkhäuer J, 2017) of various trust surveys, demonstrating the measurement of trust has health outcomes.

The purpose of this measure is to obtain direct feedback from patients regarding trust in their providers, by proxy of trust to their loved ones, as a measure of patient engagement.

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E-CPR (Emergency – Clinical Performance Registry) Measure #60

Measure Title: Avoidance of Advanced Imaging for Patients with Unprovoked, Generalized Seizure

Inverse Measure: No

Measure Description: Percentage of patients aged younger than 18 years with diagnosis of seizure that did not have a CT or MRI of the head ordered.

CBE ID: N/A

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

Published Specialty: Emergency Medicine; Urgent Care

Telehealth: No

Type of Measure: Efficiency, High Priority

High Priority Type: Efficiency

Current Clinical Guideline: This measure reflects the best practice cited by the Choosing Wisely Campaign (American Academy of Pediatrics)

Clinical Category: Imaging; Resource Use

Number of Performance Rates: 1

Measures Scoring: Proportional

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Did Not Have Order for CT or MRI of head.

- **Performance Met (VE291):** CT or MRI of head not ordered
- **Medical Performance Exclusion (Denominator Exception) (VE292):** CT or MRI of head ordered and acceptable rationale documented (e.g. new focal seizure, new focal neurologic finding, existing diagnosis of neoplasm/malignancy, coagulopathy, sickle cell disease, trauma)
- **Performance Not Met (VE239):** CT or MRI of head ordered

Denominator:

- Any patient age 18 years or less evaluated by the Eligible Professional in the Emergency Department, Urgent Care Clinic, or Observation Status settings (CPTs: 99202-99205, 99212-99215, 99221-99223, 99231-99233, 99234-992399236, 99281-99285 & 99291-99292 AND Place of Service Indicator: 02, 19, 20, 22, 23 OR equivalent in standardized code sets) PLUS
- Diagnosis of Seizure (See Appendix E)
- Transferred, eloped, AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Rationale:

This measure is adapted from Recommendations for Choosing Wisely in Pediatric Emergency Medicine. Per the recommendation, CT scan findings rarely change acute management of children presenting with unprovoked, generalized seizures or simple febrile seizures with return to baseline mental status. Advanced imaging such as head CT should be limited to patients with new focal seizure, new focal neurologic findings, or high-risk medical history (e.g. neoplasm, stroke, coagulopathy, sickle cell disease, and age. (Mullan 2024)

Per the American Academy of Neurology, The Child Neurology Society, and The American Epilepsy Society Practice Parameter: "Although abnormalities on neuroimaging are seen in up to one third of children with a first seizure, most of these abnormalities do not influence treatment or management decisions such as the need for hospitalization or further studies." They recommend emergent neuroimaging for children with postictal focal deficit that does not resolve quickly and those that have not returned to baseline within several hours after the seizure. (Hirtz 2000)

Selected References:

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H-CPR (Hospitalist – Clinical Performance Registry) Measure #20

Measure Title: Clostridium Difficile – Risk Assessment and Plan of Care

Inverse Measure: No

Measure Description: Percentage of Adult Patients Who Had a Risk Assessment for C. difficile Infection and, If High-Risk, had a Plan of Care for C. difficile Completed on the Day Of or Day After Hospital Admission

Care Setting: Hospital: Inpatient; Hospital

Published Specialty: Critical Care; Hospitalist

Telehealth: Yes

Type of Measure: Process, High Priority

High Priority Type: Patient Safety

Meaningful Measure Area: Healthcare-associated Infections

Current Clinical Guideline: This preventive screening is supported by the CDC, IDSA, SHEA, AHA, and Joint Commission.

Published Clinical Category: C. Diff

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients that had a risk assessment for C. difficile infection and, if high-risk, a plan of care documented on the day of or day after hospital admission

Definitions:

- Risk assessment (e.g., IDSA score, SHEA score, ZAR criteria):
  - Previous C. difficile infection
  - Recent antibiotic use (60-90 days prior to current admission)
  - Recent contact with healthcare facility (60-90 days prior to current admission)
  - Age ≥ 65
  - Recent use of proton pump inhibitor (PPI) or histamine receptor 2 antagonists (H2RA)
  - Diagnosis and procedure history (e.g., IBD, immunosuppression or hemodialysis)
- Plan of Care
  - Contact precautions if diarrhea is present.

- Stool assay
- Initiation of antibiotics if indicated.

Numerator Options:

- **Performance Met (VH260)**: Patients who did have a C. difficile infection risk assessment, AND if high-risk, a plan of care for C. difficile documented on the day of or day after hospital admission.
- **Medical Performance Exclusion (Denominator Exception) (VH261)**: Patients who did not have a C. difficile infection risk assessment, AND if high risk, a plan of care for C. difficile for medical reasons documented by the Eligible Professional (e.g., C. difficile infection already documented prior to hospital admission, patients unable to provide history)
- **Performance Not Met (VH262)**: Patients who did not have a C. difficile infection risk assessment, AND if high risk, a plan of care for C. difficile documented on the day of or day after hospital admission, no reason specified

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional Admitted in the inpatient acute care setting, including intensive care unit (E/M Codes 99221- 99223 99234-99236 & 99291-99292 AND Place of Service Indicator: 02 or 21 OR equivalent in standardized code sets)
- Transferred, eloped or AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Rationale:
Clostridium difficile is recognized as one of the most challenging pathogens in hospital and community healthcare settings, with a steadily rising global incidence of infection and concordant increase in mortality. (Tavetin 2013, LoVechio 2012) The Centers for Disease Control and Prevention (CDC) has assigned *C. difficile* infections (CDI) as an urgent threat because of its association with antibiotic use and high mortality and morbidity. (CDC 2013) Approximately 83,000 of the half a million patients who developed C. difficile in 2011 experienced at least one recurrence, and 29,000 died within 30 days of the initial diagnosis (CDC 2013). Hospitalized CDI patients have a 2.5 times increased 30-day mortality rate compared to in-patients without diarrhea; the CDI-related mortality is approximately 10%. (CDC 2013)

C. difficile infections can be prevented by using infection control recommendations and more careful antibiotic use. Numerous guidelines from the Centers for Disease Control and Prevention (CDC), the Infectious Diseases Society of America (IDSA), the Society for Healthcare Epidemiology of America (SHEA), the American Hospital Association (AHA), European Society of Clinical Microbiology and Infectious Diseases (ESCMID), and the Joint Commission recommend risk assessment of hospitalized patients to guide prevention and treatment. (Dubberke 2014, Cohen 2010, Bauer 2009). Multiple risk assessment tools have been developed (Cohen 2010, Tabak 2015, Kuntz 2016, Smith 2014) and different hospitals implement these assessments according to local protocols. Key risk factors identified in these assessment tools include previous CDI, recent contact with a healthcare facility, recent antibiotic use, immune status, and stomach acid reducing medications.

In the United States, the proportion of hospital discharges in which a patient received a discharge diagnosis for CDI more than doubled between 2000 and 2009. (Lucado 2012) Approximately 96% of patients with symptomatic C. difficile infection had received antimicrobials within the 14 days before the onset of diarrhea

and that all had received an antimicrobial within the previous 3 months. (Olson 1994) There is an increased risk of CDI that can persist for many weeks after cessation of antimicrobial therapy and which results from prolonged perturbation of the normal intestinal flora. (Anand 1994) Evidence also suggests that CDI resulting from exposure to C. difficile in a healthcare facility can have onset after discharge. (Palmore 2005, Chang 2006, Mayfield 2006). Advanced age is also an important risk factor for CDI, as evidenced by the several fold higher age-adjusted rate of CDI among persons more than 64 years of age. (McDonald 2006, Pepin 2004). Immunosuppression (chemotherapy, HIV, etc) is another risk factor for CDI. (Bilgrami 1999, Gorshulter 2001, Sanchez 2005) Epidemiologic associations with CDI have also been found for acid-suppressing medications such as histamine-2 blockers (HR2A) and proton pump inhibitors (PPI). (Dial 2005, Cunningham 2003, Dial 2004).

The CDC, IDSA, and SHEA currently recommend placing patients with diarrhea under contact precautions while C. difficile testing is pending. To decrease transmission, it is essential to place symptomatic patients under contact precautions as soon as diarrhea symptoms are recognized, as this is the period of greatest C. difficile shedding and
Contamination (Sethi 2010, Dubberke 2014) Contact precautions should remain in place for the duration of CDI illness when caring for patients with CDI, and some experts recommend continuing contact precautions for at least 48 hours after diarrhea resolves. (Sethi 2010). Assuring that patients with CDI are receiving appropriate severity-based treatment for their infection should be an additional goal for antimicrobial stewardship programs and may improve clinical outcome of CDI in these patients. (Dubberke 2014).

Despite recent CDI infection and control efforts, CDI remains at historically high rates. (Dubberke 2014) The CDC's *2021 Annual Report for the Emerging Infections Program for Clostridium difficile Infection* reported the incidence of healthcare associated CDI to be 54.3 per 100,000, community acquired to be 55.9 per 100,000, and the overall incidence rate to be 110.2 per 100,000. (CDC 2023) Multiple states have reported increased rates of C. difficile infection and mortality, noting more severe disease that is more virulent, and more resistant to traditional antibiotics for treatment. (CDC 2017 Fact Sheet)

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H-CPR (Hospitalist – Clinical Performance Registry) Measure #23

Measure Title: Avoidance of Echocardiogram and Carotid Ultrasound for Syncope

Inverse Measure: No

Measure Description: Percentage of Patients Presenting with Syncope Who Did Not Have an Echocardiogram or Carotid Ultrasound Ordered

Care Setting: Hospital: Inpatient; Hospital

Published Specialty: Hospitalist; Internal Medicine; Critical Care

Telehealth: Yes

Type of Measure: Process, High Priority

High Priority Type: Appropriate Use

Meaningful Measure Area: Appropriate Use of Healthcare

Current Clinical Guideline: American College of Cardiology, American Heart Association, European Society of Cardiology

Published Clinical Category: Syncope

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients That Did NOT Have an Echocardiogram or Carotid Ultrasound Ordered

- Performance Met **(VH268):** Echocardiogram AND Carotid Ultrasound NOT ordered.
- Medical Performance Exclusion (Denominator Exception) **(VH269)**: Echocardiogram or Carotid Ultrasound ordered with documentation of 1) cardiac etiology of syncope suspected or determined (i.e., abnormal cardiac exam (new murmur, bruit), abnormal EKG, cardiac dysrhythmia, abnormal cardiac biomarkers, chest pain, shortness of breath, known heart disease, known or suspected structural heart disease) OR 2) neurologic etiology of syncope suspected or determined (i.e., abnormal neurologic exam, focal neurologic deficit)
- Performance Not Met **(VH270)**: Echocardiogram and/or Carotid Ultrasound ordered.

Numerator Exclusions: None

Denominator:

- Any patient ≥ 18 years of age evaluated by the Eligible Professional Admitted in the inpatient acute care setting (E/M Codes 99221- 99223, 99231-99233, 99234-99236 & 99291-99292 AND Place of Service Indicator: 02 or 21 OR equivalent in standardized code sets) PLUS
- Admitted or Placed in Observation Status **(V0717)** PLUS
- Diagnosis of Syncope
    - ICD-10: R55
- Transferred, eloped, AMA or expired patients are excluded **(V0704)**

Denominator Exclusions: None

Rationale:
Syncope, defined as a transient loss of consciousness with rapid spontaneous recovery, is a common condition for which patients seek medical attention. It accounts for up to 6% of all hospital admissions. Given the broad range of causes (neurologic, vascular, metabolic, cardiac, psychologic, etc.) for syncope, clinicians may pursue many different diagnostic tests as part of their evaluation. Several studies have shown that many of these tests, including routine use of echocardiography and carotid ultrasonography, can be unnecessary and unlikely to contribute to the etiologic diagnosis and management of syncope. In a study of 2106 patients who received a battery of diagnostic testing during admission following a syncope episode, only 2% of echocardiograms performed revealed findings that contributed to the syncopal episode. An even smaller percentage of performed carotid ultrasounds affected the diagnosis or helped to determine the etiology of syncope. (Mendu) Another retrospective review of 128 patients admitted for syncope found that "for patients without suspected cardiac disease after history, physical examination, and electrocardiography, the echocardiogram did not appear to provide additional useful information." (Recchia) Another study of 1038 patient records coded as "syncope" revealed that only 0.94% of performed echocardiograms and 0% of performed carotid ultrasounds helped to establish the cause of syncope. (Johnson)

Per the 2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients with Syncope, "routine cardiac imaging [transthoracic echocardiography] is not useful in the evaluation of patients with syncope unless cardiac etiology is suspected on the basis of an initial evaluation, including history, physical examination, or ECG." Also, carotid artery imaging is not recommended in the routine evaluation of patients with syncope in the absence of focal neurological findings that support further evaluation. "The evidence suggests that routine neurologic testing [including carotid ultrasound] is of very limited value in the context of syncope evaluation and management; the diagnostic yield is low, with very high cost per diagnosis." (Shen)

According to the 2018 European Society of Cardiology (ESC) Guidelines for the Diagnosis and Management of Syncope, echocardiogram is only indicated if there is previous known heart disease or data suggestive of structural heart disease or syncope secondary to cardiovascular cause. (Brignole)

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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

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, MIPS Value Pathway (MVP)

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)
- 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 99221-23, 99234-36, 99281-85, 99291-92 AND Place of Service indicators 02, 19, 21, 22, or 23 OR equivalent in standardized code sets) 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 **(V0704)**

Denominator Exclusions: None

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:

1. 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.
2. 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.
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4. 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.
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H-CPR (Hospitalist – Clinical Performance Registry) Measure #25

Referenced Society of Post-Acute and Long-Term Care Medicine's Policy D-14: Promotion of Physician's Orders for Life-Sustaining Treatment Paradigm and the Institute of Medicine of the National Academies: Key Recommendations on Addressing End of Life

Measure Title: Physician's Orders for Life-Sustaining Treatment (POLST) Form

Inverse Measure: No

Measure Description: Percentage of Patients with Advanced Illness with Physician's Orders for Life-Sustaining Treatment (POLST) Forms Completed.

Care Setting: Emergency Department; Hospital; Hospital Outpatient; Hospital Inpatient; Post-Acute Care

Published Specialty: Emergency Medicine; Hospitalist; Internal Medicine; Post-Acute Care; Palliative Care

Telehealth?: Yes

Type of Measure: Process, High Priority

High Priority Type: Care Coordination

Meaningful Measure Area: End of Life Care According to Preferences

Current Clinical Guideline: AMDA (The Society of Post-Acute and Long-Term Care Medicine) and the Institute of Medicine (IOM) of the National Academies support and promote the Physician's Orders for Life-Sustaining Treatment Paradigm

Published Clinical Category: End of Life Care

Number of Performance Rates: 1

Measure Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients with a completed Physician's Orders for Life-Sustaining Treatment (POLST) form

Definitions:

- Physician's Orders for Life-Sustaining Treatment (POLST) form is defined as a legally recognized, transportable and actionable medical order – intended for seriously ill patients at high risk for mortality – that remains with the patient whether at home, in the hospital, or in a care facility; the form indicates patient-specified medical treatment preferences and is signed by the authorizing physician, physician assistant (PA), or nurse practitioner (NP)
- The following elements must be present and completed in the Physician's Orders for Life-Sustaining

Treatment (POLST) form:
  - Legally recognized decision maker verification
  - Cardiopulmonary Resuscitation (CPR) preferences (e.g., attempt CPR, DNR)
  - Medical Intervention (e.g., full code, comfort measures, limited/selective treatments)
  - Signed by eligible healthcare provider (e.g., physician, PA, or NP)
- NOTE: The approved version and title of the Physician's Orders for Life-Sustaining Treatment (POLST) form may differ slightly from state to state; variations in forms are acceptable as long as the elements listed above are present

Numerator Options
- Performance Met **(VH254)**:
  - Existing Physician's Orders for Life-Sustaining Treatment (POLST) form was acknowledged and documented in the medical record OR
  - Physician's Orders for Life-Sustaining Treatment (POLST) form was completed or updated and documented in the medical record OR
  - Documented reason for not acknowledging, completing or updating Physician's Orders for Life-Sustaining Treatment (POLST) form (e.g., patient refuses, patient is unresponsive or does not have capacity to complete, legally recognized decision maker is not present, patient NOT frail despite advanced illness)
- Performance Not Met **(VH255)**: Physician's Orders for Life-Sustaining Treatment (POLST) form was not acknowledged, completed or updated, reason not specified.

Numerator Exclusions: None

Denominator:
- All patients evaluated by the Eligible Professional in Emergency Services, Inpatient, or Post-Acute Care setting (E/M Codes 99221-99223, 99231-99233, 99234-99236, 99238-99239, 99291-99292, 99304-99310, 99315, 99316 AND Place of Service indicators 02, 10, 19, 21, 22, 23, 31 or 32 OR equivalent in standardized code sets) AND
- Diagnosis of Advanced Illness (see Appendix C for full list)
- NOTE: This measure is to be submitted a minimum of once per hospitalization for patients seen during the performance period.

Denominator Exclusions: None

Rationale:
For patients and their family caregivers, control over treatment decisions is a high priority with an illness diagnosed as serious and life-limiting. (Singer et al, 1999) The Physician Orders for Life-Sustaining Treatments (POLST) form is designed to supplement and build upon advanced care planning and advanced directives. POLST is a process, a conversation and a form; "honoring the wishes of those with serious illness and frailty." (Vandenbroucke et al., 2022). Unlike advanced directives, which are often generalized and require intermediaries on the patient's behalf (Bomba et al, 2012), the POLST form allows patients to clearly communicate their wishes regarding medical treatment and ensure that those wishes are honored across the care continuum by codifying their advanced directives as portable medical orders. Clinicians are able to focus on treatments desired by patients and avoid treatments that are unwanted by patients. These legally

recognized, HIPAA-compliant forms follow the patients wherever they go (e.g., home, skilled nursing facility, acute care facility), and are intended to be completed for patients who are **seriously ill** and unlikely to recover (Moss et al., 2008). The POLST form includes key preferences (e.g., DNR status) that can be missed during patient transfers between facilities. The use of the POLST form prevents unwanted hospitalizations, readmissions and invasive medical procedures for patients who are near death. (Lee et al, 2000) AMDA (The Society of Post-Acute and Long-Term Care Medicine) and the Institute of Medicine (IOM) of the National Academies support and promote the Physician's Orders for Life-Sustaining Treatment Paradigm.

In a recent study, POLST completion was 49% in CA nursing home residents, identifying potential opportunity for quality improvement (Jennings).

References:

- AMDA – The Society for Post-Acute and Long-Term Care Medicine. Policy D-14: PHYSICIAN ORDERS FOR LIFE-SUSTAINING TREATMENT (POLST). https://paltc.org/policies/d14-physician-orders-life-sustaining-treatment-polst. Accessed June 20 2024.
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- Institute of Medicine (IOM) of the National Academies – Committee on Approaching Death: Addressing Key End of Life Issues. (2014) Key findings and recommendations. Dying in America: Improving quality and honoring individual preferences near the end of life. The National Academies Press. http://www.nationalacademies.org/hmd/~/media/Files/Report%20Files/2014/EOL/Key%20Findings%20and%20Recommendations.pdf Accessed: January 6 2017.
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H-CPR (Hospitalist – Clinical Performance Registry) Measure #27

Measure Title: Point-of-Care Ultrasound: Evaluation for Pneumothorax after Central Venous Catheter (CVC) Placement

Inverse Measure: No

Measure Description: Percentage of patients aged 18 years and older who undergo central venous catheter (CVC) insertion for whom Point-of-Care Ultrasound was performed to evaluate for pneumothorax.

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

Published Specialty: Critical Care, Emergency Medicine

Telehealth: No

Type of Measure: Process, High Priority

High Priority Type: Patient Safety

Current Clinical Guideline: Soldati, et al. (2008) demonstrated that lung ultrasound has accuracy of pneumothorax detection almost as high as that of CT scan, which is the gold standard test. Furthermore, the time to detection of pneumothorax has been demonstrated to be significantly shorter with US compared to CXR.

Published Clinical Category: Preventable Healthcare Harm

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Received Point-of-Care Ultrasound Evaluation for Pneumothorax after CVC Placement.

- **Performance Met (VH273):** Point-of-Care Ultrasound evaluation for Pneumothorax performed.
- **Medical Performance Exclusion (Denominator Exception) (VH274):** Documented medical reason for not performing Point-of-Care Ultrasound (e.g. no ultrasound machine available, patient refusal)
- **Performance Not Met (VH275):** Point-of-Care Ultrasound evaluation for pneumothorax not performed.

Denominator:

- Any patient greater than or equal to 18 years of age who undergoes CVC insertion (limited to internal jugular or subclavian lines) by the Eligible Professional in Emergency Department or Intensive Care Unit Settings (CPTs 36555-36596 AND Place of Service Indicator: 02, 21 or 23 OR equivalent in standardized code sets).
- Transferred, eloped, AMA, or expired patients are excluded **(V0704)**

Denominator Exclusions: None

Rationale:

Central venous catheter (CVC) placement is a procedure frequently performed in the Emergency Department (ED) and Intensive Care Unit (ICU) amongst other locations in the hospital. Patients undergoing this procedure are often critically ill, and they require timely interventions and treatment. Pneumothorax is a potentially life-threatening complication of CVC placement. Point-of-Care Ultrasound (POCUS) provides a quick and reliable modality for assessing for this complication, but is **not** meant to replace chest x-ray to confirm placement of the central line. Ultrasound, which is often used to guide placement of the CVC can be readily accessible and can thus reduce the time necessary to identify this complication as opposed to waiting for other imaging modalities such as chest x-ray or CT scan.

Lung ultrasound has been identified as a reliable modality for detecting pneumothorax.[1-5] It has been shown to have greater sensitivity than supine chest x-ray for detecting traumatic pneumothorax.[1,5,6] Soldati, et al. demonstrated that lung ultrasound has accuracy of pneumothorax detection almost as high as that of CT scan, which is the gold standard test.[5] Ultrasound has also been shown to allow differentiation between small, medium and large pneumothoraces with good agreement with CT results.[1] In addition, the time to detection of pneumothorax has been demonstrated to be significantly shorter with US compared to CXR (2.3 +/- 2.9 versus 19.9 +/- 10.3 minutes).[6]

Lung ultrasound is a quick and reliable modality for detecting pneumothorax and should be performed after CVC placement to ensure patient safety.

Selected References:

1. Blaivas M, Lyon M, Duggal S. A prospective comparison of supine chest radiography and bedside ultrasound for the diagnosis of traumatic pneumothorax. *Acad Emerg Med.* 2005;12:844–9.
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H-CPR (Hospitalist – Clinical Performance Registry) Measure #28

Measure Title: Heart Failure (HF): SGLT-2 Inhibitor Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Inverse Measure: No

Measure Description: Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) less than or equal to 40% who were prescribed SGLT-2 Inhibitors during their SNF stay or at the time of discharge.

Care Setting: Hospital; Hospital Inpatient; Post Acute Care

Published Specialty: Hospitalist; Critical Care; Post Acute Care; Family Medicine; Internal Medicine

Telehealth: Yes

Type of Measure: Process

Current Clinical Guidelines: American Heart Association, American College of Cardiology, and the Heart Failure Society of America guidelines for the management of heart failure.

Published Clinical Category: CHF

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Adult patients Who Were Prescribed or Currently Taking SGLT-2 Inhibitor Therapy During SNF Stay or at Time of Hospital Discharge

- **Performance Met (VH275):** SGLT-2 Inhibitor was prescribed or being taken
- **Medical Performance Exclusion (Denominator Exception) (VH276):** Documented medical reason for not prescribing SGLT-2 Inhibitor (e.g., hypoglycemia, allergy intolerance, fungal infection, renal failure, current UTI, LVEF not available)
- **Performance Not Met (VH277):** SGLT-2 Inhibitor was neither prescribed nor active - Reason not given

Note: The numerator action applies per performance year. Once an SGLT-2 inhibitor has been identified as either a current medication, or is ordered, subsequent visits within the performance year do not need to be repeated to meet the measure. The evaluation of the numerator can be done anytime during the hospitalization or SNF stay, however certain CPT codes may only be applicable to discharge encounters.

Denominator:

- Any patient aged 18 years or older evaluated by the Eligible Professional in Inpatient or Post-Acute Care setting (E/M Codes 99238, 99239, 99234-99236, 99304-99310, 99315, 99316 and Place of Service indicators 02, 21 or 31 OR equivalent in standardized code sets)

AND

- Diagnosis for heart failure (ICD-10-CM): I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9

AND

- Left ventricular ejection fraction (LVEF) less than or equal to 40% or documentation of moderately or severely depressed left ventricular systolic function: M1150

DENOMINATOR NOTE: LVEF ≤ 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram:
1) that provides a numerical value of LVSD or
2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD. To meet the denominator criteria, a patient must have an active diagnosis of with HFrEF with or without Type 2 Diabetes encounter which is used to qualify for the denominator and evaluate the numerator. The encounter used to evaluate the numerator counts as 1 of the 2 encounters required for denominator inclusion. If the patient meets the HFrEF with or without Type 2 Diabetes diagnosis criterion, the diagnosis needs to be active only at the encounter being evaluated for the numerator action.

*Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS) can be used to identify patients

Denominator Exclusions:

- Transferred, eloped, AMA, or expired patients are excluded **(V0704)**
- Discharged to hospice
- Patients with history of heart transplant or with a Left Ventricular Assist Device (LVAD) (M1151)
- Diabetic Ketoacidosis (DKA) - refer to Exclusion List A on Appendix D
- Type 1 diabetes - refer to Exclusion List B on Appendix D

Rationale:

Recent studies have shown that a new class of medication, SGLT-2 inhibitors, have been associated with markedly improved outcomes for heart failure patients, lowering rates of both mortality and hospitalization. Thus, in 2022, the American Heart Association, American College of Cardiology, and the Heart Failure Society of America published an updated guideline for the management of heart failure. In this guideline, the guideline-directed medical therapy (GDMT) for heart failure with reduced ejection fraction (HFrEF) was

updated to include four medication classes, including sodium-glucose cotransporter-2 (SGLT-2) inhibitors (Heidenreich 2022) as well as Renin-Angiotensin System Inhibition with ACEi or ARB or ARNi and Beta Blockers addressed and measured in existing CQMs.

Per the guideline, patients with type 2 diabetes and either established cardiovascular disease or at high risk for cardiovascular disease should be treated with a SGLT-2 inhibitor to prevent HF-related hospitalizations (Class of Recommendation 1). This recommendation was based on the results of three clinical trials: CANVAS Program, DECLARE-TIMI 58, and EMPA-REG OUTCOME. The CANVAS Program demonstrated that treatment with the SGLT-2 inhibitor canagliflozin was associated with a significantly lower risk of cardiovascular events (composite of death from cardiovascular causes, nonfatal myocardial infarction, or nonfatal stroke) compared with placebo. HF-related hospitalizations were also reduced in the canagliflozin treatment group (Neal 2017). The DECLARE-TIMI 58 trial showed that the rate of hospitalization for HF was significantly reduced in patients treated with the SGLT-2 inhibitor dapagliflozin compared with those treated with placebo (Wiviott 2019). The EMPA-REG OUTCOME trial compared patients treated with the SGLT-2 inhibitor empagliflozin and those treated with placebo. In the empagliflozin treatment group, there were significantly lower rates of death from cardiovascular causes, hospitalization for heart failure, and death from any cause (Zinman 2015).

SGLT-2 inhibitors are also recommended for the reduction of HF-related hospitalization and cardiovascular mortality in patients with symptomatic chronic HFrEF, irrespective of the presence of T2D (Class of Recommendation 1). This recommendation was supported by the results from the following clinical trials: DEFINE-HF, DAPA-HF, and EMPEROR-Reduced. The DEFINE-HF trial evaluated patients with HFrEF and found clinically meaningful improvements in HF-related health status in patients treated with the SGLT-2 inhibitor dapagliflozin compared with those treated with placebo. These benefits extended to patients without type 2 diabetes (Nassif 2019). The DAPA-HF trial also evaluated patients with HFrEF. The primary outcomes of worsening HF and cardiovascular death were significantly reduced in patients treated with dapagliflozin compared to those treated with placebo. These benefits were observed regardless of the presence or absence of diabetes (McMurray 2019). The EMPEROR-Reduced trial demonstrated a significant reduction in the primary outcomes of cardiovascular death or hospitalization for HF in patients treated with empagliflozin compared to those treated with placebo. These benefits were again demonstrated regardless of the presence or absence of diabetes (Packer 2020).

Selected References:

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4. Neal B, Perkovic V, Mahaffey KW, et al. Canaglifozin and Cardiovascular and Renal Events in Type 2 Diabetes. N Engl J Med. 2017; 377:644-657
5. Packer M, Anker SD, Butler J, et al. Cardiovascular and Renal Outcomes with Empagliflozin in Heart Failure. N Engl J Med. 2020; 383:1413-1424
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7. Zinman B, Wanner C, Lachin JM, et al. Empagliflozin, Cardiovascular Outcomes, and Mortality in Type 2 Diabetes. N Engl J Med. 2015; 373:2117-2128

H-CPR (Hospitalist – Clinical Performance Registry) Measure #29

Measure Title: Avoidance of DVT Ultrasound for Patients Diagnosed with Cellulitis

Inverse Measure: No

Measure Description: Percentage of patients aged 18 years and older with diagnosis of cellulitis that did not have a DVT ultrasound ordered.

CBE ID: N/A

Care Setting: Hospital; Hospital Inpatient

Published Specialty: Hospitalist, Critical Care, Internal Medicine

Telehealth: No

Type of Measure: Process, High Priority

High Priority Type: Appropriate Use

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

Published Clinical Category: Cellulitis; Resource Use

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Did Not Have Order for DVT Ultrasound.

- **Performance Met (VH279):** DVT ultrasound not ordered
- **Medical Performance Exclusion (Denominator Exception) (VH280):** DVT ultrasound ordered AND acceptable rationale for ordering DVT documented (e.g. history of venous thromboembolism (DVT, PE); risk factors for thromboembolic disease (immobility, thrombophilia, trauma, recent surgery); CHF; CVA; failure of improvement with antibiotics)
- **Performance Not Met (VH281):** DVT ultrasound ordered; acceptable rationale not documented

Denominator:

- Any patient greater than or equal to 18 years of age evaluated by the Eligible Professional in the inpatient acute care setting (E/M Codes 99221- 99223, 99231-99233, 99234-99236 & 99291-99292 AND Place of Service Indicator: 02 or 21 OR equivalent in standardized code sets) PLUS

- Admitted or Placed in Observation Status **(V0717)** PLUS
- Diagnosis of Cellulitis: 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
- Transferred, eloped, AMA patients are excluded (V0700)

Denominator Exclusions: None

Rationale:

This measure is adapted from the Choosing Wisely campaign series - "Things We Do for No Reason." It states that routine ultrasound testing is not necessary for most patients diagnosed with cellulitis. Ultrasound should be reserved for patients with history of thromboembolism (VTE), immobility, thrombophilia, CHF, CVA with hemiparesis, trauma, recent surgery, lack of improvement of symptoms with antibiotics. (Cho 2017)

Despite high utilization of DVT ultrasound for patients diagnosed with cellulitis (with incidence cited as high as 73% of cases), the incidence of concurrent DVT with cellulitis is low. (Gunderson 2014). A meta-analysis of 9 studies that reported groups of patients with cellulitis or erysipelas who had compression ultrasound to evaluate for DVT found that the pooled incidence of DVT was low at 2.1% for proximal DVT and 3.1% for any DVT. (Gunderson 2013) Another study that retrospectively reviewed over 1500 cases of lower limb cellulitis found that 16% of cases had a DVT ultrasound performed but only 1.3% were found to have a DVT. Of the 1.3% with DVT, each case had a known risk factor for venous thromboembolism. (Maze 2011)

Selected References:

1. Cho HJ, Dunn AS. The Value of Using Ultrasound to Rule Out Deep Vein Thrombosis in Cases of Cellulitis. J Hosp Med. 2017 Apr;12(4):259-261. doi: 10.12788/jhm.2719. PMID: 28411296.

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3. Gunderson CG, Chang JJ. Overuse of compression ultrasound for patients with lower extremity cellulitis. Thromb Res. 2014 Oct;134(4):846-50. doi: 10.1016/j.thromres.2014.08.002. Epub 2014 Aug 15. PMID: 25179516.

4. Maze MJ, Pithie A, Dawes T, Chambers ST. An audit of venous duplex ultrasonography in patients with lower limb cellulitis. N Z Med J. 2011 Feb 11;124(1329):53-6. PMID: 21475360.

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H-CPR (Hospitalist – Clinical Performance Registry) Measure #30

Measure Title: Avoidance of Sliding-Scale Insulin Monotherapy for Admitted Diabetic Patients

Inverse Measure: No

Measure Description: Percentage of patients aged 18 years and older admitted to the hospital with diagnosis of diabetes mellitus that received order for basal insulin therapy.

CBE ID: N/A

Care Setting: Hospital; Hospital Inpatient

Published Specialty: Hospitalist; Critical Care; Internal Medicine

Telehealth: Yes

Type of Measure: Process

Meaningful Measures Area: Preventable Healthcare Harm

Current Clinical Guidelines: This measure reflects the best practice cited by the Choosing Wisely Campaign (American Board of Internal Medicine Foundation), as well as American Association of Clinical Endocrinologists and American Diabetes Association Consensus Statement on Inpatient Glycemic Control

Published Clinical Category: Diabetes Care

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients Who Received Order for Basal Insulin Therapy.

- **Performance Met (VH276):** Basal insulin order placed
- **Medical Performance Exclusion (Denominator Exception) (VH277):** Allergy, patient refusal, NPO status, hypoglycemia, diabetic ketoacidosis (DKA), bariatric surgery, patients with order for insulin drip or patients not on insulin therapy prior to admission
- **Performance Not Met (VH278):** Basal insulin order NOT placed

Denominator:

- Any patient greater than or equal to 18 years of age evaluated by the Eligible Professional and Admitted in the inpatient acute care setting (E/M Codes 99221- 99223, 99231-99233, 99234-99236

& 99291-99292 AND Place of Service Indicator: 02 or 21 OR equivalent in standardized code sets) PLUS

- Diagnosis of Diabetes : E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1, E13.37X2, E13.37X3, E13.37X9, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, O24.113, O24.119, O24.12, O24.13, O24.311, O24.312, O24.313, O24.319, O24.32, O24.33, O24.811, O24.812, O24.813, O24.819, O24.82, O24.83
- Transferred, eloped, AMA patients are excluded **(V0700)**

Denominator Exclusions: None

Rationale:

This measure is adapted from the Choosing Wisely campaign series - “Things We Do for No Reason.” Evidence suggests that sliding scale insulin should not be utilized as monotherapy for diabetic patients admitted to the hospital. Sliding scale insulin does not reflect normal pancreatic physiology, which requires basal insulin to control inter-prandial and nocturnal hyperglycemia. (Ambrus 2018) Sliding scale insulin monotherapy has not been shown to prevent hyperglycemia in hospitalized patients. (Browning 2004) A study also showed that it failed to correct hyperglycemia in 84% of administered doses. (Golightly 2006)

The RABBIT-2 trial highlighted the benefits of a basal-bolus insulin regimen over SSI therapy alone in non-critically ill, hospitalized patients. It was a prospective, multicenter, randomized trial that compared a weight-

based regimen of basal and prandial insulin versus sliding scale insulin alone. The basal and prandial insulin group showed improved glycemic control (66%) compared to the sliding-scale insulin only group (38%). There was no difference in the rates of hypoglycemia or length of stay between the two groups. (Umpierrez 2007) A similar study was performed for surgical patients and also found improved glycemic control with a basal-bolus insulin regimen compared to SSI alone. (Umpierrez 2011)

The American Association of Clinical Endocrinologists and American Diabetes Association Consensus Statement on Inpatient Glycemic Control states that: "Prolonged therapy with SSI as the sole regimen is ineffective in the majority of patients (and potentially dangerous in those with type 1 diabetes)." They recommend a combination of basal, nutritional, and correctional insulin for inpatient subcutaneous insulin regimens. (Moghissi 2009)

Selected References:

1. Ambrus DB, O'Connor MJ. Things We Do For No Reason: Sliding-Scale Insulin as Monotherapy for Glycemic Control in Hospitalized Patients. J Hosp Med. 2019 Feb 1;14(2):114-116. doi: 10.12788/jhm.3109. Epub 2018 Nov 28. PMID: 30534639.

2. Browning LA, Dumo P. Sliding-scale insulin: an antiquated approach to glycemic control in hospitalized patients. Am J Health Syst Pharm. 2004;61(15):1611-1614.

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5. Umpierrez GE, Smiley D, Zisman A, Prieto LM, Palacio A, Ceron M, Puig A, Mejia R. Randomized study of basal-bolus insulin therapy in the inpatient management of patients with type 2 diabetes (RABBIT 2 trial). Diabetes Care. 2007 Sep;30(9):2181-6. doi: 10.2337/dc07-0295. Epub 2007 May 18. PMID: 17513708.

6. Umpierrez GE, Smiley D, Jacobs S, Peng L, Temponi A, Mulligan P, Umpierrez D, Newton C, Olson D, Rizzo M. Randomized study of basal-bolus insulin therapy in the inpatient management of patients with type 2 diabetes undergoing general surgery (RABBIT 2 surgery). Diabetes Care. 2011 Feb;34(2):256-61. doi: 10.2337/dc10-1407. Epub 2011 Jan 12. PMID: 21228246; PMCID: PMC3024330.

H-CPR (Hospitalist – Clinical Performance Registry) Measure #31

Measure Title: Point-of-Care Ultrasound for Evaluation and Management of Shock

Inverse Measure: No

Measure Description: Percentage of patients aged 18 years and older with diagnosis of Shock that had Point-of-Care Ultrasound performed.

CBE ID: N/A

Care Setting: Emergency Department; Hospital; Hospital Inpatient; Hospital Outpatient

Published Specialty: Critical Care, Emergency Medicine

Telehealth: No

Type of Measure: Process, High Priority

High Priority, Meaningful Measures Area: Patient Safety

Current Clinical Guideline: The POCUS evaluation of IVC collapsibility has specifically been shown to help guide resuscitation by distinguishing fluid responsiveness of patients. (Corl 2017)

Published Clinical Category: Critical Care (general); Patient Safety

Number of Performance Rates: 1

Measures Scoring: Proportion

Risk Adjustment: No

Submission Pathway: Traditional MIPS

Numerator: Patients that Received a Point-of-Care Ultrasound for Evaluation and Management of Shock.

- **Performance Met (VH282):** Point-of-Care Ultrasound evaluation performed
  - POCUS study may include but is not limited to cardiac echo (including IVC view) or RUSH (Rapid Ultrasound for Shock and Hypotension) exam.
- **Medical Performance Exclusion (Denominator Exception) (VH283):** Documented medical reason for not performing Point-of-Care Ultrasound (e.g. no ultrasound machine available, patient refusal).
- **Performance Not Met (VH284):** Point-of-Care Ultrasound evaluation not performed.

Denominator:

- Any patient greater than or equal to 18 years of age evaluated by the Eligible Professional in Emergency Department or Intensive Care Unit Settings (E/M Codes 99221- 99223, 99234-99236, 99281-99285 & 99291-99292 AND Place of Service Indicator: 02, 21 or 23 OR equivalent in standardized code sets) PLUS
- Diagnosis of Shock
    - O0331; O0381; O0481; O0731; O083; O751; R570; R571; R578; R579; R6521; T782XXA; T782XXD; T782XXS; T794XXA; T794XXD; T794XXS; T8110XA ; T8110XD ; T8110XS ; T8111XA; T8111XD; T8111XS; T8112XA ; T8112XD ; T8112XS ; T8119XA ; T8119XD ; T8119XS

Denominator Exclusions: Transferred, eloped, AMA patients are excluded **(V0700)**

Rationale:

Circulatory failure is a life-threatening condition and should be diagnosed and treated early. It can manifest as shock, which is when cellular death and organ dysfunction occur as a result of hypoperfusion. Shock is classified as Distributive, Hypovolemic, Cardiogenic, or Obstructive. Differentiation of shock is important as the treatment differs for each classification.

Point-of-Care Ultrasound (POCUS) has emerged as a bedside tool to aid in the rapid diagnosis and treatment of shock. Commonly used studies include echocardiography and the RUSH (Rapid Ultrasound for Shock and Hypotension) exam. A POCUS echocardiogram typically requires acquisition of the following views: parasternal long-axis and short-axis, apical four-chamber, subcostal four-chamber, and inferior vena cava (IVC) views. These views allow for evaluation of causes of shock such as pericardial effusion, tamponade, right ventricular strain, impaired cardiac contractility, and volume depletion and responsiveness. The RUSH exam was described as early as 2006 and consists of a multi-system evaluation including the Heart, IVC, Morison's Pouch (evaluation for peritoneal free fluid), Aorta (evaluation for aortic aneurysm), and lungs (evaluation for pneumothorax). (Perera 2010)

Critical Care Echocardiography (CCE) has gained wider acceptance by the critical care community as a diagnostic and hemodynamic monitoring tool. (Vieillard-Baron 2019) The POCUS evaluation of IVC collapsibility has specifically been shown to help guide resuscitation by distinguishing fluid responsiveness of patients. (Corl 2017)

Yoshida, et al. published a systemic review and meta-analysis in 2023 to evaluate the diagnostic accuracy of POCUS in identifying the etiology of shock. The analysis found that the identification of the etiology of shock by POCUS was characterized by high specificity and positive likelihood ratios for all types of shock, particularly obstructive shock. (Yoshida 2023) This study showed similar results to a prior meta-analysis performed by Stickles, et al., which also showed the highest positive likelihood ratios for obstructive shock when using the POCUS RUSH exam. (Stickles 2019) Diagnosing obstructive shock and its etiology (e.g. tension pneumothorax, severe pulmonary embolism, cardiac tamponade) can lead to rapid intervention and life-saving treatment in a critically ill patient.

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