

**HOSPITAL OUTPATIENT DEPARTMENT QUALITY MEASURES
Pain Management**

Set Measure ID #	Measure Short Name
OP-21	Median Time to Pain Management for Long Bone Fracture

OP PAIN MANAGEMENT GENERAL DATA ELEMENT LIST

General Data Element Name	Collected For:
<i>Arrival Time</i>	All Records
<i>Birthdate</i>	All Records
<i>CMS Certification Number^{1,2}</i>	All Records
<i>First Name</i>	All Records
<i>Hispanic Ethnicity</i>	All Records
<i>Last Name</i>	All Records
<i>National Provider Identifier^{1,2}</i>	Optional for All Records
<i>Outpatient Encounter Date</i>	All Records
<i>Patient HIC#</i>	Collected by CMS for patients with a <i>Payment Source</i> of Medicare who have a standard HIC number
<i>Patient Identifier</i>	All Records
<i>Payment Source</i>	All Records
<i>Physician 1</i>	Optional for All Records
<i>Physician 2</i>	Optional for All Records
<i>Postal Code</i>	All Records
<i>Race</i>	All Records
<i>Sex</i>	All Records

¹Transmission Data Element

²Defined in the Transmission Data Element List within the Hospital Outpatient Measure Data Transmission section of this manual

OP PAIN MANAGEMENT SPECIFIC DATA ELEMENT LIST

OP Pain Management Data Element Name	Collected For:
<i>Arrival Time</i>	OP-21
<i>Discharge Code</i>	OP-21
<i>E/M Code</i>	OP-21
<i>ICD-9-CM Principal Diagnosis Code</i>	OP-21
<i>Outpatient Encounter Date</i>	OP-21
<i>Pain Medication</i>	OP-21
<i>Pain Medication Date</i>	OP-21
<i>Pain Medication Time</i>	OP-21

OP-21 Hospital Outpatient Pain Management Population

Pain Management

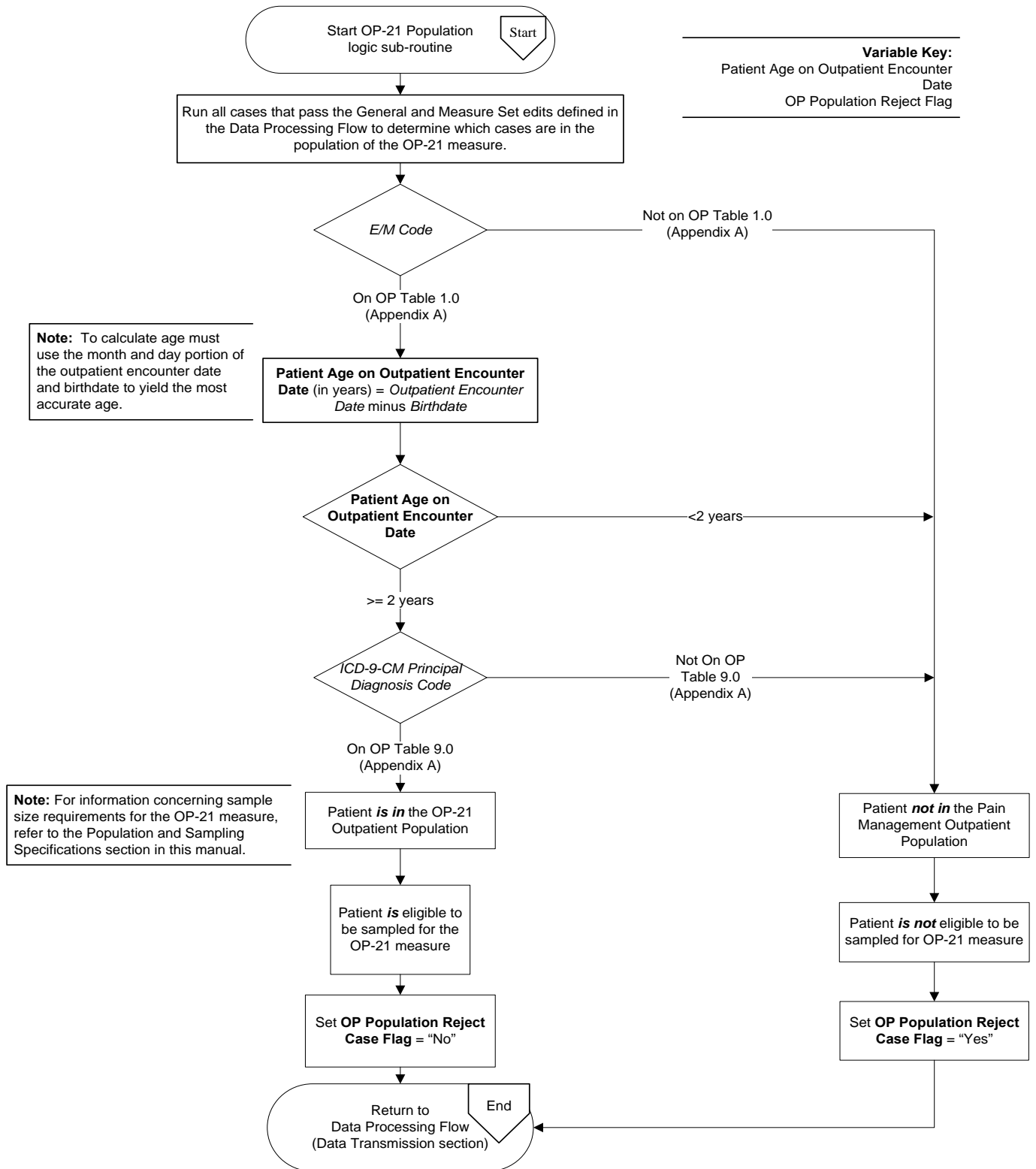
The population of the OP-21 Pain Management measure is identified using 4 data elements:

- *E/M Code*
- *Outpatient Encounter Date*
- *Birthdate*
- *ICD-9-CM Principal Diagnosis Code*

Patients seen in a Hospital Emergency Department (*E/M Code* on Appendix A OP Table 1.0) are included in the OP-21 Pain Management Hospital Outpatient Population and are eligible to be sampled if they have:

- A Patient Age on *Outpatient Encounter Date* ($Outpatient\ Encounter\ Date - Birthdate$) ≥ 2 years, and
- An *ICD-9-CM Principal Diagnosis Code* for Long Bone Fracture as defined in Appendix A, OP Table 9.0.

Pain Management Hospital Outpatient Population Algorithm OP-21



Algorithm Narrative for OP-21: Pain Management Hospital Outpatient Population

1. Start Pain Management Initial Patient Population logic sub-routine. Process all cases that have successfully reached the point in the Transmission Data Processing Flow: Clinical which calls this Initial Patient Population Algorithm. Do not process cases that have been rejected before this point in the Transmission Data Processing Flow.
2. Check *E/M Code*.
 - a. If *E/M Code* is not on Appendix A, OP Table 1.0, Patient is Not in the Outpatient Pain Management Population. Patient is not eligible to be sampled for OP-21 measure. Set the OP Population Reject Case Flag to YES. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If *E/M Code* is on Appendix A, OP Table 1.0, continue processing and proceed to Measurement Value.
3. Calculate Measurement Value. Measurement Value, in years, is equal to the *Outpatient Encounter Date* minus *Birthdate*.
4. Check Measurement Value.
 - a. If the Measurement Value is less than two years, Patient is Not in the Outpatient Pain Management Population. Patient is not eligible to be sampled for OP-21 measure. Set the OP Population Reject Case Flag to YES. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Measurement Value is greater than or equal to two years, continue processing and the case will proceed to *ICD-9-CM Principal Diagnosis Code*.
5. Check *ICD-9-CM Principal Diagnosis Code*.
 - a. If the *ICD-9-CM Principal Diagnosis Code* is on Table 9.0, Patient is in the Outpatient Pain Management Population. Patient is eligible to be sampled for OP-21 measure. Set the OP Population Reject Case Flag to NO. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the *ICD-9-CM Principal Diagnosis Code* is not on Table 9.0, Patient is Not in the Outpatient Pain Management Population. Patient is not eligible to be sampled for OP-21 measure. Set the OP Population Reject Case Flag to YES. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

Measure Information Form

Measure Set: Hospital Outpatient Pain Management

Measure ID #: OP-21

Outpatient Setting: Emergency Department

Performance Measure Name: Median Time to Pain Management for Long Bone Fracture.

Description: Median time from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a principal diagnosis of long bone fracture (LBF).

Rationale: Pain management in patients with long bone fractures is undertreated in emergency departments (Ritsema, Kelen, Pronovost, & Pham, 2007). Emergency department pain management has room for improvement (Ritsema, Kelen, Pronovost, & Pham, 2007). Patients with bone fractures continue to lack administration of pain medication as part of treatment regimens (Brown, 2003). When performance measures are implemented for pain management of these patients administration and treatment rates for pain improve (Titler, 2009). Disparities continue to exist in the administration of pain medication for minorities (Epps, 2008 and Todd, 1993) and children as well (Brown, 2003 and Friedland, 1994).

Type of Measure: Process

Improvement Noted As: A decrease in the median value

Continuous Variable Statement: Time (in minutes) from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a diagnosis of a (long bone) fracture.

Included Populations:

- Patients with a patient age on *Outpatient Encounter Date* (*Outpatient Encounter Date – Birthdate*) ≥ 2 years, and
- An *ICD-9-CM Principal Diagnosis Code* for a (long bone) fracture as defined in Appendix A, OP Table 9.0, and
- Patients with *Pain Medication*, and
- An *E/M Code* for emergency department encounter as defined in Appendix A, OP Table 1.0

Excluded Populations:

- Patients less than 2 years of age
- Patients who expired
- Patients who left the emergency department against medical advice or discontinued care

Data Elements:

- *Birthdate*
- *Discharge Code*
- *E/M Code*
- *Arrival Time*
- *ICD-9-CM Principal Diagnosis Code*
- *Outpatient Encounter Date*
- *Pain Medication*
- *Pain Medication Date*
- *Pain Medication Time*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-9-CM diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: None

Sampling: Yes, for additional information see the Population and Sampling Specifications section.

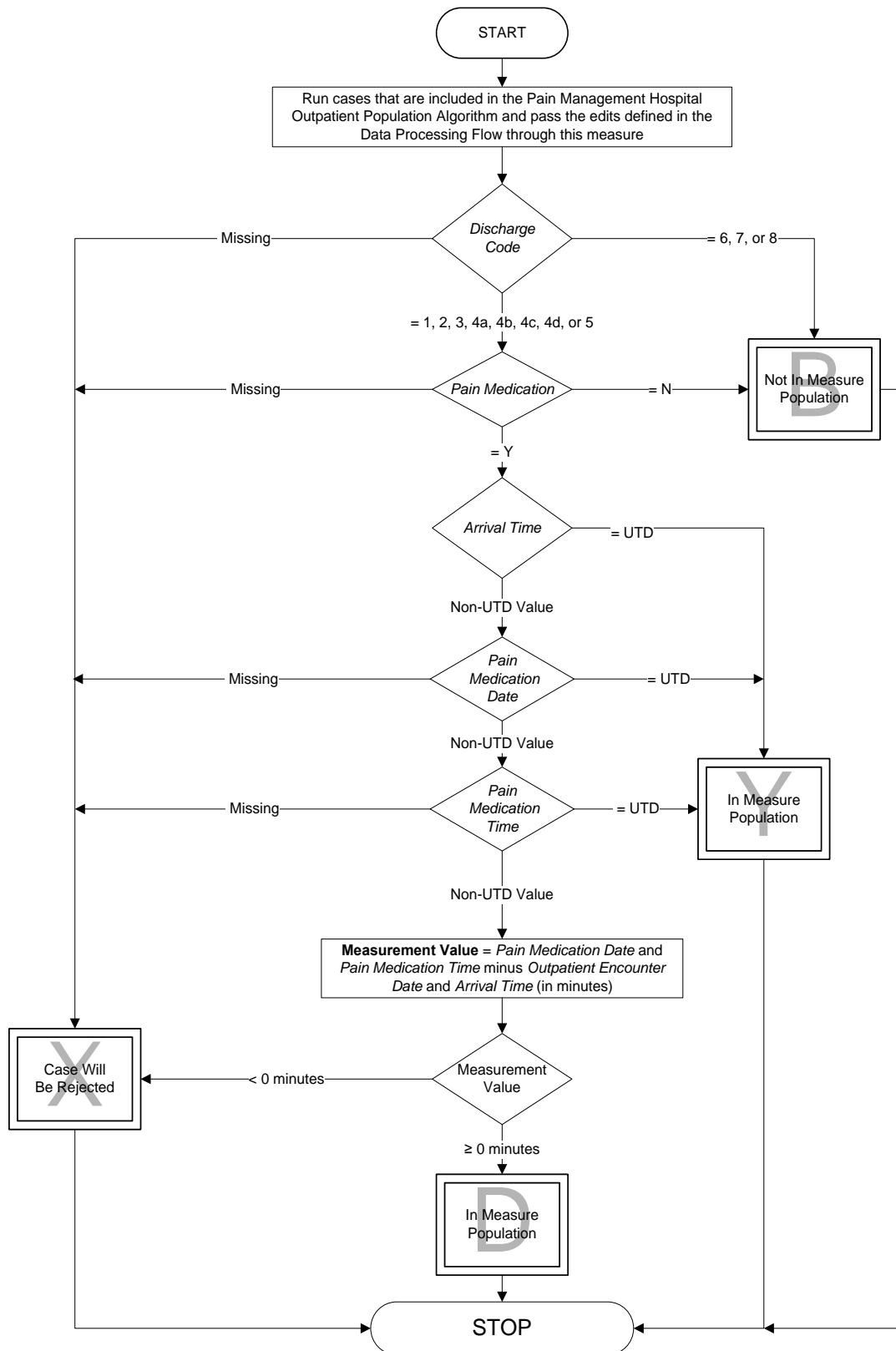
Data Reported As: Aggregate measure of central tendency

Suggested References:

- Brown JC, Klein EJ, Lewis CW, Johnston BD, and Cummings P. Emergency department analgesia for fracture pain. *Ann Emerg Med.* 2003 Aug;42(2):197-205.
- Epps CD, Ware LJ, and Packard A. Ethnic wait time differences in analgesic administration in the emergency department. *Pain Manag Nurs.* 2008 Mar;9(1):26-32.
- Friedland LR and Kulick RM. Emergency department analgesic use in pediatric trauma victims with fractures. *Ann Emerg Med.* 1994 Feb;23(2):203-7.
- Herr K and Title M. Acute pain assessment and pharmacological management practices for the older adult with a hip fracture: Review of ED trends. *J Emerg Nursing.* 2009 Jul;35(4):312-20.
- Ritsema TS, Kelen GD, Pronovost RJ, and Pham JC. The national trend in quality of emergency department pain management of long bone fractures. *Acad Emerg Med.* 2007 Feb 14; 14(2):163-9.
- Todd KH, Samaroo N, and Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA.* 1993 Mar 24-31;29(12):1537-9.

OP-21: Median Time to Pain Management for Long Bone Fracture

Continuous Variable Statement: Time (in minutes) from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a diagnosis of a (long bone) fracture.



Algorithm Narrative for OP-21: Median Time to Pain Management for Long Bone Fracture

Continuous Variable Statement: Time (in minutes) from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a diagnosis of a (long bone) fracture.

1. Start processing. Run cases that are included in the Pain Management Hospital Outpatient Population and pass the edits defined in the Data Processing Flow through this measure.
2. Check *Discharge Code*.
 - a. If *Discharge Code* is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - b. If *Discharge Code* equals 6, 7, or 8, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - c. If *Discharge Code* equals 1, 2, 3, 4a, 4b, 4c, 4d, or 5, continue processing and proceed to *Pain Medication*.
3. Check *Pain Medication*.
 - a. If *Pain Medication* is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - b. If *Pain Medication* equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - c. If *Pain Medication* equals Yes, continue processing and proceed to *Arrival Time*.
4. Check *Arrival Time*.
 - a. If the *Arrival Time* equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - b. If *Arrival Time* equals a Non-Unable To Determine Value, continue processing and proceed to *Pain Medication Date*.
5. Check *Pain Medication Date*.
 - a. If *Pain Medication Date* is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.

- b. If *Pain Medication Date* equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - c. If *Pain Medication Date* equals a Non Unable To Determine Value, continue processing and proceed to *Pain Medication Time*.
6. Check *Pain Medication Time*.
 - a. If *Pain Medication Time* is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - b. If *Pain Medication Time* equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - c. If *Pain Medication Time* equals a Non Unable To Determine Value, continue processing and proceed to Measurement Value.
7. Calculate Measurement Value. Measurement Value, in minutes, is equal to the *Pain Medication Date* and *Pain Medication Time* minus *Outpatient Encounter Date* and *Arrival Time*.
8. Check Measurement Value.
 - a. If Measurement Value is less than zero minutes, the case will proceed to a Measurement Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.
 - b. If Measurement Value is greater than or equal to zero minutes, the case will proceed to a Measurement Category Assignment of D and will be in the Measure Population. Return to Transmission Data Processing Flow: Clinical in the Data Transmission Section.