Adverse Drug Events due to Opioids  
(Institute for Safe Medication Practices Measure)

This measure is part of a set aiming to increase medication safety and avoid adverse drug events. Adverse drug events are defined as any injuries resulting from medication use, including physical or mental harm, or loss of function. Naloxone, the antidote for opiate overdose, is a competitive mu opioid-receptor antagonist that reverses opioid intoxication. For this reason, this measure uses naloxone administration to identify patients who may have experienced an adverse drug event due to an opioid.

**Name and date of specifications used:** ADE-11: Institute for Safe Medication Practices reported by hospitals to the Oregon Association of Hospitals and Health Systems (OAHHS) as part of the CMS Partnership for Patients program.

**URL of Specifications:** No formal specifications are available.

**Measure Type:**

**Data Source:** Hospitals will track these data internally (through electronic health records, chart abstractions, or another manual process). OAHHS will collect these data from DRG hospitals via its online reporting tool and report to OHA.

**Measurement Period:**
Year One: October 1, 2013 – September 30, 2014 (baseline)
Year Two: October 1, 2014 – September 30, 2015 (performance year)

**Benchmark:** 5% or below

The equation used is (N/D)*100 and performance is reported as a percentage. Hospitals must submit numerators and denominators as detailed below.

**Improvement from Baseline Target:** Minnesota method with 1 percentage point floor

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1 Additional information on surveillance of adverse drug events can be found here: http://www.health.gov/hai/ade.asp#final.

2 OHA reserves the right to contact hospitals directly or through OAHHS with additional questions about data submitted as part of the program. Hospitals must be able to provide documentation of data submitted should it be requested.

3 Information on improvement target calculations can be found in the ‘Hospital Improvement Target Brief’, here: http://www.oregon.gov/oha/Pages/Hospital-Baseline-Data.aspx.
Measure Details

Note that data are tracked on a monthly basis, but at the end of the program monthly data will be aggregated across the 12 months of the performance year to assess performance against benchmark. Guidance on how data will be aggregated for baseline year are will be available here: http://www.oregon.gov/oha/Pages/Hospital-Baseline-Data.aspx.

In addition, numerators and denominators should include all patients in all areas of the hospital where patients received an opioid medication (e.g. GI lab, procedure areas, etc.), with the exception of patients who are administered an opioid in the ED.

Data elements required denominator: Distinct count of visits in which a patient receives an opioid. Count is distinct per person per visit, and should be reported in the month in which the patient is discharged. See ‘Additional Information’ below for more detail. Number of patients who received an opioid agent during the tracked month.

Required exclusions for denominator: ED patients; use for nausea or pruritus

Deviations from cited specifications for denominator: None.

Data elements required numerator: Number of patients treated with opioids who subsequently received naloxone (Narcan) during the tracked month. The numerator is a distinct count of visits in which a patient who receives an opioid subsequently receives naloxone; therefore, one patient who receives naloxone four times during the same hospital visit is only counted once in the numerator.

Required exclusions for numerator: None.

Deviations from cited specifications for numerator: None.

Explanation of Exclusions and Deviations

List other required exclusions and or deviations from cited specifications not already indicated: None.

Additional Information

Additional Information on Numerator and Denominator Counts:

The denominator for this measure is a distinct count of visits per patient in which an opioid is administered (i.e., a patient is counted once per visit in which an opioid is administered). The numerator is also a distinct count per visit per patient (after a patient receives an opioid): A patient is counted in the numerator once if he or she receives an opioid at any point in that visit and then receives naloxone.
For example, say a patient is admitted from June 1-20 and receives an opioid three times. During this period the patient receives naloxone two times after the opioid was administered. She would be counted once in the denominator (because she received an opioid during this visit), and only once in the numerator (because naloxone administration is only counted once per visit).

Say she is later admitted from August 16 – September 3 and receives an opioid once, but does not subsequently receive naloxone. In this case, she is again counted in the denominator for September (since she received an opioid during this admission and was discharged in September), but is not counted in the numerator (as she did not require naloxone).

Over the course of the measurement year, this patient would be counted twice in the denominator (as she received an opioid on two separate visits), and only once in the numerator (as in only one visit did she require naloxone after an opioid was administered).

**Additional Information on the ED Exclusion:**

Note the 'clock', does not start until the hospital administers an opioid and the patient is an inpatient admission. However, this measure excludes opioids administered to patients while they are in the ED. If a person is given an opioid in the ED and is then admitted, that opioid administration is not counted in the denominator. If they are again given an opioid once admitted, however, they should be counted – because the hospital administered an opioid once they were admitted.

**Version Control**

- These specifications were updated on 3 December 2014 to include clarification on the numerator and denominator (to make clear that the count is per patient per visit). In addition, it was also noted that patients should be reported in the month in which they are discharged.