



NPIC

National Perinatal Information Center

ADVERSE OUTCOME INDEX (AOI) V5.0

Definitions & ICD-10 Code Tables

Definitions and ICD-10 Code Tables

The ICD-10 code tables used to determine each indicator count for the Adverse Outcome Index: [AOI Code Tables \(effective 01/01/2023\)](#)

Event Populations

Deliveries: Cases assigned to any of the following MS DRGs: 768, 796-798, 805-807, 783-788, or ≥ 981 with an ICD-10-PCS delivery code, and also assigned to any of the following APR-DRGs: 539-542, 560 (*Code Table M.1.1*)

Inborns: All neonates born in your hospital (*Code Table B.1.1*)

Event Definitions

In-hospital Maternal Death {Case Weight: 730}

Deliveries and discharge disposition = died

Exclusions: None

In-hospital Neonatal Death ≥ 2500 grams and ≥ 37 weeks Gestation² {Case Weight: 400}

Inclusions: Inborns with birthweight¹ ≥ 2500 grams and ≥ 37 weeks gestation² with discharge disposition of died within 28 days of birth

Exclusions: Cases with congenital anomalies and other disorders (*Code Table B.2.1*)

Uterine Rupture During Labor {Case Weight: 100}

Inclusions: Deliveries with diagnosis code O71.1 (rupture of uterus during labor) in the **primary, first** or **second diagnosis** code position only

Exclusions: None

Maternal Intensive Care {Case Weight: 65}

Inclusions: Deliveries with [AIM³ Severe Maternal Morbidity \(SMM\) diagnosis and/or procedure codes](#) AND

- with an ICU day or charge OR
- discharged to another hospital (UB04 disp=02)

Exclusions: Cases with placental disorders (Code Table M.3.1) or any AIM SMM diagnosis code(s) with Present on Admission (POA)⁴ indicator = Y

Birth Trauma {Case Weight: 60}

Inclusions: Inborns with birthweight¹ ≥ 2500 grams and ≥ 37 weeks gestation² with TJC PC-06⁵ severe birth trauma diagnosis codes (*Code Table B.3.1*)

Exclusions: Cases with osteogenesis imperfecta (*Code Table B.3.1*)

Unanticipated Operative Procedure {Case Weight: 40}

Inclusions: Deliveries with unanticipated operative procedure codes (*Code Table M.4.1*) in the **first** or **second procedure** field

Exclusions: Cases with placental disorders or cervical cancers; Also excludes hysterectomy cases with an ICU day or charge or discharged to another hospital (UB04 disp=02) (*Code Table M.4.1*)

Admission to NICU of Neonate Birthweight¹ ≥ 2500 grams and ≥ 37 weeks Gestational Age² (GA) for > 1 day {Case Weight: 35}

Inclusions: Inborns with birthweight¹ ≥ 2500 grams and ≥ 37 weeks gestation²; AND

- NICU admission within one day of birth for greater than one day; OR
- transferred to another hospital (UB04 disp=02 or =05) within one day of birth

Exclusions: Cases with congenital anomalies and other disorders (*Code Table B.2.1*) or neonatal drug/alcohol exposure (*Code Table B.5.1*)

APGAR 5 < 7: Inborn Neonate ≥ 2500 grams and ≥ 37 Weeks Gestation {Case Weight: 25}

Inclusions: Inborns with birthweight¹ ≥ 2500 grams and ≥ 37 weeks completed gestation²; APGAR 5 < 7

Exclusions: Cases with congenital anomalies and other disorders (*Code Table B.2.1*) or neonatal drug/alcohol exposure (*Code Table B.5.1*)



4th Degree Perineal Laceration {Case Weight: 5}

Inclusions: Deliveries with fourth degree perineal laceration diagnosis code (*Code Table M.6.1*)

Exclusions: Cases with shoulder dystocia (*Code Table M.6.1*)

Note: The Alliance for Innovation on Maternal Health (AIM) has removed Severe Maternal Morbidity (SMM) with transfusions from the formal SMM algorithm, as coding for transfusions has data quality issues that affect reliability and validity. To align with this update, Maternal Blood Transfusions have been removed as an Adverse Event and excluded from the calculation of AOI Indices. These events are provided as informational only.

Maternal Blood Transfusion

Inclusions: Deliveries with [AIM Severe Maternal Morbidity \(SMM\) blood transfusion procedure codes](#) (*Code Table M.5.1*); **OR**

- additional select code for transfusion of non-blood products (*Code Table M.5.1*); **OR**
- NPIC Blood Transfusion Indicator = 1 on submitted file

¹ Birthweight is determined by numeric value or ICD-10-CM coding

² Gestational Age is determined by numeric value or ICD-10-CM coding. Cases missing gestational age information default to ≥ 37 weeks if birthweight is ≥ 2000 grams.

³ Alliance for Innovation on Maternal Health (AIM)

⁴ Present on Admission (POA) indicator Y = diagnosis was present at time of inpatient admission

⁵ Refer to [The Joint Measure Specification Manuals](#) for the related "PC-06 Unexpected Complications in Term Newborns" version.

