ADVERSE OUTCOME INDEX (AOI) V4.0.1
Definitions & ICD-10 Code Tables
Adverse Outcome Index (AOI) Algorithm (V4.0.1)
Definitions and ICD-10 Code Tables

The ICD-10 code tables used to determine each indicator count for the Adverse Outcome Index are available here.

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 (Appendix M.1.1)

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

Event Definitions

**In-hospital Maternal Death (Case Weight: 750)**
Deliveries and discharge disposition = died

**Exclusions:** None

**In-hospital Neonatal Death ≥ 2500 grams and ≥37 weeks Gestation (Case Weight: 400)**
**Inclusions:** Inborns with birthweight $^1 \geq 2500$ grams and $\geq 37$ weeks gestation$^2$ with discharge disposition of died within 28 days of birth

**Exclusions:** Cases with congenital anomalies and other disorders (Appendix 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 (Appendix M.3.1) OR Deliveries with the NPIC Blood Transfusion Indicator = 1 on submitted file; AND
  - with an ICU day or charge OR
  - discharged to another hospital (UB04 disp=02)

Exclusions: Cases with placental disorders (Appendix 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 birthweight ≥ 2500 grams and ≥ 37 weeks gestation with TJC PC-06⁵ severe birth trauma diagnosis codes (Appendix B.3.1)

Exclusions: Cases with osteogenesis imperfecta (Appendix B.3.1)

Unanticipated Operative Procedure (Case Weight: 40)

Inclusions: Deliveries with unanticipated operative procedure codes (Appendix 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) (Appendix M.4.1)

Admission to NICU of Neonate Birthweight ≥ 2500 grams and ≥ 37 weeks Gestational Age (GA) for > 1 day (Case Weight: 35)

Inclusions: Inborns with birthweight ≥ 2500 grams and ≥ 37 weeks gestation; 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 (Appendix B.2.1) or neonatal drug/alcohol exposure (Appendix B.5.1)

APGAR 5 < 7 (Case Weight: 25)

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

Exclusions: Cases with congenital anomalies and other disorders (Appendix B.2.1) or neonatal drug/alcohol exposure (Appendix B.5.1)
Maternal Blood Transfusion {Case Weight: 20}

Inclusions: Deliveries with AIM Severe Maternal Morbidity (SMM) blood transfusion procedure codes (Appendix M.5.1); OR
- additional select code for transfusion of non-blood products (Appendix M.5.1); OR
- NPIC Blood Transfusion Indicator = 1 on submitted file

Exclusions: Delivery cases that are included in the “Maternal Intensive Care” event (see definition above).

4th Degree Perineal Laceration {Case Weight: 5}

Inclusions: Deliveries with fourth degree perineal laceration diagnosis code (Appendix M.6.1)

Exclusions: Cases with shoulder dystocia (Appendix M.6.1)

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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 The Joint Commission PC-06 measure: Unexpected Complications in Term Newborns