**HCQO 2020-21 Patient Safety Indicator Definitions**

Patient safety indicator specifications included codes in ICD-9-CM and ICD-10-WHO. The AIHW mapped these to ICD-10-AM and/or ACHI codes as appropriate, following the intent of the indicators where mapping was not straightforward.

**Retained surgical item or unretrieved device fragment**

**OECD indicator name**: Retained surgical item or unretrieved device fragment.

**Coverage**: Surgical and medical discharges for patients aged 15 and older.

**Numerator**: Discharges among cases defined in the denominator with ICD code for foreign body left in during procedure in a secondary diagnosis field during the surgical admission (Table 1).

*Note*: The AIHW could only identify instances within the one episode of care.

**Denominator**: All surgical and medical discharges for patients aged 15 and older.

**Exclusions:**

* Cases with a code for foreign body left in during procedure in the principal diagnosis field or secondary diagnosis present on admission (Table 1).
* Cases with a length of stay of less than 24 hours where patient is discharged alive.

**Table 1: ICD-10 (WHO and AM) retained surgical item or unretrieved device fragment codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| T81.5 | Foreign body accidentally left in body cavity or operation wound following a procedure |
| T81.6 | Acute reaction to foreign substance accidentally left during a procedure |
| Y61.0 | Foreign object accidentally left in body during surgical operation |
| Y61.1 | Foreign object accidentally left in body during infusion or transfusion |
| Y61.2 | Foreign object accidentally left in body during kidney dialysis or other perfusion |
| Y61.3 | Foreign object accidentally left in body during injection or immunisation |
| Y61.4 | Foreign object accidentally left in body during endoscopic examination |
| Y61.5 | Foreign object accidentally left in body during heart catheterisation |

*(continued)*

**Table 1 (continued):** **ICD-10 (WHO and AM) retained surgical item or unretrieved device fragment codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| Y61.6 | Foreign object accidentally left in body during aspiration, puncture and other catheterisation |
| Y61.7 | Foreign object accidentally left in body during removal of catheter or packing |
| Y61.8 | Foreign object accidentally left in body during other surgical and medical care |
| Y61.9 | Foreign object accidentally left in body during unspecified surgical and medical care |

**Post-operative wound dehiscence**

**OECD indicator name**: Post-operative wound dehiscence.

**Coverage**: Abdominal discharges for patients aged 15 and older.

**Numerator**: Discharges among cases defined in the denominator with procedure code for Reclosure of post-operative disruption of abdominal wall (ACHI 10th edition code 30403-03) during the surgical episode.

Note: The AIHW could only identify instances within the one episode of care.

**Denominator**: All abdominopelvic surgical discharges (Supplementary Table 4) meeting the inclusion and exclusion rules.

**Exclusions:**

* Cases from the numerator and denominator for MDC 14 (pregnancy, childbirth, and puerperium) or principal diagnosis (Supplementary Table 2).
* Cases from the numerator and denominator with any diagnosis or procedure code for immunocompromised state (Supplementary Table 5).
* Cases from the numerator and denominator where a procedure for reclosure of post-operative disruption of abdominal wall occurs before or on the same day as the first abdominopelvic surgery procedure.
* Cases with a length of stay of less than 24 hours where patient is discharged alive.

**Post-operative pulmonary embolism (PE) – hip and knee replacement discharges**

**OECD indicator name**: Post-operative pulmonary embolism – hip and knee replacement discharges.

**Coverage**: Hip and knee replacement discharges (Table 2) for patients aged 15 and older.

**Numerator**: Discharges among cases defined in the denominator with ICD code for PE in a secondary diagnosis field during the surgical admission (Table 3).

*Note*: The AIHW could only identify instances within the one episode of care.

**Denominator**: Hip and knee replacement discharges, meeting the inclusion and exclusion rules with a surgical AR- DRG (Supplementary Table 1).

**Exclusions**:

* Cases from the numerator and denominator for MDC 14 (Pregnancy, childbirth, and puerperium) or principal diagnosis (Supplementary Table 2).
* Cases with principal diagnosis or secondary diagnosis present on admission (if known) of PE during the surgical admission.
* Cases with a length of stay of less than 24 hours where patient is discharged alive.

**Table 2: ACHI 10th edition total hip and knee replacement procedure codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| 49318–00 | Total arthroplasty of hip, unilateral |
| 49319–00 | Total arthroplasty of hip, bilateral |
| 49346–00 | Revision of partial arthroplasty of hip |
| 49324–00 | Revision of total arthroplasty of hip |
| 49327–00 | Revision of total arthroplasty of hip with bone graft to acetabulum |
| 49330–00 | Revision of total arthroplasty of hip with bone graft to femur |
| 49333–00 | Revision of total arthroplasty of hip with bone graft to acetabulum and femur |
| 49339–00 | Revision of total arthroplasty of hip with anatomic specific allograft to acetabulum |
| 49342–00 | Revision of total arthroplasty of hip with anatomic specific allograft to femur |
| 49345–00 | Revision of total arthroplasty of hip with anatomic specific allograft to acetabulum and femur |
| 49517–00 | Hemiarthroplasty of knee |
| 49518–00 | Total arthroplasty of knee, unilateral |
| 49519–00 | Total arthroplasty of knee, bilateral |
| 49521–00 | Total arthroplasty of knee with bone graft to femur, unilateral |
| 49521–01 | Total arthroplasty to knee with bone graft to femur, bilateral |
| 49521–02 | Total arthroplasty to knee with bone graft to tibia, unilateral |
| 49521–03 | Total arthroplasty to knee with bone graft to tibia, bilateral |
| 49524–00 | Total arthroplasty of knee with bone graft to femur and tibia, unilateral |
| 49524–01 | Total arthroplasty of knee with bone graft to femur and tibia, bilateral |
| 49530–00 | Revision of total arthroplasty of knee with bone graft to femur |
| 49530–01 | Revision of total arthroplasty of knee with bone graft to tibia |
| 49533–00 | Revision of total arthroplasty of knee with bone graft to femur and tibia |
| 49554–00 | Revision of total arthroplasty of knee with anatomic specific allograft |
| 49545–00 | Revision arthrodesis of knee |
| 49527–00 | Revision of total arthroplasty of knee |
| 90562–00 | Patella resurfacing |

**Table 3: ICD-10 (WHO and AM) PE diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| I26.0 | Pulmonary embolism with mention of acute cor pulmonale |
| I26.9 | Pulmonary embolism without mention of acute cor pulmonale |

**Post-operative deep vein thrombosis (DVT) – hip and knee replacement discharges**

**OECD indicator name**: Post-operative deep vein thrombosis – hip and knee replacement discharges.

**Coverage**: Hip and knee replacement discharges (Table 2) for patients aged 15 and over.

**Numerator**: Discharges among cases defined in the denominator with ICD code for DVT in a secondary diagnosis field during the surgical admission (Table 5).

*Note*: The AIHW could only identify instances within the one episode of care.

**Denominator**: Hip and knee replacement discharges, meeting the inclusion and exclusion rules with a surgical AR-DRG (Supplementary Table 1).

**Exclusions:**

* Cases from the numerator and denominator for MDC 14 (Pregnancy, childbirth, and puerperium) or principal diagnosis (Supplementary Table 2).
* Cases from the numerator and denominator where a procedure for interruption of vena cava or insertion of inferior vena cava filter (Table 4) occurs before or on the same day as the first/main operating room procedure (hip/knee replacement and all surgical discharges) or where a procedure for interruption of vena cava is the only operating room procedure (all surgical discharges).
* Cases where a patient has both PE and DVT, are assigned to PE.
* Cases with principal diagnosis or secondary diagnosis present on admission (if known) of DVT during the surgical admission.
* Cases with a length of stay of less than 24 hours where patient is discharged alive.

*Note*: Due to data quality issues the AIHW did not exclude cases that arose during the surgical episode with a secondary diagnosis present on admission of DVT. (Exclusion of cases with a principal diagnosis of DVT would only have been required if readmissions were able to be included.)

**Table 5: ICD-10 (WHO and AM) DVT diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| I80.1 | Phlebitis and thrombophlebitis of femoral vein |
| I80.20 | Phlebitis and thrombophlebitis of other deep vessels of lower extremities |
| I80.3 | Phlebitis and thrombophlebitis of lower extremities, unspecified |

*(continued)*

**Table 5 (continued): ICD-10 (WHO and AM) DVT diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| I80.8 | Phlebitis and thrombophlebitis of other sites |
| I80.9 | Phlebitis and thrombophlebitis of unspecified site |
| I82.8 | Embolism and thrombosis of other specified veins |

**Post-operative sepsis – abdominal discharges**

**OECD indicator name**: Post-operative sepsis – abdominal discharges.

**Coverage**: Abdominal discharges for patients aged 15 and over.

**Numerator**: Discharges among cases defined in the denominator with ICD code for sepsis in a secondary diagnosis field during the surgical admission (Table 6).

*Note*: The AIHW could only identify instances within the one episode of care.

**Denominator**: Abdominopelvic surgical discharges only (Supplementary Table 4), meeting the inclusion and exclusion rules with a surgical AR- DRG (Supplementary Table 1).

**Exclusions**:

* Cases from the numerator and denominator for MDC 14 (Pregnancy, childbirth, and puerperium) or principal diagnosis (Supplementary Table 2).
* Cases from the numerator and denominator with principal diagnosis of infection or secondary diagnosis present on admission, if known (Supplementary Table 7).
* Cases from the numerator and denominator with any code for immunocompromised state (Supplementary Table 5) or cancer (Supplementary Table 6).
* Cases with principal diagnosis or secondary diagnosis present on admission of sepsis.
* Cases with a length of stay of less than 3 days where patient is discharged alive.

**Table 6: ICD-10-AM sepsis diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| A40.0 | Sepsis due to *streptococcus*, group A |
| A40.1 | Sepsis due to *streptococcus*, group B |
| A40.2 | Sepsis due to *streptococcus*, group D |
| A40.3 | Sepsis due to *Streptococcus pneumoniae* |
| A40.8 | Other streptococcal sepsis |
| A40.9 | Streptococcal sepsis, unspecified |
| A41.0 | Sepsis due to *Staphylococcus aureus* |
| A41.1 | Sepsis due to other specified *staphylococcus* |
| A41.2 | Sepsis due to unspecified *staphylococcus* |
| A41.3 | Sepsis due to *Haemophilus influenzae* |

*(continued)*

**Table 6 (continued): ICD-10-AM sepsis diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| A41.4 | Sepsis due to anaerobes |
| A41.50 | Sepsis due to unspecified Gram-negative organisms |
| A41.51 | Sepsis due to *Escherichia coli* [E. Coli] |
| A41.52 | Sepsis due to *Pseudomonas* |
| A41.58 | Sepsis due to other Gram-negative organisms |
| A41.8 | Other specified sepsis |
| A41.9 | Sepsis, unspecified |
| R57.2 | Septic shock |
| R57.8 | Other shock |
| R65.0 | Systemic inflammatory response syndrome [SIRS] of infectious origin without acute organ failure |
| R65.1 | Systemic inflammatory response syndrome [SIRS] of infectious origin with acute organ failure |
| T81.1 | Shock during or resulting from a procedure, not elsewhere classified |

**Obstetric trauma after vaginal delivery with instrument**

**OECD indicator name**: Obstetric trauma vaginal delivery with instrument.

**Coverage**: Vaginal delivery discharges for patients aged 15 and over (Table 7).

**Numerator**: Discharges among cases defined in the denominator with ICD code for 3rd and 4th degree obstetric trauma in any diagnosis or procedure field (Table 8 and 9).

**Denominator**: All vaginal delivery discharges with any procedure code for instrument-assisted delivery (Table 10).

**Table 7: ICD-10 (WHO and AM) outcome of delivery codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| Z37 | Outcome of delivery |
| O80 | Single spontaneous delivery |
| O81 | Single delivery by forceps and vacuum extractor |
| O83 | Other assisted single delivery |
| O84 | Multiple delivery |

**Table 8: ICD-10 (WHO and AM) obstetric trauma diagnosis codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| O70.2 | Third degree perineal laceration during delivery |
| O70.3 | Fourth degree perineal laceration during delivery |

**Table 9: ACHI 10th edition obstetric trauma procedure codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| 90480-00 | Suture of current obstetric laceration of bladder and/or urethra without perineal involvement |
| 90480-01 | Suture of current obstetric laceration of rectum and/or sphincter ani without perineal involvement |
| 16573-00 | Suture of third or fourth degree tear of perineum |

**Table 10: ACHI 10th edition instrument-assisted delivery procedure codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| 90470–01 | Assisted breech delivery |
| 90470–02 | Assisted breech delivery with forceps to after-coming head |
| 90470–04 | Breech extraction with forceps to after-coming head |

*Note*: Also includes all procedures in blocks 1337 and 1338.

**Obstetric trauma after vaginal delivery without instrument**

**OECD indicator name**: Obstetric trauma vaginal delivery without instrument.

**Coverage**: Vaginal delivery discharges for patients aged 15 and over (Table 7).

**Numerator**: Discharges among cases defined in the denominator with an ICD code for 3rd and 4th degree obstetric trauma in any diagnosis or procedure field (Table 8 and 9).

**Denominator**: All vaginal delivery discharge patients.

**Exclusions**:

* Cases with instrument-assisted delivery (Table 10).

**Table 10: ICD-10 (WHO and AM) instrument-assisted delivery procedure codes**

|  |  |
| --- | --- |
| **Code** | **Description** |
| O81 | Single delivery by forceps and vacuum extractor |
| O82 | Single delivery by caesarean section |
| O83 | Other assisted single delivery |
| O84.1 | Multiple delivery, all by forceps and vacuum extractor |
| O84.81 | Multiple delivery, all assisted, not elsewhere classified |
| O84.82 | Multiple delivery by combination of methods |