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Validation of ICD-10-based Patient Safety Indicators for identification of in-hospital post-operative complications in surgical patients

Background

Complications are common after surgery, and contribute to adverse long-term patient outcomes and increased healthcare resource utilization. Decreasing complication rates is a key priority for perioperative quality improvement initiatives, while complication rates are often used as a hospital-level quality of care indicator. Therefore, accurate identification of postoperative complications is a requirement for high-quality care and research.

Healthcare administrative (HA) data provides a relatively efficient means of monitoring and studying the healthcare system. However, even with data collection processes, such as the type 2 (occurring after admission) diagnosis codes present in the International Classification of Diseases 10th Edition (ICD-10) system, the accuracy of HA data codes to identify the true occurrence (or true non-occurrence) of complications is highly variable. The sensitivity of a diagnostic code for acute kidney injury ranges from 22-62%, while for pulmonary embolism the sensitivity of a diagnostic codes may be as high as 89%. The specificities of these codes are equally variable.

By combining a data-driven approach with clinical expertise, a set of ICD-10 specific Patient Safety Indicators (PSI) have recently been compiled by clustering common type 2 codes into clinically-relevant patient-safety categories (Appendix). The face validity of this categorization system is supported by the methodological approach and initial feasibility studies, which demonstrate that PSIs identify an in-hospital complication of rate of 5.5%, which is in keeping with complication rates described in prospective studies of adverse events in hospitalized patients. However, estimating the accuracy of these PSIs through comparison to a gold standard reference has not been performed. Therefore, the purpose of this study is to measure the diagnostic accuracy of PSIs in comparison to National Surgical Quality Improvement Program (NSQIP) complication diagnoses.

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Analysis Plan

Study cohort

We will identify all surgical inpatients who were entered into the NSQIP database since the beginning of the NSQIP program at TOH. We initially expected 2800 patients, but our criteria identified 12 400.

Demographics

We will describe patient and surgical characteristics for the full cohort, patients experiencing complications according to the NSQIP outcome variables, and those who have any Patient Safety Indicators (PSI). Appropriate descriptive measures will be provided, and parametric or non-parametric tests will be used to evaluate differences across the following covariates:

Patient demographics: age, gender

Admission characteristics: urgency status, route of admission, day care/same day admit/inpatient surgery, acute length of stay, preoperative length of stay

Disease characteristics: NSQIP patient comorbidities, Elixhauser score, PIMR score, LAPS score, ASA score less than or equal to 2, surgical service

Reference standard

NSQIP complications will be considered the reference standard. A group of anesthesiologists, surgeons, and experts in patient safety and quality have reached consensus by mapping PSIs to NSQIP definitions (Table 1). For each PSI with a specified definition, we will assign a value of 1 or 0 to each of the following variables:

True positive(TP)-PSI present, NSQIP complication present

False negative(FN)-PSI present, NSQIP complication absent

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True negative(TN)-PSI absent, NSQIP complication absent

False positive(FP)-PSI present, NSQIP complication absent

For example, in the case of AnyPSI, if a patient had AnyPSI positive and also had any of the NSQIP complications present then the aforementioned variables would assume values of TP=1; FN=0; TN=0; FP=0.

Statistical analysis

The proportion of patients with any NSQIP complication and the proportion with each complication will be calculated. The equivalent values will be calculated for the occurrence of any and each PSI.

Our primary measures of accuracy will be positive and negative likelihood ratios (+LR, -LR); sensitivity and specificity will also be calculated. An excellent example of code for calculating sensitivity, specificity and their 95% confidence intervals based on the binomial distribution is provided here: <http://support.sas.com/kb/24/170.html>. The LRs for each PSI variable will be calculated using the formulas: +LR=sensitivity/(1-specificity); -LR=(1-sensitivity)/specificity. The 95% confidence intervals for these likelihood ratios were calculated according to the method of Simel et al.²²

We will also perform several sensitivity analyses. First, all measures of accuracy will be calculated in elective inpatient patients only and then in emergency inpatients only. Next measures of accuracy will be calculated separately in orthopedic and then general surgery patients. Finally, we will calculate these measures only in patients who were in the top quartile of acute length of stay (as these patients will have more opportunity to both experience and have coded any Type 2 diagnostic code).

Table 1

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PSI Variable	NSQIP Reference	Comments
psianypsi	Cardiac_Arrest_Requiring_CPR myocardial_infarction_1 unplanned_intubation post_superficial_incisional_ssi post_deep_incisional_ssi post_organ_space_ssi postop_wound_disruption postop_pneumonia postop_unplanned_intubation postop_pulmonary_embolism Postop_On_Ventilator_gt_48_hrs Postop_Progressive_Renal_Insuffi Postop_Acute_Renal_Failure Postop_Urinary_Tract_Infection postop_stroke_cva postop_coma Postop_Peripheral_Nerve_Injury Postop_Cardiac_Arrest_Requiring_ postop_myocardial_infarction postop_bleeding_transfusions Postop_Graft_Prosthesis_Flap_Fai postop_dvt postop_sepsis postop_septic_shock Unplanned_return_to_OR	
psiseverity	postop_pulmonary_embolism unplanned_intubation Postop_On_Ventilator_gt_48_hrs postop_septic_shock Unplanned_return_to_OR Cardiac_Arrest_Requiring_CPR postop_stroke_cva postop_coma	
psiinfection	post_superficial_incisional_ssi post_deep_incisional_ssi post_organ_space_ssi postop_pneumonia Postop_Urinary_Tract_Infection postop_sepsis postop_septic_shock	
psiulcer	NOT specified	Sens-0.87/Spec 0.96 (Drug Healthc Patient Saf. 2014; 6: 101–108)

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psiendocrine	NOT specified	
psivte	postop_pulmonary_embolism	
	postop_dvt	
psicardiac	Cardiac_Arrest_Requiring_CPR	
	myocardial_infarction_1	
	Postop_Cardiac_Arrest_Requiring_	
	Postop_On_Ventilator_gt_48_hrs	
	unplanned_intubation	
	postop_myocardial_infarction	
psirespiratory	postop_pneumonia	
	unplanned_intubation	
	Postop_On_Ventilator_gt_48_hrs	
psiHemorrhagic	postop_bleeding_transfusions	
	postop_cva	
psidrug	NOT SPECIFIED	
psifluid	Postop_Progressive_Renal_Insuffi	
	Postop_Acute_Renal_Failure	
psiobstetrics	NOT SPECIFIED	
psisurgery	Unplanned_return_to_OR	
	Postop_Graft_Prosthesis_Flap_Fai	
	post_superficial_incisional_ssi	
	post_deep_incisional_ssi	
	post_organ_space_ssi	

PSI ICD-10 definitions**APPENDIX 1: Global PSI (any adverse event) n=640 codes (asterisk(*) denotes codes****where panel disagreement but median score ≥ 7)**

icd10	Description
A020*	Salmonella enteritis
A021*	Salmonella septicaemia
A044*	Other intestinal Escherichia coli infections
A045*	Campylobacter enteritis
A047	Enterocolitis due to Clostridium difficile; includes: Foodborne intoxication by Clostridium difficile, Pseudomembranous colitis
A048*	Other specified bacterial intestinal infections
A049*	Bacterial intestinal infection, unspecified
A080	Rotaviral enteritis
A081	Acute gastroenteropathy due to Norwalk agent; includes: Small round structured virus enteritis

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A410	Sepsis due to <i>Staphylococcus aureus</i>
A411	Sepsis due to other specified staphylococcus; includes: Sepsis due to coagulase-negative staphylococcus
A412	Sepsis due to unspecified staphylococcus
A414*	Septicaemia due to anaerobes
A4150	Sepsis due to <i>Escherichia coli</i> [E.coli]
A4151	Sepsis due to <i>Pseudomonas</i> ; includes: <i>Pseudomonas aeruginosa</i>
A4152	Sepsis due to <i>Serratia</i>
A4158	Sepsis due to other gram-negative organisms; includes: Gram-negative sepsis NOS
A4180	Sepsis due to enterococcus; excludes: due to <i>Streptococcus D</i> (A40.2)
A4188	Other specified septicaemia
A419*	Septicaemia unspecified
A490	Staphylococcal infection, unspecified site
B309*	Viral conjunctivitis unspecified
B373*	Candidiasis of vulva and vagina
B374*	Candidiasis of other urogenital sites
B377*	Candidal septicaemia
B3780*	Candidal esophagitis
B3781*	Candidal enteritis
B956	<i>Staphylococcus aureus</i> as the cause of diseases classified to other chapters
B957	Other staphylococcus as the cause of diseases classified to other chapters
B958	Unspecified staphylococcus as the cause of diseases classified to other chapters
B961	<i>Klebsiella pneumoniae</i> [<i>K. pneumoniae</i>] as the cause of diseases classified to other chapters
B962	<i>Escherichia coli</i> [E. coli] as the cause of diseases classified to other chapters
B964*	<i>Proteus (mirabilis)(morganii)</i> as the cause of diseases classified in other chapters
B965	<i>Pseudomonas (aeruginosa)</i> as the cause of diseases classified to other chapters
B9681	Enterococcus as the cause of diseases classified to other chapters
B9688*	Other specified bacterial agents as the cause of diseases classified to other chapters
B974*	Respiratory syncytial virus as the cause of diseases classified to other chapters
D62	Acute posthaemorrhagic anaemia
D683	Haemorrhagic disorder due to circulating anticoagulants; Includes: longterm use of anticoagulants, warfarin or like drugs, Hyperheparinaemia increase in anti-IXa, VIIIa, Xa, Xia, antithrombin, non-traumatic hematoma due to circulating anticoagulants
E1010	Type 1 diabetes mellitus with ketoacidosis
E1063	Type 1 diabetes mellitus with hypoglycaemia
E1064*	type 1 diabetes mellitus with poor control, so described
E110	Type 2 diabetes mellitus with coma
E1110*	Type 2 DM with ketoacidosis
E1111	Type 2 diabetes mellitus with lactic acidosis
E1163	Type 2 diabetes mellitus with hypoglycaemia

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E1164*	type 2 diabetes mellitus with poor control, so described
E1363	Other specified diabetes mellitus with hypoglycaemia
E1463	Unspecified diabetes mellitus with hypoglycaemia
E15	Hypoglycaemic coma
E160	Drug-induced hypoglycaemia without coma
E272	Addisonian crisis
E860*	Dehydration
E868*	Other volume depletion
E877	Fluid overload
E883*	Tumour lysis syndrome
E891	Postprocedural hypoinsulinaemia
E892	Postprocedural hypoparathyroidism
E893	Postprocedural hypopituitarism
F050*	Delirium not superimposed on dementia
F051*	Delirium superimposed on dementia
F058	Other delirium
F059*	Delirium unspecified
G003*	Staphylococcal meningitis
G372*	Central pontine myelinolysis
G540*	Brachial plexus disorders
G562*	Lesion of ulnar nerve
G971	Other reaction to spinal and lumbar puncture
G972*	Intracranial hypotension following ventricular shunting
G978	Other postprocedural disorders of nervous system
H103*	Acute conjunctivitis unspecified
H105*	Blepharoconjunctivitis
H108*	Other conjunctivitis
H109*	Conjunctivitis unspecified
H160*	Corneal ulcer
H5980*	Lens fragments in eye following cataract surgery
H5988	Other postprocedural disorders of eye and adnexa
H910*	Ototoxic hearing loss
I200*	Unstable angina
I201*	Angina pectoris with documented spasm
I2088*	Other forms of angina pectoris
I209*	Angina pectoris unspecified
I210	Acute transmural myocardial infarction of anterior wall
I211	Acute transmural myocardial infarction of inferior wall
I212	Acute transmural myocardial infarction of other sites
I213	Acute transmural myocardial infarction of unspecified site
I214	Acute subendocardial myocardial infarction (Includes: Non-Q-wave myocardial infarction)
I219	Acute myocardial infarction unspecified
I220	Subsequent myocardial infarction of anterior wall
I221	Subsequent myocardial infarction of inferior wall
I228	Subsequent myocardial infarction of other sites

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I229	Subsequent myocardial infarction of unspecified site
I260*	Pulmonary embolism with mention of acute cor pulmonale
I269	Pulmonary embolism without mention of acute cor pulmonale
I461*	Sudden cardiac death so described
I469	Cardiac arrest unspecified
I472*	Ventricular tachycardia
I481*	Atrial flutter
I4900*	Ventricular fibrillation
I4901	Ventricular flutter
I500	Congestive heart failure
I501*	Left ventricular failure
I509*	Heart failure unspecified
I801*	Phlebitis & thrombophlebitis of femoral vein
I802	Phlebitis and thrombophlebitis of other deep vessels of lower extremities (Includes: Deep vein thrombosis NOS)
I822*	Embolism and thrombosis of vena cava
I952	Hypotension due to drugs
I971	Other functional disturbances following cardiac surgery
I978	Other postprocedural disorders of circulatory system, not elsewhere classified
I979	Postprocedural disorder of circulatory system, unspecified
J150	Pneumonia due to <i>Klebsiella pneumoniae</i>
J151	Pneumonia due to <i>Pseudomonas</i>
J152	Pneumonia due to <i>Staphylococcus</i>
J155	Pneumonia due to <i>Escherichia coli</i>
J156	Pneumonia due to other aerobic Gram-negative bacteria; <i>Includes: Pneumonia due to Serratia marcescens</i>
J159*	Bacterial pneumonia unspecified
J181*	Lobar pneumonia unspecified
J210*	Acute bronchiolitis due to respiratory syncytial virus
J3801	Paralysis of vocal cords and larynx, unilateral
J3802	Paralysis of vocal cords and larynx, bilateral
J3809	Paralysis of vocal cords and larynx, unspecified whether unilateral or bilateral
J690	Pneumonitis due to food and vomit
J698	Pneumonitis due to other solids and liquids
J81	Pulmonary oedema
J853*	Abscess of mediastinum
J860	Pyothorax with fistula
J869	Pyothorax without fistula
J942	Haemothorax
J9500	Haemorrhage from tracheostomy stoma
J9501	Infection of tracheostomy stoma
J9502	Malfunction of tracheostomy stoma
J9503	Tracheo-esophageal fistula following tracheostomy
J9508*	Other tracheostomy complication
J951	Acute pulmonary insufficiency following thoracic surgery
J952	Acute pulmonary insufficiency following nonthoracic surgery

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J955	Postprocedural subglottic stenosis
J9580	Postprocedural pneumothorax
J9581	Transfusion related acute lung injury (TRALI)
J9588*	Other postprocedural respiratory disorders
J959*	Postprocedural respiratory disorder, unspecified
J960*	Acute respiratory failure
K223*	Perforation of oesophagus
K650	Acute peritonitis
K910	Vomiting following gastrointestinal surgery
K913	Postoperative intestinal obstruction
L890	Stage I decubitus ulcer and pressure area
L891	Stage II decubitus [pressure] ulcer
L892	Stage III decubitus [pressure] ulcer
L893	Stage IV decubitus [pressure] ulcer
L898	Decubitus [pressure] ulcer, unstageable
L899	Decubitus ulcer and pressure area, unspecified
M966	Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate
M968	Other postprocedural musculoskeletal disorders
M969	Postprocedural musculoskeletal disorder, unspecified
N390	Urinary tract infection, site not specified
N990	Postprocedural renal failure
N991	Postprocedural urethral stricture
N994	Postprocedural pelvic peritoneal adhesions
N9951	Infection of external stoma of urinary tract
N998	Other postprocedural disorders of genitourinary system
N999	Postprocedural disorder of genitourinary system, unspecified
O086*	Damage to pelvic organs and tissues following abortion and ectopic molar pregnancy
O2950	Other complications of spinal and epidural anaesthesia during pregnancy
O7020	Third degree perineal laceration during delivery; Includes: Perineal laceration, rupture or tear as in O70.1, also involving anal sphincter during delivery, perineal laceration, rupture or tear as in O70.1, also involving rectovaginal septum during delivery, Perineal laceration, rupture or tear as in O70.1, also involving sphincter NOS during delivery; Excludes:that involving anal or rectal mucosa (O70.3);
O7030	Fourth degree perineal laceration during delivery; Includes: Perineal laceration, rupture or tear as in O70.2, also involving anal mucosa during delivery, Perineal laceration, rupture or tear as in O70.2, also involving rectal mucosa during delivery;
O7090	Perineal laceration during delivery, unspecified;
O7110*	Dehiscence (without extension) of old uterine scar during labour
O7111*	Dehiscence of uterus with extension during labour
O7118*	Other rupture of uterus during labour
O7130	Obstetric laceration of cervix; Includes: Annular detachment of cervix;

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- O7140 Obstetric high vaginal laceration alone; Includes: Laceration of middle or upper third of vaginal wall without mention of perineal laceration; Excludes: with perineal laceration (O70.-);
- O7150 Other obstetric injury to pelvic organs; Includes: Obstetric injury to bladder, Obstetric injury to urethra;
- O7160* Obstetric damage to pelvic joints & ligaments
- O7170* Obstetric haematoma of pelvis; Includes: Obstetric haematoma of perineum, Obstetric haematoma of vagina, Obstetric haematoma of vulva;
- O7180* Other specified obstetric trauma
- O7200* 3rd-stage haemorrhage; Includes: Haemorrhage associated with retained, trapped or adherent placenta, Retained placenta NOS; Code Also any morbidly adherent placenta (O43.2.-);
- O7210* Other immediate postpartum Haemorrhage; Includes: Haemorrhage following delivery of placenta, Postpartum haemorrhage (atonic) NOS;
- O7220* Delayed & secondary postpartum haemorrhage
- O7420 Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
- O7430 Central nervous system complications of anaesthesia during labour and delivery; Includes: Cerebral anoxia due to anaesthesia during labour and delivery;
- O7450 Toxic reaction to local anaesthesia during labour and delivery;
- O7460 Other complications of spinal and epidural anaesthesia during labour and delivery;
- O7480 Other complications of anaesthesia during labour and delivery;
- O7510 Shock during or following labour and delivery; Includes: Obstetric shock;
- O7530* Other infection during labour
- O7540 Other complications of obstetric surgery and procedures; Includes: Cardiac arrest following cesarean or other obstetric surgery or procedures, including delivery NOS, Cardiac failure following cesarean or other obstetric surgery or procedures, including delivery NOS, Cerebral anoxia following cesarean or other obstetric surgery or procedures, including delivery NOS, Conditions in N99.0, N99.8, N99.9; Excludes: complications of anaesthesia during labour and delivery (O74.-);
- O7560* Delayed delivery after spontaneous or unspecified rupture of membranes
- O8500 Puerperal sepsis,
- O8600 Infection of obstetric surgical wound; Includes: Infected caesarean section wound following delivery, Infected perineal repair following delivery;
- O8610 Other infection of genital tract following delivery; Includes: Cervicitis following delivery, Vaginitis following delivery;
- O8620 Urinary tract infection following delivery; Includes: Conditions in N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N39.0 following delivery, Conditions in N10-N12, N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N34.-, N39.0 following delivery, Conditions in, N30.-, N34.-, N39.0 following delivery;

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O8630	Other genitourinary tract infections following delivery; Includes: Puerperal genitourinary tract infection NOS;
O8680	Other specified puerperal infections; Delivered, with mention of postpartum complication
O8710	Deep phlebothrombosis in the puerperium; Includes: Deep-vein thrombosis, postpartum, Pelvic thrombophlebitis, postpartum;
O8940	Spinal and epidural anaesthesia-induced headache during the puerperium;
O8950	Other complications of spinal and epidural anaesthesia during the puerperium;
O8980	Other complications of anaesthesia during the puerperium;
O9000	Disruption of caesarean section wound;
O9010	Disruption of perineal obstetric wound; Includes: Disruption of wound of episiotomy, Disruption of wound of perineal laceration, Secondary perineal tear;
O9020	Haematoma of obstetric wound; Includes: Haemorrhage of obstetric wound;
P033*	Fetus & newborn affected by vacuum extractor [venthouse]
P120	Cephalhaematoma due to birth injury
P123	Bruising of scalp due to birth injury
P128	Other birth injuries to scalp
P134	Fracture of clavicle due to birth injury
P143	Other brachial plexus birth injuries
P154	Birth injury to face
P158	Other specified birth injuries
P360*	Sepsis of newborn due to streptococcus, group B
P361*	Sepsis of newborn due to other and unspecified streptococci
P362	Sepsis of newborn due to Staphylococcus aureus
P363	Sepsis of newborn due to other and unspecified staphylococci
P364*	Sepsis of newborn due to Escherichia coli
P368*	Other bacterial sepsis of newborn
P369*	Bacterial sepsis of newborn unspecified
P38	Omphalitis of newborn with or without mild haemorrhage
R571	Hypovolaemic shock
R572	septic shock
R578*	Other shock
S000*	Superficial injury of scalp
S001	Contusion of eyelid and periocular area
S002*	Oth superfic inj eyelid periocular area
S003*	Superficial injury of nose
S004*	Superficial injury of ear
S005*	Superficial injury of lip & oral cavity
S007*	Multiple superficial injuries of head
S008*	Superficial injury of other parts of head
S009*	Superficial injury of head, part unspecified
S0100	Open wound of scalp uncomplicated
S0101	Open wound of scalp complicated
S0110	Open wound of eyelid and periocular area, uncomplicated
S0120	Open wound of nose, uncomplicated

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S0130	Open wound of ear; uncomplicated
S0140	Open wound of cheek and temporomandibular area, uncomplicated
S0150	Open wound of lip and oral cavity, uncomplicated
S0170	Multiple open wounds head; uncomplicated
S0180	Open wounds of other parts of head, uncomplicated
S0190	Open wound of head, part unspecified, uncomplicated
S02000	Fracture of vault of skull; closed
S02100	Fracture of base of skull; closed
S02200	Fracture of nasal bones; closed
S02300	Fracture of orbital floor; closed
S02480	Other fracture of malar and maxillary bones; closed
S02490	Unspecified fracture of malar and maxillary bones; closed
S025	Fracture of tooth
S02890	Fractures of other unspecified skull and facial bones; closed
S030	Dislocation of jaw
S050	Injury of conjunctiva and corneal abrasion without mention of foreign body
S051	Contusion of eyeball and orbital tissues
S058	Other injuries of eye and orbit
S059*	Injury of eye and orbit unspecified
S060	Concussion
S061	Traumatic cerebral oedema
S0625	Diffuse brain injury without open intracranial wound
S0635	Focal brain injury without open intracranial wound
S064	Epidural haemorrhage
S065	Traumatic subdural haemorrhage
S066	Traumatic subarachnoid haemorrhage
S0685	Other intracranial injuries without open intracranial wound
S069*	Intracranial injury, unspecified
S090	Injury of blood vessels of head NEC
S098*	Other specified injuries of head
S099*	Unspecified injury of head
S101*	Other & unspecified superficial injuries of throat
S109*	Superficial injury of neck, part unspecified
S1348*	Other sprain & strain of cervical spine
S1438	Other and unspecified injury of brachial plexus
S202	Contusion of thorax
S204*	Other superficial injuries of back wall of thorax
S208*	Superficial injury of other and unspecified parts of thorax
S22200	Fracture of sternum; closed
S22300	Fracture of rib; closed
S22400	Multiple fractures of 2 - 4 ribs; closed
S22410	Multiple fractures of 5 or more ribs; closed
S22490	Multiple fractures of unspecified number of ribs; closed
S26811	Laceration and puncture of heart; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; With open wound into thoracic cavity
S27000	Traumatic pneumothorax, without open wound into thoracic cavity

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- S27001 Traumatic pneumothorax, with open wound into thoracic cavity
- S27100 Traumatic haemothorax, without open wound into thoracic cavity
- S27200 Traumatic haemopneumothorax, without open wound into thoracic cavity
- S27300 Contusion and haematoma of lung; Without open wound into thoracic cavity
- S27310 Laceration and puncture of lung; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity
- S27810 Laceration of oesophagus; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity
- S27860 Other and unspecified injury of oesophagus; Without open wound into thoracic cavity
- S300 Contusion of lower back and pelvis
- S301 Contusion of abdominal wall
- S3080* Other superficial injuries of lower back & pelvis
- S3081* Other superficial injuries of abdominal wall
- S3088* Other superficial injuries of abdomen, low back & pelvis, part unspecified
- S309* Superficial injury of abdomen, low back and pelvis, part unspecified
- S31200 Open wound of penis; uncomplicated
- S31400 Open wound of vagina and vulva, uncomplicated
- S32100 Fracture of sacrum; closed
- S32400 Fracture of acetabulum; closed
- S32500 Fracture of pubis; closed
- S32700 Multiple fractures of lumbar spine and pelvis, closed
- S32800 Fracture of other and unspecified parts of lumbar spine and pelvis, closed
- S335* Sprain and strain of lumbar spine
- S351 Injury of inferior vena cava
- S352 Injury of coeliac or mesenteric artery
- S355 Injury of iliac blood vessels
- S36090 Haematoma NOS, laceration NOS, injury to spleen NOS; Without open wound into cavity
- S36091 Haematoma NOS, laceration NOS, injury to spleen NOS; With open wound into cavity
- S36150 Liver haematoma NOS, laceration NOS, injury to liver NOS; Without open wound into cavity
- S36151 Liver haematoma NOS, laceration NOS, injury to liver NOS; With open wound into cavity
- S36411 Laceration of duodenum (without bile duct injury); With open wound into cavity
- S36460 Laceration of small intestine, excluding duodenum; Without open wound into cavity
- S36461 Laceration of small intestine, excluding duodenum; With open wound into cavity
- S36610 Laceration of rectum; Without open wound into cavity
- S36800 Haematoma of other intra-abdominal organs; Without open wound into cavity
- S36810 Laceration of other intra-abdominal organs; Without open wound into cavity
- S37000 Haematoma of kidney; Without open wound into cavity

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S37090	Injury of kidney NOS; Without open wound into cavity
S37110	Laceration of ureter; Without open wound into cavity
S37111	Laceration of ureter; With open wound into cavity
S37190	Injury of NOS ureter; Without open wound into cavity
S37210	Laceration of bladder; Without open wound into cavity
S37211	Laceration of bladder; With open wound into cavity
S37290	Injury NOS of bladder; Without open wound into cavity
S37300	Haematoma of urethra; Without open wound into cavity
S37310	Laceration of urethra; Without open wound into cavity
S37311	Laceration of urethra; With open wound into cavity
S37390	Injury NOS of urethra; Without open wound into cavity
S37610	Laceration of uterus; Without open wound into cavity
S3908	Other and unspecified injury of muscle and tendon of abdomen, lower back and pelvis
S398	Other specified injuries of abdomen, lower back and pelvis
S399	Unspecified injury of abdomen, lower back and pelvis
S400	Contusion of shoulder and upper arm
S408*	Other superfic injuries of shoulder and upper arm
S409*	Superficial injury of shoulder & upper arm, unspecified
S4110	Open wound of upper arm; uncomplicated
S4111	Open wound of upper arm; complicated
S42010	Fracture of shaft of clavicle; closed
S42020	Fracture of acromial end of clavicle; closed
S42090	Fracture of unspecified part of clavicle; closed
S42190	Fracture of unspecified part of scapula; closed
S42200	Fracture of surgical neck of humerus; closed
S42210	Fracture of anatomical neck of humerus; closed
S42220	Fracture greater tuberosity of humerus; closed
S42280	Fracture of other part of upper end of humerus; closed
S42290	Fracture of unspecified part of upper end of humerus; closed
S42300	Fracture of shaft of humerus; closed
S42390	Fracture of unspecified part of humerus; closed
S42400	Supracondylar fracture of humerus; closed
S42480	Fx oth part of low end of humerus; closed
S43000	Anterior dislocation of shoulder; closed
S43090	Unspecified dislocation of glenohumeral joint; closed
S43100	Dislocation of acromioclavicular joint, closed
S4600	Laceration of muscle(s) and tendon(s) of the rotator cuff of shoulder
S4608*	Other and unspecified injury of muscle(s) and tendon(s) of the rotator cuff or shoulder
S497*	Multiple injuries of shoulder & upper arm
S498*	Other specified injuries of shoulder & upper arm
S499*	Unspecified injury of shoulder and upper arm
S500	Contusion of elbow
S501	Contusion of other and unspecified parts of forearm
S507*	Multiple superficial injuries of forearm

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S508*	Other superficial injuries of forearm
S509*	Superficial injury of forearm, unspecified
S5100	Open wound of elbow; uncomplicated
S5101	Open wound of elbow; complicated
S5170	Open wound of forearm, multiple, uncomplicated
S5180	Open wound of other parts of forearm, uncomplicated
S5190	Open wound of forearm, part unspecified, uncomplicated
S52000	Fracture of olecranon process of ulna; closed
S52100	Fracture of head of radius; closed
S52300	Fracture of shaft of radius; closed
S52500	Colles' fracture; closed
S52580	Other fracture of lower end of radius; closed
S52590	Unspecified fracture of lower end of radius; closed
S52600	Fracture of lower end of both ulna and radius, closed
S52800	Fracture of other parts of forearm, closed
S598*	Other specified injuries of forearm
S599*	Unspecified injury of forearm
S600	Contusion of finger(s) without damage to nail; includes: Contusion of finger(s) NOS; excludes: contusion involving nail (matrix) (S60.1)
S602	Contusion of other parts of wrist and hand
S607*	Multiple superficial injuries of wrist & hand
S608*	Other superficial injuries of wrist & hand
S609*	Unspecified superficial injury of wrist & hand
S6100	Open wound of finger(s) without damage to nail, uncomplicated
S6170	Multiple open wounds of wrist and hand, uncomplicated
S6180	Open wound of other parts of wrist and hand, uncomplicated
S6190	Open wound of wrist and hand part, part unspecified, uncomplicated
S62000	Fracture of navicular [scaphoid] bone of hand, closed
S62500	Fracture of proximal phalanx; closed
S62690	Fracture of unspecified part of phalanx of finger; closed
S62800	Fracture of other and unspecified parts of wrist and hand, closed
S63100	Dislocation of metacarpophalangeal (joint) of finger; closed
S6359*	Unspecified sprain and strain of wrist
S698*	Other specified injuries of wrist and hand
S699*	Unspecified injury of wrist and hand
S700	Contusion of hip
S701	Contusion of thigh
S708*	Other superficial injuries of hip & thigh
S709*	Superficial injury of hip and thigh, unspecified
S7110	Open wound of thigh; uncomplicated
S7111	Open wound of thigh; complicated
S72000	Fracture of upper femoral epiphysis (separation); closed
S72010	Fracture of base of femoral neck (cervicotrochanteric); closed
S72080	Other fracture of femoral neck; closed
S72090	Unspecified fracture of neck of femur; closed
S72100	Intertrochanteric fracture; closed

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S72190	Unspecified trochanteric fracture closed
S72200	Subtrochanteric fracture; closed
S72300	Fracture of shaft of femur; closed
S72410	Condylar fracture of femur; closed
S72420	Supracondylar fracture of femur; closed
S72490	Unspecified fracture of lower (distal) end of femur; closed
S72800	Fractures of other parts of femur, closed
S72900	Fracture of femur, part unspecified, closed
S73000	Posterior dislocation of hip; closed
S73090	Unspecified dislocation of hip; closed
S7418	Other and unspecified injury of femoral nerve at hip and thigh level
S750	Injury of femoral artery
S799*	Unspecified injury of hip and thigh
S800	Contusion of knee
S801	Contusion of other and unspecified parts of lower leg
S807*	Multiple superficial injuries lower leg
S808*	Other superficial injuries of lower leg
S809*	Superficial injury of lower leg, unspecified
S8100	Open wound of knee; uncomplicated
S8101	Open wound of knee; complicated
S8180	Open wounds of other parts of lower leg, uncomplicated
S8181	Open wounds of other parts of lower leg, complicated; includes: Wounds with mention of delayed healing, delayed treatment, foreign body or major infection
S8190	Open wound of lower leg, part unspecified, uncomplicated
S8191	Open wound of lower leg, part unspecified, complicated; includes: Wounds with mention of delayed healing, delayed treatment, foreign body or major infection
S82000	Fracture of patella; closed
S82100	Fracture of upper (proximal) end of tibia with or without fibula, closed
S82200	Fracture of shaft of tibia with or without fibula, closed
S82300	Fracture of lower (distal) end of tibia with or without fibula, closed
S82400	Fracture of fibula alone, closed
S82500	Fracture of medial malleolus, closed
S82600	Fracture of lateral malleolus, closed
S82800	Bimalleolar fracture of ankle; closed
S82890	Fracture of ankle NOS; closed
S836*	Sprain & strain of other and unspecified parts of knee
S898*	Other specified injuries of lower leg
S899*	Unspecified injury of lower leg
S900	Contusion of ankle
S901	Contusion of toe(s) without damage to nail; includes: Contusion of toe(s) NOS
S903	Contusion of other and unspecified parts of foot
S907*	Multiple superficial injuries of ankle & foot
S908*	Other superficial injuries of ankle & foot
S909*	Superficial injury of ankle & foot, unspecified

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S9100	Open wound of ankle; uncomplicated
S9110	Open wound of toe(s) without damage to nail, uncomplicated
S9120	Open wound of toe(s) with damage to nail, uncomplicated
S9130	Open wound of other parts of foot, uncomplicated
S92000	Fracture of calcaneus; closed
S92300	Fracture of metatarsal bone; closed
S92400	Fracture of great toe; closed
S92500	Fracture of other toe; closed
S9349*	Sprain and strain of ankle; unspecified
S998*	Other specified injuries of ankle and foot
S999*	Unspecified injury of ankle and foot
T001*	Superficial injuries involving thorax with abdomen, lower back and pelvis
T008*	Superficial injuries involving other combinations of body regions
T009*	Multiple superficial injuries, unspecified
T090*	Superficial injury of trunk level, unspecified
T110*	Superficial injury upper limb level, unspecified
T111	Open wound of upper limb, level unspecified
T130*	Superficial injury lower limb level, unspecified
T131	Open wound of lower limb, level unspecified
T140*	Superficial injuries of unspecified body region
T149*	Injury unspecified
T16*	Foreign body in ear
T172*	Foreign body in pharynx
T173	Foreign body in larynx
T174	Foreign body in trachea
T175	Foreign body in bronchus
T178	Foreign body in other and multiple parts of respiratory tract
T179	Foreign body in respiratory tract, part unspecified
T180*	Foreign body in mouth
T181*	Foreign body in oesophagus
T182*	Foreign body in stomach
T183*	Foreign body in small intestine
T189*	Foreign body in alimentary tract, part unspecified
T190	Foreign body in urethra
T191	Foreign body in bladder
T200	Burn of unspecified degree of head and neck
T202	Burn of second degree of head and neck
T210	Burn of unspecified thickness of trunk
T211	Burn of first degree of trunk
T212	Burn of second degree of trunk
T213	Burn of third degree of trunk
T220	Burn of unspecified degree of shoulder and upper limb, except wrist and hand
T224	Corrosion of unspecified degree of shoulder and upper limb, except wrist and hand
T230	Burn of unspecified degree of wrist and hand
T232	Burn of second degree of wrist and hand

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T240	Burn of unspecified degree of hip and lower limb, except ankle and foot
T242	Burn of second degree of hip and lower limb, except ankle and foot
T250	Burn of unspecified degree of ankle and foot
T252	Burn of second degree of ankle and foot
T282	Burn of other parts of alimentary tract
T360	Poisoning by penicillins
T361	Poisoning by cephalosporins and other beta-lactam antibiotics
T365	Poisoning by aminoglycosides
T368	Poisoning by other systemic antibiotics
T369	Poisoning by systemic antibiotic, unspecified
T378	Poisoning by other specified systemic anti-infectives and antiparasitics
T380	Poisoning by glucocorticoids and synthetic analogues
T383	Poisoning by insulin and oral hypoglycaemic [antidiabetic] drugs
T390	Poisoning by salicylates
T391	Poisoning by 4-Aminophenol derivatives
T393	Poisoning by other nonsteroidal anti-inflammatory drugs [NSAID]
T398	Poisoning by other nonopioid analgesics and antipyretics, not elsewhere classified
T402	Poisoning by other opioids
T403	Poisoning by methadone
T404	Poisoning by other synthetic narcotics
T406	Poisoning by other and unspecified narcotics
T412	Poisoning by other and unspecified general anaesthetics
T413	Poisoning by local anaesthetics
T420	Poisoning by hydantoin derivatives
T421	Poisoning by iminostilbenes
T424	Poisoning by benzodiazepines
T426	Poisoning by other antiepileptic and sedative-hypnotic drugs
T427	Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
T430	Poisoning by tricyclic and tetracyclic antidepressants
T432	Poisoning by other and unspecified antidepressants
T434	Poisoning by butyrophenone and thioxanthene neuroleptics
T435	Poisoning by other and unspecified antipsychotics and neuroleptics
T438	Poisoning by other psychotropic drugs, not elsewhere classified
T445	Poisoning by predominantly beta-adrenoreceptor agonists, not elsewhere classified
T447	Poisoning by beta-Adrenoreceptor antagonists, not elsewhere classified
T450	Poisoning by antiallergic and antiemetic drugs
T451	Poisoning by antineoplastic and immunosuppressive drugs
T455	Poisoning by anticoagulants
T457	Poisoning by anticoagulant antagonists, vitamin K and other coagulants
T458	Poisoning by other primarily systemic and haematological agents
T460	Poisoning by cardiac-stimulant glycosides and drugs of similar action
T461	Poisoning by calcium-channel blockers
T462	Poisoning by other antidysrhythmic drugs, not elsewhere classified
T464	Poisoning by angiotensin-converting-enzyme inhibitors

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T465	Poisoning by other antihypertensive drugs, not elsewhere classified
T474	Poisoning by other laxatives
T480	Poisoning by oxytocic drugs
T486	Poisoning by antiasthmatics, not elsewhere classified
T490	Poisoning by local antifungal, anti-infective and anti-inflammatory drugs, not elsewhere classified
T501	Poisoning by loop [high-ceiling] diuretics
T502	Poisoning by carbonic-anhydrase inhibitors, benzothiadiazides and other diuretics
T503	Poisoning by electrolytic, caloric and water-balance agents
T508	Poisoning by diagnostic agents
T509	Poisoning by other and unspecified drugs, medicaments and biological substances
T71	Asphyxiation
T788	Other adverse effects, not elsewhere classified
T792	Traumatic secondary and recurrent haemorrhage
T793	Post-traumatic wound infection, not elsewhere classified
T796	Traumatic ischaemia of muscle
T797	Traumatic subcutaneous emphysema
T798	Other early complications of trauma
T800	Air embolism following infusion, transfusion and therapeutic injection
T801	Vascular complications following infusion, transfusion and therapeutic injection
T802	Infections following infusion, transfusion and therapeutic injection
T803	ABO incompatibility reaction
T805	Anaphylactic shock due to serum
T806	Other serum reactions
T808	Other complications following infusion, transfusion and therapeutic injection
T809	Unspecified complication following infusion, transfusion and therapeutic injection
T810	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
T811	Shock during or resulting from a procedure, not elsewhere classified
T812	Accidental puncture and laceration during a procedure, not elsewhere classified
T813	Disruption of operation wound, not elsewhere classified
T814	Infection following a procedure, not elsewhere classified
T8152	Perforation due to foreign body accidentally left in body cavity or operation wound following a procedure
T8158	Other specified complication due to foreign body left in body cavity or operation wound following a procedure
T8159	Unspecified complication due to foreign body accidentally left in body cavity or operation wound following a procedure
T816	Acute reaction to foreign substance accidentally left during a procedure
T817	Vascular complications following a procedure, not elsewhere classified
T8180	Complication of inhalation therapy

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T8181	Emphysema (subcutaneous) resulting from a procedure
T8182	Persistent postoperative fistula
T8188	Other complications of procedures, not elsewhere classified
T819	Unspecified complication of procedure
T820	Mechanical complication of heart valve prosthesis
T821	Mechanical complication of cardiac electronic device
T822	Mechanical complication of coronary artery bypass and valve grafts
T823	Mechanical complication of other vascular grafts
T824	Mechanical complication of vascular dialysis catheter
T825	Mechanical complication of other cardiac and vascular devices and implants
T826	Infection and inflammatory reaction due to cardiac valve prosthesis
T827	Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts
T828	Other specified complications of cardiac and vascular prosthetic devices, implants and grafts
T829	Unspecified complication of cardiac and vascular prosthetic device, implant and graft
T830	Mechanical complication of urinary (indwelling) catheter
T831	Mechanical complication of other urinary devices and implants
T832	Mechanical complication of graft of urinary organ
T833	Mechanical complication of intrauterine contraceptive device
T834	Mechanical complication of other prosthetic devices, implants and grafts in genital tract
T835	Infection and inflammatory reaction due to prosthetic device, implant and graft in urinary system
T836	Infection and inflammatory reaction due to prosthetic device, implant and graft in genital tract
T838	Other complications of genitourinary prosthetic devices, implants and grafts
T839	Unspecified complication of genitourinary prosthetic device, implant and graft
T8400	Mechanical complication of shoulder prosthesis
T8403	Mechanical complication of hip prosthesis
T8404	Mechanical complication of knee prosthesis
T8410	Mechanical complication of internal fixation device of humerus
T8411	Mechanical complication of internal fixation device of radius and ulna
T8413	Mechanical complication of internal fixation device of femur
T8414	Mechanical complication of internal fixation device of tibia and fibula
T8415	Mechanical complication of internal fixation device of bones of foot
T8419	Mechanical complication of internal fixation device of bones of limb NOS
T8422	Mechanical complication of internal fixation device of mandible
T8423	Mechanical complication of internal fixation device of spinal vertebrae
T8424	Mechanical complication of internal fixation device of pelvis
T8428	Mechanical complication of internal fixation device of other bones
T843	Mechanical complication of other bone devices, implants and grafts
T844	Mechanical complication of other internal orthopaedic devices, implants and grafts
T8453	Infection and inflammatory reaction due to hip prosthesis

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T8454	Infection and inflammatory reaction due to knee prosthesis
T8460	Infection and inflammatory reaction due to internal fixation device of humerus
T8461	Infection and inflammatory reaction due to internal fixation device of radius and ulna
T8463	Infection and inflammatory reaction due to internal fixation device of femur
T8464	Infection and inflammatory reaction due to internal fixation device of tibia and fibula
T8465	Infection and inflammatory reaction due to internal fixation device of bones of foot
T8468	Infection and inflammatory reaction due to internal fixation device of bones at other site
T847	Infection and inflammatory reaction due to other internal orthopaedic prosthetic devices, implants & grafts
T848	Other complications of internal orthopaedic prosthetic devices, implants and grafts
T849	Unspecified complication of internal orthopaedic prosthetic device, implant and graft
T850	Mechanical complication of ventricular intracranial (communicating) shunt; includes: Conditions listed in T82.0 due to ventricular intracranial (communicating) shunt
T851	Mechanical complication of implanted electronic stimulator of nervous system; includes: Conditions listed in T82.0 due to electronic neurostimulator (electrode) of: brain, peripheral nerve, spinal cord
T852	Mechanical complication of intraocular lens; includes: Conditions listed in T82.0 due to intraocular lens
T853	Mechanical complication of other ocular prosthetic devices, implants and grafts; includes: Conditions listed in T82.0 due to: corneal graft, prosthetic orbit of eye
T855	Mechanical complication of gastrointestinal prosthetic devices, implants and grafts; Conditions listed in T82.0 due to: bile-duct prosthesis, oesophageal anti-reflux device
T856	Mechanical complication of other specified internal prosthetic devices, implants and grafts
T857	Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts
T858*	Other complications of internal prosthetic devices, implants and grafts, not elsewhere classified
T859*	Unspecified complication of internal orthopaedic prosthetic device, implant and graft
T8742	Infection of below knee amputation stump
T8746	Infection of above knee amputation stump
T8747	Infection of below knee amputation stump
T8748	Infection of other amputation stump
T8752	Necrosis of below elbow amputation stump
T8756	Necrosis of above knee amputation stump
T8757	Necrosis of below knee amputation stump

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- T8758 Necrosis of other amputation stump
- T882 Shock due to anaesthesia
- T883 Malignant hyperthermia due to anaesthesia
- T884 Failed or difficult intubation
- T885 Other complications of anaesthesia
- T886 Anaphylactic shock due to adverse effect of correct drug or medicament properly administered

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Category/Type	icd10	Description
Hospital-acquired infection	A020	Salmonella enteritis
	A021	Salmonella septicaemia
	A044	Other intestinal Escherichia coli infections
	A045	Campylobacter enteritis
	A047	Enterocolitis due to Clostridium difficile; includes: Foodborne intoxication by Clostridium difficile, Pseudomembranous colitis
	A048	Other specified bacterial intestinal infections
	A049	Bacterial intestinal infection, unspecified
	A080	Rotaviral enteritis
	A081	Acute gastroenteropathy due to Norwalk agent; includes: Small round structured virus enteritis
	A410	Sepsis due to Staphylococcus aureus
	A411	Sepsis due to other specified staphylococcus; includes: Sepsis due to coagulase-negative staphylococcus
	A412	Sepsis due to unspecified staphylococcus
	A414	Septicaemia due to anaerobes
	A4150	Sepsis due to Escherichia coli [E.coli]
	A4151	Sepsis due to Pseudomonas; includes: Pseudomonas aeruginosa
	A4152	Sepsis due to Serratia
	A4158	Sepsis due to other gram-negative organisms; includes: Gram-negative sepsis NOS
	A4180	Sepsis due to enterococcus; excludes: due to Streptococcus D (A40.2)
	A4188	Other specified septicaemia
	A419	Septicaemia unspecified
	A490	Staphylococcal infection, unspecified site
	B309	Viral conjunctivitis unspecified
	B373	Candidiasis of vulva and vagina
	B374	Candidiasis of other urogenital sites
	B377	Candidal septicaemia
	B3780	Candidal esophagitis
	B3781	Candidal enteritis
	B956	Staphylococcus aureus as the cause of diseases classified to other chapters
	B957	Other staphylococcus as the cause of diseases classified to other chapters
	B958	Unspecified staphylococcus as the cause of diseases classified to other chapters
	B961	Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified to other chapters

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B962	Escherichia coli [E. coli] as the cause of diseases classified to other chapters
B964	Proteus (mirabilis)(morganii) as the cause of diseases classified in other chapters
B965	Pseudomonas (aeruginosa) as the cause of diseases classified to other chapters
B9681	Enterococcus as the cause of diseases classified to other chapters
B9688	Other specified bacterial agents as the cause of diseases classified to other chapters
B974	Respiratory syncytial virus as the cause of diseases classified to other chapters
G003	Staphylococcal meningitis
J150	Pneumonia due to Klebsiella pneumonia
J151	Pneumonia due to Pseudomonas
J152	Pneumonia due to Staphylococcus
J155	Pneumonia due to Escherichia coli
J156	Pneumonia due to other aerobic Gram-negative bacteria; <i>Includes:</i> Pneumonia due to Serratia marcescens
J159	Bacterial pneumonia unspecified
J181	Lobar pneumonia unspecified
J210	Acute bronchiolitis due to respiratory syncytial virus
J853	Abscess of mediastinum
J860	Pyothorax with fistula
J869	Pyothorax without fistula
J9501	Infection of tracheostomy stoma
K650	Acute peritonitis
N390	Urinary tract infection, site not specified
N9951	Infection of external stoma of urinary tract
O7530	Other infection during labour/delivered
O8500	Puerperal sepsis,
O8600	Infection of obstetric surgical wound; <i>Includes:</i> Infected caesarean section wound following delivery, Infected perineal repair following delivery;
O8610	Other infection of genital tract following delivery; <i>Includes:</i> Cervicitis following delivery, Vaginitis following delivery;
O8620	Urinary tract infection following delivery; <i>Includes:</i> Conditions in N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N39.0 following delivery, Conditions in N10-N12, N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N34.-, N39.0 following delivery, Conditions in, N30.-, N34.-, N39.0 following delivery;
O8630	Other genitourinary tract infections following delivery; <i>Includes:</i> Puerperal genitourinary tract infection NOS;
O8680	Other specified puerperal infections;
P360	Sepsis of newborn due to streptococcus, group B
P361	Sepsis of newborn due to other and unspecified streptococci
P362	Sepsis of newborn due to Staphylococcus aureus

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P363	Sepsis of newborn due to other and unspecified staphylococci
P364	Sepsis of newborn due to Escherichia coli
P368	Other bacterial sepsis of newborn
P369	Bacterial sepsis of newborn unspecified
P38	Omphalitis of newborn with or without mild haemorrhage
R572	septic shock
T814	Infection following a procedure, not elsewhere classified
T826	Infection and inflammatory reaction due to cardiac valve prosthesis
T827	Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts
T835	Infection and inflammatory reaction due to prosthetic device, implant and graft in urinary system
T836	Infection and inflammatory reaction due to prosthetic device, implant and graft in genital tract
T8453	Infection and inflammatory reaction due to hip prosthesis
T8454	Infection and inflammatory reaction due to knee prosthesis
T8460	Infection and inflammatory reaction due to internal fixation device of humerus
T8461	Infection and inflammatory reaction due to internal fixation device of radius and ulna
T8463	Infection and inflammatory reaction due to internal fixation device of femur
T8464	Infection and inflammatory reaction due to internal fixation device of tibia and fibula
T8465	Infection and inflammatory reaction due to internal fixation device of bones of foot
T8468	Infection and inflammatory reaction due to internal fixation device of bones at other site
T847	Infection and inflammatory reaction due to other internal orthopaedic prosthetic devices, implants & grafts
T857	Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts
T8742	Infection of below knee amputation stump
T8746	Infection of above knee amputation stump
T8747	Infection of below knee amputation stump
T8748	Infection of other amputation stump
Decubitus Ulcer	
L890	Stage I decubitus ulcer and pressure area
L891	Stage II decubitus [pressure] ulcer
L892	Stage III decubitus [pressure] ulcer
L893	Stage IV decubitus [pressure] ulcer
L898	Decubitus [pressure] ulcer, unstageable
L899	Decubitus ulcer and pressure area, unspecified
Endocrine & Metabolic Complications	

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E1010 Type 1 diabetes mellitus with ketoacidosis
 E1063 Type 1 diabetes mellitus with hypoglycaemia
 E1064 type 1 diabetes mellitus with poor control, so described
 E110 Type 2 diabetes mellitus with coma
 E1110 Type 2 DM with ketoacidosis
 E1111 Type 2 diabetes mellitus with lactic acidosis
 E1163 Type 2 diabetes mellitus with hypoglycaemia
 E1164 type 2 diabetes mellitus with poor control, so described
 E1363 Other specified diabetes mellitus with hypoglycaemia
 E1463 Unspecified diabetes mellitus with hypoglycaemia
 E15 Hypoglycaemic coma
 E160 Drug-induced hypoglycaemia without coma
 E272 Addisonian crisis
 E891 Postprocedural hypoinsulinaemia
 E892 Postprocedural hypoparathyroidism
 E893 Postprocedural hypopituitarism
 G372 Central pontine myelinolysis
 T503 Poisoning by electrolytic, caloric and water-balance agents

Venous Thromboembolic Events

I260 Pulmonary embolism with mention of acute cor pulmonale
 I269 Pulmonary embolism without mention of acute cor pulmonale
 I801 Phlebitis & thrombophlebitis of femoral vein
 I802 Phlebitis and thrombophlebitis of other deep vessels of lower extremities (Includes: Deep vein thrombosis NOS)
 I822 Embolism and thrombosis of vena cava
 O8710 Deep phlebothrombosis in the puerperium; Includes: Deep-vein thrombosis, postpartum, Pelvic thrombophlebitis, postpartum;

Cardiac Complications

I200 Unstable angina
 I201 Angina pectoris with documented spasm
 I2088 Other forms of angina pectoris
 I209 Angina pectoris unspecified
 I210 Acute transmural myocardial infarction of anterior wall
 I211 Acute transmural myocardial infarction of inferior wall
 I212 Acute transmural myocardial infarction of other sites
 I213 Acute transmural myocardial infarction of unspecified site
 I214 Acute subendocardial myocardial infarction (Includes: Non-Q-wave myocardial infarction)
 I219 Acute myocardial infarction unspecified
 I220 Subsequent myocardial infarction of anterior wall

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I221	Subsequent myocardial infarction of inferior wall
I228	Subsequent myocardial infarction of other sites
I229	Subsequent myocardial infarction of unspecified site
I461	Sudden cardiac death so described
I469	Cardiac arrest unspecified
I472	Ventricular tachycardia
I481	Atrial flutter
I4900	Ventricular fibrillation
I4901	Ventricular flutter
I500	Congestive heart failure
I501	Left ventricular failure
I509	Heart failure unspecified
J81	Pulmonary oedema
O7420	Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
S26811	Laceration and puncture of heart; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; With open wound into thoracic cavity
T820	Mechanical complication of heart valve prosthesis
T821	Mechanical complication of cardiac electronic device
T822	Mechanical complication of coronary artery bypass and valve grafts
T825	Mechanical complication of other cardiac and vascular devices and implants
T826	Infection and inflammatory reaction due to cardiac valve prosthesis
T827	Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts
T828	Other specified complications of cardiac and vascular prosthetic devices, implants and grafts
T829	Unspecified complication of cardiac and vascular prosthetic device, implant and graft

Respiratory Complications

J150	Pneumonia due to Klebsiella pneumonia
J151	Pneumonia due to Pseudomonas
J152	Pneumonia due to Staphylococcus
J155	Pneumonia due to Escherichia coli
J156	Pneumonia due to other aerobic Gram-negative bacteria; <i>Includes:</i> Pneumonia due to Serratia marcescens
J159	Bacterial pneumonia unspecified
J181	Lobar pneumonia unspecified
J210	Acute bronchiolitis due to respiratory syncytial virus
J3801	Paralysis of vocal cords and larynx, unilateral
J3802	Paralysis of vocal cords and larynx, bilateral
J3809	Paralysis of vocal cords and larynx, unspecified whether unilateral or bilateral

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J690	Pneumonitis due to food and vomit
J698	Pneumonitis due to other solids and liquids
J853	Abscess of mediastinum
J860	Pyothorax with fistula
J869	Pyothorax without fistula
J942	Haemothorax
J9500	Haemorrhage from tracheostomy stoma
J9501	Infection of tracheostomy stoma
J9502	Malfunction of tracheostomy stoma
J9503	Tracheo-esophageal fistula following tracheostomy
J9508	Other tracheostomy complication
J951	Acute pulmonary insufficiency following thoracic surgery
J952	Acute pulmonary insufficiency following nonthoracic surgery
J955	Postprocedural subglottic stenosis
J9580	Postprocedural pneumothorax
J9581	Transfusion related acute lung injury (TRALI)
J9588	Other postprocedural respiratory disorders
J959	Postprocedural respiratory disorder, unspecified
J960	Acute respiratory failure
S202	Contusion of thorax
S22200	Fracture of sternum; closed
S22300	Fracture of rib; closed
S22400	Multiple fractures of 2 - 4 ribs; closed
S22410	Multiple fractures of 5 or more ribs; closed
S22490	Multiple fractures of unspecified number of ribs; closed
S27000	Traumatic pneumothorax, without open wound into thoracic cavity
S27001	Traumatic pneumothorax, with open wound into thoracic cavity
S27100	Traumatic haemothorax, without open wound into thoracic cavity
S27200	Traumatic haemopneumothorax, without open wound into thoracic cavity
S27300	Contusion and haematoma of lung; Without open wound into thoracic cavity
S27310	Laceration and puncture of lung; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity
T173	Foreign body in larynx
T174	Foreign body in trachea
T175	Foreign body in bronchus
T178	Foreign body in other and multiple parts of respiratory tract
T179	Foreign body in respiratory tract, part unspecified
T71	Asphyxiation
T797	Traumatic subcutaneous emphysema
T8181	Emphysema (subcutaneous) resulting from a procedure
Hemorrhagic Events	
D62	Acute posthaemorrhagic anaemia

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- D683 Haemorrhagic disorder due to circulating anticoagulants; Includes: longterm use of anticoagulants, warfarin or like drugs, Hyperheparinaemia increase in anti-IXa, VIIIa, Xa, Xia, antithrombin, non-traumatic hematoma due to circulating anticoagulants
- J942 Haemothorax
- J9500 Haemorrhage from tracheostomy stoma
- O7170 Obstetric haematoma of pelvis; Includes: Obstetric haematoma of perineum
- O7180 Other specified obstetric trauma
- O7200 Third-stage haemorrhage; Includes: Haemorrhage associated with retained, trapped or adherent placenta, Retained placenta NOS; Code Also any morbidly adherent placenta (O43.2.-);
- O7210 Other immediate postpartum Haemorrhage; Includes: Haemorrhage following delivery of placenta, Postpartum haemorrhage (atonic) NOS;
- O7220 Delayed & secondary postpartum haemorrhage
- O9020 Haematoma of obstetric wound; Includes: Haemorrhage of obstetric wound;
- P120 Cephalhaematoma due to birth injury
- S064 Epidural haemorrhage
- S065 Traumatic subdural haemorrhage
- S066 Traumatic subarachnoid haemorrhage
- S27100 Traumatic haemothorax, without open wound into thoracic cavity
- S27200 Traumatic haemopneumothorax, without open wound into thoracic cavity
- S27300 Contusion and haematoma of lung; Without open wound into thoracic cavity
- S36090 Haematoma NOS, laceration NOS, injury to spleen NOS; Without open wound into cavity
- S36091 Haematoma NOS, laceration NOS, injury to spleen NOS; With open wound into cavity
- S36150 Liver haematoma NOS, laceration NOS, injury to liver NOS; Without open wound into cavity
- S36151 Liver haematoma NOS, laceration NOS, injury to liver NOS; With open wound into cavity
- S36800 Haematoma of other intra-abdominal organs; Without open wound into cavity
- S36810 Laceration of other intra-abdominal organs; Without open wound into cavity
- S37000 Haematoma of kidney; Without open wound into cavity
- S37300 Haematoma of urethra; Without open wound into cavity
- T792 Traumatic secondary and recurrent haemorrhage
- T810 Haemorrhage and haematoma complicating a procedure, not elsewhere classified

**Drug Related
Adverse Events**

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D683	Haemorrhagic disorder due to circulating anticoagulants; Includes: longterm use of anticoagulants, warfarin or like drugs, Hyperheparinaemia increase in anti-IXa, VIIIa, Xa, Xia, antithrombin, non-traumatic hematoma due to circulating anticoagulants
E160	Drug-induced hypoglycaemia without coma
E883	Tumour lysis syndrome
H910	Ototoxic hearing loss
I952	Hypotension due to drugs
O7450	Toxic reaction to local anaesthesia during labour and delivery;
T360	Poisoning by penicillins
T361	Poisoning by cephalosporins and other beta-lactam antibiotics
T365	Poisoning by aminoglycosides
T368	Poisoning by other systemic antibiotics
T369	Poisoning by systemic antibiotic, unspecified
T378	Poisoning by other specified systemic anti-infectives and antiparasitics
T380	Poisoning by glucocorticoids and synthetic analogues
T383	Poisoning by insulin and oral hypoglycaemic [antidiabetic] drugs
T390	Poisoning by salicylates
T391	Poisoning by 4-Aminophenol derivatives
T393	Poisoning by other nonsteroidal anti-inflammatory drugs [NSAID]
T398	Poisoning by other nonopioid analgesics and antipyretics, not elsewhere classified
T402	Poisoning by other opioids
T403	Poisoning by methadone
T404	Poisoning by other synthetic narcotics
T406	Poisoning by other and unspecified narcotics
T412	Poisoning by other and unspecified general anaesthetics
T413	Poisoning by local anaesthetics
T420	Poisoning by hydantoin derivatives
T421	Poisoning by iminostilbenes
T424	Poisoning by benzodiazepines
T426	Poisoning by other antiepileptic and sedative-hypnotic drugs
T427	Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
T430	Poisoning by tricyclic and tetracyclic antidepressants
T432	Poisoning by other and unspecified antidepressants
T434	Poisoning by butyrophenone and thioxanthene neuroleptics
T435	Poisoning by other and unspecified antipsychotics and neuroleptics
T438	Poisoning by other psychotropic drugs, not elsewhere classified
T445	Poisoning by predominantly beta-adrenoreceptor agonists, not elsewhere classified
T447	Poisoning by beta-Adrenoreceptor antagonists, not elsewhere classified
T450	Poisoning by anti-allergic and antiemetic drugs
T451	Poisoning by antineoplastic and immunosuppressive drugs
T455	Poisoning by anticoagulants

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	T457	Poisoning by anticoagulant antagonists, vitamin K and other coagulants
	T458	Poisoning by other primarily systemic and haematological agents
	T460	Poisoning by cardiac-stimulant glycosides and drugs of similar action
	T461	Poisoning by calcium-channel blockers
	T462	Poisoning by other antidysrhythmic drugs, not elsewhere classified
	T464	Poisoning by angiotensin-converting-enzyme inhibitors
	T465	Poisoning by other antihypertensive drugs, not elsewhere classified
	T474	Poisoning by other laxatives
	T480	Poisoning by oxytocic drugs
	T486	Poisoning by antiasthmatics, not elsewhere classified
	T490	Poisoning by local antifungal, anti-infective and anti-inflammatory drugs, not elsewhere classified
	T501	Poisoning by loop [high-ceiling] diuretics
	T502	Poisoning by carbonic-anhydrase inhibitors, benzothiadiazides and other diuretics
	T509	Poisoning by other and unspecified drugs, medicaments and biological substances
	T808	Other complications following infusion, transfusion and therapeutic injection
	T809	Unspecified complication following infusion, transfusion and therapeutic injection
	T8180	Complication of inhalation therapy
	T882	Shock due to anaesthesia
	T883	Malignant hyperthermia due to anaesthesia
	T886	Anaphylactic shock due to adverse effect of correct drug or medicament properly administered
Adverse events related to fluid management		
	E860	Dehydration
	E868	Other volume depletion
	E877	Fluid overload
	G372	Central pontine myelinolysis
	T503	Poisoning by electrolytic, caloric and water-balance agents
	T808	Other complications following infusion, transfusion and therapeutic injection
	T809	Unspecified complication following infusion, transfusion and therapeutic injection
Obstetrical Complications affecting mother		
	O086	Damage to pelvic organs and tissues following abortion and ectopic molar pregnancy
	O2950	Other complications of spinal and epidural anaesthesia during pregnancy;

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- O7020 Third degree perineal laceration during delivery; Includes: Perineal laceration, rupture or tear as in O70.1, also involving anal sphincter during delivery, perineal laceration, rupture or tear as in O70.1, also involving rectovaginal septum during delivery, Perineal laceration, rupture or tear as in O70.1, also involving sphincter NOS during delivery; Excludes: that involving anal or rectal mucosa (O70.3);
- O7030 Fourth degree perineal laceration during delivery; Includes: Perineal laceration, rupture or tear as in O70.2, also involving anal mucosa during delivery, Perineal laceration, rupture or tear as in O70.2, also involving rectal mucosa during delivery;
- O7090 Perineal laceration during delivery, unspecified;
- O7110 Dehiscence (without extension) of old uterine scar during labour
- O7111 Dehiscence of uterus with extension during labour
- O7118 Other rupture of uterus during labour
- O7130 Obstetric laceration of cervix; Includes: Annular detachment of cervix;
- O7140 Obstetric high vaginal laceration alone; Includes: Laceration of middle or upper third of vaginal wall without mention of perineal laceration; Excludes: with perineal laceration (O70.-);
- O7150 Other obstetric injury to pelvic organs; Includes: Obstetric injury to bladder, Obstetric injury to urethra;
- O7160 Obstetric damage to pelvic joints & ligaments
- O7170 Obstetric haematoma of pelvis; Includes: Obstetric haematoma of perineum, Obstetric haematoma of vagina, Obstetric haematoma of vulva;
- O7180 Other specified obstetric trauma
- O7200 Third-stage haemorrhage; Includes: Haemorrhage associated with retained, trapped or adherent placenta, Retained placenta NOS; Code Also any morbidly adherent placenta (O43.2.-);
- O7210 Other immediate postpartum Haemorrhage; Includes: Haemorrhage following delivery of placenta, Postpartum haemorrhage (atonic) NOS;
- O7220 Delayed & secondary postpartum haemorrhage
- O7420 Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
- O7430 Central nervous system complications of anaesthesia during labour and delivery; Includes: Cerebral anoxia due to anaesthesia during labour and delivery;
- O7450 Toxic reaction to local anaesthesia during labour and delivery;
- O7460 Other complications of spinal and epidural anaesthesia during labour and delivery;
- O7480 Other complications of anaesthesia during labour and delivery;
- O7510 Shock during or following labour and delivery; Includes: Obstetric shock;
- O7530 Other infection during labour

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O7540	Other complications of obstetric surgery and procedures; Includes: Cardiac arrest following cesarean or other obstetric surgery or procedures, including delivery NOS, Cardiac failure following cesarean or other obstetric surgery or procedures, including delivery NOS, Cerebral anoxia following cesarean or other obstetric surgery or procedures, including delivery NOS, Conditions in N99.0, N99.8, N99.9; Excludes: complications of anaesthesia during labour and delivery (O74.-);
O7560	Delayed delivery after spontaneous or unspecified rupture of membranes
O8500	Puerperal sepsis
O8600	Infection of obstetric surgical wound; Includes: Infected caesarean section wound following delivery, Infected perineal repair following delivery;
O8610	Other infection of genital tract following delivery; Includes: Cervicitis following delivery, Vaginitis following delivery;
O8620	Urinary tract infection following delivery; Includes: Conditions in N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N39.0 following delivery, Conditions in N10-N12, N15.-, N30.-, N34.-, N39.0 following delivery, Conditions in N34.-, N39.0 following delivery, Conditions in, N30.-, N34.-, N39.0 following delivery;
O8630	Other genitourinary tract infections following delivery; Includes: Puerperal genitourinary tract infection NOS;
O8680	Other specified puerperal infections;
O8710	Deep phlebothrombosis in the puerperium; Includes: Deep-vein thrombosis, postpartum, Pelvic thrombophlebitis, postpartum;
O8940	Spinal and epidural anaesthesia-induced headache during the puerperium;
O8950	Other complications of spinal and epidural anaesthesia during the puerperium;
O8980	Other complications of anaesthesia during the puerperium;
O9000	Disruption of caesarean section wound;
O9010	Disruption of perineal obstetric wound; Includes: Disruption of wound of episiotomy, Disruption of wound of perineal laceration, Secondary perineal tear;
O9020	Haematoma of obstetric wound; Includes: Haemorrhage of obstetric wound;
Obstetrical Complications affecting fetus	
P033	Fetus & newborn affected by vacuum extractor [venthouse]
P120	Cephalhaematoma due to birth injury
P123	Bruising of scalp due to birth injury
P128	Other birth injuries to scalp
P134	Fracture of clavicle due to birth injury
P143	Other brachial plexus birth injuries

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	P154	Birth injury to face
	P158	Other specified birth injuries
	P360	Sepsis of newborn due to streptococcus, group B
	P361	Sepsis of newborn due to other and unspecified streptococci
	P362	Sepsis of newborn due to Staphylococcus aureus
	P363	Sepsis of newborn due to other and unspecified staphylococci
	P364	Sepsis of newborn due to Escherichia coli
	P368	Other bacterial sepsis of newborn
	P369	Bacterial sepsis of newborn unspecified
	P38	Omphalitis of newborn with or without mild haemorrhage
Complications Directly Related to Surgery	H5980	Lens fragments in eye following cataract surgery
	M966	Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate
	O7540	Other complications of obstetric surgery and procedures; Includes: Cardiac arrest following cesarean or other obstetric surgery or procedures, including delivery NOS, Cardiac failure following cesarean or other obstetric surgery or procedures, including delivery NOS, Cerebral anoxia following cesarean or other obstetric surgery or procedures, including delivery NOS, Conditions in N99.0, N99.8, N99.9; Excludes: complications of anaesthesia during labour and delivery (O74.-);
	O8600	Infection of obstetric surgical wound; Includes: Infected caesarean section wound following delivery, Infected perineal repair following delivery;
	O9000	Disruption of caesarean section wound;
	S26811	Laceration and puncture of heart; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; With open wound into thoracic cavity
	S27001	Traumatic pneumothorax, with open wound into thoracic cavity
	S36091	Haematoma NOS, laceration NOS, injury to spleen NOS; With open wound into cavity
	S36151	Liver haematoma NOS, laceration NOS, injury to liver NOS; With open wound into cavity
	S36411	Laceration of duodenum (without bile duct injury); With open wound into cavity
	S36461	Laceration of small intestine, excluding duodenum; With open wound into cavity
	S37111	Laceration of ureter; With open wound into cavity
	S37211	Laceration of bladder; With open wound into cavity
	S37311	Laceration of urethra; With open wound into cavity
	T810	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
	T811	Shock during or resulting from a procedure, not elsewhere classified

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	T812	Accidental puncture and laceration during a procedure, not elsewhere classified
	T813	Disruption of operation wound, not elsewhere classified
	T8152	Perforation due to foreign body accidentally left in body cavity or operation wound following a procedure
	T8158	Other specified complication due to foreign body left in body cavity or operation wound following a procedure
	T8159	Unspecified complication due to foreign body accidentally left in body cavity or operation wound following a procedure
	T816	Acute reaction to foreign substance accidentally left during a procedure
	T8181	Emphysema (subcutaneous) resulting from a procedure
	T8188	Other complications of procedures, not elsewhere classified
	T819	Unspecified complication of procedure (*needs external cause from list: W01, W03-W08, W10, W13, W17-W20, W22-W27, W29, W31-W38, W40-W46, W49-W55, W57, W60, W64-W68, W73-W77, W86-W94, W99, X00, X02, X04-X06, X08-X19)
Traumatic injuries (non-procedural) arising in hospital	S0100	Open wound of scalp uncomplicated
	S0101	Open wound of scalp complicated
	S0110	Open wound of eyelid and periocular area, uncomplicated
	S0120	Open wound of nose, uncomplicated
	S0130	Open wound of ear; uncomplicated
	S0140	Open wound of cheek and temporomandibular area, uncomplicated
	S0150	Open wound of lip and oral cavity, uncomplicated
	S0170	Multiple open wounds head; uncomplicated
	S0180	Open wounds of other parts of head, uncomplicated
	S0190	Open wound of head, part unspecified, uncomplicated
	S02000	Fracture of vault of skull; closed
	S02100	Fracture of base of skull; closed
	S02200	Fracture of nasal bones; closed
	S02300	Fracture of orbital floor; closed
	S02480	Other fracture of malar and maxillary bones; closed
	S02490	Unspecified fracture of malar and maxillary bones; closed
	S025	Fracture of tooth
	S02890	Fractures of other unspecified skull and facial bones; closed
	S030	Dislocation of jaw
	S050	Injury of conjunctiva and corneal abrasion without mention of foreign body
	S051	Contusion of eyeball and orbital tissues
	S058	Other injuries of eye and orbit
	S059	Injury of eye and orbit unspecified
	S060	Concussion
	S061	Traumatic cerebral oedema
S0625	Diffuse brain injury without open intracranial wound	

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S0635	Focal brain injury without open intracranial wound
S064	Epidural haemorrhage
S065	Traumatic subdural haemorrhage
S066	Traumatic subarachnoid haemorrhage
S0685	Other intracranial injuries without open intracranial wound
S069	Intracranial injury, unspecified
S090	Injury of blood vessels of head NEC
S098	Other specified injuries of head
S099	Unspecified injury of head
S101	Other & unspecified superficial injuries of throat
S109	Superficial injury of neck, part unspecified
S1348	Other sprain & strain of cervical spine
S1438	Other and unspecified injury of brachial plexus
S202	Contusion of thorax
S204	Other superficial injuries of back wall of thorax
S208	Superficial injury of other and unspecified parts of thorax
S22200	Fracture of sternum; closed
S22300	Fracture of rib; closed
S22400	Multiple fractures of 2 - 4 ribs; closed
S22410	Multiple fractures of 5 or more ribs; closed
S22490	Multiple fractures of unspecified number of ribs; closed
S27000	Traumatic pneumothorax, without open wound into thoracic cavity
S27100	Traumatic haemothorax, without open wound into thoracic cavity
S27200	Traumatic haemopneumothorax, without open wound into thoracic cavity
S27300	Contusion and haematoma of lung; Without open wound into thoracic cavity
S27310	Laceration and puncture of lung; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity
S27810	Laceration of oesophagus; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity
S27860	Other and unspecified injury of oesophagus; Without open wound into thoracic cavity
S300	Contusion of lower back and pelvis
S301	Contusion of abdominal wall
S3080	Other superficial injuries of lower back & pelvis
S3081	Other superficial injuries of abdominal wall
S3088	Other superficial injuries of abdomen, low back & pelvis, part unspecified
S309	Superficial injury of abdomen, low back and pelvis, part unspecified
S31200	Open wound of penis; uncomplicated
S31400	Open wound of vagina and vulva, uncomplicated
S32100	Fracture of sacrum; closed
S32400	Fracture of acetabulum; closed

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S32500	Fracture of pubis; closed
S32700	Multiple fractures of lumbar spine and pelvis, closed
S32800	Fracture of other and unspecified parts of lumbar spine and pelvis, closed
S335	Sprain and strain of lumbar spine
S351	Injury of inferior vena cava
S352	Injury of coeliac or mesenteric artery
S355	Injury of iliac blood vessels
S36090	Haematoma NOS, laceration NOS, injury to spleen NOS; Without open wound into cavity
S36150	Liver haematoma NOS, laceration NOS, injury to liver NOS; Without open wound into cavity
S36460	Laceration of small intestine, excluding duodenum; Without open wound into cavity
S36610	Laceration of rectum; Without open wound into cavity
S36810	Laceration of other intra-abdominal organs; Without open wound into cavity
S37000	Haematoma of kidney; Without open wound into cavity
S37090	Injury of kidney NOS; Without open wound into cavity
S37110	Laceration of ureter; Without open wound into cavity
S37190	Injury of NOS ureter; Without open wound into cavity
S37210	Laceration of bladder; Without open wound into cavity
S37290	Injury NOS of bladder; Without open wound into cavity
S37300	Haematoma of urethra; Without open wound into cavity
S37310	Laceration of urethra; Without open wound into cavity
S37390	Injury NOS of urethra; Without open wound into cavity
S37610	Laceration of uterus; Without open wound into cavity
S3908	Other and unspecified injury of muscle and tendon of abdomen, lower back and pelvis
S398	Other specified injuries of abdomen, lower back and pelvis
S399	Unspecified injury of abdomen, lower back and pelvis
S400	Contusion of shoulder and upper arm
S408	Other superfic injuries of shoulder and upper arm
S409	Superficial injury of shoulder & upper arm, unspecified
S4110	Open wound of upper arm; uncomplicated
S4111	Open wound of upper arm; complicated
S42010	Fracture of shaft of clavicle; closed
S42020	Fracture of acromial end of clavicle; closed
S42090	Fracture of unspecified part of clavicle; closed
S42190	Fracture of unspecified part of scapula; closed
S42200	Fracture of surgical neck of humerus; closed
S42210	Fracture of anatomical neck of humerus; closed
S42220	Fracture greater tuberosity of humerus; closed
S42280	Fracture of other part of upper end of humerus; closed
S42290	Fracture of unspecified part of upper end of humerus; closed
S42300	Fracture of shaft of humerus; closed

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S42390	Fracture of unspecified part of humerus; closed
S42400	Supracondylar fracture of humerus; closed
S42480	Fx oth part of low end of humerus; closed
S43000	Anterior dislocation of shoulder; closed
S43090	Unspecified dislocation of glenohumeral joint; closed
S43100	Dislocation of acromioclavicular joint, closed
S4600	Laceration of muscle(s) and tendon(s) of the rotator cuff of shoulder
S4608	Other and unspecified injury of muscle(s) and tendon(s) of the rotator cuff or shoulder
S497	Multiple injuries of shoulder & upper arm
S498	Other specified injuries of shoulder & upper arm
S499	Unspecified injury of shoulder and upper arm
S500	Contusion of elbow
S501	Contusion of other and unspecified parts of forearm
S507	Multiple superficial injuries of forearm
S508	Other superficial injuries of forearm
S509	Superficial injury of forearm, unspecified
S5100	Open wound of elbow; uncomplicated
S5101	Open wound of elbow; complicated
S5170	Open wound of forearm, multiple, uncomplicated
S5180	Open wound of other parts of forearm, uncomplicated
S5190	Open wound of forearm, part unspecified, uncomplicated
S52000	Fracture of olecranon process of ulna; closed
S52100	Fracture of head of radius; closed
S52300	Fracture of shaft of radius; closed
S52500	Colles' fracture; closed
S52580	Other fracture of lower end of radius; closed
S52590	Unspecified fracture of lower end of radius; closed
S52600	Fracture of lower end of both ulna and radius, closed
S52800	Fracture of other parts of forearm, closed
S598	Other specified injuries of forearm
S599	Unspecified injury of forearm
S600	Contusion of finger(s) without damage to nail; includes: Contusion of finger(s) NOS; excludes: contusion involving nail (matrix) (S60.1)
S602	Contusion of other parts of wrist and hand
S607	Multiple superficial injuries of wrist & hand
S608	Other superficial injuries of wrist & hand
S609	Unspecified superficial injury of wrist & hand
S6100	Open wound of finger(s) without damage to nail, uncomplicated
S6170	Multiple open wounds of wrist and hand, uncomplicated
S6180	Open wound of other parts of wrist and hand, uncomplicated
S6190	Open wound of wrist and hand part, part unspecified, uncomplicated
S62000	Fracture of navicular [scaphoid] bone of hand, closed
S62500	Fracture of proximal phalanx; closed
S62690	Fracture of unspecified part of phalanx of finger; closed
S62800	Fracture of other and unspecified parts of wrist and hand, closed

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S63100	Dislocation of metacarpophalangeal (joint) of finger; closed
S6359	Unspecified sprain and strain of wrist
S698	Other specified injuries of wrist and hand
S699	Unspecified injury of wrist and hand
S700	Contusion of hip
S701	Contusion of thigh
S708	Other superficial injuries of hip & thigh
S709	Superficial injury of hip and thigh, unspecified
S7110	Open wound of thigh; uncomplicated
S7111	Open wound of thigh; complicated
S72000	Fracture of upper femoral epiphysis (separation); closed
S72010	Fracture of base of femoral neck (cervicotrochanteric); closed
S72080	Other fracture of femoral neck; closed
S72090	Unspecified fracture of neck of femur; closed
S72100	Intertrochanteric fracture; closed
S72190	Unspecified trochanteric fracture closed
S72200	Subtrochanteric fracture; closed
S72300	Fracture of shaft of femur; closed
S72410	Condylar fracture of femur; closed
S72420	Supracondylar fracture of femur; closed
S72490	Unspecified fracture of lower (distal) end of femur; closed
S72800	Fractures of other parts of femur, closed
S72900	Fracture of femur, part unspecified, closed
S73000	Posterior dislocation of hip; closed
S73090	Unspecified dislocation of hip; closed
S7418	Other and unspecified injury of femoral nerve at hip and thigh level
S750	Injury of femoral artery
S799	Unspecified injury of hip and thigh
S800	Contusion of knee
S801	Contusion of other and unspecified parts of lower leg
S807	Multiple superficial injuries lower leg
S808	Other superficial injuries of lower leg
S809	Superficial injury of lower leg, unspecified
S8100	Open wound of knee; uncomplicated
S8101	Open wound of knee; complicated
S8180	Open wounds of other parts of lower leg, uncomplicated
S8181	Open wounds of other parts of lower leg, complicated; includes: Wounds with mention of delayed healing, delayed treatment, foreign body or major infection
S8190	Open wound of lower leg, part unspecified, uncomplicated
S8191	Open wound of lower leg, part unspecified, complicated; includes: Wounds with mention of delayed healing, delayed treatment, foreign body or major infection
S82000	Fracture of patella; closed
S82100	Fracture of upper (proximal) end of tibia with or without fibula, closed
S82200	Fracture of shaft of tibia with or without fibula, closed

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S82300	Fracture of lower (distal) end of tibia with or without fibula, closed
S82400	Fracture of fibula alone, closed
S82500	Fracture of medial malleolus, closed
S82600	Fracture of lateral malleolus, closed
S82800	Bimalleolar fracture of ankle; closed
S82890	Fracture of ankle NOS; closed
S836	Sprain & strain of other and unspecified parts of knee
S898	Other specified injuries of lower leg
S899	Unspecified injury of lower leg
S900	Contusion of ankle
S901	Contusion of toe(s) without damage to nail; includes: Contusion of toe(s) NOS
S903	Contusion of other and unspecified parts of foot
S907	Multiple superficial injuries of ankle & foot
S908	Other superficial injuries of ankle & foot
S909	Superficial injury of ankle & foot, unspecified
S9100	Open wound of ankle; uncomplicated
S9110	Open wound of toe(s) without damage to nail, uncomplicated
S9120	Open wound of toe(s) with damage to nail, uncomplicated
S9130	Open wound of other parts of foot, uncomplicated
S92000	Fracture of calcaneus; closed
S92300	Fracture of metatarsal bone; closed
S92400	Fracture of great toe; closed
S92500	Fracture of other toe; closed
S9349	Sprain and strain of ankle; unspecified
S998	Other specified injuries of ankle and foot
S999	Unspecified injury of ankle and foot
T001	Superficial injuries involving thorax with abdomen, lower back and pelvis
T008	Superficial injuries involving other combinations of body regions
T009	Multiple superficial injuries, unspecified
T090	Superficial injury of trunk level, unspecified
T110	Superficial injury upper limb level, unspecified
T111	Open wound of upper limb, level unspecified
T130	Superficial injury lower limb level, unspecified
T131	Open wound of lower limb, level unspecified
T140	Superficial injuries of unspecified body region
T149	Injury unspecified
T200	Burn of unspecified degree of head and neck
T202	Burn of second degree of head and neck
T210	Burn of unspecified thickness of trunk
T211	Burn of first degree of trunk
T212	Burn of second degree of trunk
T213	Burn of third degree of trunk
T220	Burn of unspecified degree of shoulder and upper limb, except wrist and hand

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	T224	Corrosion of unspecified degree of shoulder and upper limb, except wrist and hand
	T230	Burn of unspecified degree of wrist and hand
	T232	Burn of second degree of wrist and hand
	T240	Burn of unspecified degree of hip and lower limb, except ankle and foot
	T242	Burn of second degree of hip and lower limb, except ankle and foot
	T250	Burn of unspecified degree of ankle and foot
	T252	Burn of second degree of ankle and foot
	T71	Asphyxiation
	T792	Traumatic secondary and recurrent haemorrhage
	T796	Traumatic ischaemia of muscle
	T797	Traumatic subcutaneous emphysema
Anesthesia related complications		
	O2950	Other complications of spinal and epidural anaesthesia during pregnancy;
	O7420	Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
	O7430	Central nervous system complications of anaesthesia during labour and delivery; Includes: Cerebral anoxia due to anaesthesia during labour and delivery;
	O7450	Toxic reaction to local anaesthesia during labour and delivery;
	O7460	Other complications of spinal and epidural anaesthesia during labour and delivery;
	O7480	Other complications of anaesthesia during labour and delivery;
	O8940	Spinal and epidural anaesthesia-induced headache during the puerperium;
	O8950	Other complications of spinal and epidural anaesthesia during the puerperium;
	O8980	Other complications of anaesthesia during the puerperium;
	T412	Poisoning by other and unspecified general anaesthetics
	T413	Poisoning by local anaesthetics
	T882	Shock due to anaesthesia
	T883	Malignant hyperthermia due to anaesthesia
	T884	Failed or difficult intubation
	T885	Other complications of anaesthesia
Delirium		
	F050	Delirium not superimposed on dementia
	F051	Delirium superimposed on dementia
	F058	Other delirium
	F059	Delirium unspecified

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Central Nervous System Complications

E110	Type 2 diabetes mellitus with coma
E15	Hypoglycaemic coma
F050	Delirium not superimposed on dementia
F051	Delirium superimposed on dementia
F058	Other delirium
F059	Delirium unspecified
G003	Staphylococcal meningitis
G372	Central pontine myelinolysis
G972	Intracranial hypotension following ventricular shunting
O7430	Central nervous system complications of anaesthesia during labour and delivery; Includes: Cerebral anoxia due to anaesthesia during labour and delivery;
O8940	Spinal and epidural anaesthesia-induced headache during the puerperium;
S060	Concussion
S061	Traumatic cerebral oedema
S0625	Diffuse brain injury without open intracranial wound
S0635	Focal brain injury without open intracranial wound
S064	Epidural haemorrhage
S065	Traumatic subdural haemorrhage
S066	Traumatic subarachnoid haemorrhage
S0685	Other intracranial injuries without open intracranial wound
S069	Intracranial injury, unspecified

Gastrointestinal

A020	Salmonella enteritis
A044	Other intestinal Escherichia coli infections
A045	Campylobacter enteritis
A047	Enterocolitis due to Clostridium difficile; includes: Foodborne intoxication by Clostridium difficile, Pseudomembranous colitis
A048	Other specified bacterial intestinal infections
A049	Bacterial intestinal infection, unspecified
A080	Rotaviral enteritis
A081	Acute gastroenteropathy due to Norwalk agent; includes: Small round structured virus enteritis
B3780	Candidal esophagitis
B3781	Candidal enteritis
K223	Perforation of oesophagus
K650	Acute peritonitis
K910	Vomiting following gastrointestinal surgery
K913	Postoperative intestinal obstruction
S27810	Laceration of oesophagus; Includes: Minor, moderate, major lacerations, puncture, traumatic rupture; Without open wound into thoracic cavity

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	S27860	Other and unspecified injury of oesophagus; Without open wound into thoracic cavity
	S36150	Liver haematoma NOS, laceration NOS, injury to liver NOS; Without open wound into cavity
	S36151	Liver haematoma NOS, laceration NOS, injury to liver NOS; With open wound into cavity
	S36411	Laceration of duodenum (without bile duct injury); With open wound into cavity
	S36460	Laceration of small intestine, excluding duodenum; Without open wound into cavity
	S36461	Laceration of small intestine, excluding duodenum; With open wound into cavity
	S36610	Laceration of rectum; Without open wound into cavity
	T181	Foreign body in oesophagus
	T182	Foreign body in stomach
	T183	Foreign body in small intestine
	T189	Foreign body in alimentary tract, part unspecified
	T282	Burn of other parts of alimentary tract
	T855	Mechanical complication of gastrointestinal prosthetic devices, implants and grafts; Conditions listed in T82.0 due to: bile-duct prosthesis, oesophageal anti-reflux device
Severe life or major vital organ threatening adverse event	G372	Central pontine myelinolysis
	I210	Acute transmural myocardial infarction of anterior wall
	I211	Acute transmural myocardial infarction of inferior wall
	I212	Acute transmural myocardial infarction of other sites
	I213	Acute transmural myocardial infarction of unspecified site
	I214	Acute subendocardial myocardial infarction (Includes: Non-Q-wave myocardial infarction)
	I219	Acute myocardial infarction unspecified
	I220	Subsequent myocardial infarction of anterior wall
	I221	Subsequent myocardial infarction of inferior wall
	I228	Subsequent myocardial infarction of other sites
	I229	Subsequent myocardial infarction of unspecified site
	I260	Pulmonary embolism with mention of acute cor pulmonale
	I461	Sudden cardiac death so described
	I469	Cardiac arrest unspecified
	I472	Ventricular tachycardia
	I4900	Ventricular fibrillation
	I4901	Ventricular flutter
	J960	Acute respiratory failure
	K223	Perforation of oesophagus

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- K650 Acute peritonitis
- O7420 Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
- O7420 Cardiac complications of anaesthesia during labour and delivery; Includes: Cardiac arrest due to anaesthesia during labour and delivery, Cardiac failure due to anaesthesia during labour and delivery;
- O7430 Central nervous system complications of anaesthesia during labour and delivery; Includes: Cerebral anoxia due to anaesthesia during labour and delivery;
- O7510 Shock during or following labour and delivery; Includes: Obstetric shock;
- O7540 Other complications of obstetric surgery and procedures; Includes: Cardiac arrest following cesarean or other obstetric surgery or procedures, including delivery NOS, Cardiac failure following cesarean or other obstetric surgery or procedures, including delivery NOS, Cerebral anoxia following cesarean or other obstetric surgery or procedures, including delivery NOS, Conditions in N99.0, N99.8, N99.9; Excludes: complications of anaesthesia during labour and delivery (O74.-);
- R571 Hypovolaemic shock
- R572 septic shock
- R578 Other shock
- T71 Asphyxiation
- T800 Air embolism following infusion, transfusion and therapeutic injection
- T805 Anaphylactic shock due to serum
- T811 Shock during or resulting from a procedure, not elsewhere classified
- T882 Shock due to anaesthesia
- T883 Malignant hyperthermia due to anaesthesia
- T884 Failed or difficult intubation
- T886 Anaphylactic shock due to adverse effect of correct drug or medicament properly administered