Diagnostic Related Group codes and the definition of specialties.

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Introduction – This paper sets out the subdivision of hospital discharges used in the analysis of discharge volumes and their variation.

The National Minimum Data Set (NMDS) records all discharges from New Zealand public hospitals. Data from private hospitals is also available for 1995 and 2001. When analyzing NMDS data it is often desirable to group discharges by surgical or medical specialty. For example, projections of need to inform workforce planning must recognise what sorts of discharges are likely to have required the oversight of a general surgeon or of a haematologist. Similarly, analysis of variation between districts must recognise specialties since hospitals and specialist staff organise themselves by specialty.

The NMDS does provide a discharge department for each case but, for the purposes mentioned, this may be inadequate because, in different hospitals, cases may be distributed differently. At least two causes of such variation may be distinguished. There is uncertainty about specialty boundaries; “lumps and bumps” may be removed by general or plastic surgeons, or by a dermatologist. Some specialties will not be present in smaller hospitals; what is done by plastic or vascular surgeons at a tertiary centre may well be done by a general surgeon in a smaller one. In addition, a person may be transferred between departments and discharged from a department responsible for only part of the care.

The NMDS also provides a list of diagnoses made and procedures undertaken, but the number of possible diagnoses and procedures is so great that, for analytical purposes, further grouping is required. In addition, a single diagnosis or procedure may include cases covering a wide range of severity and complexity. In 1983 Diagnostic Related Groups (DRG) were established in the United States to assist classifying cases and assessing their cost. Each DRG includes a series of similar diagnoses and/or procedures but is limited to those with similar resource needs. Each DRG can be assigned a weight representing the resource input typically required – thus a D&C is weighted at 0.36 while a upper gastro-intestinal procedure with complications is weighted at 7.06. In New Zealand, NMDS discharges have been assigned a DRG since 1995 and weightings have been modified to take account of the Australasian context (ANDRG v 3.1). The most recent modification occurred in 2002 (ANDRG v 4.1).
DRGs may be used to partition discharges for analytical purposes; they have the advantage that their weights are established and that volumes of work may be distinguished from simply numbers of discharges. This paper documents the assignment of DRG to groupings and gives the rules used to generate the groupings. Dr Gary Jackson pioneered the grouping of DRGs in New Zealand and this work follows his lead in all but small details.

**Grouping of DRG** – A number of DRGs have been excluded from this classification. Thus those relating to mental health are not considered and neither are those relating to non-acute care. Renal dialysis, chemotherapy and radiotherapy are also excluded. Finally, DRGs relating to un-groupable or unacceptable records are excluded.

Surgery – In general, DRGs assigned to surgical groupings were associated with a surgical procedure and there was little ambiguity as to the appropriate specialty. Within specialties, subdivisions were made to include similar procedures, for example, within general surgery twelve components are identified. In smaller specialties fewer distinctions were made. In otolaryngology much of the procedural work is related to tonsillectomy and adenoidectomy; the specialty was divided into “Ts & As” and “all other procedures.” Similarly in ophthalmology, removal of cataracts was distinguished from other procedures. Some distinctions were made to recognize newly developing procedures; thus, in cardio-thoracic surgery per-cutaneous procedures, more recently developed and in some cases undertaken by interventional radiologists, were separated out.

Medicine - Compared to surgery, there is more ambiguity in distinguishing medical specialties. In smaller institutions less-numerous subspecialties may not be represented and, even when such specialties are present, the borderline between general medicine and each sub-specialty varies from place to place. DRGs are grouped in two ways: by anatomical area or system, eg respiratory, haematology, cardiology etc; and, in two cases, by pathological process, thus malignancy and infectious diseases. No further components are distinguished.

Maternity and Neonates – DRGs relating to maternity and to the care of newborns were easily distinguished. One DRG, “674 Vaginal delivery without complicating diagnosis,” was considered separately from all complicated delivery DRGs. Neonatal DRGs group into well-newborns, non-complex and complex care.

High Cost and Trauma – There remain a number of DRGs which do not fit comfortably into any of the groupings defined above. They have in common high cost and the frequency of multi-specialty input. They include organ transplants, discharges defined by the need for a tracheostomy, trauma and burns. Trauma
and burns cases, depending on diagnosis, may require input from general surgery, neurosurgery, orthopaedics and plastic surgery, among other specialties. Further, a procedure may not be needed for, or may not be a good defining feature of, such discharges. A category of “high cost and trauma” has been established alongside medicine and surgery; the components are: high cost; trauma (general surgery); trauma (orthopaedics); burns; renal; and facio-maxillary. The latter is included because responsibility for these discharges is distributed among dental surgery, otolaryngology and plastic surgery. It should be noted that all injuries and burns have been included, not just those of high severity. This generated a clearer distinction than leaving some trauma and burn cases in general surgery, orthopaedics and plastic surgery.

Table 1 lists the groupings of DGRs and the components of the surgical specialties. The actual DRGs and their descriptors are listed in the Table 2. These are the data used in studying district variation.

In some analyses we have projected data describing the current volume of surgery to predict the future need for surgery. In this context it was felt desirable to include all work done by each group of surgeons. The range of discharge departments for DRGs with ambiguous specialty associations was examined. These included: transplantation, trauma and burns, here classified under “high cost and trauma;” and endoscopy, malignancy, musculoskeletal conditions and infectious diseases, here classified under medicine. Where 5% or more of discharges for a particular DRG were from a surgical department, this DRG was included as a “contribution” of that department but discounted on the basis of the percentage of discharges so related. Table 3, gives the DRG-based definition of surgical specialties used in that work; most specialties have a list of DRGs to which they contribute. The percentage shows the proportion of the weighted contribution-DRGs that were included in the estimates. This represents a weighted average of the proportion of each DRG that was associated with the specialty.

Table 1. List of Categories, Specialties and surgical specialty components.

<table>
<thead>
<tr>
<th>Category</th>
<th>Specialty</th>
<th>Specialty Component</th>
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</thead>
<tbody>
<tr>
<td>HIGH COST AND TRAUMA</td>
<td>High cost</td>
<td>Renal</td>
</tr>
<tr>
<td></td>
<td>Trauma (general surgery)</td>
<td>Maxillo-facial</td>
</tr>
<tr>
<td></td>
<td>Trauma (orthopaedics)</td>
<td></td>
</tr>
<tr>
<td>MEDICAL</td>
<td>Cardiology</td>
<td>Dermatology</td>
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</tbody>
</table>
Endocrinology
Endoscopy
Gastroenterology
Genitourinary
Haematology
Infectious diseases
Malignancy
Musculoskeletal
Neurology
Respiratory
Stroke
Other medical

SURGERY

Cardiothoracic

Neonates
Cardiothoracic with pump
Coronary bypass
Other cardiothoracic and circulatory
Percutaneous

General surgery

Upper GI
Cholecystectomy
Liver, Biliary, Pancreas
Appendix
Lower GI
Anus, stomal, abdominal herniae
Groin herniae
Breast Surgery
Endocrine
Blood forming organs
Veins
Other General Surgery

Gynaecology

D&C and hysteroscopy
Endoscopy
Gynaecological Malignancy
Reconstructive procedures
Uterine and adnexal procedures for non-malignancy
Vulva vagina and cervix
Other gynaecology
Therapeutic abortion
Pregnancy related
Neurosurgery
Ophthalmology
Cataract etc
Other Ophthalmology

Orthopaedics
Diagnostic procedures
Axial skeleton (and limb lengthening)
Major joints
Limb procedures excluding major joints
Carpal tunnel
Miscellaneous Orthopaedics

Otolaryngology
Myringotomy and Tonsils
Other ENT

Plastic and Reconstructive
Burns
Cleft palate or lip
Hand surgery
Plastic procedures on lower limb
Plastic surgery of breast
Other plastic surgery

Urology
Urological Malignancy
Prostatectomy including transurethral
Other Urology
Male sterilisation

Vascular

MATERNITY
Uncomplicated maternity
Complicated Maternity
Complex neonates
Non-complex neonates
Well Newborn

Table 2 Distribution of DRGs across Categories, specialties and surgical components, with DRG description.

HIGH COST AND TRAUMA
High cost
001 Mouth larynx or pharynx disorder with tracheostomy age >15
002 Mouth larynx or pharynx disorder with tracheostomy age <16
003 Tracheostomy except for mouth, larynx or pharynx disorder age >15
004 Tracheostomy except for mouth, larynx or pharynx disorder age <16
005 Liver transplant
Bone marrow transplant
Multiple organs transplant
Heart transplant
Lung transplant
ECMO without cardiac surgery
Cochlear implant
Respiratory system diagnosis with ventilator support
Implantation or replacement of AICD, total system
AICD component implantation or replacement

### Trauma (general surgery)

Acute quadriplegia or paraplegia with or without OR procedure
Head, chest and lower limb diagnoses of multiple significant trauma
Injuries age <65
Injuries age >64 with CC
Injuries age >64 without CC
Major chest trauma (> 69 without CC) or (age <70 with CC)
Major chest trauma age <70 without CC
Major chest trauma age >69 with CC
Minor head injury
Moderate head injury
Other diagnoses of multiple significant trauma
Other OR procedure for multiple significant trauma
Severe head injury
Tracheostomy for multiple significant trauma age <16
Tracheostomy for multiple significant trauma age >15
Trauma to skin, subcutaneous tissue and breast age <70
Trauma to skin, subcutaneous tissue and breast age >69 without CC
Trauma to the skin, subcutaneous tissue and breast age >69 with CC

### Trauma (orthopaedics)

Major fractures of femur
Non-major fractures of femur
Fractures of hip and pelvis with CC
Fractures of hip and pelvis age >74 without CC
Fractures of hip and pelvis age <75 without CC
Sprains, strains and dislocations of hip, pelvis and thigh
Fracture,sprain,strain,dislocation forearm,hand,foot age >74 with CC
#,sprain,strain,disloc forearm,hand,foot (age >74 no CC)/(age <75+CC)
Fracture,sprain,strain,disloc of forearm,hand,foot age <75 without CC
Fracture,sprain,strain,dislocation upper arm,lower leg age >64 with CC
#,sprain,strain,disl upper arm,lower leg (age >64 no CC)/(age <65+CC)
Fracture,srpain,strain,disloc upper arm, lower leg age <65 without CC
Hip, femur and limb reattachment proc for multiple significant trauma
Other procedures for injuries to lower limb age >59 or with CC
<table>
<thead>
<tr>
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<tr>
<td>899</td>
<td>Other procedures for injuries to lower limb age &lt;60 without CC</td>
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<tr>
<td>901</td>
<td>Other procedures for other injuries with CC</td>
</tr>
<tr>
<td>902</td>
<td>Other procedures for other injuries without CC</td>
</tr>
<tr>
<td><strong>Burns</strong></td>
<td></td>
</tr>
<tr>
<td>920</td>
<td>Burns, transferred to other acute facility, LOS &lt;5 days</td>
</tr>
<tr>
<td>921</td>
<td>Severe third degree burns with skin graft</td>
</tr>
<tr>
<td>922</td>
<td>Other third degree burns with skin graft age &gt;64</td>
</tr>
<tr>
<td>923</td>
<td>Other third degree burns with skin graft age &lt;65</td>
</tr>
<tr>
<td>924</td>
<td>Other burns with skin graft</td>
</tr>
<tr>
<td>925</td>
<td>Other operating room procedures for burns</td>
</tr>
<tr>
<td>926</td>
<td>Severe burns</td>
</tr>
<tr>
<td>927</td>
<td>Other burns age &gt;64</td>
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<tr>
<td>928</td>
<td>Other burns age &lt;65</td>
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<tr>
<td><strong>Renal</strong></td>
<td></td>
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<tr>
<td>550</td>
<td>Kidney transplant with CC</td>
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<tr>
<td>551</td>
<td>Kidney transplant without CC</td>
</tr>
<tr>
<td>566</td>
<td>Insertion of peritoneal catheter</td>
</tr>
<tr>
<td>567</td>
<td>Other kidney and urinary tract OR procedures with major CC</td>
</tr>
<tr>
<td>568</td>
<td>Other kidney and urinary tract OR procedures with non-major CC</td>
</tr>
<tr>
<td>569</td>
<td>Other kidney and urinary tract OR procedures without CC</td>
</tr>
<tr>
<td>570</td>
<td>Renal failure with CC</td>
</tr>
<tr>
<td>571</td>
<td>Renal failure without CC</td>
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<tr>
<td>585</td>
<td>Other kidney and urinary tract diagnoses with major CC</td>
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<td>586</td>
<td>Other kidney and urinary tract diagnoses with non-major CC</td>
</tr>
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<td>Other kidney and urinary tract diagnoses without CC</td>
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<tr>
<td><strong>Maxillo-facial</strong></td>
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</tr>
<tr>
<td>149</td>
<td>Maxillo surgery with CC</td>
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<tr>
<td>150</td>
<td>Maxillo surgery without CC</td>
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<td>433</td>
<td>Maxillo-facial surgery</td>
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</table>

**MEDICAL**

**Cardiology**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>236</td>
<td>Cardiac pacemaker implantation</td>
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<tr>
<td>247</td>
<td>Circulatory disorder with AMI without invasive cardiac proc, died</td>
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<tr>
<td>248</td>
<td>Circulatory dis with AMI without invasive cardiac proc with major CC</td>
</tr>
<tr>
<td>249</td>
<td>Circulatory dis + AMI without invasive cardiac proc without major CC</td>
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<tr>
<td>251</td>
<td>Infective endocarditis</td>
</tr>
<tr>
<td>252</td>
<td>Heart failure and shock</td>
</tr>
<tr>
<td>253</td>
<td>Venous thrombosis with major CC</td>
</tr>
<tr>
<td>254</td>
<td>Venous thrombosis without major CC</td>
</tr>
<tr>
<td>255</td>
<td>Coronary atherosclerosis with CC</td>
</tr>
<tr>
<td>256</td>
<td>Coronary atherosclerosis without CC</td>
</tr>
<tr>
<td>257</td>
<td>Hypertension with CC</td>
</tr>
</tbody>
</table>
Hypertension without CC
Syncope and collapse with CC
Syncope and collapse without CC
Chest pain
Congenital heart disease
Major arrhythmia and cardiac arrest with CC
Major arrhythmia and cardiac arrest age >74 without CC
Major arrhythmia and cardiac arrest age <75 without CC
Unstable angina with CC
Unstable angina without CC
Valvular disorders with CC
Valvular disorders without CC
Peripheral vascular disorder with major CC
Peripheral vascular disorder (with non-major CC) or (age >74 without CC)
Peripheral vascular disorder age <75 without CC
Non-major arrhythmia and conduction disorders with major CC
Non-major arrhythmia and conduction disorders age >69 or with non-major CC
Non-major arrhythmia and conduction disorders age <70 without CC
Other circulatory system diagnoses age >69 with CC
Other circulatory system diagnoses (age >69 no CC)/(age <70 with CC)
Other circulatory system diagnoses age <70 without CC
Cardiac pacemaker replacement with CC
Cardiac pacemaker replacement without CC
Cardiac pacemaker revision except device replacement

Dermatology
Skin ulcers for circulatory disorders
Cellulitis age >59 with CC
Cellulitis (age >59 without CC) or (age <60 with CC)
Cellulitis age <60 without CC
Skin ulcers age >64
Skin ulcers age <65
Major skin disorders age >44 with CC
Major skin disorders age 10-44 or (age >44 without CC)
Major skin disorders age <10
Miscellaneous skin disorders
Minor skin disorders
Diabetic foot

Endocrinology
Severe nutritional disturbance
Miscellaneous metabolic disorders with CC
Miscellaneous metabolic disorders without CC
Inborn errors of metabolism
Endocrine disorders age >69
536  Endocrine disorders age <70 with CC
537  Endocrine disorders age <70 without CC
539  Diabetes with major CC or (age >59 with non-major CC)
540  Diabetes age >59 without CC
541  Diabetes age <60 without major CC

**Endoscopy**
325  Complex therapeutic gastroscopy for major digestive disease with CC
326  Complex therapeutic gastroscopy for major digestive disease without CC
327  Complex therapeutic gastroscopy for non-major digestive disease with CC
328  Complex therapeutic gastroscopy for non-major digestive disease without CC
329  Other gastroscopy for major digestive disease with CC
330  Other gastroscopy for major digestive disease without CC
331  Other gastroscopy for non-major digestive disease with CC
332  Other gastroscopy for non-major digestive disease without CC
333  Complex therapeutic colonoscopy
334  Other colonoscopy with CC
335  Other colonoscopy without CC
385  ERCP complex therapeutic procedures for malignancy or with CC
386  ERCP complex therapeutic procedures not for malignancy without CC
387  ERCP other therapeutic procedures for malignancy or with CC
388  ERCP other therapeutic procedures not for malignancy without CC
529  Intended sameday stay, endosc OR proc for endo, nutr, misc metabolic dis
538  Intended sameday investigation, management, obs end, nutr, metabolic dis

**Gastroenterology**
337  GI haemorrhage age >64 or with CC
338  GI haemorrhage age <65 without CC
339  Complicated peptic ulcer with CC
340  Complicated peptic ulcer without CC
341  Uncomplicated peptic ulcer
342  Inflammatory bowel disease with CC
343  Inflammatory bowel disease without CC
344  GI obstruction with CC
345  GI obstruction without CC
346  Abdominal pain or mesenteric adenitis with CC
347  Abdominal pain or mesenteric adenitis without CC
348  Oesophagitis, gastroenteritis, misc digest dis age >74 or age 10-74 + CC
349  Oesophagitis, gastroenteritis, misc digestive dis age 10-74 without CC
350  Gastroenteritis age <10
351  Oesophagitis and miscellaneous digestive system disorders age <10
352  Other digestive system diagnoses age >9 with CC
353  Other digestive system diagnoses age >9 without CC
354  Other digestive system diagnoses age <10
371  Cirrhosis and alcoholic hepatitis with CC
Cirrhosis and alcoholic hepatitis without CC
Liver disease except malignancy, cirrhosis, alcoholic hepatitis with CC
Liver disease except malignancy, cirrhosis, alcoholic hepatitis without CC
Disorders of the biliary tract with CC
Disorders of the biliary tract without CC
Disorders of pancreas except malignancy age >54 with CC
Disorders of pancreas except malignancy (age <55 with CC)/(age >54 without CC)
Disorders of pancreas except malignancy age <55 without CC

**Genitourinary**
Kidney and urinary tract infections age >69 with CC
Kidney and urinary tract infections (age <70 with CC)/(age >69 without CC)
Kidney and urinary tract infections <70 without CC
Urinary stones with ESW lithotripsy
Urinary stones without ESW lithotripsy
Kidney and urinary tract signs and symptoms age >74 with CC
Kidney, urinary tract signs/symptoms (age >74 no CC)/(age <75 with CC)
Kidney and urinary tract signs and symptoms age <75 without CC
Urethral stricture with CC
Urethral stricture without CC
Benign prostatic hypertrophy with CC
Benign prostatic hypertrophy without CC
Inflammation of male reproductive system with CC
Inflammation of male reproductive system without CC
Other male reproductive system diagnoses

**Haematology**
Reticuloendothelial and immunity disorders with major CC
Reticuloendothelial and immunity disorders with non-major CC
Reticuloendothelial and immunity disorders without CC
Red blood cell disorders age >64 with CC
Red blood cell disorders (age >64 without CC) or (age <65 with CC)
Red blood cell disorders age <65 without CC
Coagulation disorders age >69
Coagulation disorders age <70
Acute leukaemia without major OR procedure with major CC
Acute leukaemia without major OR procedure with non-major CC
Acute leukaemia without major OR procedure without CC
Lymphoma and non-acute leukaemia with CC
Lymphoma and non-acute leukaemia without CC

**Infectious diseases**
Nervous system infection except viral meningitis
Viral meningitis
Otitis media and URI age >9 with CC
Otitis media and URI age >9 without CC
135  Otitis media and URI age <10
136  Laryngotracheitis
801  HIV-related central nervous system disease
802  HIV-related malignancy
803  HIV-related infection
804  HIV with other related condition
805  HIV without specified related condition
808  Septicaemia age >34
809  Septicaemia age <35
811  Fever of unknown origin age >9 with CC
812  Fever of unknown origin age >9 without CC
813  Fever of unknown origin age <10
814  Viral illness age >59
815  Viral illness age <60
816  Other infectious and parasitic diseases age >49
817  Other infectious and parasitic diseases age <50
818  OR procedure for infectious and parasitic diseases age >54 with CC
819  OR proc for infectious, parasitic dis (age >54 no CC)/(age <55 with CC)
820  OR procedure for infectious and parasitic diseases age <55 without CC
821  Postoperative and post-traumatic infections age >54
822  Postoperative and post-traumatic infections age <55

Malignancy
059  Nervous system neoplasms age >64
060  Nervous system neoplasms age 25-64
061  Nervous system neoplasms age <25
140  Ear, nose, mouth and throat malignancy-therapeutic care or major CC
141  Ear, nose, mouth and throat malignancy, other care without major CC
189  Respiratory neoplasms with CC
190  Respiratory neoplasms without CC
336  Digestive malignancy
382  Malignancy of hepatobiliary system or pancreas age >69 with CC
383  Hepatobiliary system or pancreas malignancy (<70+CC)/(>69 without CC)
384  Malignancy of hepatobiliary system or pancreas age <70 without CC
446  Path # and musculoskeletal system or conn tissue malignancy age >64
447  Path # and musculoskeletal system or conn tissue malignancy age <65
511  Malignant breast disorders age >69 with CC
512  Malignant breast disorders (age >69 without CC) or (age <70 with+ CC)
513  Malignant breast disorders age <70 without CC
573  Kidney and urinary tract neoplasms with CC
574  Kidney and urinary tract neoplasms without CC
616  Malignancy of male reproductive system with CC
617  Malignancy of male reproductive system without CC
664  Malignancy of female reproductive system age >69
Malignancy of female reproductive system age 70
Other neoplastic disorders with CC
Other neoplastic disorders without CC

Musculoskeletal
Osteomyelitis age >64 or with CC
Osteomyelitis age <65 without CC
Connective tissue disorders age >64 or with CC
Connective tissue disorders age <65 without CC
Septic arthritis with CC
Septic arthritis age >54 without CC
Septic arthritis age <55 without CC
Medical back problems age >74 with CC
Medical back problems (age >74 without CC) or (age <75 with CC)
Medical back problems age <75 without CC
Bone diseases and specific arthropathies age >74 with CC
Bone diseases and specific arthropathies age >74 without CC
Bone diseases and specific arthropathies age 65-74
Bone diseases and specific arthropathies age <65
Non-specific arthropathies age >69
Non-specific arthropathies age <70
S&S musculoskeletal syst and connective tissue age >69 with CC
S&S musculoskeletal syst and conn tissue (age >69 no CC)/(age <70+CC)
S&S musculoskeletal system and connective tissue age <70 without CC
Tendonitis, myositis and bursitis age >79
Tendonitis, myositis and bursitis age <80 with CC
Tendonitis, myositis and bursitis age 80 without CC
Other musculoskeletal system or connective tissue diag age >69 with CC
Oth musculoskeletal syst or conn tissue diag (age >69 no CC)/(age <70+CC)
Other musculoskeletal system or connect new tissue diag age <70 without CC

Neurology
Cranial and peripheral nerve disorders with CC
Cranial and peripheral nerve disorders without CC
Prolonged monitoring for complex epilepsy
Nontraumatic stupor and coma
Seizure age >64 with CC
Seizure (age <65 with CC) or (age >64 without CC)
Seizure age < 65 without CC
Headache
Febrile convulsions age <5
Other disorders of nervous system with CC
Other disorders of nervous system without CC
Cerebral palsy age >3
Cerebral palsy age <4
Degenerative nervous system disorders >59
Degenerative nervous system disorders <60
Multiple sclerosis and cerebellar ataxia with CC
Multiple sclerosis and cerebellar ataxia age >44 without CC
Multiple sclerosis and cerebellar ataxia age <45 without CC
Dysequilibrium

**Respiratory**

Pulmonary embolism age > 69 with CC
Pulmonary embolism (age> 69 without CC) or (age <70 with CC)
Pulmonary embolism age <70 without CC
Respiratory infections or inflammations >54 with CC
Respiratory infections or inflammations (age >54 no CC)/(age <55+CC)
Respiratory infections or inflammations age <55 without CC
Cystic fibrosis
Sleep apnoea with CC
Sleep apnoea without CC
Pulmonary oedema and respiratory failure
Chronic obstructive airways disease
Respiratory signs and symptoms age >74 or with CC
Respiratory signs and symptoms age <75 without CC
Pneumothorax with CC
Pneumothorax without CC
Bronchitis and asthma age >49 with CC
Bronchitis and asthma (age <50 with CC) or (age >49 without CC)
Bronchitis and asthma age <50 without CC
Whooping chough and acute bronchiolitis
BPD and other chronic respiratory disease arising perinatally
Other respiratory problems after birth
Pleural effusion age >64 with CC
Pleural effusion (age >64 without CC) or (age <65 with CC)
Pleural effusion age <65 without CC
Interstitial lung disease age >64 with CC
Interstitial lung disease (age >64 without CC) or (age <65 with CC)
Intstitial lung disease age <65 without CC
Other respiratory system diagnoses age >64 with CC
Other resp syst diagnoses (>64 without CC) or (age <65 with CC)
Other respiratory system diagnoses age <65 without CC

**Stroke**

Cerebrovascular disorders except TIA with CC
Cerebrovascular disorders except TIA without CC
Dementia and global disturbances of cerebral function
TIA and precerebral occlusion age >79 with CC
TIA and precerebral occlusion (age<80 with CC) or (age >79 without CC)
069  TIA and precerebral occlusion age <80 without CC

Other medical
886  Allergic reactions
888  Poisoning or toxic effects of drugs age >59 with CC
889  Poisoning or toxic effect of drugs age <60 without CC
890  Complications of treatment age >59 with CC
891  Complications of treatment age <60 or without CC
892  Other injury, poisoning and toxic effect diagnosis age >59 or with CC
893  Other injury, poisoning and toxic effect diagnosis age <60 without CC
894  Lead poisoning
932  Signs and symptoms
934  Short stay contacts with health services
935  Multiple other and unspec congenital anomalies
942  Other factors influencing health status >79 or +CC
943  Other factors influencing health status <80 - no CC

SURGERY
Cardiothoracic
  Neonates
704  Cardiothoracic or vascular procedures for neonates

  Chest procedures
160  Major chest procedures with major CC
161  Major chest procedures with non-major CC
162  Major chest procedures without CC
163  Other respiratory system OR procedures with major CC
164  Other respiratory system OR procedures with non-major CC
165  Other respiratory system OR procedures without CC

  Cardiothoracic with pump
221  Cardiac valve proc+pump+invasive cardiac investigative proc with CC
222  Cardiac valve proc+pump+invasive cardiac investigative proc without CC
223  Cardiac valve proc+pump without invasive cardiac proc with major CC
224  Cardiac valve proc+pump without invasive cardiac proc without major CC
292  Other cardiothoracic or vascular procedures with pump, congenital
293  Other cardiothoracic or vascular procedures with pump, acquired

  Coronary bypass
287  Coronary bypass with invasive cardiac investigative proc with major CC
288  Coronary bypass + invasive cardiac proc age >64 or with non-major CC
289  Coronary bypass+invasive cardiac investigative proc age <65 without CC
290  Coronary bypass without invasive cardiac procedure with major CC
291  Coronary bypass without invasive cardiac procedure without major CC

  Other cardiothoracic and circulatory
226  Other cardiothoracic procedures without pump, congenital
227  Other cardiothoracic procedures without pump, acquired
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<td>244</td>
<td>Circulatory system diagnosis with ventilator support</td>
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<td>245</td>
<td>Circulatory disorder with AMI with invasive cardiac proc with major CC</td>
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<tr>
<td>246</td>
<td>Circulatory disorder with AMI+invasive cardiac proc without major CC</td>
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<td>273</td>
<td>Circulatory dis,no AMI+invasive cardiac proc+compl diag or + major CC</td>
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<td>274</td>
<td>Circulatory dis,no AMI+invasive cardiac proc,no compl diag, without CC</td>
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<td>297</td>
<td>Percutaneous</td>
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<td>297</td>
<td>Trans-vascular percutaneous cardiac intervention</td>
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<td>General surgery</td>
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<td>Upper GI</td>
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<td>300</td>
<td>Stomach, oesophageal and duodenal procedures with major CC</td>
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<td>Stomach, oesophageal and duodenal procedures without CC</td>
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<tr>
<td>302</td>
<td>Stomach, oesophageal and duodenal procedures without major CC</td>
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<td>304</td>
<td>Pyloromyotomy procedure</td>
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<tr>
<td>304</td>
<td>Cholecystectomy</td>
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<tr>
<td>304</td>
<td>Cholecystectomy with CDE with CC</td>
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<tr>
<td>304</td>
<td>Cholecystectomy with CDE without CC</td>
</tr>
<tr>
<td>304</td>
<td>Cholecystectomy without CC</td>
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<tr>
<td>305</td>
<td>Liver, Biliary, Pancreas</td>
</tr>
<tr>
<td>305</td>
<td>Biliary tract proc except cholecyst only with/without CDE +non-maj CC</td>
</tr>
<tr>
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<td>Biliary tract proc except cholecyst only with/without CDE without CC</td>
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<tr>
<td>307</td>
<td>Biliary tract proc except cholecystectomy only with/without CDE+maj CC</td>
</tr>
<tr>
<td>308</td>
<td>Hepatobiliary diagnostic procedures for malignancy</td>
</tr>
<tr>
<td>308</td>
<td>Hepatobiliary diagnostic procs for non malignancy</td>
</tr>
<tr>
<td>309</td>
<td>Other hepatobiliary and pancreas OR procedures with CC</td>
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<td>309</td>
<td>Other hepatobiliary and pancreas OR procedures with CC</td>
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<td>310</td>
<td>Pancreas, liver and shunt procedures without CC</td>
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<td>Pancreas, liver and shunt procedures with major CC</td>
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<tr>
<td>312</td>
<td>Pancreas, liver and shunt procedures with non-major CC</td>
</tr>
<tr>
<td>313</td>
<td>Appendix</td>
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<tr>
<td>313</td>
<td>Appendectomy without complicated principal diagnosis</td>
</tr>
<tr>
<td>314</td>
<td>Appendicectomy with complicated principal diagnosis</td>
</tr>
<tr>
<td>315</td>
<td>Lower GI</td>
</tr>
<tr>
<td>315</td>
<td>Major small and large bowel procedures with CC</td>
</tr>
<tr>
<td>316</td>
<td>Major small and large bowel procedures without CC</td>
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<tr>
<td>316</td>
<td>Minor small and large bowel procedures with CC</td>
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<td>316</td>
<td>Minor small and large bowel procedures without CC</td>
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<td>Peritoneal adhesiolysis (age &lt;50 with CC) or (age &gt;49 without CC)</td>
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<td>Peritoneal adhesiolysis age &lt;50 without CC</td>
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<tr>
<td>316</td>
<td>Peritoneal adhesiolysis age &gt;49 with CC</td>
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<tr>
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<td>Rectal resection (age &lt;70 with CC) or (age &gt;69 without CC)</td>
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<td>Rectal resection age &lt;70 without CC</td>
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<tr>
<td>316</td>
<td>Rectal resection age &gt;69 with CC</td>
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<tr>
<td>Code</td>
<td>Description</td>
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<td>------</td>
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<tr>
<td>317</td>
<td>Anal and stomal procedures with CC</td>
</tr>
<tr>
<td>318</td>
<td>Anal and stomal procedures without CC</td>
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<td>482</td>
<td>Perianal and pilonidal procedures</td>
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**Groin herniae**

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<thead>
<tr>
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<tbody>
<tr>
<td>319</td>
<td>Abdominal, umbilical and other hernia procedures age &gt;9</td>
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<tr>
<td>320</td>
<td>Hernia procedures age &lt;10</td>
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<tr>
<td>321</td>
<td>Inguinal and femoral hernia procedures age &gt;9</td>
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**Breast Surgery**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>488</td>
<td>Major procedures for malignant breast conditions</td>
</tr>
<tr>
<td>495</td>
<td>Minor procedures for malignant breast conditions</td>
</tr>
<tr>
<td>496</td>
<td>Non-malignant breast disorders</td>
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**Endocrine**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>521</td>
<td>Adrenal procedures</td>
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<tr>
<td>525</td>
<td>Other endocrine, nutritional and metabolic OR procedures</td>
</tr>
<tr>
<td>526</td>
<td>Parathyroid procedures</td>
</tr>
<tr>
<td>528</td>
<td>Thyroid procedures</td>
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**Blood forming organs**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>750</td>
<td>Lymphoma and leukaemia with major OR procedures with CC</td>
</tr>
<tr>
<td>751</td>
<td>Lymphoma and leukaemia with major OR procedures without CC</td>
</tr>
<tr>
<td>785</td>
<td>Lymphoma and non-acute leukaemia with other OR proc with non-major CC</td>
</tr>
<tr>
<td></td>
<td>Lymphoma and non-acute leukaemia with other OR procedure with major CC</td>
</tr>
<tr>
<td>786</td>
<td>Lymphoma and non-acute leukaemia with other OR procedure without CC</td>
</tr>
<tr>
<td>791</td>
<td>Other OR procs of blood and blood forming organs</td>
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<tr>
<td>792</td>
<td>Splenectomy</td>
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</table>

**Veins**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>239</td>
<td>Vein ligation and stripping</td>
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**Other General Surgery**

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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>322</td>
<td>Extensive OR proc unrelated to principal diagnosis</td>
</tr>
<tr>
<td>323</td>
<td>Non-extensive OR proc unrelated to principal diag</td>
</tr>
<tr>
<td>411</td>
<td>OR proc+ diag of oth contacts with health serv+CC</td>
</tr>
<tr>
<td>412</td>
<td>OR proc+diag of oth contact with health serv - no CC</td>
</tr>
<tr>
<td>484</td>
<td>Other digestive system OR procedures with CC or with malignancy</td>
</tr>
<tr>
<td>795</td>
<td>Other digestive system OR procedures without CC without malignancy</td>
</tr>
<tr>
<td>796</td>
<td>Other neoplastic disorders with major OR procedure with CC</td>
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<td>797</td>
<td>Other neoplastic disorders with major OR procedure without CC</td>
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<tr>
<td>930</td>
<td>Other neoplastic disorders with other OR procedures</td>
</tr>
<tr>
<td>931</td>
<td>Other skin, subcutaneous tissue and breast procedures</td>
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<tr>
<td>950</td>
<td>Extensive OR proc unrelated to principal diagnosis</td>
</tr>
<tr>
<td>954</td>
<td>Non-extensive OR proc unrelated to principal diag</td>
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**Gynaecology**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td></td>
<td>D&amp;C and hysteroscopy</td>
</tr>
</tbody>
</table>
Diagnostic curettage and/or diagnostic hysteroscopy

Endoscopy

Endoscopic procedures on female reproductive system

Gynaecological Malignancy

Pelvic evisceration and radical vulvectomy

Uterine or adnexa procedure for ovarian or adnexal malignancy with CC

Uterine or adnexa procedure for ovarian or adnexal malignancy without CC

Uterine or adnexa procedure for non-ovarian or adnexal malignancy with CC

Uterine or adnexa procedure for non-ovarian, adnexal malignancy without CC

Reconstructive procedures

Female reproductive system reconstructive procedures

Uterine and adnexal procedures for non-malignancy

Uterine or adnexal procedure for non-malignancy age >39 with CC

Uterine, adnexal proc, non-malignancy (age >39 no CC)/(age <40 with CC

Uterine or adnexal procedure for non-malignancy <40 without CC

Vulva vagina and cervix

Conisation, vagina, cervix and vulva procedures

Other gynaecology

Other female reproductive syst OR procs age >64 or with malign or with +CC

Other female reproductive syst OR procs age <65 without malignancy or CC

Infections of the female reproductive system

Menstrual and other female reproductive system disorders age >69 or with CC

Menstrual, other female reproductive system disorders age <70 without CC

Therapeutic abortion

Abortion without D & C

Abortion with D & C, aspiration, curettage or hysterotomy

Pregnancy related

Postpartum and post abortion diagnoses without OR procedure

Postpartum and post abortion diagnoses with OR procedure

Ectopic pregnancy

Threatened abortion

Neurosurgery

Ventricular shunt revision with no other OR proc

Craniotomy with CC

Craniotomy without CC

Admission for plasmapheresis

Plasmapheresis with neurological disease

Cranio-facial surgery

Pituitary procedures

Craniotomy for multiple significant trauma

Ophthalmology

Cataract etc

Lens procedures with vitrectomy or with CC
099  Lens procedures without vitrectomy and without CC

Other Ophthalmology

082  Hyphema
084  Neurological and vascular disorders
085  Other disorders of the eye with CC
086  Other disorders of the eye without CC
088  Acute and major infections of the eye age >54
089  Acute and major infections of the eye age <55
091  Multiple eye procedures
092  Orbital procedures
093  Retinal procedures with CC
094  Retinal procedures without CC
095  Corneal, scleral and conjunctival procedures
096  Glaucoma procedures with CC
097  Glaucoma procedures without CC
100  Strabismus procedures
101  Eyelid procedures
102  Lacrimal procedures
103  Other eye procedures

Orthopaedics

Diagnostic procedures

431  Arthroscopy
435  Biopsies of musculoskeletal system and connective tissue

Axial skeleton (and limb lengthening)

025  Spinal procedures with CC
026  Spinal procedures without CC
413  Spinal fusion with scoliosis
414  Back and neck procedures or spinal fusion with malignancy or with CC
415  Spinal fusion
416  Back and neck procedures
417  Limb lengthening procedures

Major joints

401  Bilateral or multiple major joint procedures of lower limb
404  Hip replacement with CC
405  Hip replacement without CC
406  Other major joint and limb reattachment procedures with CC
407  Other major joint and limb reattachment procedures without CC

Limb procedures excluding major joints

408  Hip and femur procedures except major joint with CC
409  Hip and femur procedures except major joint age >54 without CC
410  Hip and femur procedures except major joint age <55 without CC
411  Amputation
412  Stump revision
Lower extremity and humerus procs except hip, foot and femur with CC
Leg and humerus procs except hip, foot and femur age >59 without CC
Leg and humerus procs except hip, foot and femur age <60 without CC
Knee procedures
Local excision and removal of internal fixation device of hip or femur
Local excision, removal internal fixation device except hip and femur
Major shoulder or elbow procedures age >59
Major shoulder or elbow procedures age <60
Foot procedures
Shoulder, elbow, forearm proc except major joint age >69 or with CC
Shoulder, elbow, forearm proc except major joint age <70 without CC

Carpal tunnel
030 Carpal tunnel release

Miscellaneous Orthopaedics
031 Procedure for cerebral palsy, muscular distrophy or neuropathy with CC
032 Procedure for cerebral palsy, muscular distrophy, neuropathy without CC
033 Peripheral and cranial nerve and other nervous system proc age >54
034 Peripheral and cranial nerve and other nervous system proc age <55
400 Bone, joint infect, inflamm with misc musculoskel, connect tissue proc
422 Soft tissue procedures
436 Other musculoskeletal system and connective tissue procedures with CC
437 Other musculoskeletal system and connective tissue proc without CC

Otolaryngology
Myringotomy and Tonsils
122 Tonsillectomy and/or adenoidectomy
124 Myringotomy with tube insertion
Other ENT
111 Sialoadenectomy
112 Salivary gland procedures except sialoadenectomy
115 Sinus, mastoid and complex middle ear procedures
117 Miscellaneous ear, nose, mouth and throat procgs
118 Rhinoplasty (with or without turbinectomy)
125 Other ear, nose, mouth and throat procedures
131 Epistaxis
132 Epiglottis
137 Nasal trauma and deformity
138 Other ear, nose, mouth and throat diagnoses with CC
139 Other ear, nose, mouth and throat diagnoses without CC
145 Head and neck procedures without CC and without malignancy
146 Major head and neck procedures with CC or with malignancy
147 Other head and neck procedures with CC or with malignancy
151 Mouth procedures for malignant conditions
152 Mouth procedures for non-malignant conditions
<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>527</td>
<td>Thyroglossal procedures</td>
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<tr>
<td><strong>Plastic and Reconstructive</strong></td>
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<td><strong>Cleft palate or lip</strong></td>
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<tr>
<td>113</td>
<td>Surgical repair for cleft lip or palate diagnoses</td>
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<tr>
<td><strong>Hand surgery</strong></td>
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<td>427</td>
<td>Major thumb or joint procedures</td>
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<tr>
<td>432</td>
<td>Hand or wrist procedures except major joint</td>
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<td>896</td>
<td>Skin grafts for injuries to hand</td>
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<tr>
<td>900</td>
<td>Other procedures for injuries to hand</td>
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<tr>
<td><strong>Plastic procedures on lower limb</strong></td>
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<tr>
<td>500</td>
<td>Leg with skin graft or flap repair with ulcer or cellulitis with CC</td>
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<tr>
<td>501</td>
<td>Leg with skin graft or flap repair with ulcer or cellulitis without CC</td>
</tr>
<tr>
<td>502</td>
<td>Lower limb with other OR procedure with ulcer or cellulitis</td>
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<td>503</td>
<td>Lower limb with skin graft or flap repair without ulcer or cellulitis</td>
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<td>504</td>
<td>Lower limb with other OR procedure without ulcer or cellulitis</td>
</tr>
<tr>
<td>895</td>
<td>Skin grafts for injuries to lower limb</td>
</tr>
<tr>
<td><strong>Plastic surgery of breast</strong></td>
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<tr>
<td>483</td>
<td>Skin, subcutaneous tissue and breast plastic procedures</td>
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<td>497</td>
<td>Major procedures for non-malignant breast conditions</td>
</tr>
<tr>
<td>498</td>
<td>Minor procedures for non-malignant breast conditions</td>
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<tr>
<td><strong>Other plastic surgery</strong></td>
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<tr>
<td>402</td>
<td>Skin graft excluding hand with CC</td>
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<tr>
<td>403</td>
<td>Skin graft excluding hand without CC</td>
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<tr>
<td>505</td>
<td>Other skin graft and/or debridement procedures</td>
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<tr>
<td>524</td>
<td>Obesity procedures</td>
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<tr>
<td>897</td>
<td>Skin grafts for other injuries</td>
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<tr>
<td><strong>Urology</strong></td>
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<tr>
<td><strong>Urological Malignancy</strong></td>
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<tr>
<td>552</td>
<td>Kidney, ureter and major bladder procedure for neoplasm with CC</td>
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<td>Kidney, ureter and major bladder procedure for neoplasm without CC</td>
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<td>Kidney, ureter and major bladder procedure for non-neoplasm</td>
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<td>Minor bladder procedures with CC</td>
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<td>557</td>
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<td>Major male pelvic procedures with CC</td>
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<td>Major male pelvic procedures without CC</td>
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<td>Testes procedures for malignancy with CC</td>
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<tr>
<td>608</td>
<td>Testes procedures for malignancy without CC</td>
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<td>614</td>
<td>Other male reproductive system OR procedures for malignancy</td>
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<td><strong>Prostatectomy including transurethral</strong></td>
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<td>558</td>
<td>Prostatectomy with CC</td>
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<td>Prostatectomy without CC</td>
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<tr>
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<td>Transurethral prostatectomy age &gt;79 with CC</td>
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<td>Transurethral prostatectomy (age &lt;80 with CC) or (age &gt;79 without CC)</td>
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Other Urology

Transurethral prostatectomy age <80 without CC

Transurethral procedures with major CC
Transurethral procedures with non-major CC
Transurethral procedures without CC
Urethral procedures age >9 with CC
Urethral procedures age >9 without CC
Urethral procedures age <10
Penis procedures with CC
Penis procedures without CC
Testes procedures except for malignancy age >9 with CC
Testes procedures except for malignancy age >9 without CC
Testes procedures except for malignancy age <10
Circumcision age >9
Circumcision age <10
Other male reproductive system OR procedures except for malignancy
Prostatic OR proc unrelated to principal diagnosis

Male sterilisation
Sterilisation, male

Vascular
Extracranial vascular procedure with major CC
Extracranial vascular procedure with non-major CC
Extracranial vascular procedures without CC
Major reconstructive vascular procedure without pump with major CC
Major reconstructive vascular procedure without pump with non-major CC
Major reconstructive vascular procedure without pump without CC
Vascular procedures except major reconstruction without pump with CC
Vascular procedures except major reconstruct without pump without CC
Upper limb and toe amputation for circulatory disorder
Amputation for circulatory disorders except upper limb and toe

MATERNITY AND NEONATES

Uncomplicated Maternity
Vaginal delivery without complicating diagnosis

Complicated maternity
Caesarean delivery without complicating diagnosis
Caesarean delivery with moderate complicating diagnosis
Caesarean delivery with severe complicating diagnosis
Vaginal delivery with moderate complicating diagnosis
Vaginal delivery with severe complicating diagnosis
Vaginal delivery with complicating OR procedures
Preterm labour
Other antenatal admission with severe complicating diagnosis
Other antenatal admission with moderate or no complicating diagnosis

Caesarean delivery with multiple complicating diag, at least one severe

Vaginal delivery with multiple complicating diag, at least one severe

**Complex neonates**

- 702 Neonate - complex
- 705 Neonate - complex
- 706 Neonate - complex
- 707 Neonate - complex
- 708 Neonate - complex
- 709 Neonate - complex
- 710 Neonate - complex
- 711 Neonate - complex
- 712 Neonate - complex
- 713 Neonate - complex
- 714 Neonate - complex
- 715 Neonate - complex
- 721 Neonate - complex
- 722 Neonate - complex

**Non-complex**

- 701 Neonate - non-complex
- 703 Neonate - non-complex
- 717 Neonate - non-complex
- 718 Neonate - non-complex
- 719 Neonate - non-complex
- 723 Neonate - non-complex
- 724 Neonate - non-complex
- 725 Neonate - non-complex

**Well Newborn**

- 720 Neonate - well newborn
- 726 Neonate - well newborn
- 727 Neonate - well newborn

**Table 3. DRG Groupings used to define surgical specialties for projection of future surgical need including “contributions” made to other specialties.**

**GENERAL SURGERY**

**DRG Descriptor**

**A. GENERAL SURGERY COMPONENTS**

1. **Trauma**
   - 492 Trauma to the skin, subcutaneous tissue and breast age >69 with CC
   - 493 Trauma to skin, subcutaneous tissue and breast age >69 without CC
   - 494 Trauma to skin, subcutaneous tissue and breast age <70

2. **Veins**
   - 239 Vein ligation and stripping
3 Upper GI
300 Stomach, oesophageal and duodenal procedures with major CC
301 Stomach, oesophageal and duodenal procedures without major CC
302 Stomach, oesophageal and duodenal procedures without CC
4 Lower GI
305 Major small and large bowel procedures with CC
306 Major small and large bowel procedures without CC
307 Rectal resection age >69 with CC
308 Rectal resection (age <70 with CC) or (age >69 without CC)
309 Rectal resection age <70 without CC
310 Peritoneal adhesiolysis age >49 with CC
311 Peritoneal adhesiolysis (age <50 with CC) or (age >49 without CC)
312 Peritoneal adhesiolysis age <50 without CC
315 Minor small and large bowel procedures with CC
316 Minor small and large bowel procedures without CC
5 Appendix
313 Appendicectomy with complicated principal diagnosis
314 Appendicectomy without complicated principal diagnosis
6 Anus, stomal, abdominal herniae
317 Anal and stomal procedures with CC
318 Anal and stomal procedures without CC
482 Perianal and pilonidal procedures
7 Groin herniae
319 Abdominal, umbilical and other hernia procedures age >9
321 Hernia procedures age <10
8 Liver, Biliary, Pancreas
359 Pancreas, liver and shunt procedures with major CC
360 Pancreas, liver and shunt procedures with non-major CC
361 Pancreas, liver and shunt procedures without CC
362 Biliary tract proc except cholecystectomy only with/without CDE+maj CC
363 Biliary tract proc except cholecyst only with/without CDE +non-maj CC
364 Biliary tract proc except cholecyst only with/without CDE without CC
368 Hepatobiliary diagnostic procedures for malignancy
369 Hepatobiliary diagnostic procs for non malignancy
380 Other hepatobiliary and pancreas OR procedures with CC
381 Other hepatobiliary and pancreas OR procedures with CC
9 Cholecystectomy
365 Cholecystectomy with CDE with CC
366 Cholecystectomy with CDE without CC
367 Cholecystectomy without CC
10 Breast Specific
488 Non-malignant breast disorders
495 Major procedures for malignant breast conditions
Minor procedures for malignant breast conditions

**Endocrine**

- Adrenal procedures
- Parathyroid procedures
- Thyroid procedures
- Other endocrine, nutritional and metabolic OR procedures

**Blood forming organs**

- Splenectomy
- Other OR proc of blood and blood forming organs
- Lymphoma and leukaemia with major OR procedures with CC
- Lymphoma and leukaemia with major OR procedures without CC
- Lymphoma and non-acute leukaemia with other OR procedure with major CC
- Lymphoma and non-acute leukaemia with other OR proc with non-major CC
- Lymphoma and non-acute leukaemia with other OR procedure without CC

**Non-specific**

- Pyloromyotomy procedure
- Other digestive system OR procedures with CC or with malignancy
- Other digestive system OR procedures without CC without malignancy
- Amputation
- Stump revision
- Other skin, subcutaneous tissue and breast procedures
- Other neoplastic disorders with major OR procedure with CC
- Other neoplastic disorders with major OR procedure without CC
- Other neoplastic disorders with other OR procedures
- OR proc+ diag of oth contacts with health serv+CC
- OR proc+diag of oth contact with health serv - no CC
- Extensive OR proc unrelated to principal diagnosis
- Non-extensive OR proc unrelated to principal diag

**C.GENERAL SURGERY CONTRIBUTIONS 45%**

- Tracheostomy except for mouth, larynx or pharynx disorder age >15
- Tracheostomy except for mouth, larynx or pharynx disorder age <16
- Respiratory system diagnosis with ventilator support
- Complex therapeutic gastroscopy for major digestive disease with CC
- Complex therapeutic gastroscopy for major digestive disease without CC
- Complex therapeutic gastroscopy for non-major digestive dis with CC
- Complex therapeutic gastroscopy for non-major digestive dis without CC
- Other gastroscopy for major digestive disease with CC
- Other gastroscopy for major digestive disease without CC
- Other gastroscopy for non-major digestive disease with CC
- Other gastroscopy for non-major digestive disease without CC
- Complex therapeutic colonoscopy
- Other colonoscopy with CC
335  Other colonoscopy without CC
385  ERCP complex therapeutic procedures for malignancy or with CC
386  ERCP complex therapeutic procedures not for malignancy without CC
387  ERCP other therapeutic procedures for malignancy or with CC
388  ERCP other therapeutic procedures not for malignancy without CC
529  Intended sameday stay, endosc OR proc for endo, nutr, misc metabolic dis
538  Intended sameday investigation, management, obs end, nutr, metabolic dis
50  Severe head injury
51  Moderate head injury
52  Minor head injury
178  Major chest trauma age >69 with CC
179  Major chest trauma (> 69 without CC) or (age <70 with CC)
180  Major chest trauma age <70 without CC
870  Tracheostomy for multiple significant trauma age >15
871  Tracheostomy for multiple significant trauma age <16
872  Craniotomy for multiple significant trauma
874  Other OR procedure for multiple significant trauma
875  Head, chest and lower limb diagnoses of multiple significant trauma
876  Other diagnoses of multiple significant trauma
883  Injuries age >64 with CC
884  Injuries age >64 without CC
885  Injuries age <65
802  HIV-related malignancy
818  OR procedure for infectious and parasitic diseases age >54 with CC
819  OR proc for infectious, parasitic dis (age >54 no CC)/(age <55 with CC)
820  OR procedure for infectious and parasitic diseases age <55 without CC
821  Postoperative and post-traumatic infections age >54
822  Postoperative and post-traumatic infections age <55
336  Digestive malignancy
382  Malignancy of hepatobiliary system or pancreas age >69 with CC
383  Hepatobiliary system or pancreas malignancy (<70+CC)/(>69 without CC)
384  Malignancy of hepatobiliary system or pancreas age <70 without CC
511  Malignant breast disorders age >69 with CC
512  Malignant breast disorders (age >69 without CC) or (age <70 with+ CC)
513  Malignant breast disorders age <70 without CC
783  Other neoplastic disorders with CC
784  Other neoplastic disorders without CC

CARDIOTHORACIC VASCULAR AND TRANSPLANTS

DRG Descriptors
CAR

A. CARDIOTHORACIC COMPONENTS
Chest procedures
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>Major chest procedures with major CC</td>
</tr>
<tr>
<td>161</td>
<td>Major chest procedures with non-major CC</td>
</tr>
<tr>
<td>162</td>
<td>Major chest procedures without CC</td>
</tr>
<tr>
<td>163</td>
<td>Other respiratory system OR procedures with major CC</td>
</tr>
<tr>
<td>164</td>
<td>Other respiratory system OR procedures with non-major CC</td>
</tr>
<tr>
<td>165</td>
<td>Other respiratory system OR procedures without CC</td>
</tr>
<tr>
<td>704</td>
<td>Cardiothoracic or vascular procedures for neonates</td>
</tr>
<tr>
<td>221</td>
<td>Cardiac valve proc+pump+invasive cardiac investigative proc with CC</td>
</tr>
<tr>
<td>222</td>
<td>Cardiac valve proc+pump+invasive cardiac investigative proc without CC</td>
</tr>
<tr>
<td>223</td>
<td>Cardiac valve proc+pump without invasive cardiac proc with major CC</td>
</tr>
<tr>
<td>224</td>
<td>Cardiac valve proc+pump without invasive cardiac proc without major CC</td>
</tr>
<tr>
<td>226</td>
<td>Other cardiothoracic procedures without pump, congenital</td>
</tr>
<tr>
<td>227</td>
<td>Other cardiothoracic procedures without pump, acquired</td>
</tr>
<tr>
<td>240</td>
<td>Other circulatory system OR procedures</td>
</tr>
<tr>
<td>244</td>
<td>Circulatory system diagnosis with ventilator support</td>
</tr>
<tr>
<td>245</td>
<td>Circulatory disorder with AMI with invasive cardiac proc with major CC</td>
</tr>
<tr>
<td>246</td>
<td>Circulatory disorder with AMI+invasive cardiac proc without major CC</td>
</tr>
<tr>
<td>273</td>
<td>Circulatory dis,no AMI+invasive cardiac proc+compl diag or + major CC</td>
</tr>
<tr>
<td>274</td>
<td>Circulatory dis,no AMI+invasive cardiac proc,no compl diag, without CC</td>
</tr>
<tr>
<td>228</td>
<td>Major reconstructive vascular procedure without pump with major CC</td>
</tr>
<tr>
<td>229</td>
<td>Major reconstructive vascular procedure without pump with non-major CC</td>
</tr>
<tr>
<td>230</td>
<td>Major reconstructive vascular procedure without pump without CC</td>
</tr>
<tr>
<td>231</td>
<td>Vascular procedures except major reconstruction without pump with CC</td>
</tr>
<tr>
<td>232</td>
<td>Vascular procedures except major reconstruct without pump without CC</td>
</tr>
</tbody>
</table>
TRANSPRANTS
007 Multiple organs transplant
008 Heart transplant
009 Lung transplant
550 Kidney transplant with CC
551 Kidney transplant without CC

ORTHOPAEDICS

A. ORTHOPAEDIC COMPONENTS

1. Axial skeleton (and limb lengthening)
   025 Spinal procedures with CC
   026 Spinal procedures without CC
   149 Maxillo surgery with CC
   150 Maxillo surgery without CC
   413 Spinal fusion with scoliosis
   414 Back and neck procedures or spinal fusion with malignancy or with CC
   415 Spinal fusion
   416 Back and neck procedures
   433 Maxillo-facial surgery
   434 Cranio-facial surgery
   417 Limb lengthening procedures

2. Carpal tunnel
   030 Carpal tunnel release

3. Major joints
   401 Bilateral or multiple major joint procedures of lower limb
   404 Hip replacement with CC
   405 Hip replacement without CC
   406 Other major joint and limb reattachment procedures with CC
   407 Other major joint and limb reattachment procedures without CC

4. Other limb
   408 Hip and femur procedures except major joint with CC
   409 Hip and femur procedures except major joint age >54 without CC
   410 Hip and femur procedures except major joint age <55 without CC
   418 Lower extremity and humerus procs except hip, foot and femur with CC
   419 Leg and humerus procs except hip, foot and femur age >59 without CC
   420 Leg and humerus procs except hip, foot and femur age <60 without CC
   421 Knee procedures
   423 Local excision and removal of internal fixation device of hip or femur
   424 Local excision, removal internal fixation device except hip and femur
   425 Major shoulder or elbow procedures age >59
   426 Major shoulder or elbow procedures age <60
   428 Foot procedures
5. Diagnostic procedures
- Arthroscopy
- Biopsies of musculoskeletal system and connective tissue

6. Miscellaneous
- Procedure for cerebral palsy, muscular distrophy or neuropathy with CC
- Procedure for cerebral palsy, muscular distrophy, neuropathy without CC
- Peripheral and cranial nerve and other nervous system proc age >54
- Peripheral and cranial nerve and other nervous system proc age <55
- Amputation for circulatory disorders except upper limb and toe
- Upper limb and toe amputation for circulatory disorder
- Bone, joint infect, inflam with misc musculoskel, connect tissue proc
- Other musculoskeletal system and connective tissue procedures with CC
- Other musculoskeletal system and connective tissue procedures without CC
- Soft tissue procedures

7. Injuries
- Fractures of hip and pelvis with CC
- Fractures of hip and pelvis age >74 without CC
- Fractures of hip and pelvis age <75 without CC
- Sprains, strains and dislocations of hip, pelvis and thigh
- Fracture, sprain, strain, dislocation forearm, hand, foot age >74 with CC
- Fracture, sprain, strain, dislocation forearm, hand, foot (age >74 no CC)/(age <75+CC)
- Fracture, sprain, strain, disloc of forearm, hand, foot age <75 without CC
- Fracture, sprain, strain, dislocation upper arm, lower leg age >64 with CC
- Fracture, sprain, strain, disloc upper arm, lower leg (age >64 no CC)/(age <65+CC)
- Fracture, sprain, strain, disloc upper arm, lower leg age <65 without CC
- Other procedures for injuries to lower limb age >59 or with CC
- Other procedures for injuries to lower limb age <60 without CC
- Other procedures for other injuries with CC
- Other procedures for other injuries without CC

C. CONTRIBUTIONS (36.13%)
- Major fractures of femur
- Non-major fractures of femur
- Tracheostomy for multiple significant trauma age >15
- Tracheostomy for multiple significant trauma age <16
- Craniotomy for multiple significant trauma
- Hip, femur and limb reattachment proc for multiple significant trauma
- Other OR procedure for multiple significant trauma
- Head, chest and lower limb diagnoses of multiple significant trauma
- Other diagnoses of multiple significant trauma
- Injuries age >64 with CC
884 Injuries age >64 without CC
885 Injuries age <65
446 Path # and musculoskeletal system or conn tissue malignancy age >64
447 Path # and musculoskeletal system or conn tissue malignancy age <65
444 Osteomyelitis age >64 or with CC
445 Osteomyelitis age <65 without CC
448 Connective tissue disorders age >64 or with CC
449 Connective tissue disorders age <65 without CC
450 Septic arthritis with CC
451 Septic arthritis age >54 without CC
452 Septic arthritis age <55 without CC
453 Medical back problems age >74 with CC
454 Medical back problems (age >74 without CC) or (age <75 with CC)
455 Medical back problems age <75 without CC
456 Bone diseases and specific arthropathies age >74 with CC
457 Bone diseases and specific arthropathies age >74 without CC
458 Bone diseases and specific arthropathies age 65-74
459 Bone diseases and specific arthropathies age <65
460 Non-specific arthropathies age >69
461 Non-specific arthropathies age <70
462 S&S musculoskeletal syst and connective tissue age >69 with CC
463 S&S musculoskeletal syst and conn tissue (age >69 no CC)/(age <70+CC)
464 S&S musculoskeletal system and connective tissue age <70 without CC
465 Tendonitis, myositis and bursitis age >79
466 Tendonitis, myositis and bursitis age <80 with CC
467 Tendonitis, myositis and bursitis age 80 without CC
477 Other musculoskeletal system or connective tissue diag age >69 with CC
478 Oth musculoskelet syst or conn tissue diag (age >69 no CC)/(age <70+CC)
479 Other musculoskeletal system or connective tissue diag age <70 without CC

ENT and Ophthalmology
DRG Descriptions

ENT
A. ENT COMPONENTS
1. Myringotomy and Tonsils
   122 Tonsillectomy and/or adenoidectomy
   124 Myringotomy with tube insertion
2. Other ENT
   111 Sialoadenectomy
   112 Salivary gland procedures except sialoadenectomy
   115 Sinus, mastoid and complex middle ear procedures
   117 Miscellaneous ear, nose, mouth and throat procs
   118 Rhinoplasty (with or without turbinectomy)
125 Other ear, nose, mouth and throat procedures
131 Epistaxis
132 Epiglottis
137 Nasal trauma and deformity
138 Other ear, nose, mouth and throat diagnoses with CC
139 Other ear, nose, mouth and throat diagnoses without CC
145 Head and neck procedures without CC and without malignancy
146 Major head and neck procedures with CC or with malignancy
147 Other head and neck procedures with CC or with malignancy
151 Mouth procedures for malignant conditions
152 Mouth procedures for non-malignant conditions
527 Thyroglossal procedures

C. CONTRIBUTIONS 50%
001 Mouth larynx or pharynx disorder with tracheostomy age >15
002 Mouth larynx or pharynx disorder with tracheostomy age <16
148 Cochlear implant
133 Otitis media and URI age >9 with CC
134 Otitis media and URI age >9 without CC
140 Ear, nose, mouth and throat malignancy-therapeutic care or major CC
141 Ear, nose, mouth and throat malignancy, other care without major CC

OPHTHALMOLOGY
OPHTHALMOLOGY COMPONENTS
1. Cataract etc
   098 Lens procedures with vitrectomy or with CC
   099 Lens procedures without vitrectomy and without CC
2. Other Ophthalmology
   082 Hyphema
   084 Neurological and vascular disorders
   085 Other disorders of the eye with CC
   086 Other disorders of the eye without CC
   088 Acute and major infections of the eye age >54
   089 Acute and major infections of the eye age <55
   091 Multiple eye procedures
   092 Orbital procedures
   093 Retinal procedures with CC
   094 Retinal procedures without CC
   095 Corneal, scleral and conjunctival procedures
   096 Glaucoma procedures with CC
   097 Glaucoma procedures without CC
   100 Strabismus procedures
   101 Eyelid procedures
Lacrimal procedures
Other eye procedures

**GENITOURINARY**
**DRG Description**
**UROLOGY**

**A. UROLOGY COMPONENTS**

1. **Malignancy**
   - 552 Kidney, ureter and major bladder procedure for neoplasm with CC
   - 553 Kidney, ureter and major bladder procedure for neoplasm without CC
   - 607 Testes procedures for malignancy with CC
   - 608 Testes procedures for malignancy without CC
   - 614 Other male reproductive system OR procedures for malignancy
   - 554 Kidney, ureter and major bladder procedure for non-neoplasm
   - 600 Major male pelvic procedures with CC
   - 601 Major male pelvic procedures without CC
   - 556 Minor bladder procedures with CC
   - 557 Minor bladder procedures without CC

2. **Prostatectomy including transurethral**
   - 558 Prostatectomy with CC
   - 559 Prostatectomy without CC
   - 604 Transurethral prostatectomy age >79 with CC
   - 605 Transurethral prostatectomy (age <80 with CC) or (age >79 without CC)
   - 606 Transurethral prostatectomy age <80 without CC

3. **Other Urology**
   - 560 Transurethral procedures with major CC
   - 561 Transurethral procedures with non-major CC
   - 562 Transurethral procedures without CC
   - 563 Urethral procedures age >9 with CC
   - 564 Urethral procedures age >9 without CC
   - 565 Urethral procedures age <10
   - 602 Penis procedures with CC
   - 603 Penis procedures without CC
   - 609 Testes procedures except for malignancy age >9 with CC
   - 610 Testes procedures except for malignancy age >9 without CC
   - 611 Testes procedures except for malignancy age <10
   - 612 Circumcision age >9
   - 613 Circumcision age <10
   - 615 Other male reproductive system OR procedures except for malignancy
   - 953 Prostatic OR proc unrelated to principal diagnosis

**Sterilisation**
   - 622 Sterilisation, male
C. UROLOGY CONTRIBUTIONS 22.5%
575 Kidney and urinary tract infections age >69 with CC
576 Kidney and urinary tract infect (age <70 with CC)/(age >69 without CC)
577 Kidney and urinary tract infections <70 without CC
578 Urinary stones with ESW lithotripsy
579 Urinary stones without ESW lithotripsy
580 Kidney and urinary tract signs and symptoms age >74 with CC
581 Kidney, urinary tract signs/symptoms (age >74 no CC)/(age <75 with CC)
582 Kidney and urinary tract signs and symptoms age <75 without CC
583 Urethral stricture with CC
584 Urethral stricture without CC
618 Benign prostatic hypertrophy with CC
619 Benign prostatic hypertrophy without CC
620 Inflammation of male reproductive system with CC
621 Inflammation of male reproductive system without CC
623 Other male reproductive system diagnoses
573 Kidney and urinary tract neoplasms with CC
574 Kidney and urinary tract neoplasms without CC

GYNAECOLOGY
A. GYNAECOLOGY COMPONENTS
1. Malignancy
650 Pelvic evisceration and radical vulvectomy
651 Uterine or adnexa procedure for ovarian or adnexal malignancy with CC
652 Uterine or adnexa proc for ovarian or adnexal malignancy without CC
653 Uterine or adnexa proc for non-ovarian or adnexal malignancy with CC
654 Uterine or adnexa proc for non-ovarian, adnexal malignancy without CC
2. Uterine and adnexal procedures for non-malignancy
655 Uterine or adnexal procedure for non-malignancy age >39 with CC
656 Uterine, adnexal proc, non-malignancy (age >39 no CC)/(age <40 with CC
657 Uterine or adnexal procedure for non-malignancy <40 without CC
3. Reconstructive procedures
658 Female reproductive system reconstructive procedures
4. Vulva vagina and cervix
659 Conisation, vagina, cervix and vulva procedures
5. Endoscopy
660 Endoscopic procedures on female reproductive system
6. D&C and hysteroscopy
661 Diagnostic curettage and/or diagnostic hysteroscopy
7. Other gynaecology
662 Oth female reproductive syst OR procs age >64 or with malig or with +CC
8. Pregnancy related
   678  Postpartum and post abortion diagnoses without OR procedure
   679  Postpartum and post abortion diagnoses with OR procedure
   680  Ectopic pregnancy
   681  Threatened abortion

9. Therapeutic abortion
   682  Abortion without D & C
   683  Abortion with D & C, aspiration, curettage or hysterotomy

C. GYNAECOLOGICAL CONTRIBUTIONS 33%
   664  Malignancy of female reproductive system age >69
   665  Malignancy of female reproductive system age  70

PLASTICS AND NEURO SURGERY
DRG  Descriptor
A. PLASTIC SURGERY COMPONENTS
1. Cleft palate or lip
   113  Surgical repair for cleft lip or palate diagnoses

2. Hand surgery
   427  Major thumb or joint procedures
   432  Hand or wrist procedures except major joint
   896  Skin grafts for injuries to hand
   900  Other procedures for injuries to hand

3. Plastic surgery of breast
   483  Skin, subcutaneous tissue and breast plastic procedures
   497  Major procedures for non-malignant breast conditions
   498  Minor procedures for non-malignant breast conditions

4. Plastic lower limb
   500  Leg with skin graft or flap repair with ulcer or cellulitis with CC
   501  Leg with skin graft or flap repair with ulcer or cellulitis without CC
   502  Lower limb with other OR procedure with ulcer or cellulitis
   503  Lower limb with skin graft or flap repair without ulcer or cellulitis
   504  Lower limb with other OR procedure without ulcer or cellulitis
   895  Skin grafts for injuries to lower limb

5. Non-specific plastics
   402  Skin graft excluding hand with CC
   403  Skin graft excluding hand without CC
   505  Other skin graft and/or debridement procedures
   524  Obesity procedures
897 Skin grafts for other injuries

6. Burns
920 Burns, transferred to other acute facility, LOS <5 days
922 Other third degree burns with skin graft age >64
923 Other third degree burns with skin graft age <65
924 Other burns with skin graft
925 Other operating room procedures for burns
927 Other burns age >64
928 Other burns age <65

C. PLASTIC SURGERY CONTRIBUTIONS
Discounted burns 20%
921 Severe third degree burns with skin graft
926 Severe burns

NEUROSURGERY
A. Neurosurgery
022 Ventricular shunt revision with no other OR proc
023 Craniotomy with CC
024 Craniotomy without CC
035 Admission for plasmapheresis
036 Plasmapheresis with neurological disease
522 Pituitary procedures

C. Contributions 10.8%
003 Tracheostomy except for mouth, larynx or pharynx disorder age >15
004 Tracheostomy except for mouth, larynx or pharynx disorder age <16
050 Severe head injury
051 Moderate head injury
052 Minor head injury
059 Nervous system neoplasms age >64
060 Nervous system neoplasms age 25-64
061 Nervous system neoplasms age <25
870 Tracheostomy for multiple significant trauma age >15
871 Tracheostomy for multiple significant trauma age <16
872 Craniotomy for multiple significant trauma