National Health Performance Authority

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Healthy Communities:

Potentially preventable hospitalisations in 2013–14

Technical Supplement

Please note:

This Technical Supplement applies only to *Healthy Communities: Potentially preventable hospitalisations in 2013–14*. Data and methods have since been revised. See **www.myhealthycommunities.gov.au** for the most up-to-date results and methods.

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Disclaimer
This report is produced for health research, health care and health advocacy purposes. This report is not intended to provide guidance on particular health care choices. You should contact your medical advisors on particular health care choices.

ISSN: 2201-8212
Online ISBN: 978-1-76007-233-9

Suggested citation: National Health Performance Authority 2015, *Healthy Communities: Potentially preventable hospitalisations in 2013–14, Technical Supplement.*

Further copies of this document can be downloaded from **www.myhealthycommunities.gov.au**

Published December 2015.

Please note that there is the potential for minor revisions of this report.
Please check **www.myhealthycommunities.gov.au** for any amendments.

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Healthy Communities: Potentially preventable hospitalisations in 2013–14

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Summary

The National Health Performance Authority (the Authority) publishes two streams of reports: Healthy Communities reports and Hospital Performance reports. The Authority bases its performance reports on a set of indicators agreed by the Council of Australian Governments (COAG).

This Technical Supplement summarises the methods used to calculate the descriptive statistics for the performance indicator *potentially preventable hospitalisations*, presented in *Healthy Communities: Potentially preventable hospitalisations in 2013–14*. It also provides information on the release of 2012–13 potentially preventable hospitalisations data, noting this is only available as a web download.

The report, *Healthy Communities: Potentially preventable hospitalisations in 2013–14*, provides information on the following measures:

- Age-standardised rates of potentially preventable hospitalisations
- Number of hospital bed days for potentially preventable hospitalisations and the proportion that are same-day admissions.

The report publishes statistics for 31 Primary Health Networks and 333 Australian Bureau of Statistics (ABS) Statistical Areas Level 3 (SA3s). For each level of geography, the Authority has calculated information using data from the Admitted Patient Care National Minimum Data Set (APC NMDS) for the financial year 2013–14 and the Australian Bureau of Statistics Estimated Resident Population at 30 June 2013.

This supplement provides information about the data source and methods used. It is assumed that readers possess technical expertise in the creation and use of health information.

Data for 2013–14 used in the report are also available on the MyHealthyCommunities website as an interactive tool and a downloadable Excel file. Data for 2012–13 are only available on the MyHealthyCommunities website as a downloadable Excel file. See **www.myhealthycommunities.gov.au/exploredata**

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Introduction

Potentially preventable hospitalisations (also called potentially avoidable hospitalisations or ambulatory care sensitive conditions) are those that may have been prevented by timely and effective provision of non-hospital or primary health care, including prevention.

This does not mean that a person with a potentially preventable hospitalisation (PPH) did not need to be hospitalised at the time of admission. Rather, the admission may have been prevented by timely access to adequate primary health care to prevent the condition, or managing the condition appropriately out of hospital.

The report shows there are regional variations across Australia in the rates of these potentially preventable hospitalisations, and highlights which local areas have higher or lower rates. People who live in areas with lower rates are considered to have access to stronger primary health care systems that are able to prevent hospitalisations for conditions that are better managed in the community.

Classification of potentially preventable hospitalisations

In January 2015, a new national standard for potentially preventable hospitalisations was agreed by national health data standards committees (see Metadata Online Registry (METeOR) specification in the Appendix). To maintain national consistency in reporting, the National Health Performance Authority (the Authority) adopted this standard for reporting 2012–13 and 2013–14 data.

The Authority also changed the name of this indicator in its reporting from potentially *avoidable* hospitalisations to potentially *preventable* hospitalisations to align with the national standard. The terms 'avoidable' and 'preventable', in this context, are interchangeable.

People of all ages are included in this report, although some conditions have specific age exclusions.

In the 2015 specification, there are 22 conditions for which hospitalisation is considered to be potentially preventable, categorised as chronic, acute and vaccine-preventable conditions.

Chronic conditions may be preventable through behaviour modification and lifestyle change. They can also be managed in a primary health care setting to prevent the condition worsening and requiring hospitalisation. They are:

- Angina
- Asthma
- Bronchiectasis
- COPD (chronic obstructive pulmonary disease)
- Diabetes complications
- Heart failure
- Hypertension
- Iron deficiency anaemia
- Nutritional deficiencies
- Rheumatic heart diseases.

Acute conditions may not be preventable. However, hospitalisation should not occur if people receive timely and adequate access to primary health care. They are:

- Cellulitis
- Convulsions and epilepsy
- Dental conditions
- Ear, nose and throat infections
- Eclampsia
- Gangrene
- Kidney and urinary tract infections

- Pelvic inflammatory disease
- Perforated/bleeding ulcer
- Pneumonia (not vaccine-preventable).

Vaccine-preventable conditions are preventable and therefore, so is the hospitalisation. They are:

- Pneumonia and influenza (vaccine-preventable)
- Other vaccine-preventable conditions.

There were two conditions which were **removed** from the specification used in the 2011–12 report:

- Dehydration and gastroenteritis
- Appendicitis with generalised peritonitis.

There were also changes to the coding of a number of other conditions:

- Asthma now excludes children aged under 4 years, which resulted in a large decrease in potentially preventable hospitalisations for asthma
- There were changes to exclusions for angina
- An additional code was added to cellulitis and procedure exclusions were changed
- There were substantial changes to the coding of influenza and pneumonia by creating a pneumonia (not vaccine-preventable) condition from 'influenza and pneumonia' and many codes changed
- Both pneumonia (not vaccine-preventable), and pneumonia and influenza (vaccine-preventable), exclude babies aged under two months.

Two diagnoses groups were split:

- Bronchiectasis was separated from COPD and is now reported individually
- Eclampsia was separated from 'convulsions and epilepsy' and is now reported individually.

The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) 7th edition was used to identify diagnoses related to potentially preventable hospitalisations for data in 2012–13, while ICD-10-AM 8th edition was used for 2013–14 data. Specific ICD-10-AM codes used in this release are available in the **Appendix, page 9**. Appropriate concordances were undertaken to ensure comparability of diagnosis and procedure codes over the time periods. Through this process, no change to either diagnosis or procedure codes were required over the time periods.

ICD-10-AM codes are assigned by clinical coders in each hospital, based on the diagnoses recorded in the patient's medical record. The diagnosis is recorded for each hospital episode and is specific to that admission.

Some potentially preventable hospitalisations are identified using procedure codes in addition to diagnosis codes. A procedure is a clinical intervention represented by a code that:

- Is surgical in nature and/or
- Carries a procedural risk and/or
- Carries an anaesthetic risk and/or
- Requires specialised training and/or
- Requires special facilities or equipment only available in an acute care setting.

The procedure codes used in this report were based on the Australian Classification of Health Interventions 7th edition for 2012–13, and 8th edition for 2013–14 data.

Measures presented

Data are presented for 31 Primary Health Networks (PHNs) and ABS Statistical Areas Level 3 (SA3s). There are 333 SA3s, each of which has a population of between 30,000 and 130,000 people (with some exceptions) – for more information see **Geography, page 4**.

Data for 2013–14 are presented in the report and on the MyHealthyCommunities website as an interactive tool and as an Excel download. Data for 2012–13 are only available to download as an Excel file.

The report and website include data on:

- Age-standardised hospitalisation rate
- Number of hospitalisations
- Total bed days
- Average length of stay (including same day)
- Average length of stay (excluding same day).

Average length of stay is defined as the number of bed days divided by the number of hospitalisations. Outliers were not removed. This measure is presented both **with** and **without** same-day hospitalisations.

Same-day hospitalisations are where the patient is admitted and discharged on the same day and does not stay overnight.

Measures of potentially preventable hospitalisations are available for downloading as Excel files. These are:

- Number of hospitalisations
- Crude hospitalisation rate
- Age-standardised hospitalisation rate
- PPH for a condition, as a percentage of all PPH hospitalisations
- PPH bed days for a condition, as a percentage of all PPH bed days
- Number of same-day hospitalisations
- Percentage of same-day hospitalisations
- Average length of stay (including same day)
- Average length of stay (excluding same day)
- Hospital in the home days.

Five selected conditions

The report presents data for five selected conditions, three chronic and two acute, these are:

Chronic

- Chronic obstructive pulmonary disease (COPD)
- Diabetes complications
- Heart failure

Acute

- Cellulitis
- Kidney and urinary tract infections.

These five conditions were selected because together they contribute to just under half (47%) of all potentially preventable hospitalisations nationally and almost two-thirds (63%) of bed days for potentially preventable hospitalisations.

Data source

Data for 2012–13 and 2013–14 were sourced from the Admitted Patient Care National Minimum Data Set (APC NMDS) for the financial years 2012–13 and 2013–14. The datasets were supplied in March 2014 and March 2015 respectively.

The APC NMDS includes episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free standing day hospital facilities and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories may also

be included. Hospitals specialising in dental, ophthalmic aids and other specialised acute medical or surgical care are included.

Episodes of non-admitted patient care provided in outpatient clinics or emergency departments are excluded from the APC NMDS.

Also excluded, are admitted patient episodes for the following care types:

- Newborn care (care type=7.0)
- Organ procurement posthumous (care type=9.0)
- Hospital boarders (care type=10.0).

Data are collected at each hospital from patient administrative and clinical record systems. Hospitals then forward data to the relevant state or territory health authority on a regular basis. State and territory health authorities provide the data to the Australian Institute of Health and Welfare (AIHW) for national collation on an annual basis.

The counting unit for the APC NMDS is a 'separation'. Separation is the term used to refer to an episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). As a record is included for each separation, not for each patient, patients hospitalised more than once in the financial year will have more than one record.

In this release, the word 'hospitalisation' is used to mean 'separation'.

For more information on the 2013–14 APC NMDS, see the Data Set Specification on the AIHW's Metadata Online Registry (METeOR), **http://meteor.aihw.gov.au/content/index.phtml/itemId/491555**

Geography

Primary Health Network areas

From 1 July 2015, Primary Health Networks (PHNs) replaced Medicare Locals. Their objectives are to increase the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes. PHNs are also responsible for ensuring patients receive the most appropriate and timely care and in the most suitable setting.[1]

The data in the report relate to the period from July 2013 to June 2014, before PHNs were established and therefore do not reflect the performance of PHNs, but may be used as baseline information for future reporting.

Statistical Areas Level 3 (SA3s)

Statistical Areas Level 3 (SA3s) are geographic areas defined in the Australian Bureau of Statistics (ABS) Australian Statistical Geography Standard (ASGS).[2]

There are 333 spatial SA3s covering the whole of Australia without gaps or overlaps. They are designed to provide a regional breakdown of Australia. SA3s generally have a population of between 30,000 and 130,000 people. There are approximately 50 with fewer than 30,000 people and 35 with more than 130,000, as of 30 June 2011.

In major cities, they represent the area serviced by a major transport and commercial hub. They often closely align to large urban local government areas (for example, Parramatta, Geelong). In regional areas, they represent the area serviced by regional cities with populations of more than 20,000 people. In outer regional and remote areas, they represent areas which are widely recognised as having a distinct identity and have similar social and economic characteristics (for example, Macedon Ranges in Victoria, Southern Highlands in NSW).[2]

Assigning patients to geographic areas

Potentially preventable hospitalisations data are presented in this release at PHN area and SA3 level, based on the patient's residential postcode at the time of the hospitalisation, not the hospital's location. Statistics in this report have been compiled by applying geographic concordances (PHN area or SA3) to APC NMDS data determined by a patient's postcode. This has led to several methodological decisions:

- **Where a postcode overlapped geographic area boundaries,** hospital admissions have been apportioned to the area using concordance files from the Australian Bureau of Statistics (ABS) based on the percentage of the population of the postcode in each geographic area
- **Where a postcode overlapped geographic area boundaries over multiple states and territories,** the patient's state or territory of residence was used to apportion the hospitalisations across only the geographic areas in that particular patient's state or territory of residence
- **Where a postcode did not map to a geographic area,** these postcodes have been excluded in the compilation of statistics for maps and tables in the report. Only a small number of postcodes are excluded.

Fair comparisons

Previous reports by the Authority peer grouped Medicare Local catchments based on socioeconomic status, remoteness and distance to hospitals to allow for fairer comparisons of results. The 31 PHNs that replaced 61 Medicare Local catchments are much larger in size and have greater diversity in their populations' characteristics and therefore have not been peer grouped.

Local area (SA3) results have, however, been categorised by remoteness, into:

- Major cities
- Inner regional
- Outer regional
- Remote (includes Very remote).

Local areas (SA3s) in major cities have been further categorised by socioeconomic status (SES), reported by:

- Higher SES
- Medium SES
- Lower SES.

Local areas (SA3s) have been grouped into five remoteness categories based on the ABS 2011 Australian Statistical Geography Standard.[2] For each SA3, the percentage of the population that was in each remoteness category was calculated. The remoteness category with the highest percentage of the population was allocated to the SA3. Due to the small numbers of SA3s in the Remote and Very remote categories, these categories were combined to create four remoteness categories, **Table 1**.

Table 1: Number of SA3s by ASGS remoteness categories

ASGS remoteness	Number of SA3s
Major cities	188
Inner regional	80
Outer regional	48
Remote (9) & Very remote (8)	17

The majority of SA3s (188 of 333) across Australia were in the Major cities remoteness category. To enable fairer comparisons within city areas, the Major cities category was further categorised into three socioeconomic groups: high, middle and low using the 2011 ABS Index of Relative Socioeconomic Disadvantage (IRSD). IRSD is one of the Socio-economic Indexes for Areas (SEIFA) produced by the ABS using the results of the Census.[3]

To allocate SA3s in Major cities into a socioeconomic group, socioeconomic quintiles for each Statistical Area Level 1 (SA1) within the SA3 (calculated by the ABS) were used. For each SA3, the number of SA1s in each quintile was calculated and the quintile with the largest number of SA1s was allocated to the SA3 **(Table 2a)**.

Table 2a: Number of SA3s in the Major cities remoteness category, by SEIFA IRSD quintiles

ASGS remoteness	Quintiles of SEIFA IRSD				
	1 (low)	2	3	4	5 (high)
Major cities	30	27	33	37	61

The highest SES group (quintile 5) has nearly double the number of areas (61) than the average number in the other quintiles (32). This is because the socioeconomic index covers all of Australia, and city areas are generally more advantaged than rural areas. To create more equal sized groups, the Authority combined the lower quintiles **(Table 2b)**.

Table 2b: Number of SA3s in the Major cities remoteness category, by combined SEIFA IRSD quintiles

ASGS remoteness	Quintiles of SEIFA IRSD				
	1 (low)	2	3	4	5 (high)
Major cities	–	57	–	70	61

The final step to create equal sized groups involved reallocating SA3s in Group 1 (high SES) and Group 2 (medium SES), which have a high overall average SES (as assessed by IRSD score), as follows and **Table 3**:

- Group 1 (high SES) = SES quintile 5 or average SES > IRSD score 1,050
- Group 2 (medium SES) = SES quintile 3 or 4 (and average SES < IRSD score 1,050)
- Group 3 (low SES) = SES quintile 1 or 2.

Therefore, these are the final categories as seen in the report.

Table 3: Number of SA3s by ASGS remoteness categories and SEIFA IRSD

ASGS remoteness	SEIFA IRSD		
	Low	Medium	High
Major cities	57	63	68
Inner regional		78	
Outer regional		48	
Remote		17	

Interpretation of data

Principal and additional diagnoses

The identification of most potentially preventable hospitalisations was based on principal diagnosis only. However, four conditions were identified using principal and additional diagnoses, these were:

- Pneumonia and influenza (vaccine-preventable)
- Pneumonia (not vaccine-preventable)
- Other vaccine-preventable conditions
- Gangrene.

This means, for example, that for the same hospitalisation, pneumonia and gangrene may be reported with pneumonia as principal and gangrene as an additional diagnosis. As a result, components may not add to totals.

Emergency department only patients

The Authority, through its Jurisdictional Advisory Committee, was advised that two states in Australia have a process of administratively admitting a portion of their emergency department (ED) patients (this includes patients who died). These patients are included in this report.

Comparison over time

The report does not compare 2012–13 and 2013–14 data with 2011–12 data published in November 2013, as the specification changed for some conditions. In addition, Activity Based Funding (ABF) was introduced Australia wide after the 2011–12 report. For this reason, the Authority recommends that comparisons should not be undertaken across years in this release of potentially preventable hospitalisations data.

Age-standardising the data

The report includes potentially preventable hospitalisations expressed as both crude and age-standardised rates per 100,000 population. Crude rates are the number of potentially preventable hospitalisations in an area divided by the total ABS estimated resident population (ERP) for that area multiplied by 100,000. The ERP at 30 June 2012 was used for 2012–13 data and 30 June 2013 ERP for 2013–14 data.

Age-standardised rates are hypothetical rates that would have been observed if the populations studied had the same age distribution as the standard population, while all other factors remained unchanged. Age-standardised rates were derived by calculating crude rates within an area for each five year age group (0–4, 5–9, 10–14, …, 80–84, 85+). These rates were then given a weight that reflected the age composition of the standard population. The current standard population is the ERP for Australia as at 30 June 2001.

When comparing rates adjusted for age, any remaining observed differences between the populations cannot be attributed to confounding by age.

The method for calculating age-standardised rates for both PHNs and SA3s was the same.

Where the age for an individual patient was clearly invalid, it was classified as a data error and excluded in performing the age-standardisation process.

Suppression of data

Suppression of data is used to protect individual confidentiality. It is also used to produce reliable results by not calculating statistics using insufficient numbers of observations. For this report, there were several levels of suppression. These rules have been applied to both PHN areas and SA3s if the:

- Number of separations are <5 then all data for that geographic area are suppressed
- Number of separations is <20, and/or the geography's population is <2,500, and/or the population of an age group in a particular geography is <30, then all data are suppressed, except the number of hospitalisations. The <30 rule was relaxed for Barkley and East Arnhem SA3s (both in the Northern Territory), after consultation with the jurisdiction
- Number of same-day hospitalisations is <5 then all data pertaining to length of stay are suppressed.

There are several reasons why national totals may not correspond to the sum of lower-level statistics:

- Rounding
- Omission of results where postcodes did not match to SA3s or PHN areas
- Suppression of results for SA3s and/or PHN areas.

Potentially preventable hospitalisations for Aboriginal and Torres Strait Islander people

The Authority have undertaken exploratory analyses of admitted patient care data focussing on potentially preventable hospitalisations for Aboriginal and Torres Strait Islander people. Rates of potentially preventable hospitalisations for Aboriginal and Torres Strait Islander people were not able to be reported in ways that allowed fair and robust comparisons at the local level, due to the following:

- Under-estimates due to incomplete recording of Indigenous status in the Admitted Patient Care Dataset
- Scale-up factors being insufficiently robust to allow data to be reported and compared fairly, particularly at smaller levels of geography
- Unavailability of Estimated Resident Population data for Aboriginal and Torres Strait Islander people at PHN and SA3 geographic areas.

Appendix

National Healthcare Agreement: PI 18-Selected potentially preventable hospitalisations, 2015

This classification can be found online at **http://meteor.aihw.gov.au/content/index.phtml/itemId/559032** Note that the codes below are ICD-10-AM 7th edition.

Category	ICD-10-AM codes	ICD-10-AM description	Additional requirements
Chronic			
Asthma	J45	Asthma	As principal diagnosis. Exclude children aged less than 4 years.
	J46	Status asthmaticus	As principal diagnosis. Exclude children aged less than 4 years.
Congestive cardiac failure	I50	Heart failure	As principal diagnosis. Exclude cases with the following cardiac procedure codes: Blocks 600-606, 608-650, 653-657, 660-664, 666, 669-682, 684-691, 693, 705-707, 717 and codes 33172-00[715], 33827-01[733], 34800-00[726], 35412-00[11], 38721-01[733], 90217-02[734], 90215-02[732].
	I11.0	Hypertensive heart diseased with (congestive) heart failure	As principal diagnosis. Exclude cases with the following cardiac procedure codes: Blocks 600-606, 608-650, 653-657, 660-664, 666, 669-682, 684-691, 693, 705-707, 717 and codes 33172-00[715], 33827-01[733], 34800-00[726], 35412-00[11], 38721-01[733], 90217-02[734], 90215-02[732].
	J81	Pulmonary oedema	As principal diagnosis. Exclude cases with the following cardiac procedure codes: Blocks 600-606, 608-650, 653-657, 660-664, 666, 669-682, 684-691, 693, 705-707, 717 and codes 33172-00[715], 33827-01[733], 34800-00[726], 35412-00[11], 38721-01[733], 90217-02[734], 90215-02[732].
Diabetes complications	E10.0–E10.9	Type 1 diabetes mellitus	As principal diagnosis.
	E11.0–E11.9	Type 2 diabetes mellitus	As principal diagnosis.

Chronic cont.			
	E13.0–E13.9	Other specified diabetes mellitus	As principal diagnosis.
	E14.0–E14.9	Unspecified diabetes mellitus	As principal diagnosis.
COPD	J20	Acute bronchitis	As principal diagnosis. Only with additional diagnoses of J41, J42, J43, J44.
	J41	Simple and mucopurulent chronic bronchitis	As principal diagnosis.
	J42	Unspecified chronic bronchitis	As principal diagnosis.
	J43	Emphysema	As principal diagnosis.
	J44	Other chronic obstructive pulmonary disease	As principal diagnosis.
Bronchiectasis	J47	Bronchiectasis	As principal diagnosis.
	J20	Acute bronchitis	As principal diagnosis. Only with additional diagnosis of J47.
Angina	I20	Angina pectoris	As principal diagnosis. Exclude cases according to the list of procedures excluded from the Congestive cardiac failure category above.
	I24.0	Coronary thrombosis not resulting in myocardial infarction	As principal diagnosis. Exclude cases according to the list of procedures excluded from the Congestive cardiac failure category above.
	I24.8	Other forms of acute ischaemic heart disease	As principal diagnosis. Exclude cases according to the list of procedures excluded from the Congestive cardiac failure category above.
	I24.9	Acute ischaemic heart disease, unspecified	As principal diagnosis. Exclude cases according to the list of procedures excluded from the Congestive cardiac failure category above.

Chronic cont.			
Iron deficiency anaemia	D50.1	Sideropenic dysphagia	As principal diagnosis.
	D50.8	Other iron deficiency anaemias	As principal diagnosis.
	D50.9	Iron deficiency anaemia, unspecified	As principal diagnosis.
Hypertension	I10	Essential (primary) hypertension	As principal diagnosis. Exclude cases with procedure codes according to the list of procedures excluded from the Congestive cardiac failure category above.
	I11.9	Hypertensive heart disease without (congestive) heart failure	As principal diagnosis. Exclude cases with procedure codes according to the list of procedures excluded from the Congestive cardiac failure category above.
Nutritional deficiencies	E40	Kwashiorkor	As principal diagnosis.
	E41	Nutritional marasmus	As principal diagnosis.
	E42	Marasmic kwashiorkor	As principal diagnosis.
	E43	Unspecified severe protein-energy malnutrition	As principal diagnosis.
	E55.0	Rickets, active	As principal diagnosis.
	E64.3	Sequelae of rickets	As principal diagnosis.
Rheumatic heart diseases	I00	Rheumatic fever without mention of heart involvement	As principal diagnosis.
	I01	Rheumatic fever with heart involvement	As principal diagnosis.
	I02	Rheumatic chorea	As principal diagnosis.

Chronic cont.			
	I05	Rheumatic mitral valve diseases	As principal diagnosis.
	I06	Rheumatic aortic valve diseases	As principal diagnosis.
	I07	Rheumatic tricuspid valve diseases	As principal diagnosis.
	I08	Multiple valve diseases	As principal diagnosis.
	I09	Other rheumatic heart diseases	As principal diagnosis.
Acute			
Pneumonia (not vaccine-preventable)	J15.3	Pneumonia due to streptococcus, group B	In any diagnosis. Exclude people under 2 months.
	J15.4	Pneumonia due to other streptococci	In any diagnosis. Exclude people under 2 months.
	J15.7	Pneumonia due to Mycophasma pneumoniae	In any diagnosis. Exclude people under 2 months.
	J16.0	Chlamydial pneumonia	In any diagnosis. Exclude people under 2 months.
Urinary tract infections, including pyelonephritis	N10	Acute tublo-interstitial nephnitis	As principal diagnosis.
	N11	Chronic tublo-interstitial nephritis	As principal diagnosis.
	N12	Tubolo-interstitial nephritis, not specified as acute or chronic	As principal diagnosis.
	N13.6	Pyonephrosis	As principal diagnosis.

Acute cont.			
	N15.1	Renal and perinephric abscess	As principal diagnosis.
	N15.9	Renal tubule-interstitial disease, unspecified	As principal diagnosis.
	N28.9	Disorders of kidney and ureter, unspecified	As principal diagnosis.
	N39.0	Urinary tract infection, site not specified	As principal diagnosis.
	N39.9	Disorder or urinary system, unspecified	As principal diagnosis.
Perforated/ bleeding ulcer	K25.0	Gastric ulcer, acute with haemorrhage	As principal diagnosis.
	K25.1	Gastric ulcer, acute with perforation	As principal diagnosis.
	K25.2	Gastric ulcer, acute with both haemorrhage and perforation	As principal diagnosis.
	K25.4	Gastric ulcer, chronic or unspecified with haemorrhage	As principal diagnosis.
	K25.5	Gastric ulcer, chronic or unspecified with perforation	As principal diagnosis.
	K25.6	Gastric ulcer, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.
	K26.0	Duodenal ulcer, acute with haemorrhage	As principal diagnosis.
	K26.1	Duodenal ulcer, acute with perforation	As principal diagnosis.

Acute cont.			
	K26.2	Duodenal ulcer, acute with both haemorrhage and perforation	As principal diagnosis.
	K26.4	Duodenal ulcer, chronic or unspecified with haemorrhage	As principal diagnosis.
	K26.5	Duodenal ulcer, chronic or unspecified with perforation	As principal diagnosis.
	K26.6	Duodenal ulcer, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.
	K27.0	Peptic ulcer, site unspecified, acute with haemorrhage	As principal diagnosis.
	K27.1	Peptic ulcer, site unspecified, acute with perforation	As principal diagnosis.
	K27.2	Peptic ulcer, site unspecified, acute with both haemorrhage and perforation	As principal diagnosis.
	K27.4	Peptic ulcer, site unspecified, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.
	K27.5	Peptic ulcer, site unspecified, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.
	K27.6	Peptic ulcer, site unspecified, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.

Acute cont.			
	K28.0	Gastrojejunal ulcer, acute with haemorrhage	As principal diagnosis.
	K28.1	Gastrojejunal ulcer, acute with perforation	As principal diagnosis.
	K28.2	Gastrojejunal ulcer, acute with both haemorrhage and perforation	As principal diagnosis.
	K28.4	Gastrojejunal ulcer, chronic or unspecified with haemorrhage	As principal diagnosis.
	K28.5	Gastrojejunal ulcer, chronic or unspecified with perforation	As principal diagnosis.
	K28.6	Gastrojejunal ulcer, chronic or unspecified with both haemorrhage and perforation	As principal diagnosis.
Cellulitis	L02	Cutaneous abscess, furuncle and carbuncle	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
	L03	Cellulitis	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
	L04	Acute Lymphadenitis	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.

Acute cont.			
	L08	Other local infections of skin and subcutaneous tissue	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
	L88	Pyoderma gangrenosum	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
	L98.0	Pyogenic granuloma	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
	L98.3	Eosinphilic cellulitis [Wells]	As principal diagnosis. Exclude cases with any procedure except those in blocks 1820 to 2016, or if procedure is 30216-00, 30216-01, 30216-02, 30676-00, 30223-01, 30223-02, 30064-00, 90660-00, 90661-00, and this is the only listed procedure.
Pelvic inflammatory disease	N70	Salpingitis and oophoritis	As principal diagnosis.
	N73	Other female pelvic inflammatory diseases	As principal diagnosis.
	N74	Other female pelvic inflammatory disorders in diseases classified elsewhere	As principal diagnosis.
Ear, nose and throat infections	H66	Suppurative and unspecified otitis media	As principal diagnosis.
	J02	Acute pharyngitis	As principal diagnosis.
	J03	Acute tonsillitis	As principal diagnosis.

Acute cont.			
	J06	Acute upper respiratory infections of multiple and unspecified sites	As principal diagnosis.
	J31.2	Chronic pharyngitis	As principal diagnosis.
Dental conditions	K02	Dental caries	As principal diagnosis.
	K03	Other diseases of hard tissues of teeth	As principal diagnosis.
	K04	Diseases of pulp and periapical tissues	As principal diagnosis.
	K05	Gingivitis and periodontal diseases	As principal diagnosis.
	K06	Other disorders of gingiva and edentulous alveolar ridge	As principal diagnosis.
	K08	Other disorders of teeth and supporting structures	As principal diagnosis.
	K09.8	Other cysts of oral region, not elsewhere classified	As principal diagnosis.
	K09.9	Cyst of oral region, unspecified	As principal diagnosis.
	K12	Stomatitis and related lesions	As principal diagnosis.
	K13	Other diseases of lip and oral mucosa	As principal diagnosis.
	K14.0	Glossitis	As principal diagnosis.
Convulsions and epilepsy	G40	Epilepsy	As principal diagnosis.
	G41	Status epilepticus	As principal diagnosis.

Acute cont.			
	R56	Convulsions, not elsewhere classified	As principal diagnosis.
Eclampsia	O15	Eclampsia	As principal diagnosis.
Gangrene	R02	Gangrene, not elsewhere classified	In any diagnosis.
	I70.24	Atherosclerosis of arteries of extremities with gangrene	As principal diagnosis.
	E09.52	Impaired glucose regulation with peripheral angiopathy, with gangrene	As principal diagnosis.
Vaccine-preventable			
Pneumonia and influenza (vaccine-preventable)	J10	Influenza due to other identified influenza virus	In any diagnosis. Exclude people under 2 months.
	J11	Influenza, virus not identified	In any diagnosis. Exclude people under 2 months.
	J13	Pneumonia due to Streptococcus pneumoniae	In any diagnosis. Exclude people under 2 months.
	J14	Pneumonia due to Haemophilus influenza	In any diagnosis. Exclude people under 2 months.
Other vaccine-preventable conditions	A08.0	Rotaviral enteritis	In any diagnosis.
	A35	Other tetanus	In any diagnosis.
	A36	Diphtheria	In any diagnosis.
	A37	Whooping cough	In any diagnosis.
	A80	Acute poliomyelitis	In any diagnosis.

Vaccine-preventable cont.			
	B01	Varicella [chicken pox]	In any diagnosis.
	B05	Measles	In any diagnosis.
	B06	Rubella [German measles]	In any diagnosis.
	B16.1	Acute hepatitis B with delta-agent (coinfection) without hepatic coma	In any diagnosis.
	B16.9	Acute hepatitis B without delta-agent and without hepatic coma	In any diagnosis.
	B18.0	Chronic viral hepatitis B with delta-agent	In any diagnosis.
	B18.1	Chronic viral hepatitis B without delta-agent	In any diagnosis.
	B26	Mumps	In any diagnosis.
	G00.0	Haemophilus meningitis	In any diagnosis.

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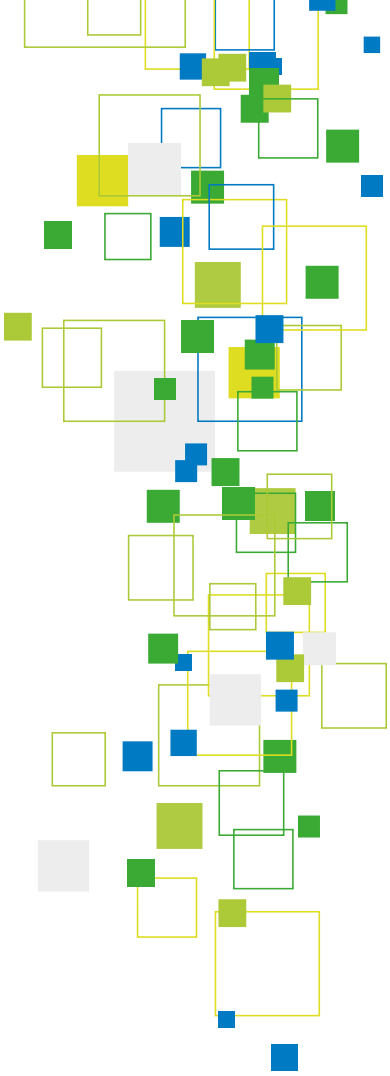

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