Data Processing

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ECDS Data

Age

Data spec variable: **activage** (AGE AT CDS ACTIVITY DATE (data dictionary.nhs.uk))

Code	Description
999	Not known i.e. date of birth not known and age cannot be estimated

Age will be summarised both as a numerical and as a categorical variable. The following categories should be applied.

Code	Description
1	< 20 years
2	20 - 24
3	25 - 29
4	30 - 34
5	35 - 39
6	40 - 44
7	45 - 49
8	50 - 54

9	55 - 59
10	60 - 64
11	65 - 69
12	70 - 74
13	75 - 79
14	80 - 84
15	85+
999	Not Known

Gender

Data spec variable: **gender** ([PERSON STATED GENDER CODE (data dictionary.nhs.uk)](https://www.datadictionary.nhs.uk))

Code	Description
1	Male
2	Female
9	Indeterminate (unable to be classified as either male or female)
X	Not Known

Ethnicity

Data spec variable: **ethnos** (ETHNIC CATEGORY (datadictionary.nhs.uk))

Ethnicity should be coded into the following categories:

Code	Description	Categories
A	White - British	White
B	White - Irish	White
C	White - Any other White background	White
D	Mixed - White and Black Caribbean	Mixed
E	Mixed - White and Black African	Mixed
F	Mixed - White and Asian	Mixed
G	Mixed - Any other mixed background	Mixed
H	Asian or Asian British - Indian	Asian or Asian British
J	Asian or Asian British - Pakistani	Asian or Asian British

K	Asian or Asian British - Bangladeshi	Asian or Asian British
L	Asian or Asian British - Any other Asian background	Asian or Asian British
M	Black or Black British - Caribbean	Black or Black British
N	Black or Black British - African	Black or Black British
P	Black or Black British - Any other Black background	Black or Black British
R	Other Ethnic Groups - Chinese	Other Ethnic Groups
S	Other Ethnic Groups - Any other Ethnic Groups	Other Ethnic Groups
Z	Not stated (e.g. unwilling to state)	Not stated
99	Not known (e.g. unconscious)	Not known

Townsend Score Decile

Data spec variable: **townsend_score_quintile (**[2011 UK Townsend Deprivation Scores - Dataset - UK Data Service CKAN](#)**)**

Please note that Townsend Score decile is not available from the UK data service. Please provide Townsend Score quintile instead.

Code	Description
1	Quintile 1 (least deprived)

2	Quintile 2
3	Quintile 3
4	Quintile 4
5	Quintile 5 (most deprived)

Care Home Flag

Data spec variable: **AccommodationStatus_SnomedCt** ([ACCOMMODATION STATUS (SNOMED CT)](#))

This variable will indicate where a patient was resident in a care home prior to arrival at ED.

SNOMED CODE	ECDS Description with notes	Care Home
414418009	**Patient has own stable accommodation e.g. home / flat** Includes : house, farm house, non-institutional place of residence, apartment/ flat, boarding house, hotel, caravan park, refuge, long-term squat with utilities Excludes : Institutional long-term place of residence, Abandoned or derelict house	No
224221006	**Warden controlled accommodation**	No

	Includes : home with intermittent welfare checks Excludes : residential / nursing home with continuous dedicated staffing	
394923006	**Residential institution WITHOUT routine nursing care** Includes : Children's home, residential home, old people's home, military camp, prison, monastery Excludes : Hospital, nursing home, hospice, psychiatric hospital	No
160734000	**Residential institution WITH routine nursing care** Includes : nursing home, hospice Excludes : hospital, residential home, psychiatric hospital	Yes
224225002	**Medical area** Includes : hospital, clinic, psychiatric hospital (long term) Excludes : hospice, nursing home	No
224231004	**Homeless in night shelter** Includes : night shelter, homeless shelter, emergency housing Excludes : sleeping rough	No

32911000	**Homeless without accommodation** Includes : homeless, sleeping rough, abandoned or derelict housing, squatting without utilities Excludes : night shelter, homeless shelter	No
1064831000000106	**Usual accommodation not given: patient refused** Includes : any situation where the patient can physically answer questions but refuses to answer this question.	Unknown
1064841000000102	**Usual accommodation not given: patient physically unable** Includes : only situation when patient physically unable to respond e.g. unconscious and not able to establish by other means	Unknown
1066881000000100	**Usual accommodation not known** Do not use unless there is no other applicable code	Unknown

Comorbidities

Data spec variable: edcomorb_NN (https://www.datadictionary.nhs.uk/data_elements/comorbidity__snomed_ct_.html)

Comorbidities identified for the patient.

Used to identify comorbid conditions. May include up to 10 fields, from 01-10.

Format: SNOMED code (min n6 max n18).

Create a count variable across all comorbidity variables (edcomorb_01 and edcomorb_NN).

Using all comorbidity codes, categorise as follows to determine whether a patient had any comorbidities or not:

Code	Category
Blank	No
Any SNOMED code	Yes/Count

Ambulatory Care Sensitive Conditions (ACSC_Code_ED)

Ambulatory Care Sensitive Conditions are identified from the primary diagnosis code recorded for the attendance (eddiag_01 NHS Data Model EMERGENCY CARE DIAGNOSIS (SNOMED CT)). The classification system in use for the Emergency Department data set is Snomed.

The Snomed codes (with linked ICD10 codes) to identify Ambulatory Care Sensitive Conditions in the Emergency Department data set are given in this spreadsheet:

ECDS - ACSC V5 20230130.xlsx

All other Snomed codes are not considered Ambulatory Care Sensitive Conditions.

Arrival Mode

Data spec variable: **edarrivalmode** ([EMERGENCY CARE ARRIVAL MODE (SNOMED CT)](#))
Arrival mode should be coded into the following categories:

SNOMED CODE	ECDS Description	Arrival Mode
1048071000000103	Patient arranged own transport / walk-in	Walk-In
1048061000000105	Arrival by public transport	Walk-In
2018310000	Emergency road ambulance	Ambulance
2018350000	Emergency road ambulance with medical escort	Ambulance
2018370000	Non-emergency road ambulance	Ambulance
2018510000	Helicopter	Ambulance
2018550000	Fixed wing / medical repatriation by air	Other
2018810000	Custodial services: prison / detention centre transport	Other
2018910000	Police Transport	Other

Source of Attendance

Data spec variable: **edattendsource** ([EMERGENCY CARE ATTENDANCE SOURCE (SNOMED CT)](#))

Source of Attendance should be coded into the following categories:

SNOMED CODE	ECDS Description	Categories
507291000000100	Self-referral to accident and emergency department	Personal
1065391000000104	Referred by carer	Personal
315261000000101	Advised to attend accident and emergency department	Personal
276491000	Referred by member of Primary Health Care Team	Primary Care
166941000000106	Out of hours GP service	Primary Care
879591000000102	NHS telephone / internet advice e.g. NHS 111	Primary Care
1066431000000102	Emergency department	Hospital
1066441000000106	Urgent care service	Hospital
835091000000109	Outpatient service inc. ambulatory care	Hospital
835101000000101	Inpatient	Hospital
1079521000000104	Private specialist	Hospital
1077191000000103	Community nurse (not practice nurse)	Community

1052681000000105	Health visitor	Community
185363009	Midwife	Community
1065401000000101	School nurse	Community
1077201000000101	Community mental health nurse	Community
1065991000000100	Mental health assessment team	Community
877171000000103	Social services	Community
1077761000000105	Older persons day care centre	Community
1077211000000104	Homeless persons drop in centre	Community
1066011000000104	Custodial services : prison	Community
1066001000000101	Custodial services : detention centre	Community
185369008	Pharmacist (including community pharmacist)	Community
185366001	Dentist (including community dentist)	Community
185368000	Optician / optometrist	Community
1066021000000105	Advanced care practitioner	Emergency Services
198261000000104	Ambulance service - patient in transit	Emergency Services
889801000000100	Police service / forensic medical officer	Emergency Services
1066031000000107	Fire service	Emergency Services

1066061000000102	Search and rescue	Emergency Services
1066041000000103	Coastguard	Emergency Services
1066051000000100	Mountain rescue	Emergency Services

Day of Week

Data spec variable: **edarrivaldatetime** (Derived from NHS Data Model EMERGENCY CARE ARRIVAL DATE And NHS Data Model EMERGENCY CARE ARRIVAL TIME)

Emergency Care Arrival DateTime

Format: YYYY/MM/DD hh:mm:ss TMZ

Extract day of week from date time variable

Categorise into day of week:

Data Format	Category
YYYY/MM/DD hh:mm:ss TMZ	Sunday
	Monday
	Tuesday
	Wednesday

	Thursday
	Friday
	Saturday

Time of Day

Data spec variable: **edarrivaldatetime** (Derived from NHS Data Model EMERGENCY CARE ARRIVAL DATE And NHS Data Model EMERGENCY CARE ARRIVAL TIME)

Emergency Care Arrival DateTime

Format: YYYY/MM/DD hh:mm:ss TMZ

Extract time of day from date time variable

Categorise in to hour intervals:

Data Format	Category (hh:mm:ss)
YYYY/MM/DD hh:mm:ss TMZ	00:00:00 - 00:59:59
	01:00:00 - 01:59:59
	02:00:00 - 02:59:59
	03:00:00 - 03:59:59

	04:00:00 - 04:59:59
	05:00:00 - 05:59:59
	06:00:00 - 06:59:59
	07:00:00 - 07:59:59
	08:00:00 - 08:59:59
	09:00:00 - 09:59:59
	10:00:00 - 10:59:59
	11:00:00 - 11:59:59
	12:00:00 - 12:59:59
	13:00:00 - 13:59:59
	14:00:00 - 14:59:59
	15:00:00 - 15:59:59
	16:00:00 - 16:59:59
	17:00:00 - 17:59:59
	18:00:00 - 18:59:59
	19:00:00 - 19:59:59
	20:00:00 - 20:59:59

	21:00:00 - 21:59:59
	22:00:00 - 22:59:59
	23:00:00 - 23:59:59

ED Waiting time

Data spec variable: **edwaittime** (Derived from NHS Data Model EMERGENCY CARE DATE SEEN FOR TREATMENT and NHS Data Model EMERGENCY CARE TIME SEEN FOR TREATMENT and **edarrivaldatetime** (specified above))

Format: Continuous (specified in minutes)
No categorisation required

Acuity

Data spec variable: **edacuity** (EMERGENCY CARE ACUITY (SNOMED CT))

No recoding required

SNOMED Code	ECDS Description
1064891000000107	1 - Immediate care level emergency care

1064911000000105	2 - Very urgent level emergency care
1064901000000108	3 - Urgent level emergency care
1077241000000103	4 - Standard level emergency care
1077251000000100	5 - Low acuity level emergency care

Chief Complaint

Data spec variable: **edchiefcomplaint** (EMERGENCY CARE CHIEF COMPLAINT (SNOMED CT))

Chief complaint should be grouped into a smaller number of categories. The ECDS codes, SNOMED codes and descriptions are presented along with the final categories (Chief_Complaint_Category) in the following spreadsheet:

https://docs.google.com/spreadsheets/d/1KBPKDQtg0s1o-01OKSpmcEdtN2Y4ZFD2/edit?usp=sharing&ouid=100004624391618449495&rtpof=true&sd=true

The codes were extracted from the NHS Digital Enhanced Technical Output Specification (ETOS) document available here:

https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/emergency-care-data-set-ecds/ecds-guidance

Any ECDS groups and descriptions coded as 'Not applicable to max terms' have been grouped based on the Core_List_Term_Description.

Investigations

[EMERGENCY CARE CLINICAL INVESTIGATION (SNOMED CT)](#)

Data spec variables: **edinvest_01** to **edinvest_NN** (up to 12)**.**

NOTE: If all invest fields empty, data is considered missing. If one or more fields complete, empty fields are considered no investigation.

SNOMED CODE	ECDS Description	Categories
1088291000000101	None	None
Blank	None	Missing **OR** None
27171005	Urinalysis	Non-urgent
167252002	Urine pregnancy test	Non-urgent
67900009	Pregnancy test	Non-urgent
53115007	Dental investigation	Non-urgent
All others		Urgent

Treatments

[NHS Data Model EMERGENCY CARE PROCEDURE (SNOMED CT)](#)

Data spec variables: **edtreat_01** to **edtreat_NN** (up to 12)**.**

NOTE: If all edtreat fields empty, data is considered missing. If one or more fields complete, empty fields are considered no investigation.

SNOMED CODE	ECDS Description	Categories
183964008	None	None
Blank	None	None **OR** missing
266712008	Prescriptions	Non-urgent
413334001	Guidance / advice - written	Non-urgent
81733005	Dental treatment	Non-urgent
All others		Urgent

Seasonal Diagnosis

Data spec variable: **eddiag_01EmergencyCareDiagnosis_SnomedCt (**[NHS Data Model EMERGENCY CARE DIAGNOSIS (SNOMED CT)](#)**)**

NOTE: Only use first diagnosis recorded (eddiag_01) to record seasonal diagnosis

SNOMED CODE	ECDS Description	Categories
6142004	Influenza	Respiratory infection
233604007	Pneumonia	Respiratory infection
278516003	Lobar Pneumonia	Respiratory infection
205237003	Pneumonitis	Respiratory infection
50417007	Lower Respiratory Tract Infection	Respiratory infection
36971009	Sinusitis	Respiratory infection
90176007	Tonsilitis	Respiratory infection
62994001	Tracheitis	Respiratory infection
80384002	Epiglottitis	Respiratory infection
54150009	Upper Respiratory Infection	Respiratory infection
13645005	COPD - Chronic obstructive pulmonary disease	Chronic disease exacerbation
195951007	Acute exacerbation of chronic obstructive airways disease	Chronic disease exacerbation
195967001	Asthma	Chronic disease exacerbation
12295008	Bronchiectasis	Chronic disease exacerbation
1325171000000109	Acute COVID-19 infection	Respiratory infection
1325181000000106	Ongoing symptomatic COVID-19	Respiratory infection

1325161000000102	Post-COVID-19 syndrome	Respiratory infection
All others		None

Certainty

Data spec variable: **eddiagqual_01EmergencyCareDiagnosisQualifier_SnomedCt** ([EMERGENCY CARE DIAGNOSIS QUALIFIER (SNOMED CT)](#))

NOTE: Only eddiagqual_01 required

No recoding required

SNOMED CODE	ECDS Description
415684004	Suspected diagnosis
410605003	Confirmed diagnosis

Time in Emergency Department

Data spec variable: **timeined** (Derived from NHS Data Model [NHS Data Model EMERGENCY CARE DEPARTURE DATE](#) And [NHS Data Model EMERGENCY CARE DEPARTURE TIME](#) and **edarrivaldatetime** specified above)

Defines time a patient spent in ED in minutes.
Format: Continuous variable
No categorisation required.

Discharge Destination

Data spec variable: **edattenddispatch** ([EMERGENCY CARE DISCHARGE DESTINATION (SNOMED CT)](#)

Discharge Destination should be coded into the following categories:

SNOMED CODE	ECDS Description	Categories
306689006	Usual place of residence / family members	Discharged
306691003	Residential care facility without 24 hour nursing care (e.g. residential home)	Discharged
306694006	Residential care facility with 24 hour nursing care (e.g. nursing home)	Discharged
306705005	Police	Discharged
50861005	Custodial services e.g. prison / detention centre	Discharged
1066331000000109	Short stay (less than 24hr) ward outside the ED but managed by ED	Ambulatory / Short Stay
1066341000000100	Ambulatory Emergency Care service	Ambulatory / Short Stay

1066351000000102	Hospital in the home service	Ambulatory / Short Stay
306706006	Ward – physical ward bed outside ED	Admitted
1066361000000104	High Dependency Unit (level 2)	Admitted
1066371000000106	Coronary Care Unit (level 2)	Admitted
1066381000000108	Special Care Baby Unit (level 2)	Admitted
1066391000000105	Intensive Care Unit (level 3)	Admitted
1066401000000108	Neonatal Intensive Care Unit (level 3)	Admitted
19712007	Transfer to another hospital / healthcare facility	Transfer
183919006	Discharge to Hospice	Transfer
305398007	Mortuary	Died

Discharge status

Data spec variable: **disstatus** ([EMERGENCY CARE DISCHARGE STATUS (SNOMED CT)](#))

SNOMED CODE	ECDS Description	Categories
1077021000000100	Streamed from emergency department to general practitioner following initial assessment	Non-urgent

182992009	Treatment completed	Non-urgent
1066321000000107	Left care setting before treatment completed	Non-urgent
1066301000000103	Left care setting before initial assessment	Non-urgent
1066311000000101	Left care setting after initial assessment	Non-urgent
1077031000000103	Streamed from emergency department to urgent care service following initial assessment	Urgent
1077781000000101	Streamed to emergency department following initial assessment	Urgent
1324201000000109	Streamed from emergency department to inpatient unit following initial assessment	Urgent
1077081000000104	Streamed from emergency department to ambulatory emergency care service following initial assessment	Urgent
1077091000000102	Streamed from emergency department to falls service following initial assessment	Urgent
1077101000000105	Streamed from emergency department to frailty service following initial assessment	Urgent
1077041000000107	Streamed from emergency department to mental health service following initial assessment	Urgent
1077051000000105	Streamed from emergency department to dental service following initial assessment	Urgent
1077061000000108	Streamed from emergency department to ophthalmology service following initial assessment	Urgent

1077071000000101	Streamed from emergency department to pharmacy service following initial assessment	Urgent
63238001	Dead on arrival at hospital	Died
75004002	Emergency room admission, died in emergency room	Died

Service Referred To

Data spec variable: **edrefservice** ([REFERRED TO SERVICE (SNOMED CT)](#))

Service Referred To should be coded into the following categories:

SNOMED CODE	ECDS Description	Categories
1064851000000104	Acute medicine	Medical
898791000000105	Ambulatory care	Medical
183516009	General medicine	Medical
183522000	Care of the elderly	Medical
306114008	Respiratory medicine	Medical
183519002	Cardiology	Medical

183523005	Gastroenterology	Medical
306124000	Infectious disease	Medical
306118006	Endocrinology	Medical
306140002	Clinical oncology	Medical
306148009	Haematology	Medical
183521007	Neurology	Medical
306802002	Stroke	Medical
307374004	Rehabilitation	Medical
306237005	Palliative care	Medical
306125004	Nephrology	Medical
306127007	Rheumatology	Medical
183518005	Dermatology	Medical
306111000	Clinical allergy	Medical
306285006	Medical ophthalmology	Medical
306123006	Genitourinary medicine	Medical
183542009	General surgery	Surgical
183545006	Orthopaedic surgery	Surgical

306200004	Trauma surgery	Surgical
183546007	Neurosurgery	Surgical
306201000	Urology	Surgical
306934005	Vascular surgery	Surgical
183544005	Ear, nose and throat	Surgical
306198005	Plastic surgery	Surgical
183543004	Ophthalmology	Surgical
306182003	Cardiothoracic surgery	Surgical
306184002	Thoracic surgery	Surgical
327121000000104	Dental surgery	Surgical
384712002	Oral surgery	Surgical
384711009	Maxillofacial surgery	Surgical
306107006	Adult intensive care	Critical Care
975951000000109	Paediatric critical care	Critical Care
382271000000102	Interventional radiology	Critical Care
770677000	Referral to hyperbaric medicine service	Critical Care
183549000	Gynaecology	ObGyn

183548008	Obstetrics	ObGyn
202291000000107	Mental Health Act assessment	Psychiatric
306136006	Liaison psychiatry	Psychiatric
380241000000107	Child and adolescent mental health service	Psychiatric
183524004	Psychiatry (general)	Psychiatric
306138007	Older persons mental health service	Psychiatric
413127007	Learning disability team	Psychiatric
183561008	General Practitioner	Local Medical
770411000000102	General practitioner out of hours	Local Medical
276490004	Primary health care team	Local Medical
306152009	Occupational health	Local Medical
247541000000106	Falls service	Community / OPD
818861000000107	Older people rapid assessment	Community / OPD
516511000000107	Community nursing out of hours	Community / OPD
61801003	Psychiatric aftercare	Community / OPD
38670004	Alcoholism rehabilitation	Community / OPD
4266003	Drug addiction rehabilitation	Community / OPD

78429003	Physical rehabilitation	Community / OPD
415263003	Anticoagulant clinic	Community / OPD
307375003	Head injury rehabilitation	Community / OPD
823961000000102	Memory assessment service	Community / OPD
894171000000100	Neurological rehabilitation	Community / OPD
353961000000104	Community rapid response team	Community / OPD
307376002	Community rehabilitation	Community / OPD
811391000000104	Community diabetes	Community / OPD
306129005	Community paediatric	Community / OPD
785701000000106	Community dermatology	Community / OPD
785761000000105	Community cardiology	Community / OPD
307380007	Swallow clinic	Community / OPD
785721000000102	Community ophthalmology	Community / OPD
785781000000101	Community gynaecology	Community / OPD
785621000000108	Community gastroenterology	Community / OPD
785681000000109	Community ear, nose and throat	Community / OPD
All others	All other snomed codes	Other

APC Data

Age

Data spec variable: **admiage** ([AGE ON ADMISSION](#))

Code	Description
999	Not known i.e. date of birth not known and age cannot be estimated

Age will be summarised both as a numerical and as a categorical variable. The following categories should be applied.

Code	Description
1	< 20 years
2	20 - 24
3	25 - 29
4	30 - 34
5	35 - 39
6	40 - 44

7	45 - 49
8	50 - 54
9	55 - 59
10	60 - 64
11	65 - 69
12	70 - 74
13	75 - 79
14	80 - 84
15	85+
999	Not Known

Gender

Data spec variable: **gender** (**PERSON GENDER CODE CURRENT**)

Gender does not need recoding.

Code	Description

1	Male	
2	Female	
9	Indeterminate (unable to be classified as either male or female)	
X	Not Known	

Ethnicity

Data spec variable: **ethnos** (ETHNIC CATEGORY)

Ethnicity should be coded into the following categories:

Code	Description	Categories
A	British (White)	White
B	Irish (White)	White
C	Any other White background	White
D	White and Black Caribbean (Mixed)	Mixed
E	White and Black African (Mixed)	Mixed
F	White and Asian (Mixed)	Mixed

G	Any other mixed background	Mixed
H	Indian (Asian or Asian British)	Asian or Asian British
J	Pakistani (Asian or Asian British)	Asian or Asian British
K	Bangladeshi (Asian or Asian British)	Asian or Asian British
L	Any other Asian background	Asian or Asian British
M	Caribbean (Black or Black British)	Black or Black British
N	African (Black or Black British)	Black or Black British
P	Any other Black background	Black or Black British
R	Chinese (Other Ethnic Groups)	Other Ethnic Groups
S	Any other Ethnic Groups	Other Ethnic Groups
Z	Not stated	Not stated
99	Not known	Not known

Townsend Score

Data spec variable: **townsend_score_quintile (**[2011 UK Townsend Deprivation Scores - Dataset - UK Data Service CKAN](#)**)**

Please note that Townsend Score decile is not available from the UK data service. Please provide Townsend Score quintile instead.

Code	Description
1	Quintile 1 (least deprived)
2	Quintile 2
3	Quintile 3
4	Quintile 4
5	Quintile 5 (most deprived)

Comorbidities

Data spec variable: **diag_NN (02 to 20)** ([NHS Data Model SECONDARY DIAGNOSIS (ICD)](#))

The secondary diagnosis codes recorded for the episode. The classification system in use is ICD-10.
May include up to 19 secondary diagnosis fields, from 02-20.

Used to determine comorbidities.

Format: ICD-10 Code.

Create a count variable across all secondary diagnosis variables **(diag_NN (02 - 20)).**

Using all secondary diagnosis codes, categorise as follows to determine whether a patient had any comorbidities or not:

Code	Category
Blank	No

ICD-10 code	Yes/Count

Ambulatory Care Sensitive Conditions (ASCS_Code_APC)

Ambulatory Care Sensitive Conditions are identified from the primary diagnosis coded recorded for the episode (data spec variable diag_01 PRIMARY DIAGNOSIS (ICD)). The classification system in use for the Admitted Patient Care data set is ICD-10.

The ICD-10 Codes to identify Ambulatory Care Sensitive Condition in the Admitted Patient Care data set are given in this spreadsheet:

APC - ACSC V1 20230130.xlsx

All other ICD-10 codes are not considered Ambulatory Care Sensitive Conditions.

Source of Admission

Data spec variable: **admisorc** (SOURCE OF ADMISSION CODE (HOSPITAL PROVIDER SPELL))

Source of Admission should be coded into the following categories:

Code	Description	Category
19	The usual place of residence, unless listed below, for example, a private dwelling whether owner occupied or owned by Local Authority, housing association or other landlord. This includes wardened accommodation but not residential accommodation where health care is provided. It also includes patients with no fixed abode.	Residence

29	Temporary place of residence when usually resident elsewhere, for example, hotels and residential educational establishments	Residence
39	Penal establishment, court or police station / police custody suite	Penal
49	NHS other hospital provider: high security psychiatric accommodation in an NHS hospital provider (NHS trust or NHS Foundation Trust)	Medical care
51	NHS other hospital provider: ward for general patients or the younger physically disabled or A&E department	Medical care
52	NHS other hospital provider: ward for maternity patients or neonates	Medical care
53	NHS other hospital provider: ward for patients who are mentally ill or have learning disabilities	Medical care
54	NHS run care home	Care Home
65	Local authority residential accommodation i.e. where care is provided	Care Home
66	Local authority foster care, but not in residential accommodation i.e. where care is provided	Residence
79	Babies born in or on the way to hospital	Residence
85	Non-NHS (other than local authority) run care home	Care Home
86	Non-NHS (other than local authority) run nursing home	Care Home
87	Non-NHS run hospital	Medical care
88	non-NHS (other than local authority) run hospice	Care Home
98	Not applicable	Unknown

99	Not known	Unknown

Day of Week

Data spec variable: **admidate** ([NHS Data Model START DATE (HOSPITAL PROVIDER SPELL)](#))

The date the patient was admitted to hospital at the start of a hospital spell.

Format: CCYY-MM-DD

Extract day of week from date time variable

Categorise into day of week:

Data Format	Category
CCYY-MM-DD	Sunday
	Monday
	Tuesday
	Wednesday
	Thursday
	Friday

	Saturday

Seasonal Diagnosis

Data spec variable: **diag_01** (NHS Data Model PRIMARY DIAGNOSIS (ICD))
NOTE: .X in ICD10 code denotes any or no appending subcode

ICD10 CODE	Description	Categories
J09.X	Influenza due to identified zoonotic or pandemic influenza virus	Respiratory infection
J10.X	Influenza due to identified seasonal influenza virus	Respiratory infection
J11.X	Influenza, virus not identified	Respiratory infection
J12.X	Viral pneumonia, not elsewhere classified	Respiratory infection
J13.X	Pneumonia due to Streptococcus pneumoniae	Respiratory infection
J14.X	Pneumonia due to Haemophilus influenzae	Respiratory infection
J15.X	Bacterial pneumonia, not elsewhere classified	Respiratory infection
J16.X	Pneumonia due to other infectious organisms, not elsewhere classified	Respiratory infection
J17.X	Pneumonia in diseases classified elsewhere	Respiratory infection
J18.X	Pneumonia, organism unspecified	Respiratory infection

J20.X	Lower respiratory tract infection	Respiratory infection
J21.X	Lower respiratory tract infection	Respiratory infection
J22.X	Lower respiratory tract infection	Respiratory infection
J00.X	Acute nasopharyngitis [common cold]	Respiratory infection
J01.X	Acute sinusitis	Respiratory infection
J02.X	Acute pharyngitis	Respiratory infection
J03.X	Acute tonsillitis	Respiratory infection
J04.X	Acute laryngitis and tracheitis	Respiratory infection
J05.X	Acute obstructive laryngitis [croup] and epiglottitis	Respiratory infection
J06.X	Acute upper respiratory infections of multiple and unspecified sites	Respiratory infection
J40.X	Bronchitis, not specified as acute or chronic	Chronic disease exacerbation
J41.X	Simple and mucopurulent chronic bronchitis	Chronic disease exacerbation
J42.X	Unspecified chronic bronchitis	Chronic disease exacerbation
J43.X	Emphysema	Chronic disease exacerbation
J44.X	Other chronic obstructive pulmonary disease	Chronic disease exacerbation
J45.X	Asthma	Chronic disease exacerbation
J46.X	Status asthmaticus	Chronic disease exacerbation

J47.X	Bronchiectasis	Chronic disease exacerbation
U07.1	COVID-19, virus identified	Respiratory infection
U07.2	COVID-19, virus not identified	Respiratory infection
U10.X	Multisystem inflammatory syndrome associated with COVID-19	Respiratory infection
All others		None

Length of Stay

Data spec variable: **length_of_stay** (Derived from NHS Data Model START DATE (HOSPITAL PROVIDER SPELL) And NHS Data Model DISCHARGE DATE (HOSPITAL PROVIDER SPELL))

The length of stay of the patient admission. Calculated as the time between a patient's spell start date and spell end date.

Format: Continuous variable

Dictomise length of stay:

Data format	Category
Continuous variable	< 2 days
	≥ 2 days

Discharge Destination

Data spec variable: **disdest** (**DISCHARGE DESTINATION CODE (HOSPITAL PROVIDER SPELL**)

Discharge Destination should be coded into the following categories:

Code	Description	Category
19	The usual place of residence, including no fixed abode	Residence
29	Temporary place of residence when usually resident elsewhere, for example, hotels and residential educational establishments	Residence
30	Repatriation from high security psychiatric hospital	Medical care
37	Penal establishment - court	Penal
38	Penal establishment - police station	Penal
39	Penal establishment - court and police station excluded	Penal
48	High security psychiatric hospital, Scotland	Medical care
49	NHS other hospital provider - high security psychiatric	Medical care
50	NHS other hospital provider - medium secure unit	Medical care
51	NHS other hospital provider - ward for general PATIENTS or the younger physically disabled	Medical care

52	NHS other hospital provider - ward for maternity PATIENTS or Neonates	Medical care
53	NHS other hospital provider - ward for PATIENTS who are mentally ill or have learning disabilities	Medical care
54	NHS run Care Home	Care Home
65	Local Authority residential accommodation i.e. where care is provided	Care Home
66	Local Authority foster care	Residence
79	Not applicable - PATIENT died or still birth	Died
84	Non-NHS run hospital - medium secure unit	Medical care
85	Non-NHS (other than Local Authority) run Care Home	Care Home
87	Non-NHS run hospital	Medical care
88	Non-NHS (other than Local Authority) run Hospice	Care Home
98	Not applicable - Hospital Provider Spell not finished at episode end (i.e. not discharged) or current episode unfinished	Unknown
99	Not known	Unknown

Days ready for discharge

Data spec variable: **disreadydays** (Derived from NHS Data Model DISCHARGE READY DATE (HOSPITAL PROVIDER SPELL) and NHS Data Model DISCHARGE DATE (HOSPITAL PROVIDER SPELL))

The number of days a patient spends occupying a hospital bed whilst ready to be discharged. Calculated as the time between a patient is determined to be ready for discharge and the spell end date.

Format: Continuous variable
No categorisation required.

Discharge Method

Data spec variable: **dismeth** ([DISCHARGE METHOD CODE (HOSPITAL PROVIDER SPELL)](#))

Discharge Method should be coded into the following categories:

Code	Description	Category
1	Patient discharged on clinical advice or with clinical consent	Discharged
2	Patient discharged him/herself or was discharged by a relative or advocate	Discharged
3	Patient discharged by mental health review tribunal, Home Secretary or Court	Discharged
4	Patient died	Died
5	Stillbirth	Died
8	Not applicable (Hospital Provider Spell not finished at episode end (i.e. not discharged) or current episode unfinished)	Not Applicable
9	Discharge Method not known	Unknown

Procedures

Data spec variables: **opertn_01** and **opertn_NN** ([NHS Data Model PRIMARY PROCEDURE (OPCS)](#) and [NHS Data Model PROCEDURE (OPCS)](#) respectively)

opertn_01: The main operative procedure code recorded for the episode. The classification system in use is OPCS-4.
opertn_NN: Secondary procedure code

Format: Codes required to be in contemporary OPCS-4 coding standard.

<u>Create a count variable</u> across all procedure variables (**opertn_01** and **opertn_NN).**

Using primary and all secondary procedure codes, categorise as follows to determine whether a patient had any procedures or not:

Code	Category
- = No procedures performed	No
4an = Procedure code	Count
& = Not known X998 = Procedure carried out but no appropriate OPCS-4 code available (submitted value present between 1997-98 and 2005-07) X999 = No procedure carried out (submitted value present between 1997-98 and 2001-02)	Missing