

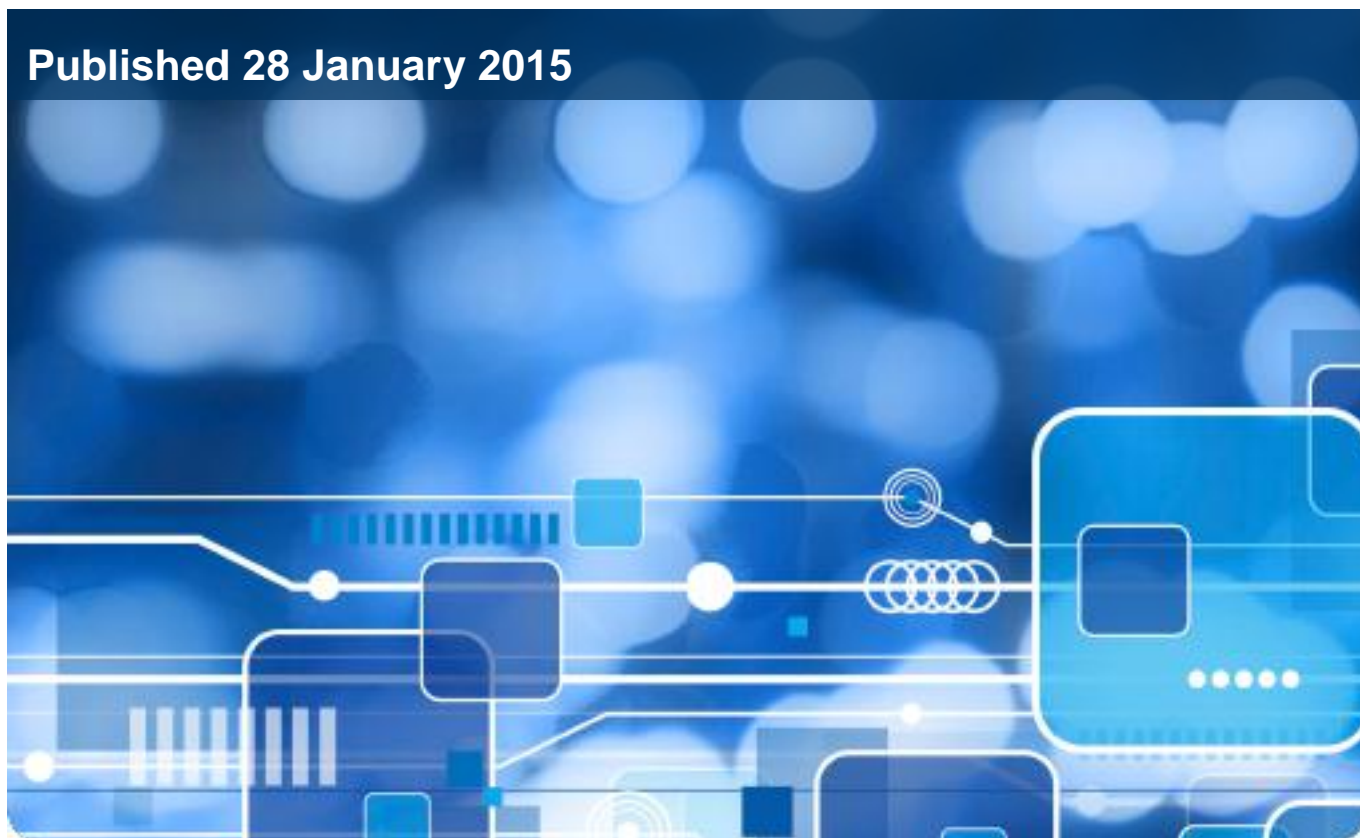


Health & Social Care
Information Centre

Hospital Episode Statistics

Accident and Emergency Attendances in England - 2013-14

Published 28 January 2015



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This document has been written primarily for those working in the NHS, to inform and support strategic and policy led processes for the benefit of patient care. This document will also be of interest to researchers, journalists and members of the public interested in NHS hospital activity in England.

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Document Management

Revision History

Version	Date	Summary of Changes
1.0	28/01/2015	-
2.0	26/02/2015	Report no longer contains only Headline Figures. Detailed analysis included.

Executive Summary

Introduction

Hospital Episode Statistics (HES) come from the HES data warehouse containing details of all admissions to NHS hospitals in England. It includes private patients treated in NHS hospitals, patients who were resident outside of England and care delivered by treatment centres (including those in the independent sector) funded by the NHS.

HES data sets are the data source for a wide range of healthcare analysis for the NHS, Government and many other organisations and individuals.

Records in the HES Accident and Emergency (A&E) database are called 'attendances', and each A&E attendance relates to a single visit by an individual to A&E. Where follow up care is required and provided by the A&E department, a second planned attendance is recorded.

Each record in HES includes a wide range of information including details of the patient (age, gender, geographic details), when they were treated and what they were treated for. This publication releases some high level analyses of HES data relating to A&E attendances in NHS hospitals.

Key Facts¹

In 2013-14:

- There were 18.5 million Accident and Emergency (A&E) attendances recorded at major A&E departments, single specialty A&E departments, walk-in centres and minor injury units in England; an increase of one per cent from 2012-13.
- Data is incomplete; there were 18.2 million attendances reported in A&E HES (excluding planned follow-up attendances), compared to 21.8 million reported in NHS England's Weekly A&E situation reports (Sit Reps) aggregate data for the equivalent period.
- There were 205 providers with attendances recorded in A&E HES compared to 247 providers who have submitted A&E attendances via Weekly A&E Sit Reps². Weekly A&E Sit Reps receives data from a number of private providers, walk in centres and minor injury units that do not currently submit data to HES .
- Of all A&E attendances, over half, 54.6 per cent (10.1 million) were for patients under 40. Patients aged 20-29 accounted for 16.2 per cent (3.0 million), while 14.5 per cent (2.7 million) of all attendances were for those under 10. One per cent (0.2 million) of A&E Attendances had Unknown gender recorded with the remaining records showing an almost even split between male (9.2 million) and female (9.1 million)
- Of all A&E attendances, 23.9 per cent (4.4 million) arrived by ambulance or helicopter, the same proportion as in 2012-13(23.9 per cent, 4.4 million).
- Of all A&E attendances, 64.3 per cent (11.9 million) had a valid diagnosis code and 14.2 per cent (2.6 million) of all attendances had a diagnosis of 'Diagnosis not classifiable' recorded.
- Of all A&E attendances, 94.4 per cent (17.5 million) had a valid treatment code. 34.5 per cent (6.4 million) of all attendances had a recorded treatment of 'guidance/advice only'.
- Of all A&E attendances, 57.9 per cent (10.7 million) were discharged ('GP follow-up required' or 'no follow-up required') and 20.9 per cent (3.9 million) of all attendances were admitted to hospital.

¹ Figures in this section have been rounded. Percentage calculations are based on the un-rounded figures.

² This is a count of the number of unique provider codes from each data-set. Please note that some providers submit data at different levels of aggregation to A&E HES and Weekly Sit Reps. For example, Virgin Care Services (NDA) submit a single aggregated record to Sit Reps, but have three separate hospitals which submit data to A&E HES (NDA55, NDA56 & NDA57). Table 3 in the attached data sheet compares provider counts based on the first three digits of the provider code.

Changes to the Publication

As of April 1 2013 changes in the structure of NHS health geographies in England led to Area Teams (AT) replacing Strategic Health Authorities (SHA). To reflect these changes, within the provider level analysis (PLA) tables (*published March 2015*) the breakdown by SHA of treatment will be replaced with a breakdown by AT of treatment for 2013-14; within these tables, figures for AT will not be re-stated for 2012-13.

Due to changes from the Quarterly Monitoring of A&E (QMAE) to Weekly Sit Reps the comparison of data in Table 1 of this report was no longer available. This table has been changed to reflect a more meaningful comparison of Weekly Sit Rep data with A&E HES, and now shows A&E attendances by type of A&E department.

Published Tables

For the 2013-14 financial year, HES collected over 18.5 million recorded attendances at Accident and Emergency (A&E) departments at NHS hospitals in England or performed in the independent sector, and commissioned by the English NHS.

The publication includes 16 tables at a national level (with breakdowns including attendance by category, assessment, diagnosis, treatment, duration and disposal) along with a series of charts and graphs and a further 10 tables at more detailed geographies.

In addition to national aggregations of activity, the provider level analysis (published March 2015) is supplied in the form of an excel spreadsheet. This allows users to select hospital providers and compare activity with peer organisations, regions or the England total. The purpose of the provider level analysis is to contribute to the improvement of both the quality and coverage of the data submitted to HES. It is hoped this will stimulate discussion and ultimately contribute to enhancements in patient care. This Excel spreadsheet provides information at provider level (where submitted) relating to:

- Gender
- Age group
- Hour of arrival
- Day of arrival
- Method of arrival by age group
- Comparison with attendances recorded in Weekly A&E Sit Reps
- Duration
- Method of discharge
- Method of discharge by duration
- Average length of stay by hour of arrival

Background

Accident and Emergency (A&E) departments

The role of major A&E departments is to assess and treat patients who have serious and unforeseen injuries or illnesses. Major A&E departments are consultant-led, open 24 hours a day and 365 days a year with full resuscitation facilities. Not all hospitals have an A&E department.

In addition to major A&E departments, single specialty A&E departments, walk-in centres and minor injury units are also covered by the A&E HES data. People can attend these services without an appointment. They deal with a range of minor injuries and illnesses.

Reporting of A&E data

A&E HES data consists of individual records of patient care that are held within the HES database. These have been submitted from the local NHS providers' Patient Administration Systems (PAS) via the Secondary Uses Service (SUS), a national data warehouse.

Weekly A&E situation reports (Sit Reps)

The collection process used for A&E HES data is very different from the process used for collecting data for the other nationally published source of information on A&E activity, the weekly A&E situation reports (Sit Reps). Weekly Sit Reps are based on counts made in local NHS organisations and submitted to the NHS England in aggregate form, rather than from patient level data.

This aggregate data is still the official source of A&E information and should be used in preference to A&E HES for information that is held in both data sets.

Weekly Sit Reps data are available here – <http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/>

Assessing growth through time

A&E HES figures are available from 2007-08 onwards. Changes to the figures over time need to be interpreted in the context of both improvements in data quality, coverage and changes in activity. The introduction of Payment by Results (PbR), which increased private sector involvement in the delivery of secondary care, and some changes in clinical practice (including some procedures occurring as outpatient appointments instead of hospital admissions) will have affected trends.

PbR is a system whereby hospitals are paid for the number of patient treatments, known as activity, they perform and the complexity of these treatments. It was introduced in a phased way from 2003-04 onwards. In order to get paid correctly, hospitals need to record the activity they perform and the clinical codes that outline the patients' conditions and treatment. This has provided a major financial incentive for hospitals to ensure all of the activity they perform and the clinical coding is fully recorded. This improved recording of information captured by HES could be one of the factors leading to the reported increase in activity.

One of the key government priorities since the introduction of PbR has been for patients to wait for as short a time as possible. In order to decrease patients' waiting times there has been the need for additional elective operations to be performed and more capacity in NHS funded care to perform this activity. In the middle of the last decade, additional capacity was brought in from the private sector via Treatment Centres, with the NHS funding some patients to be treated there for routine operations.

Improvements in technology and the need to increase efficiency to allow more patients to be treated have led to a reduction in the length of time patients need to stay in hospital for certain planned operations. In particular, many of those operations that would have involved an overnight stay at the start of the period are now routinely performed as day cases. In addition, many operations where a patient would have been admitted to hospital at the start of the period are now routinely performed in outpatient clinics. This has led to increases in day case rates and outpatient attendances over the period.

The NHS has seen increases in real terms expenditure throughout the period. In the earlier years of the period, the year-on-year increase in this expenditure was higher than in the most recent years. The period has also seen a rise in the number of emergency admissions. One factor contributing to this is likely to be the increased demand on health services from an ageing population. Alongside this, there has been the introduction of observation or medical assessment units at many hospitals. Patients arriving in A&E departments are admitted to these units, often for around a day, to enable observation and tests to be performed on them.

The data we have provided here highlight these changes. Care should be taken when interpreting these changes as improvements in coverage in HES will contribute alongside growth from increased activity.

Extra care should be taken when looking at clinical data, as changes in NHS practices (such as the introduction of new procedures and interventions) can have an effect on changes through time.

Findings

Overview

In 2013-14 there were 18,517,381 A&E attendances recorded at major A&E departments, single specialty A&E departments, walk-in centres and minor injury units in England; an increase of 1.0 per cent from 2012-13. This difference is largely driven by coverage improvements within A&E HES. Over the same period A&E attendance levels reported within Weekly A&E situation reports (Sit Reps) increased by 0.2 per cent.

Table 1a: Headline figures

	Number	Percentage
Total	18,517,381	100.0
Planned attendances	319,851	1.7
Admitted to hospital	3,865,746	20.9
Patients' age		
0-4	1,812,285	9.8
5-14	1,855,649	10.0
15-44	7,499,844	40.5
45-64	3,525,045	19.0
65-84	2,750,890	14.9
85 and over	904,203	4.9
Not known	169,465	0.9

Source: Health and Social Care Information Centre

Table 1b: Comparison to Sit Reps

	Number
HES attendances (Excluding planned follow-up)	18,197,530
A&E Sit Reps attendances	21,778,657
HES number of providers ^(see footnote 2 – page 6)	205
A&E Sit Reps number of providers ^(see footnote 2 – page 6)	247

Source: Health and Social Care Information Centre

Accident and emergency (A&E) attendances

Total attendances (Tables 1, 2, 3, 4 and 17)

While A&E Sit Reps are the official source of A&E attendance activity A&E HES is able to offer more detailed analysis. As stated previously, A&E HES coverage (83.6 per cent of the A&E Sit Reps attendances) has improved since the first publication of these figures as experimental statistics in 2007-08 (62.2 per cent).

Attendance records in A&E HES data can be split into groups based on whether the attendance was a first or a follow-up attendance. Furthermore, follow-up attendances can be split into whether the attendance was planned or unplanned.

The A&E Sit Reps submission does not collect information about planned follow-up attendances, but does include unplanned follow-up attendances. Where A&E HES is being compared with A&E Sit Reps directly, total attendance will exclude planned follow-up attendances.

Using this definition, the number of total attendances when derived from A&E HES is 18.2 million. Therefore, there were 3,581,127 fewer attendances than those reported in A&E Sit Reps for 2013-14.

Table 1 clearly shows that the difference between A&E Sit Reps and HES is due to records from Type 3 (minor injury units and walk in centres) which do not get submitted to A&E HES.

Who attends A&E? (Tables 5, 6; Chart 1)

Despite the improvements in coverage, the demographic profile of patients who use A&E departments remained relatively stable when compared to previous years. In 2013-14 there was an even split of male and female patients: male (49.7 per cent), female (49.3 per cent). The number of attendances where an unknown gender was recorded fell from 1.4 per cent (261,367) in 2012-13 to one per cent (192,326) in 2013-14.

The distribution of attendances by age group changed very little from the previous year: 42.5 per cent (7,863,316) of all A&E attendances were for patients aged 29 or under, and 16.2 per cent (2,990,663) were for patients aged 20-29. The percentage of attendances in the older age groups was consistently higher than in previous years. In 2013-14, 33.1 per cent (6,125,538) of attendances were for patients 50 and over, up from 32.5 per cent (5,965,284) in 2012-13. The number of attendances with age group recorded as unknown has remained stable at 0.9 per cent (168,261 in 2012-13 and 169,465 in 2013-14).

When do A&E attendances occur? (Tables 7, 8; Charts 2, 3)

The distribution of A&E attendances in 2013-14 was very similar to 2012-13. Across England the annual average number of attendances per day was over 50,700 up from just over 50,200 per day in 2012-13. Individually, March and July were the busiest months with over 53,500 attendances per day. Whereas November, December and January were the least busy months with fewer than 50,000 attendances per day.

When looking at the day and hour of arrival of A&E attendances, the busiest day continued to be Monday with 16.1 per cent of all attendances (2,988,653). The busiest time of arrival on that day was 11am (hour) with 223,488 attendances (1.2 per cent of all A&E attendances). The trend for the arrival time was relatively similar for all weekdays; peaking

between 11am and midday. There was a slight variation to the underlying trend on weekends, which didn't see the second - and lesser - 'post-work' peak at about 6pm.

Referral method (Table 9)

The majority of A&E attendances were self-referred (63.3 per cent or 11,730,527) in 2013-14. Referrals to A&E from all sources remained relatively stable when compared to previous years.

Arrival method (Tables 10, 11; Charts 4, 5, 6, 7)

In 2013-14, 23.9 per cent (4,419,919) of all arrivals at A&E were by ambulance or helicopter, the same proportion as in 2012-13 (23.9 per cent or 4,374,611).

The number of attendances where the arrival method was 'ambulance or helicopter' was greatest between 15:00 and 16:00 hours; 241,416 patients arrived at A&E providers by this method. Despite this, these patients represented only 21.2 per cent of all attendances to A&E during the hour of 15:00 – 16:00. The highest proportion of attendances where the arrival mode was ambulance or helicopter was seen between 04:00 - 05:00. Fifty-four per cent (103,601) of all attendances arrived by this method.

More males up to the age of 74 arrived at A&E by ambulance or helicopter (1,547,105) compared to females (1,423,970). However, from the age of 75 onwards the number of female attendances (arriving by ambulance or helicopter) was higher than male attendances; this is possibly linked to population demographics.

The age group with the highest number of A&E attendances (who arrived by ambulance or helicopter) was the 80 to 84 year-old age group (414,926 or 9.4 per cent).

How a patient arrives at an A&E department may indicate the level of treatment / care required. Of patients who arrived at A&E by ambulance or helicopter, 51.2 per cent (2,264,986) were admitted to hospital. Conversely, for those who arrived by another method, 11.6 per cent (1,585,902) were admitted and 43.6 per cent (5,963,504) discharged with no follow up required, indicating that these were less severe cases.

Reason for A&E attendance

Patient Groups (Table 12; Charts 8, 9, 10 and 11)

Within the reason for attendance field, 95.2 per cent of entries were valid records i.e. all records excluding 'not known'. However, the majority of these (16,744,389 or 90.4 per cent of all records) were classified as either 'other accident' or 'other'.

Road accidents

Road accidents accounted for 1.4 per cent (255,964) of all recorded attendances. There were peaks in the number of A&E attendances during the morning and evening rush hours. There were fewer road accident related attendances over the weekend.

Assaults

Assaults accounted for 0.8 per cent (146,834) of all recorded attendances. There were more assault related attendances on Friday and Saturday nights.

Deliberate self-harm

Deliberate self-harm accounted for 0.6 per cent (117,719) of all recorded attendances. There was a clear recurring pattern through the week, increasing slightly on weekend evenings. The number of attendances increased through the day.

Sports injury

Sports injuries accounted for 1.9 per cent (348,807) of all recorded attendances. These were most likely to occur on Saturday and Sunday afternoons.

Investigation, Diagnosis and Treatment

First investigation (Table 13)

In total 17,647,408 (95.3 per cent) of recorded attendances had a valid investigation code. More than 40 per cent of valid records had the first investigation recorded as 'none', and just under a quarter were recorded as 'X-ray plain film'.

Data completeness remained the same as in 2012-13 at just over 95 per cent.

First diagnosis (Table 14)

In total 11,914,171 (64.3 per cent) of recorded attendances had a valid diagnosis code; an increase of 1.5 percentage points from 2012-13.

The highest percentage of valid A&E HES attendances within primary diagnosis information were coded as 'diagnosis not classifiable', representing 22.1 per cent of all valid records.

This was followed by 'dislocation/fracture/joint injury/amputation' at 7.1 per cent. The greatest proportional increases from 2012-13 in attendances for specific diagnoses were seen in:

- Septicaemia – up from 24,850 to 34,043 – an increase of 37.0 per cent, this is the second year in a row that attendances for septicaemia have increased by over 30 per cent
- Haematological Conditions – up from 35,411 to 40,778 – an increase of 15.2 per cent
- Psychiatric Conditions – up from 124,633 to 143,090 – an increase of 14.8 per cent

The extent to which these increases are due to improved recording is not known.

First treatment (Table 15)

In total 17,484,684 (94.4 per cent) of recorded attendances had a valid treatment code, an increase of 0.5 percentage points from 2012-13.

The highest percentage of A&E HES attendances with valid first treatment information were coded as 'guidance/advice only', representing 36.5 per cent of all valid records, followed by 'none (consider guidance/advice option)' (13.0 per cent).

Attendance disposal

Disposal method (Table 16; Charts 12, 13, 14)

In 2013-14, 57.9 per cent (10,716,160) of all attendances were discharged ('GP follow-up required' or 'no follow-up required') and 20.9 per cent (3,865,746) of all attendances were admitted to hospital.

As the length of time the patient spent in the A&E department increased, so did the likelihood that the patient would be admitted to hospital, peaking in the 10-minute time slot between 3hrs 51 min and 4hrs.

Patients who had shorter durations in A&E were more likely to be discharged with no follow-up required, compared to those patients who waited longer.

Accessing HES

The HES publications focus on headline information about hospital activity. Each annual publication includes a series of national tables and also provider level breakdowns for some main areas.

All data items included in the published tables are explained in the footnotes. The Health and Social Care Information Centre publish data dictionaries for HES describing the format and possible values for all HES data items:

<http://www.hscic.gov.uk/hesdatadictionary>

The data are also readily accessible via an online interrogation service (for NHS users) or via our bespoke extract service:

HES Data Interrogation Service (HDIS): <http://www.hscic.gov.uk/hdis>

Data Access Request Service (DARS): <http://www.hscic.gov.uk/dars>

Feedback

Feedback on this publication can be provided via our website:

<http://www.hscic.gov.uk/haveyoursay>

Alternatively, feedback can be provided to the Health and Social Care Information Centre via enquiries@hscic.gov.uk or 0300 303 5678.

The Health and Social Care Information Centre welcomes all feedback relating to any aspect of this publication. In particular we would welcome feedback on the usefulness of the information to different users, the ways in which the information is used and what further information would be useful. Any additional information you can provide us with about your use of HES data will help us to improve our statement on known users and uses of the data - available at:

http://www.hscic.gov.uk/media/10495/Users-and-uses-of-HES/pdf/HES_Users_and_Uses.pdf

Appendices

Appendix 1: Data submissions

A list of mandatory and optional fields for submission in the Accident and Emergency Commissioning Data Set (CDS) is provided within the CDS data dictionary

http://www.datadictionary.nhs.uk/web_site_content/cds_supporting_information/commissioning_data_set_version_6-2_type_list.asp?shownav=0

CDS V6-2 Type 010 - Accident and Emergency CDS

Please note: The markers in the columns "OPT, U/A, and HES" indicate the NHS recommendations for the inclusion of data:

M = Mandatory: data must be included where available

O = Optional: data need not be included

* = Must **not** be used

Appendix 2: Glossary of terms

A&E	Accident and Emergency
AR	Annual Refresh
CCG	Clinical Commissioning Group
CDS	Commissioning Data Set
DH	Department of Health
HES	Hospital Episode Statistics
HSCIC	Health and Social Care Information Centre
ICD-10	International Classification of Diseases and Related Health Problems v.10
MIU	Minor Injury Unit
NHS	National Health Service
ONS	Office for National Statistics
OOH	Out of Hours
OP	Outpatient
PAS	Patient Administration Systems
SUS	Secondary Uses Service
WIC	Walk-in Centre

Appendix 3: Hospital Episode Statistics (HES) Data Quality Statement

Introduction

HES data includes patient level data on hospital admissions, outpatient appointments and A&E attendances for all NHS trusts in England. It covers acute hospitals, community trusts and other providers of hospital care. HES includes information about private patients treated in NHS hospitals, patients who were resident outside England and care delivered by treatment centres (including those in the independent sector) funded by the NHS.

Healthcare providers collect administrative and clinical information locally to support the care of the patient. This data is submitted to the Secondary Uses Service (SUS) to enable hospitals to be paid for the care they deliver. HES is created from SUS to enable further secondary use of this data.

HES is the data source for a wide range of healthcare analysis used by a variety of people including the NHS, government, regulators, academic researchers, the media and members of the public.

HES is a unique data source, whose strength lies in the richness of detail at patient level. This data source goes back to 1989 for inpatient episodes, 2003 for outpatient appointments and 2007 for A&E attendances. HES data includes:

- specific information about the patient, such as age, gender and ethnicity
- clinical information about diagnoses, operations and consultant specialties
- administrative information, such as time waited, and dates and methods of admission and discharge
- geographical information such as where the patient was treated and the area in which they live.

The principal benefits of HES are in its use to:

- monitor trends and patterns in NHS hospital activity
- assess effective delivery of care and provide the basis for national indicators of clinical quality
- support NHS and parliamentary accountability
- inform patient choice
- provide information on hospital care within the NHS for the media
- determine fair access to healthcare
- develop, monitor and evaluate government policy
- reveal health trends over time
- support local service planning

Relevance

The HES publications focus on headline information about hospital activity. Each annual publication includes a series of national tables and also provider level breakdowns for some main areas.

Most data included in the published tables are aggregate counts of hospital activity. Where averages are published, e.g. average length of stay for inpatients or caesarean rates for maternity statistics, the data are clearly labelled stating how the data has been calculated.

Accessibility

As HES is such a rich source of data it is not possible to publish aggregate tables covering all permutations of possible analysis. Underlying HES data are also made available to facilitate further analysis that is of direct relevance to users. There are no restriction to access of the published data.

Accuracy and Reliability

The accuracy of HES data is the responsibility of the NHS providers who submit the data to SUS. These data are required to be accurate to enable them to be correctly paid for the activity they undertake. HSCIC has a well-developed data quality assurance process for SUS and HES data. It uses an xml schema to ensure some standardisation of the data received. The use of the schema means that the dataset has to meet certain validation rules before it can be submitted to SUS. HSCIC leads on the schema changes and consults the data suppliers about proposed changes.

Each month the HSCIC makes data quality dashboards available to NHS providers to show the completeness and validity of their data submissions to SUS. This helps to highlight any issues present in the provisional data, allowing time for corrections to be made before the annual data are submitted.

An external auditor, acting on behalf of the Department for Health, audits the data submitted to SUS to ensure NHS providers are being correctly paid by PbR for the care they provide.

HSCIC validates and cleans the HES extract and derives new items. The team discusses data quality issues with the information leads in hospital trusts who are responsible for submitting the data. The roles and responsibilities within HSCIC are clear for the purposes of data quality assurance, i.e. to assess the quality of data received against published standards and report the results.

Data quality information for each year to date HES dataset is published alongside the provisional year to date HES data, and also alongside annual publications. These specify known data quality issues each year, e.g. if a trust has a known shortfall of secondary diagnoses. The statisticians can only check the validity and format of the data and not whether it is accurate, as accuracy checking requires a level of audit capacity. A capability which the HSCIC does not currently possess.

There is further information about HES data quality published online:

<http://www.hscic.gov.uk/article/1825/The-processing-cycle-and-HES-data-quality>

HSCIC also publishes an annual report, *[The Quality of Nationally Submitted Health and Social Care Data](#)*, which highlights issues around the recording of the underlying data that are used for HES, as well as examples of good and poor practice.

The UK Statistics Authority conducted case studies of quality assurance and audit arrangements of administrative data sources. HES was used as a case study and further information can be found in the published report (Annex C, case study 3), available at: <http://www.statisticsauthority.gov.uk/assessment/monitoring/administrative-data-and-official-statistics/quality-assurance-and-audit-arrangements-for-administrative-data.html>

Data Completeness

As explained above, there are some definitional differences between A&E HES data and Weekly A&E Sit Reps data. The main difference is that A&E Sit Reps data does not include attendances where the A&E appointment has been pre-arranged or planned. Therefore, where A&E HES is compared directly with A&E Sit Reps planned follow-up attendances are excluded.

Overall coverage in HES has increased slightly from 2012-13 compared to the A&E Sit Rep data, although data completeness of key fields remains at similar levels to the previous year. Codes were considered to be valid if they matched to one of the A&E Commissioning Data Set (CDS) data dictionary values for the specified field and were considered invalid if they did not match one of the data dictionary values. Where a field has a null value it is considered invalid.

Multiple diagnosis, investigation and treatment codes can be submitted within the data set. The analysis contained within this report only looks at the first (or primary) diagnosis, investigation and treatment codes submitted. It also only uses the first two characters of these codes covering the diagnosis condition, investigation and treatment sections of the six character codes. This is due to quality issues with these clinical fields.

Table 2: A&E Count of attendances with a valid entry in key fields

Field description	2012-13		2013-14	
	Number	Percentage	Number	Percentage
Total number of records	18,328,896	100.0	18,517,381	100.0
A&E Arrival Mode	18,048,577	98.5	18,107,876	97.8
A&E Department Type	18,102,018	98.8	18,473,170	99.8
A&E Attendance Category	18,152,752	99.0	18,285,081	98.7
A&E Attendance Disposal	18,187,337	99.2	18,219,422	98.4
A&E Incident Location Type	16,353,585	89.2	16,472,785	89.0
A&E Patient Group	17,428,075	95.1	17,620,710	95.2
Source of Referral for A&E	17,778,439	97.0	17,892,999	96.6
Arrival Date	18,328,896	100.0	18,517,381	100.0
Arrival Time	18,328,896	100.0	18,517,381	100.0
A&E Initial Assessment Time	16,160,209	88.2	16,502,979	89.1
A&E Time Seen For Treatment	16,839,828	91.9	17,170,671	92.7
A&E Attendance Conclusion Time	18,090,263	98.7	18,285,800	98.7
A&E Departure Time	18,298,516	99.8	18,489,545	99.8
Primary A&E Diagnosis - 2 Character Level	11,503,263	62.8	11,914,171	64.3
First A&E Investigation - 2 Character Level	17,480,127	95.4	17,647,408	95.3
First A&E Treatment - 2 Character Level	17,218,883	93.9	17,484,684	94.4

Source: Health and Social Care Information Centre

Final and Provisional Data Comparison

Collection of HES data is carried out on a monthly basis throughout the financial year, with a final annual refresh (AR) once the year end has passed. Each monthly collection refreshes data back to the start of the financial year.

'Month 13' represents the provisional full year data and was published in June 2014. Hospital providers and the HSCIC HES Data Quality team work to improve the quality and completeness of the data in order to produce the final annual refresh data used in this report, as described in 'Accuracy and Reliability'.

Table 3 shows the change from the Month 13 provisional data and the final annual refresh data

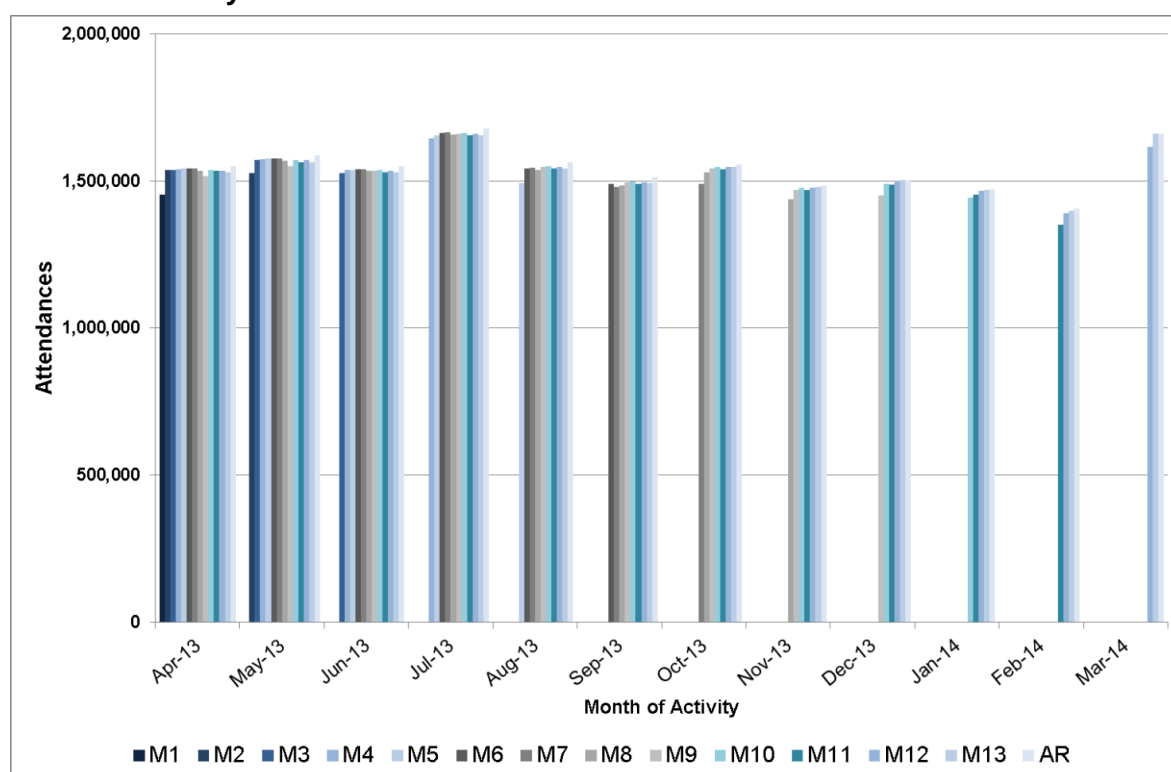
Table 3: Comparing month 13 and annual refresh data

	Month 13	Annual refresh	Percentage change
Total attendances	18,367,192	18,517,381	0.82%
Admitted / became a lodged patient	3,839,900	3,865,746	0.67%
Discharged – GP follow up	3,604,840	3,632,928	0.78%
Discharged – no follow up	7,014,253	7,083,232	0.98%
Referred	2,356,103	2,368,534	0.53%
Others	1,552,096	1,566,941	0.96%

Source: Health and Social Care Information Centre

Chart 1 below shows the number of attendances occurring in each month, by the submission version for 2013-14. The number of records per month of activity generally increases as more submissions are made; the completeness of the data increases over time.

Chart 1: Monthly variation in submitted records



Timeliness and Punctuality

HES data are published as early as possible. The production of the underlying HES datasets takes several months after the reference period. The final submission deadline for NHS providers to send annual data to SUS is normally at the end of the May, almost 2 months after that financial year has finished. It then takes approximately 3 months to produce the Admitted Patient Care (APC) HES dataset and a further 2 months to complete publication production and data investigation. However, annual HES publications relating to final 2013-14 data are following a slighter later publication schedule - the reason for this is that the processing of annual HES data has been transferred in-house to HSCIC from the previous third-party supplier, and therefore additional time is needed this year to test and assure the new arrangements.

In addition to annual data the HSCIC also publish provisional monthly HES data approximately 3 months after the reference period.

The final annual data includes additional data cleaning, validation and processing, unlike the provisional monthly data.

Coherence and Comparability

Users can misinterpret HES data as relating to the number of patients, but care should be taken as HES data relates to hospital activity, not individuals.

A&E data is presented as attendances, which may include people attending more than once in the reporting period.

UK comparisons

Separate collections of hospital statistics are undertaken by Northern Ireland, Scotland and Wales. There are a number of important differences between the countries in the way that data measures are collected and classified, and because of differences between countries in the organisation of health and social services. For these reasons, any comparisons made between HES and other UK data should be treated with caution.

ONS used to produce UK Health Statistics. This contained key figures about the use of health and social services, including hospital admitted patient activity and waiting times across the UK. The last version of this discontinued series can be found at:

<http://www.ons.gov.uk/ons/rel/ukhs/united-kingdom-health-statistics/2010/edition-4--2010.pdf>

Other UK Data:

Hospital data for the other administrations can be found at:

- Northern Ireland – [Hospital Statistics & Research](#)
- Scotland – [Hospital Care](#)
- Wales – [Health and social care statistics](#)

NHS England also publish hospital activity data:

<http://www.england.nhs.uk/statistics/statistical-work-areas>

Wider international comparisons

HES and similar statistics from the devolved administrations are used to contribute to the World Health Organisation (WHO), Organisation for Economic Co-operation and Development (OECD) and the Eurostat compendiums on health statistics.

Improvements over time

HES data are available from 1989-90 onwards. Changes to the figures over time need to be interpreted in the context of improvements in data quality and coverage (particularly in earlier years), improvements in coverage of independent sector activity (particularly from 2006-07) and changes in NHS practice. For example, reductions in activity may be due to a number of procedures which may now be undertaken in outpatient settings and so are no longer included in APC HES data.

Changes to organisation codes and geographical boundaries

The Organisation Data Service (ODS) is responsible for the publication of all organisation and practitioner codes, national policy and standards with regard to the majority of organisation codes. It encompasses the functionality and services previously provided by the National Administrative Codes Service (NACS).

For more information about the ODS and changes to organisation codes and geographical boundaries visit:

<http://systems.hscic.gov.uk/data/ods>

Performance, Cost and Respondent Burden

The production of HES data is a secondary use of data collected during the care of patients in the NHS and submitted for NHS Providers to be paid for the care they deliver. Therefore HES does not incur additional costs or burden on the providers of the data.

Confidentiality, Transparency and Security

Although certain information is considered especially sensitive, all information about someone's health and the care they are given must be treated with regard to confidentiality at all times.

There are a limited number of people authorised to have access to the record level data, all of who must adhere to the written protocol issued by The HSCIC on the dissemination of HES data. For example, guidance is given on handling the very small numbers that sometimes occur in tables. This is to reduce the risk that local knowledge could enable the identification of either a patient or clinician.

HES is a record level data warehouse and it contains information that could (if it was made freely available) potentially identify patients or the consultant teams treating them. In some cases record level data may be provided for medical/healthcare research purposes. For example, data is likely to be required by the Care Quality Commission and other such bodies. The information may be given following a stringent application procedure, where the project can justify the need and where aggregated data will not suffice. Any request involving sensitive information, or where there may be potential for identification of an individual, is referred to the appropriate governance committee. HSCIC publishes a quarterly register of data releases, which includes releases of HES data.

HES data are stored to strict standards: a system level security protocol is in place. This details the security standards that are in place to ensure data are secure and only accessed by authorised users.

Appendix 4: Table Summary

Unplanned attendances by A&E department type in A&E HES and Weekly A&E Sit Reps (Table 1)

The *Unplanned attendances recorded by type in A&E HES and Weekly A&E Sit Reps* table provides a comparison between recorded attendances at different types of A&E unit in A&E HES and in weekly A&E Sit Reps. Weekly A&E Sit Reps does not include planned follow up attendances and so for the purposes of this comparison the A&E HES figures exclude planned attendances. The table design has been changed to show the A&E HES data for the different types of A&E department as a percentage of the Weekly sit rep data.

This change has been implemented as Weekly Sit Rep data no longer includes unplanned or other attendances at A&E.

Number of valid records in HES by A&E key field (Table 2)

The *Number of valid records in HES by A&E key field* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by various key fields where the records are deemed to be valid. Records are deemed to be valid if the codes contained in the respective key fields are also valid. Codes are considered to be valid if they match one of the A&E Commissioning Data Set (CDS) data dictionary values for the specified field and are considered to be invalid if they do not match one of those data dictionary values. Where a field has a null value it is considered invalid. Alongside the count of valid records for each key field is the percentage value of that count as a proportion of the total of all valid records.

Comparison of 2012-13 and 2013-14 A&E HES attendances with Weekly A&E Sit Reps attendances by organisation type (Table 3)

The *Comparison of 2012-13 and 2013-14 A&E HES attendances with Weekly A&E Sit Reps attendances by organisation type* table provides a comparison between recorded attendances at A&E units in A&E HES and in Weekly A&E Sit Reps. Two comparisons are made: between the numbers of each provider type submitting data to the respective systems and between the numbers of A&E attendances broken down by provider type. For the purposes of this comparison planned follow up attendances are excluded from the A&E HES figures. Furthermore, due to some providers having submitted data to both A&E HES and Weekly A&E Sit Reps at different levels of aggregation in 2013-14, the provider level counts in this table have been consolidated to the 3 character provider code level. Consolidation was necessary in order to allow direct comparison between the two data collections. For consistency, the data provided for 2012-13 has also been consolidated to the 3 character provider code level.

A&E Attendances by attendance category (Table 4)

The *A&E Attendances by attendance category* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by attendance category. Alongside the count of attendances for each category is the percentage value of that count as a proportion of the attendances in A&E HES.

A&E attendances by gender (Table 5)

The *A&E attendances by gender* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the gender of the attendee. Alongside the count of attendances for each gender category is the percentage value of that count as a proportion of all the attendances in A&E HES.

A&E attendances by age group (Table 6)

The *A&E attendances by age group* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by 5-year age groups. Additionally, the 15-19 age group has been disaggregated to individual ages to allow users to distinguish between under-16, under-18 and teenage categories. Attendees aged 90 or over are grouped together in the 90+ age group. Alongside the count of attendances for each age group is the percentage value of that count as a proportion of all the attendances in A&E HES.

A&E attendances by month (Table 7)

The *A&E attendances by month* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the month of attendance. Alongside the count of attendances for each month is the percentage value of that count as a proportion of the whole year's attendances in A&E HES.

A&E attendances by day (Table 8)

The *A&E attendances by day* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the day of attendance. Alongside the count of attendances for each day is the percentage value of that count as a proportion of all the attendances in A&E HES.

A&E attendances by referral method (Table 9)

The *A&E attendances by referral method* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the referral method. Alongside the count of attendances by each referral method is the percentage value of that count as a proportion of all the attendances in A&E HES.

A&E attendances by arrival method (Table 10)

The *A&E attendances by arrival method* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the arrival method. Alongside the count of attendances by each arrival method is the percentage value of that count as a proportion of all the attendances in A&E HES. The method of arrival is recorded as: *Brought in by ambulance (including helicopter / Air Ambulance)*, *Other* or *Unknown*.

A&E attendances by hour of arrival – ambulance (including helicopter / air ambulance) arrivals only (Table 11)

The *A&E attendances by hour of arrival – ambulance (including helicopter / air ambulance) arrivals only* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the hour of attendance. This table only includes attendances where the arrival method was ambulance. Alongside the count of attendances for each hour of arrival is the percentage value of that count as a proportion of attendances by all arrival methods for that hour.

A&E attendances by patient group (Table 12)

The *A&E attendances by patient group* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the patient group of the attendee. Alongside the count of attendances for each patient group is the percentage value of that count as a proportion of all the attendances in A&E HES.

Number of A&E attendances, first A&E investigation '2 character description field' (Table 13)

The *Number of A&E attendances, first A&E investigation '2 character description field'* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the initial A&E investigation. The descriptions included in the *First A&E investigation* column are based upon the first 2 characters of the A&E investigation code. Alongside the count of attendances for each A&E investigation are percentage values of that count as a proportion of all the attendances in A&E HES and as a proportion of attendances excluding records with unknown or unmatched A&E investigation codes.

Number of A&E attendances, A&E primary diagnosis '2 character description field' (Table 14)

The *Number of A&E attendances, A&E primary diagnosis '2 character description field'* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the initial A&E diagnosis. The descriptions included in the *First A&E diagnosis* column are based upon the first 2 characters of the A&E diagnosis condition. Alongside the count of attendances for each A&E diagnosis are percentage values of that count as a proportion of all the attendances in A&E HES, and as a proportion of attendances excluding records with unknown or unmatched diagnoses.

Number of A&E attendances, first A&E treatment '2 character description field' (Table 15)

The *Number of A&E attendances, first A&E treatment '2 character description field'* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the initial A&E treatment. The descriptions included in the *First A&E treatment* column is populated are based upon the first 2 characters of the A&E treatment code. Alongside the count of attendances for each A&E treatment are percentage values of that count as a proportion of all the attendances in A&E HES, and as a proportion of attendances excluding records with unknown or unmatched treatment codes.

Total number of attendances in A&E HES by attendance disposal method (Table 16)

The *Total number of attendances in A&E HES by attendance disposal method* table provides a year-on-year comparison between 2012-13 and 2013-14 counts of A&E attendances broken down by the method the attendee left A&E (the disposal method). Alongside the count of attendances for each disposal method is the percentage value of that count as a proportion of all the attendances in A&E HES. The table aggregates data by attendance disposal method at two levels of granularity. At the higher level the disposal methods are: Admitted / became a lodged patient, Discharged - follow up by GP, Discharged - no follow up required, Referred and Others. Figures for the Referred and Others disposal methods are also broken down further to present the figures for the disposal methods that are grouped together under those headings.

Number of A&E attendances, recorded in A&E HES (excluding planned follow-up attendances) and Weekly A&E Sit Reps by each provider (Table 17)

The *Number of A&E attendances, recorded in A&E HES (excluding planned follow-up attendances) and Weekly A&E Sit Reps by each provider* table provides a comparison between recorded attendances at A&E units in A&E HES and in Weekly A&E Sit Reps when broken down by the A&E provider. For each provider, the data includes the total number of attendances and the number of attendances with a duration of less than 4 hours in A&E. The proportion of the number of attendances with a duration of less than 4 hours to the total number of attendances for each provider is also presented as a percentage. For the purposes of this comparison planned follow-up attendances are excluded from the A&E HES figures. It should be noted that some providers submit A&E data to Weekly Sit Reps, but do not submit A&E data to HES; therefore leading to a high number of empty fields in the HES columns. Additionally, some private providers have submitted an aggregated return to Weekly Sit Reps, but submitted site specific data to A&E HES (e.g. NLL – Peninsula Health).

Appendix 5: Table Definitions

This section contains descriptions of the column headers found in the published tables. Definitions for generic columns (common to all tables) are given first, followed by definitions for columns that are only in specific tables.

General columns

Number of A&E attendances

A count of the number of HES records submitted to the Secondary Uses Service (SUS), on behalf of hospital providers, that relate to A&E attendances that started during the 2013-14 HES year. The data presented in the tables have not been adjusted to account for shortfalls in the number of records submitted, or for missing or invalid clinical information (e.g. diagnosis).

Data completeness tables

The data completeness tables have the additional columns below:

Attendance category

An indication of whether a patient is making an initial or follow-up attendance within a particular A&E Department. The first attendance is the first in a series, or the only attendance, in a particular A&E episode. A planned follow-up A&E attendance is a subsequent planned attendance at the same department, and for the same incident as the first attendance. An unplanned follow-up A&E attendance is a subsequent unplanned attendance at the same department, and for the same incident as the first attendance.

A&E key fields

The fields that are used to aggregate data in the published tables and charts.

Organisation type

Healthcare provider type.

Attendance category tables

The attendance category tables have the additional columns below:

Gender

A derived field containing the gender of the patient.

Age group

A derived field containing the count of attendances relating to patients who fell within the following age groups (inclusive) when the attendance began: 0-4, 5-9, 10-14, 15, 16, 17, 18, 19, 20-24, 25-29, and in five-year age bands to 85-89, 90+ and unknown. The source field contains the age in whole years on arrival, calculated from arrival date and date of birth.

Month

The month of attendance of a patient in the A&E department. Derived from the arrival date field.

Day

The day of attendance of a patient in the A&E department. Derived from the arrival date field.

Referral method

The source of referral for each A&E episode.

Arrival method

The mode by which a patient arrived at an A&E department.

Arrival hour

The time of patient arrival in the A&E department. For 'urgent transport requests' this is the time the vehicle arrives at the specified destination.

Patient group

The reason for an A&E episode.

Attendance by assessment, diagnosis and treatment tables

The attendance by assessment, diagnosis and treatment tables have the additional columns below:

First A&E investigation

The A&E investigation description. This field contains a description of the initial A&E investigation based upon the first 2 characters of the A&E investigation code and only displays a code where it is unclassifiable against the A&E Investigation classification.

First A&E Diagnosis

The A&E diagnosis description at 2-character level covering the diagnosis condition. This field contains a description based on the diagnosis condition (first 2 characters) of the A&E diagnosis and only displays a code where it is unclassifiable against the A&E Diagnosis classification.

First A&E treatment

The A&E treatment description at 2-character level covering the treatment. This field contains a description based upon the treatment (first 2 characters) of the A&E treatment code and only displays a code where it is unclassifiable against the A&E Investigation classification.

Duration and disposal tables

The duration and disposal tables have the additional columns below:

Disposal Method

The way in which an A&E attendance ends.

Provider description

A derived field that gives the name of a provider. The field is derived from the provider code field.

Provider Code

A provider code is a unique code that identifies an organisation acting as a healthcare provider. It contains either a 3 digit or 5 digit provider code, which can be used to identify the provider type (NHS Trust, Private, etc.)

Number of attendances with a duration of less than 4 hrs in A&E

The time (expressed to the nearest minute) between the patient's arrival, and the time the A&E attendance has concluded (i.e. the department is no longer responsible for the care of the patient).

Appendix 6: Data Used in Media Press Release

Table 4: Type 1 attendances by Area Team of residence

Area Team code	Area Team	2013-14	
		Attendances	Rate per 1,000 population
Q53	Arden, Herefordshire and Worcestershire	399,131	243.8
Q64	Bath, Gloucestershire, Swindon and Wiltshire	288,001	194.0
Q54	Birmingham and the Black Country	790,159	322.0
Q65	Bristol, North Somerset, Somerset and South Gloucestershire	310,202	213.8
Q44	Cheshire, Warrington and Wirral	322,777	262.6
Q49	Cumbria, Northumberland, Tyne and Wear	549,735	284.3
Q55	Derbyshire and Nottinghamshire	483,194	243.1
Q66	Devon, Cornwall and Isles of Scilly	350,977	207.3
Q45	Durham, Darlington and Tees	298,801	253.0
Q56	East Anglia	537,279	218.3
Q57	Essex	448,775	256.0
Q46	Greater Manchester	918,159	334.1
Q58	Hertfordshire and the South Midlands	663,340	244.9
Q67	Kent and Medway	473,622	268.4
Q47	Lancashire	376,031	256.0
Q59	Leicestershire and Lincolnshire	342,771	195.0
Q71	London	2,544,928	302.4
Q48	Merseyside	362,371	303.9
Q50	North Yorkshire and Humber	423,161	253.1
Q60	Shropshire and Staffordshire	352,230	222.3
Q51	South Yorkshire and Bassetlaw	442,793	300.8
Q68	Surrey and Sussex	694,497	254.2
Q69	Thames Valley	403,583	195.8
Q70	Wessex	561,084	206.1
Q52	West Yorkshire	720,493	313.0
	England Unknown	44,045	
	England Total	14,102,139	261.8
	Other (Not England)	208,301	

Source: Health and Social Care Information Centre

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