

Accident and Emergency Attendances in England (Experimental Statistics) 2008-09

January 2010

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Executive summary

This is the second publication of the accident and emergency (A&E) attendance data within Hospital Episode Statistics (HES). It covers the period from April 2008 to March 2009 and draws on nearly 13.8 million detailed records of attendances at major A&E departments, single specialty A&E departments, walk-in centres and minor injury units in England.

These records provide a much wider variety of statistics about patterns of service use in A&E than is available from any other national data source. During the period covered by this report, not all A&E providers have completed data submissions and in some instances where it has been submitted data quality is considered poor. However, there have been improvements from last year and we hope this will continue.

Publishing 2008-09 A&E HES data, as experimental statistics, enables:

- comparisons to be made with last year (2007-08)
- conclusions to be presented for discussion
- the uses of this potentially rich dataset to be promoted and highlighted
- information on data coverage and quality to be made available at a local level to encourage the continual coverage improvements in these areas, supported by engagement between The NHS Information Centre (The NHS IC) and NHS organisations
- the comparison of the dataset against other data sources, such as the Quarterly Monitoring of Accident and Emergency (QMAE) return, the official source of A&E information, to highlight areas for further investigation.

Key messages

- A&E HES data contains almost 13.8 million accident and emergency attendances from April 2008 to March 2009 at major A&E departments, single specialty A&E departments, walk-in centres and minor injury units in England.
- Data is incomplete; there are 13.3 million attendances reported in A&E HES (excluding planned follow-up appointments), compared to 19.6 million reported in Quarterly Monitoring of Accident and Emergency (QMAE) aggregate data for the equivalent period. Although incomplete, this is an improvement from last year.
- There are 161 providers with attendances in A&E HES compared to 256 providers that have submitted A&E attendances via QMAE.
- Of the 95 providers that have no attendances showing under A&E HES data, 84 of them are primary care trusts (PCTs), while 11 are trusts.

Target audience

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.

Background

A&E departments

The role of major accident and emergency (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.

Once a patient arrives at an A&E department a doctor or nurse will assess their condition and decide on further action. A patient may have to wait on arrival at an A&E department before they are seen by either a doctor or nurse.

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

A&E HES data consists of individual records of patient care that are held within the HES database. These have been submitted from local NHS providers' patient administration systems (PAS), via the Secondary Uses Service (SUS). SUS is a national data warehouse that has been delivered as part of the National Programme for IT.

Quarterly Monitoring of Accident and Emergency (QMAE)

The collection process used for A&E HES data is very different from the process used for collecting the other nationally published source of information on A&E activity, the Quarterly Monitoring of Accident and Emergency (QMAE) return. QMAE is based on counts made in local NHS organisations and submitted to the Department of Health in aggregate form.

Comparison between sources

These two different sources of A&E data complement each other. When information can be captured directly from NHS organisations' PAS it has the following advantages:

- There is a far wider set of data items available that can be aggregated in a variety of ways and so can be used to answer a much greater number of questions.
- Data can be linked, in a secure environment and with appropriate permissions, to other datasets, such as the admitted patient care (APC) HES dataset and the Office for National Statistics (ONS) mortality dataset. This enables much richer analysis and the potential to measure health outcomes. This linkage work is currently being carried out by The NHS IC.
- There is the potential to analyse tariff values using other data from SUS.
- NHS organisations capture this information in their own local systems and most use it for internal hospital management. In these cases, there is no additional burden on them in submitting A&E data, once their IT infrastructure is in place.

To realise these advantages fully, the quality and coverage of A&E HES data needs to be improved, with the support of providers throughout England.

Consequently, the QMAE 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 datasets.

Publishing the 2008-09 A&E HES data is a continuation from last year (2007-08), which represented the first publication, in order that these publications can contribute to the improvement of both the quality and coverage of A&E data submitted to HES. Through presenting the data available from A&E HES, it is hoped this will stimulate discussion and ultimately contribute to enhancements in patient care.

Table 2.1 summarises the main differences between the frequency, content and usage of the two datasets.

Table 2.1: Summary of QMAE and A&E HES datasets

| Name | Frequency | Detail included in collection | Current uses |
|---|--|--|--|
| Quarterly Monitoring of Accident and Emergency (QMAE) return | Quarterly | Aggregate number of attendances, number of breaches of the 4 hour standard ¹ , admissions via A&E and time from decision to admit and admission. | National performance monitoring, including monitoring of the 4 hour standard. |
| Accident and Emergency Hospital Episode Statistics (A&E HES) | Providers can submit data at any point. Currently, monthly (cumulative) snapshots are included in HES. | Record level detail for each patient attending A&E departments, including details of patient, demographics, time of arrival and departure, and other times in between, details of any diagnosis, assessment and treatment ² . | Specific analyses that only this dataset can support, with appropriate caveats. Data quality comparisons and monitoring for quality improvement. |

Information in A&E HES

The source data for A&E HES is the commissioning data set (CDS), which includes records for attendances at major A&E departments, single specialty A&E departments, walk-in centres and minor injury units. Any one patient can have multiple attendances, which may be in the same or different time period for the same or different condition.

Record-level data is extracted from the Secondary Uses Service for the HES system on a monthly basis and used to build up a set of records for the year.

Each attendance record contains information about:

- The patient, including gender, age and other demographics
- The organisation where the patient was seen
- Time of arrival, conclusion, assessment and departure
- Diagnosis, investigation and treatment detail.

Appendix 5 provides a link to the Connecting for Health website, which provides a list of the fields submitted as part of the CDS and summarises what each field contains. The website also indicates whether a field is mandatory (required to be submitted) or optional (to be submitted if available and if the organisation wishes to do so).

Not all of the fields in the CDS are submitted to the A&E HES database. In particular, certain data items that directly identify patients are not available in order to maintain confidentiality.

Fields available in A&E HES data can be analysed in many ways and some of these analyses are included within this report. A&E HES data not only contains most of the fields submitted as part of the CDS but it also contains a number of fields which are derived from the CDS fields.

Where additional information is required this can be requested via The NHS IC (e-mail enquires@ic.nhs.uk or call 0845 300 6016).

¹ Four-hour standard is the total time spent in A&E from the time that the patient arrives in A&E to when the patient leaves the department on admission, transfer to another agency or organisation, or discharge.

² The HESonline website [<http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=289>]

Improving data quality

This second release of A&E HES data continues to be labelled as 'experimental statistics'. There have been improvements in the coverage and quality of data provided to A&E HES compared to last year, with relative coverage levels improving in A&E HES.

Table 2.2: Coverage differences between A&E HES and QMAE, 2008-09 and 2007-08

| | A&E HES ³ | QMAE ⁴ | Coverage ⁵ |
|----------------|----------------------|-------------------|-----------------------|
| 2008-09 | 13,266,413 | 19,588,017 | 67.7% |
| 2007-08 | 11,900,146 | 19,127,993 | 62.2% |
| Change | 11.5% | 2.4% | |

The 'experimental statistics' status enables the release of inaccessible data into the public domain within a controlled environment, seeking to involve users actively in improving data quality. At the same time it allows the data to be used by experts who can accommodate and compensate for any identified data deficiencies.

The NHS IC will also provide specific advice and guidance to providers that are having difficulties with submitting A&E data, via the HES Data Quality team (email enquires@ic.nhs.uk).

As detailed in this report, there are also some definitional differences between A&E HES data and QMAE data. The main difference is that QMAE 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 QMAE planned appointments are excluded, as shown in Table 2.3.

Table 2.3: Attendances recorded by type in A&E HES and QMAE, 2008-09

| Attendance category | 2008-09 | | | |
|--|-------------------|------------------------|-------------------|------------------------|
| | A&E HES | | QMAE | |
| | Number | % of total attendances | Number | % of total attendances |
| First A&E attendance | 12,816,256 | 92.9% | 18,820,828 | 96.1% |
| Planned follow-up A&E attendance | 527,659 | 3.8% | - | - |
| Unplanned follow-up A&E attendance | 295,369 | 2.1% | 417,905 | 2.1% |
| Not known | 154,788 | 1.1% | - | - |
| Total (all attendances) | 13,794,072 | 100.0% | 19,588,017 | 100.0% |
| Total (Excluding planned follow-up) ⁶ | 13,266,413 | 96.2% | 19,588,017 | 100.0% |

Coverage within A&E HES has improved over the past year, both in terms of the comparison with QMAE and completed data fields within A&E HES. However, while there is an improvement in the percentage of valid records submitted it should be noted that in some fields this may be misleading.

³ Excluding attendances which are planned follow-up appointments

⁴ QMAE data is published quarterly by the Department of Health

[<http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/Perfomancedataandstatistics/AccidentandEmergency/index.htm>]

⁵ Coverage is the percentage of A&E HES attendances (excluding planned follow-up appointments) against QMAE attendances

⁶ Comparable to QMAE

For example, the A&E 'patient group' field (Table 3.7), where although the percentage of valid records is 95.8% (13,212,647), 90% (12,430,602) of these are recorded as either 'other accident' or 'other'. These could be the most appropriate code for an individual's 'reason' for being in A&E if the reason is not related to any of the other codes available within this field, or it could be that some providers are not coding this field fully.

The fields available within A&E HES are provided within the A&E HES Data Dictionary [<http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=289>].

Table 2.4: Number of valid records in HES by A&E key field, 2008-09 and 2007-08

| A&E key fields | 2008-09 | | 2007-08 | |
|--|-------------------------|--------------------|-------------------------|--------------------|
| | Number of valid records | % of valid records | Number of valid records | % of valid records |
| Total number of records | 13,794,072 | | 12,318,051 | |
| A&E Arrival Mode | 13,540,474 | 98.2% | 12,049,509 | 97.8% |
| A&E Department Type (from April 2007) | 5,604,697 | 40.6% | 16,383 | 0.1% |
| A&E Attendance Category | 13,639,284 | 98.9% | 12,237,385 | 99.3% |
| A&E Attendance Disposal | 13,767,706 | 99.8% | 12,281,166 | 99.7% |
| A&E Incident Location Type | 12,726,577 | 92.3% | 11,274,953 | 91.5% |
| A&E Patient Group | 13,212,647 | 95.8% | 11,759,586 | 95.5% |
| Source of Referral for A&E | 13,623,033 | 98.8% | 12,046,754 | 97.8% |
| A&E Arrival Date | 13,794,072 | 100.0% | 12,318,051 | 100.0% |
| A&E Arrival Time | 13,794,072 | 100.0% | 12,318,051 | 100.0% |
| A&E Initial Assessment Time | 10,744,746 | 77.9% | 9,329,364 | 75.7% |
| A&E Time Seen For Treatment | 11,464,250 | 83.1% | 10,195,865 | 82.8% |
| A&E Attendance Conclusion Time | 12,041,043 | 87.3% | 10,725,082 | 87.1% |
| A&E Departure Time | 13,445,355 | 97.5% | 11,808,133 | 95.9% |
| First A&E Diagnosis - 2 Character Level ⁷ | 7,805,270 | 56.6% | 7,348,207 | 59.7% |
| First A&E Investigation - 2 Character Level ⁸ | 9,008,765 | 65.3% | 7,896,468 | 64.1% |
| First A&E Treatment - 2 Character Level ⁹ | 8,003,000 | 58.0% | 7,806,010 | 63.4% |

Codes were considered to be valid if they matched to one of the A&E CDS data dictionary values for the specified field and were considered invalid if they did not match to 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 dataset. The analysis contained within this report only looks at the first (or primary) diagnosis, investigation and treatment 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.

⁷ The A&E diagnosis is a six character code made up of diagnosis condition (n2), sub-analysis (n1), anatomical area (n2) and anatomical side (an1)

⁸ The A&E investigation is a six character code made up of investigation (n2) and local sub-analysis (up to an4)

⁹ The A&E treatment is a six character code made up of treatment (n2), sub-analysis (n1) and local use (up to an3)

Findings

Summary of current limitations

There are some limitations of A&E HES data for 2008-09:

- Coverage: there are 95 providers who have not submitted data to A&E HES
- Validity: many of the submitted records use invalid codes in the clinical fields
- Accuracy of individual fields:
 - High use of default categories in diagnosis and treatment codes
 - Some fields contain high numbers of the same value, such as the arrival and departure time fields where there are many attendances showing arrival and departure time at exactly midnight (00:00hr)
- Inconsistency between data captured in the A&E CDS when compared to the same data collated for QMAE.

The NHS IC would welcome feedback from providers and others on the limitations of the A&E HES data for 2008-09 highlighted within this publication, including those listed above. Please refer to the details in Section 6 about how to provide your feedback.

Provider level analysis

Provider level analysis is available within the supporting Excel document [A&E Attendances - Provider level analysis (Experimental statistics) 2008-09]. Also provided within Appendix 1 of this report are provider level comparisons relating to coverage between A&E HES and QMAE.

The accompanying Excel spreadsheet provides information at provider level (where submitted) relating to:

- Number of attendances
- Gender and age group profiles
- Arrival to A&E, by day and time
- Arrival method
- Comparison with QMAE
- Duration spent in A&E department
- Method of discharge
- Average duration in A&E department.

Where the comparison information is blank for A&E HES within Appendix 1 this signifies that the provider, having submitted data to QMAE, has not submitted data to A&E HES. Table 3.1 provides information relating to the number of providers who have not submitted data to A&E HES. It also provides a comparison between the two accident and emergency data sources and their relative coverage levels; 93% of trusts submit data to A&E HES, while 17% of PCTs provide this information. There have been small improvements in coverage from last year.

Table 3.1: Comparison of 2008-09 and 2007-08 A&E attendances in A&E HES against those reported in QMAE, broken down by organisation type

| Organisation type | 2008-09 | | 2007-08 | |
|------------------------|-------------------|-------------------|-------------------|-------------------|
| | HES | QMAE | HES | QMAE |
| All providers | 161 | 256 | 148 | 253 |
| Trusts | 144 | 155 | 134 | 158 |
| PCT ¹⁰ | 17 | 101 | 14 | 95 |
| All attendances | 13,266,413 | 19,588,017 | 11,900,304 | 19,127,993 |
| Trusts | 12,870,757 | 15,222,825 | 11,670,246 | 15,356,072 |
| PCT | 395,656 | 4,365,192 | 230,058 | 3,771,921 |

Overall coverage

Total attendances

While QMAE remains the official source of A&E attendance numbers and 4 hour wait target information, A&E HES is able to offer more detailed analysis. As stated previously, A&E HES coverage (68% of the QMAE attendances) has improved since the first publication of these experimental statistics last year (62%), aligning more closely to QMAE data.

With this in mind, this report focuses on the information available and submitted by providers to A&E HES as a rich data source, providing lower level trends and valuable analytical information which can be used to direct and inform decision making.

In 2008-09 there were 13.8 million A&E attendances (all) recorded within HES, representing an increase of 12% from the previous year. This difference is largely driven by coverage improvements within A&E HES. Over the same period A&E attendance levels reported within QMAE increased by 2%.

Attendance records in A&E HES data can be split into groups based on whether the attendance was a first¹¹ or a follow-up¹² attendance. Furthermore, follow-up attendances can be split into whether the attendance was planned or unplanned.

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

Using this definition, the number of total attendances when derived from A&E HES is 13.3 million. Therefore, there are 6.3 million fewer attendances than those reported in QMAE for 2008-09 (refer also to Table 2.3).

¹⁰ PCT includes independent sector

¹¹ First Attendance to A&E - the first in a series or the only attendance

¹² Follow-up Attendance to A&E - Planned: a subsequent planned attendance at the same department and for the same incident as the first attendance. Unplanned: a subsequent unplanned attendance at the same department and for the same incident as the first attendance. (Source: A&E HES Data Dictionary
<http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=289>)

Table 3.2: A&E attendances by attendance category, 2008-09 and 2007-08

| Attendance category | 2008-09 | | 2007-08 | |
|---|-------------------|------------------------|-------------------|------------------------|
| | Number | % of total attendances | Number | % of total attendances |
| First A&E attendance | 12,816,256 | 92.9% | 11,522,799 | 93.5% |
| Planned follow-up A&E attendance | 527,659 | 3.8% | 417,905 | 3.4% |
| Unplanned follow-up A&E attendance | 295,369 | 2.1% | 296,681 | 2.4% |
| Not known | 154,788 | 1.1% | 80,666 | 0.7% |
| Total (all attendances) | 13,794,072 | - | 12,318,051 | - |
| Total (excluding planned follow-up)¹³ | 13,266,413 | 96.2% | 11,900,146 | 96.6% |

Accident and emergency (A&E) attendances

Who attends A&E?

Despite the improvements in coverage, the demographic profile of patients who use A&E departments has remained relatively stable when compared to 2007-08 data. Table 3.3 shows that in 2008-09 males are marginally the main users of A&E departments in England, slightly down by 0.2 percentage points from 2007-08.

Table 3.3: A&E attendances by gender, 2008-09 and 2007-08

| Gender | 2008-09 | | 2007-08 | |
|--------------|---------------------------|------------|---------------------------|------------|
| | Number of A&E attendances | Percentage | Number of A&E attendances | Percentage |
| Male | 7,158,512 | 51.9% | 6,416,419 | 52.1% |
| Female | 6,564,540 | 47.6% | 5,845,021 | 47.5% |
| Unknown | 71,020 | 0.5% | 56,611 | 0.4% |
| Total | 13,794,072 | | 12,318,051 | |

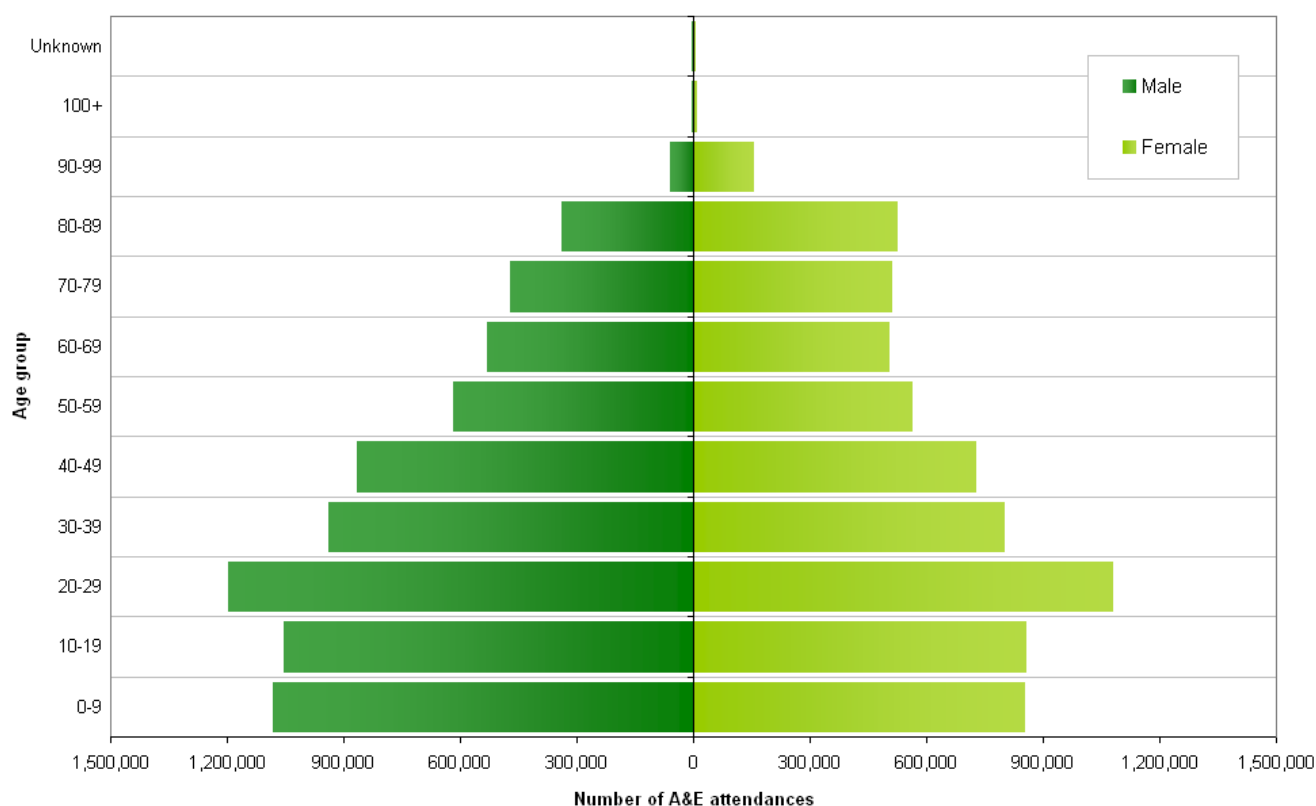
When focusing specifically on age groups (see Table 3.4), again these have changed very little in terms of the underlying distribution from last year. The age group with the largest number of A&E attendances is for those aged 20 – 29 years, of which the largest proportion are males (see Chart 3.1). Almost 45% of A&E attendances are for people aged 29 or under (2008-09).

¹³ Comparable with QMAE

Table 3.4: A&E attendances by age group, 2008-09 and 2007-08

| Age group | 2008-09 | | 2007-08 | |
|-----------|-----------|------------|-----------|------------|
| | Number | Percentage | Number | Percentage |
| 0-9 | 1,937,963 | 14.0% | 1,736,586 | 14.1% |
| 10-19 | 1,916,610 | 13.9% | 1,775,031 | 14.4% |
| 20-29 | 2,281,334 | 16.5% | 2,041,981 | 16.6% |
| 30-39 | 1,742,829 | 12.6% | 1,593,210 | 12.9% |
| 40-49 | 1,597,425 | 11.6% | 1,404,411 | 11.4% |
| 50-59 | 1,182,733 | 8.6% | 1,033,300 | 8.4% |
| 60-69 | 1,035,865 | 7.5% | 886,748 | 7.2% |
| 70-79 | 983,427 | 7.1% | 842,406 | 6.8% |
| 80-89 | 865,588 | 6.3% | 720,805 | 5.9% |
| 90-99 | 214,734 | 1.6% | 185,830 | 1.5% |
| 100+ | 9,377 | 0.1% | 7,150 | 0.1% |
| Unknown | 26,187 | 0.2% | 90,593 | 0.7% |

Chart 3.1: A&E attendances by gender and age group, 2008-09



When do A&E attendances occur?

Notionally, there is a perception that A&E departments will be busier on Friday and Saturday nights. This is not corroborated in A&E HES data. A&E departments are usually busier on a Monday (especially mornings); Fridays and Saturdays are generally amongst the quieter days in terms of number of A&E attendances.

Table 3.5: A&E attendances by day, 2008-09 and 2007-08

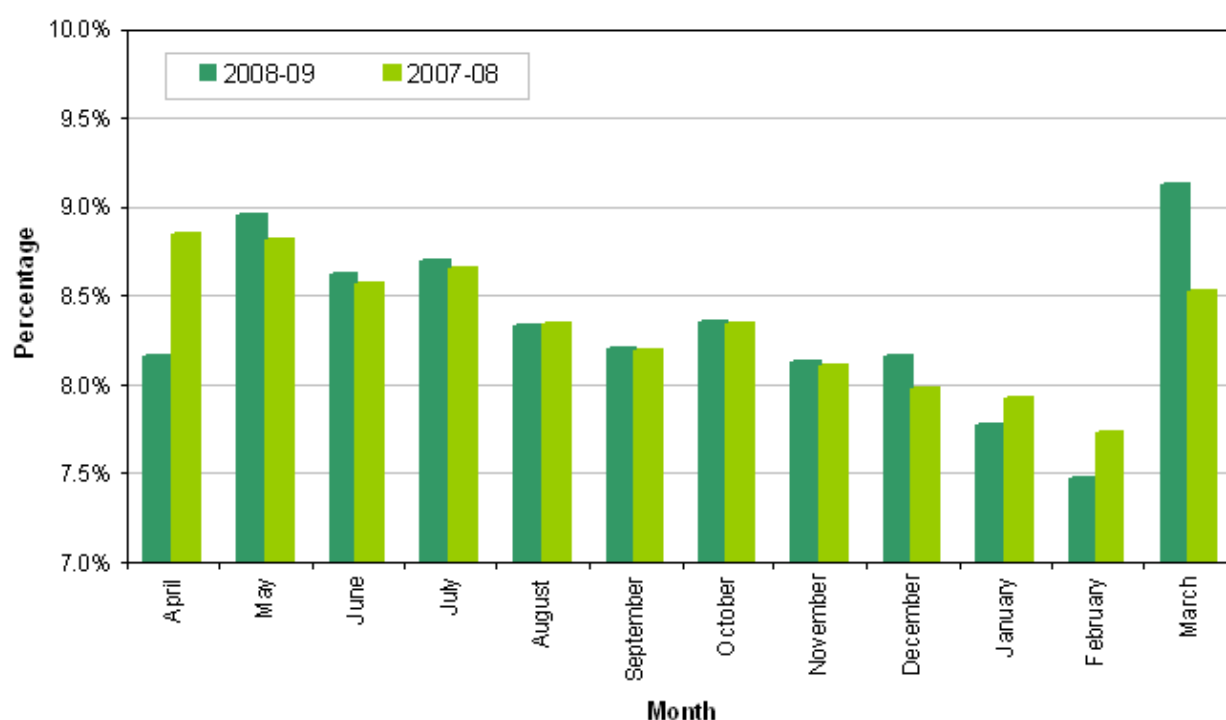
| | 2008-09 | | 2007-08 | |
|--------------|-------------------|------------|-------------------|------------|
| Day | Number | Percentage | Number | Percentage |
| Monday | 2,186,095 | 15.8% | 1,972,734 | 16.0% |
| Tuesday | 2,000,358 | 14.5% | 1,742,307 | 14.1% |
| Wednesday | 1,916,703 | 13.9% | 1,708,482 | 13.9% |
| Thursday | 1,916,262 | 13.9% | 1,704,822 | 13.8% |
| Friday | 1,918,415 | 13.9% | 1,694,373 | 13.8% |
| Saturday | 1,898,654 | 13.8% | 1,695,912 | 13.8% |
| Sunday | 1,957,585 | 14.2% | 1,799,421 | 14.6% |
| Total | 13,794,072 | | 12,318,051 | |

Table 3.6: A&E attendances by month, 2008-09 and 2007-08

| | 2008-09 | | 2007-08 | |
|--------------|-------------------|------------|-------------------|------------|
| Month | Number | Percentage | Number | Percentage |
| April | 1,125,175 | 8.2% | 1,090,535 | 8.9% |
| May | 1,235,891 | 9.0% | 1,085,820 | 8.8% |
| June | 1,189,715 | 8.6% | 1,055,606 | 8.6% |
| July | 1,199,422 | 8.7% | 1,066,035 | 8.7% |
| August | 1,149,472 | 8.3% | 1,026,979 | 8.3% |
| September | 1,131,584 | 8.2% | 1,008,982 | 8.2% |
| October | 1,152,728 | 8.4% | 1,027,328 | 8.3% |
| November | 1,121,270 | 8.1% | 998,048 | 8.1% |
| December | 1,126,183 | 8.2% | 982,490 | 8.0% |
| January | 1,072,069 | 7.8% | 975,036 | 7.9% |
| February | 1,031,699 | 7.5% | 951,744 | 7.7% |
| March | 1,258,864 | 9.1% | 1,049,448 | 8.5% |
| Total | 13,794,072 | | 12,318,051 | |

All A&E attendances (arrival month) are recorded within A&E HES; the number of attendances has increased across the months compared to last year as coverage has improved. The distribution of A&E attendances compared to 2007-08 is very similar. The number of A&E attendances recorded (submitted) in March is generally higher, some of this could be attributed to providers submitting data in bulk.

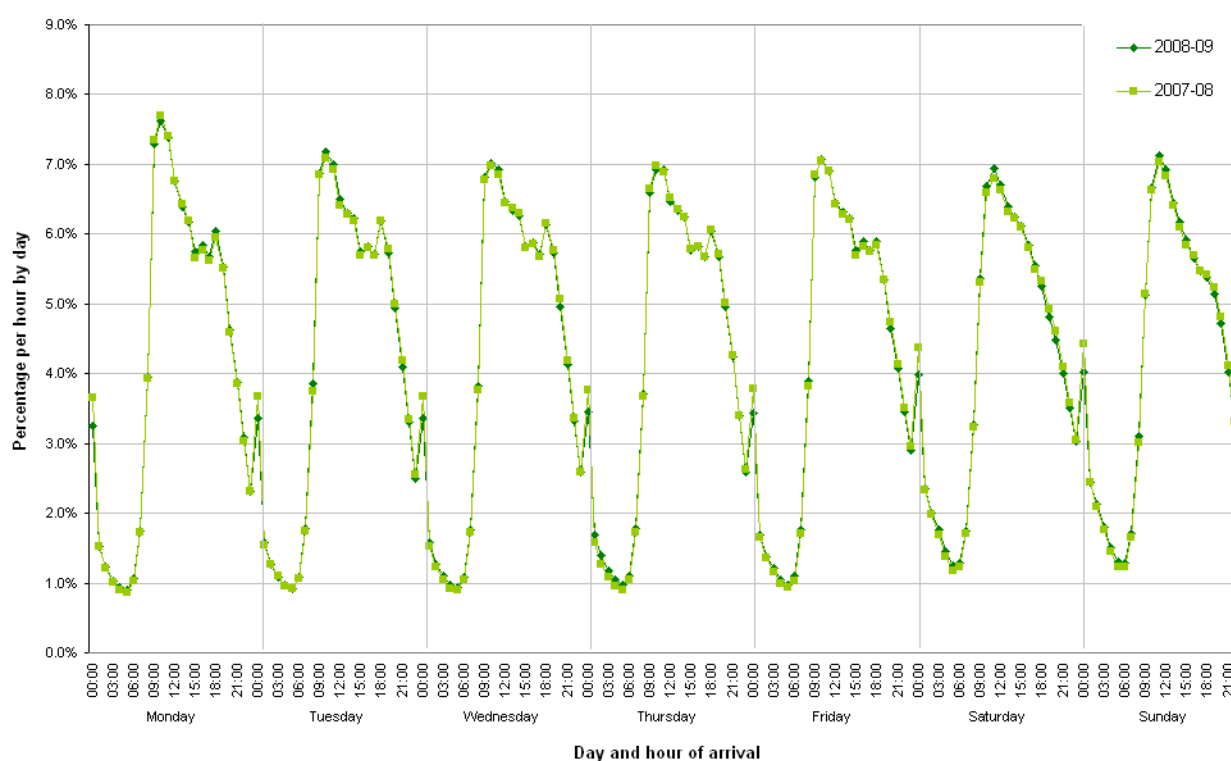
Chart 3.2: A&E attendances by month of arrival, 2008-09 and 2007-08



When looking at the day and hour of arrival of A&E attendances, the busiest day is Monday, the busiest time of arrival is 10am (hour). The trend for the arrival time / day is relatively similar for all weekdays; there is a slight variation to the underlying trend on a weekend, which doesn't see the 'post-work' peak at about 6pm.

Interestingly, despite the changes in A&E attendance numbers and the people visiting these departments, these trends are remarkably similar between 2008-09 and 2007-08. These percentages (per day) are shown in Chart 3.3. This stability should prove beneficial to providers when arranging staffing levels / requirements.

Chart 3.3: A&E attendances by day and hour of arrival (All)



Referral method

Table 3.7 shows that the majority of A&E attendances are self referred some 66% (9,071,194) in 2008-09, a small increase from 2007-08. Referrals to A&E from general practitioners have remained stable, representing 6.1% of all attendances. Indeed all referral methods have remained stable when compared to 2007-08 data, with the exception of 'not known' which has decreased by 1 percentage point, a consequence of recording improvements.

Table 3.7: A&E attendances by referral method, 2008-09 and 2007-08

| Referral method | 2008-09 | | 2007-08 | |
|-------------------------------------|-------------------|------------|-------------------|------------|
| | Number | Percentage | Number | Percentage |
| Self referral | 9,071,194 | 65.8% | 8,006,971 | 65.0% |
| Other | 1,748,129 | 12.7% | 1,543,399 | 12.5% |
| Emergency services | 1,229,429 | 8.9% | 1,055,503 | 8.6% |
| General Medical Practitioner | 839,264 | 6.1% | 749,630 | 6.1% |
| Health care provider: same or other | 386,054 | 2.8% | 320,782 | 2.6% |
| Police | 175,348 | 1.3% | 192,270 | 1.6% |
| Not known | 171,039 | 1.2% | 271,297 | 2.2% |
| Work | 99,746 | 0.7% | 98,026 | 0.8% |
| Educational establishment | 53,124 | 0.4% | 58,092 | 0.5% |
| Local authority social services | 17,089 | 0.1% | 15,864 | 0.1% |
| General Dental Practitioner | 3,205 | 0.0% | 5,866 | 0.0% |
| Community Dental Service | 451 | 0.0% | 351 | 0.0% |
| Total | 13,794,072 | | 12,318,051 | |

A&E attendances where the referral source is the emergency services account for 8.9% of all attendances in 2008-09, of these 90% (1,100,191) are taken to hospital by ambulance.

Arrival method

Table 3.8 shows that nearly a quarter of A&E attendances in 2008-09 arrived in an ambulance or helicopter. This is similar to last year.

Table 3.8: A&E attendances by arrival method, 2008-09 and 2007-08

| Arrival method | 2008-09 | | 2007-08 | |
|-----------------------------------|-------------------|------------|-------------------|------------|
| | Number | Percentage | Number | Percentage |
| Arrival by ambulance / helicopter | 3,379,694 | 24.5% | 2,867,180 | 23.3% |
| Other arrival method | 10,160,780 | 73.7% | 9,182,329 | 74.5% |
| Unknown | 253,598 | 1.8% | 268,542 | 2.2% |
| Total | 13,794,072 | | 12,318,051 | |

Within Section 4: Arrival by ambulance, specific focus is provided for those A&E attendances where the patient arrived at the department by ambulance / helicopter.

Reason for A&E attendance

Table 3.9: A&E attendances by patient group, 2008-09 and 2007-08

| Patient group | 2008-09 | | 2007-08 | |
|-----------------------|-------------------|------------|-------------------|------------|
| | Number | Percentage | Number | Percentage |
| Other | 8,754,164 | 63.5% | 7,689,063 | 62.4% |
| Other accident | 3,676,438 | 26.7% | 3,331,231 | 27.0% |
| Not known | 581,425 | 4.2% | 558,465 | 4.5% |
| Sports injury | 274,056 | 2.0% | 252,505 | 2.0% |
| Road traffic accident | 221,174 | 1.6% | 211,384 | 1.7% |
| Assault | 181,568 | 1.3% | 175,927 | 1.4% |
| Deliberate self-harm | 101,670 | 0.7% | 94,488 | 0.8% |
| Brought in dead | 1,934 | 0.0% | 2,036 | 0.0% |
| Firework injury | 1,643 | 0.0% | 2,952 | 0.0% |
| Total | 13,794,072 | | 12,318,051 | |

Within the reason for attendance field, 96% of entries are valid records. However, the majority of these 12,430,602 (or 90% of all records) are classified as either 'other accident' or 'other'. Taking this into consideration, this field should be used with caution.

However, there is useful information which could be used when looking specifically at those A&E attendances attributed to 'road traffic accident', 'assault', 'deliberate self-harm' or 'sports injury'.

When looking specifically at these 'reasons' why an A&E attendance has been necessary, by hour and day there are some interesting trends, these can be seen in Charts 3.4 to 3.7. Within this data there are some notable peaks at 00:00, some of which can be attributed to known data quality issues.

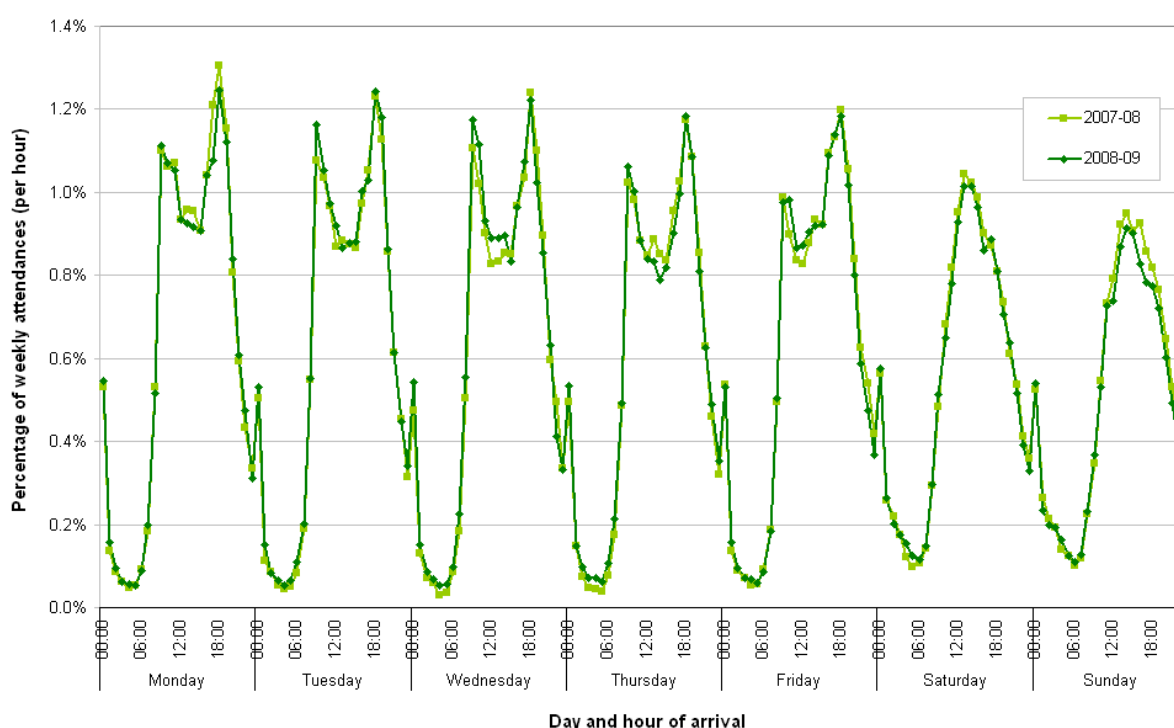
In examining the underlying provider level data in more detail, it may be the case that some attendances recorded as 'other accident' and 'other' are recorded incorrectly and should be recorded as 'road traffic accident', 'assault', 'deliberate self-harm' or 'sports injury'. The extent to which this is occurring is unknown. Analysis reflects the data submitted to HES; coding accuracy should improve over time. Conclusions should be treated with caution; patterns are likely to be more reliable than volume figures.

The analysis provided below focuses specifically on the provided data and looks to give an understanding of the data available from A&E HES.

Road accidents

Road accidents accounted for about 1.6 per cent of all recorded attendances (221,174 out of 13,794,072). There are peaks in the number of A&E attendances during the morning and evening rush hours. There are fewer accident related attendances over the weekend.

Chart 3.4: A&E attendances by day and hour of arrival (road accidents)



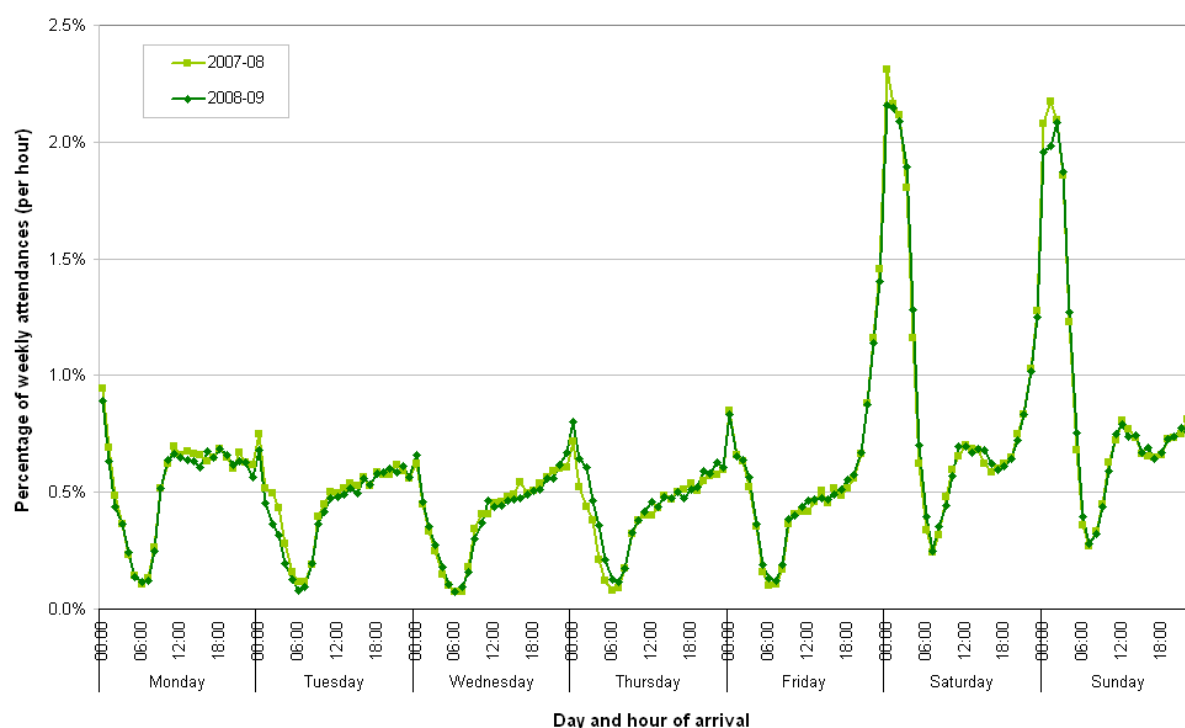
Note: Peaks at 00:00 may be exaggerated due to poor data quality.

Assaults

Assaults accounted for about 1.3 per cent of all recorded attendances (181,568 out of 13,794,072). There is a clear pattern Monday to Thursday, which increases on Friday and Saturday nights.

Please note: This data relates to all A&E attendances for assault, previous data published by the NHS Information Centre on assault related specifically to those who had been admitted to hospital as an inpatient.

Chart 3.5: A&E attendances by day and hour of arrival (assaults)

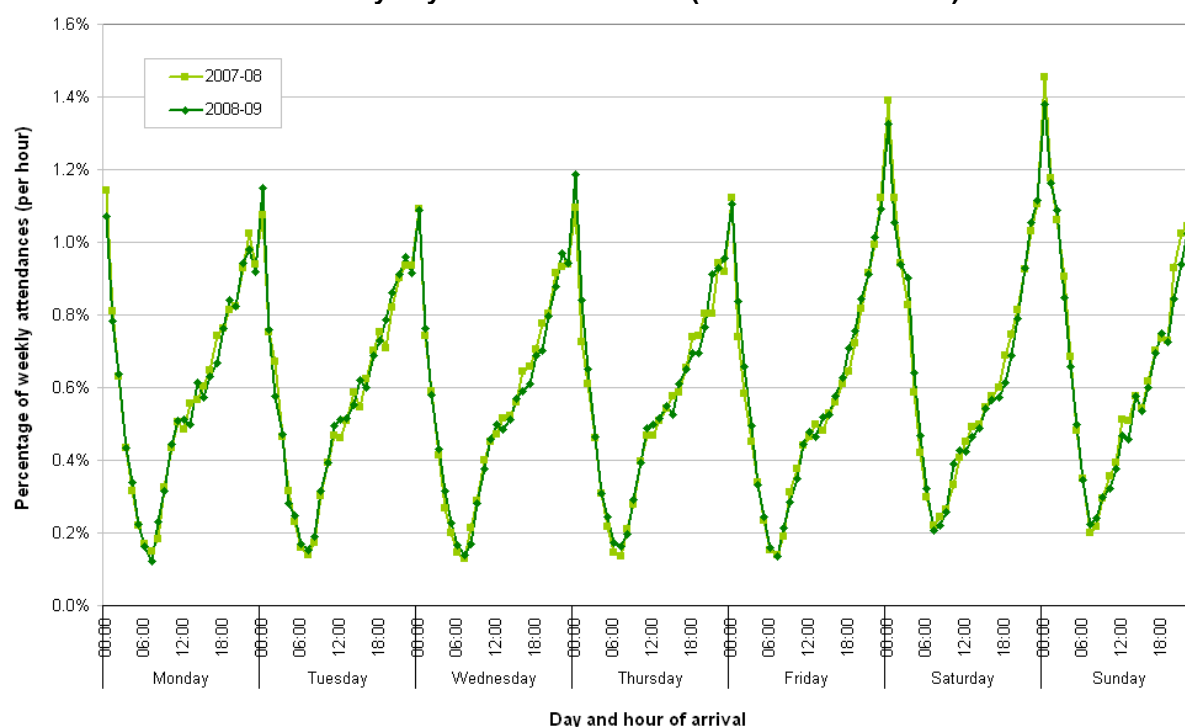


Note: Peaks at 00:00 may be exaggerated due to poor data quality.

Deliberate Self harm

Deliberate Self harm accounted for about 0.7 per cent of all recorded attendances (101,670 out of 13,794,072). There is a clear re-occurring pattern throughout the week, increasing slightly on Friday and Saturday evenings. The number of attendances increases throughout the day.

Chart 3.6: A&E attendances by day and hour of arrival (deliberate self harm)

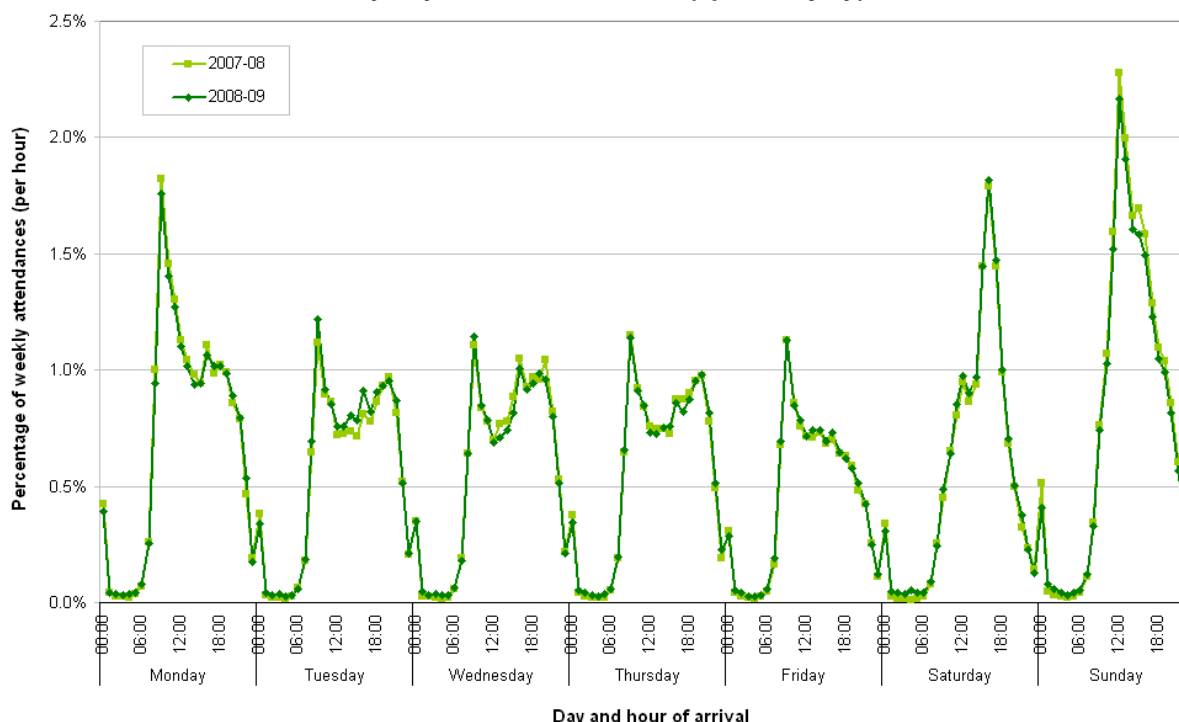


Note: Peaks at 00:00 may be exaggerated due to poor data quality.

Sports injury

Sports injuries accounted for about two per cent of all recorded attendances (274,056 out of 13,794,072). These are most likely to occur on Saturday and Sunday afternoons, with an additional influx on weekday mornings.

Chart 3.7: A&E attendances by day and hour of arrival (sports injury)



Note: Peaks at 00:00 may be exaggerated due to poor data quality.

Main investigation

Investigations can be requested to assist with any diagnosis during an A&E attendance. Not all attendances involve investigations. The A&E HES database can hold up to 12 investigation codes for each attendance. Analyses of investigations contained within this report are based on the first investigation code recorded for each attendance.

The A&E investigation coding scheme is the only scheme available for classifying investigation within the A&E Commissioning Data Set. It is mandatory¹⁴ for all providers to populate the 'first investigation' field using a valid A&E investigation code for each attendance.

The A&E investigation code is made up of two parts. The first part, made up of two characters, contains the code to identify the investigation that took place. The second part of the A&E investigation code can be up to four characters long and is used for local analysis only.

Appendix 2 shows a list of all the investigations within the A&E investigation field for all providers (where submitted). This list also includes options for 'none', where no investigation took place, and 'other', for any investigation not listed.

Table 3.10 shows that there are 13.8 million A&E attendance records in A&E HES, of these 66% (9,008,765) held a valid investigation code that matched to an A&E main investigation condition, while 34% were invalid (the provider did not submit valid data).

¹⁴ Mandatory fields are those that are required to be populated.

Table 3.10 A&E attendances by main investigation, 2008-09 and 2007-08

| Main investigation | 2008-09 | | 2007-08 | |
|--|------------------|---------------------------------|------------------|---------------------------------|
| | Number | Percentage (valid records only) | Number | Percentage (valid records only) |
| X-ray plain film | 3,482,978 | 38.7% | 3,198,790 | 40.5% |
| None | 2,266,170 | 25.2% | 1,479,094 | 18.7% |
| Other | 1,006,699 | 11.2% | 1,219,487 | 15.4% |
| Haematology | 559,183 | 6.2% | 550,359 | 7.0% |
| Biochemistry | 546,038 | 6.1% | 415,811 | 5.3% |
| Electrocardiogram | 362,776 | 4.0% | 367,663 | 4.7% |
| Urinalysis | 246,545 | 2.7% | 266,843 | 3.4% |
| Computerised tomography (exc genito urinary contrast examination/tomography) | 105,137 | 1.2% | 32,523 | 0.4% |
| Bacteriology | 98,270 | 1.1% | 74,638 | 0.9% |
| Cross match blood/group & save serum for later cross match | 84,377 | 0.9% | 64,622 | 0.8% |
| Total Valid records | 9,008,765 | 66.3% | 7,896,468 | 66.6% |
| Total Invalid records | 4,572,746 | 33.7% | 3,957,862 | 33.4% |

For the largest proportion of A&E attendances the first investigation is coded as 'X-ray plain film' (39%), for the year 2008-09, based on the data submitted to A&E HES.

Primary diagnosis

'Primary diagnosis' is the first diagnosis recorded for each A&E attendance. From April 2008, all providers are mandated to use the A&E diagnosis coding scheme, improving comparative analysis of diagnoses.

The A&E HES dataset provides two separate fields that can potentially be used to determine which diagnosis scheme is used. These are 'diagnosis scheme in use' and 'primary diagnosis'. The 'diagnosis scheme in use' field enables providers to submit details of which diagnosis coding scheme has been used, while the 'primary diagnosis' field contains the actual diagnosis code submitted. It is mandated for providers to populate and submit both of these fields.

Table 3.11 is a breakdown of primary diagnosis condition for all 13.8 million A&E attendance records in A&E HES for 2008-09 and 2007-08. The majority of valid A&E HES attendances within primary diagnosis information are coded as 'diagnosis not classifiable', representing 16% of all valid records, followed by 'laceration' (9%) and then 'dislocation/fracture/joint injury/amputation' (8%), replicating last year's top 3. There are 5,988,802 invalid records within this field, 3.1 percentage points higher than last year.

Table 3.11: A&E attendances by primary diagnosis, 2008-09 and 2007-08

| Primary diagnosis description | 2008-09 | | 2007-08 | |
|--|------------------|--------------------------|------------------|--------------|
| | Number | Percentage ¹⁵ | Number | Percentage |
| Diagnosis not classifiable | 1,266,514 | 16.2% | 1,247,456 | 17.0% |
| Laceration | 663,475 | 8.5% | 623,479 | 8.5% |
| Dislocation/fracture/joint injury/amputation | 644,563 | 8.3% | 619,867 | 8.4% |
| Sprain/ligament injury | 530,922 | 6.8% | 535,852 | 7.3% |
| Soft tissue inflammation | 473,055 | 6.1% | 433,500 | 5.9% |
| Contusion/abrasion | 442,501 | 5.7% | 437,146 | 5.9% |
| Gastrointestinal conditions | 413,656 | 5.3% | 388,367 | 5.3% |
| Respiratory conditions | 357,481 | 4.6% | 323,342 | 4.4% |
| Cardiac conditions | 278,586 | 3.6% | 251,488 | 3.4% |
| Nothing abnormal detected | 276,850 | 3.5% | 217,606 | 3.0% |
| Total Valid records | 7,805,270 | 56.6% | 7,348,207 | 59.7% |
| Null / blank | 4,703,418 | - | 3,612,526 | - |
| Unmatched | 1,285,384 | - | 1,357,318 | - |
| Total Invalid records¹⁶ | 5,988,802 | 43.4% | 4,969,844 | 40.3% |

Though there has been a decrease in the percentage of results that are valid it is hoped that over time, with providers operating under a single approach, both the quality and quantity of valid records will improve.

First treatment

First treatment is the primary clinical intervention that takes place for an A&E attendance. From April 2008 providers were mandated to use the A&E treatment coding scheme. As this is implemented over time by providers it should provide improvements to the analysis of treatment.

Analyses of A&E treatment in this report are based on the A&E treatment code. This report aims to exclude information where providers have submitted treatment data using a coding scheme other than the A&E treatment coding scheme.

The A&E HES dataset provides two separate fields that can potentially be used to determine which treatment scheme is used. These are 'treatment scheme in use' and 'first treatment'. The field 'treatment scheme in use' enables providers to submit details of which treatment scheme has been used, while the 'first treatment' field contains the actual treatment code submitted. It is mandated for providers to record and submit both of these fields.

Table 3.12 shows that there are 13.8 million A&E attendance records in A&E HES, of these 58% (8,003,000) held a valid treatment code that matched to an A&E main treatment condition, for 38% of these the first treatment was recorded as 'Guidance/advice only'. Whilst the remaining 42% of all A&E attendance records, are classified as invalid.

¹⁵ Percentage (of Valid records only)

¹⁶ Invalid records are recorded as either Null / blank or Unmatched

Table 3.12: A&E attendances by first treatment, 2008-09 and 2007-08

| First treatment description | 2008-09 | | 2007-08 | |
|--|------------------|-----------------------------|------------------|----------------------------|
| | Number | Percentage (valid records) | Number | Percentage (valid records) |
| Guidance/advice only | 3,020,024 | 37.7% | 2,801,648 | 35.9% |
| None (consider guidance/advice option) | 967,931 | 12.1% | 1,291,831 | 16.5% |
| Other (consider alternatives) | 550,421 | 6.9% | 664,555 | 8.5% |
| Observation / electrocardiogram, pulse oximetry / head injury / trends | 508,521 | 6.4% | 456,636 | 5.8% |
| Medication administered | 363,302 | 4.5% | 195,965 | 2.5% |
| Intravenous cannula | 357,366 | 4.5% | 336,022 | 4.3% |
| Dressing | 279,632 | 3.5% | 291,920 | 3.7% |
| Prescription (retired 2006) | 267,461 | 3.3% | 365,882 | 4.7% |
| Prescription/medicines prepared to take away | 232,482 | 2.9% | 172,898 | 2.2% |
| Recording vital signs | 206,493 | 2.6% | 132,663 | 1.7% |
| Bandage/support | 157,837 | 2.0% | 122,470 | 1.6% |
| Total valid records | 8,003,000 | 58.0% | 7,806,010 | 63.4% |
| Total invalid records | 5,791,072 | 42.0% | 4,512,041 | 36.6% |

The quantity of valid A&E diagnosis codes submitted for 2008-09 has increased from 2007-08, however, the proportion of valid codes has decreased from 2007-08. Therefore, it continues to be difficult to carry out detailed analysis using the diagnosis code field. Some of the issues with submitted A&E diagnosis codes are:

- Incomplete diagnosis code: providers that have used the A&E diagnosis code have not always submitted the sub-analysis, anatomical area or anatomical side.
- Inconsistent use of codes: some providers have used a space between each part of the code and other providers have used an alpha or numeric character to split each part of the A&E code. The NHS Data Dictionary for A&E clinical codes does not ask for providers to separate each part of the A&E code.
- Incorrectly using A&E diagnosis codes: some providers have omitted the use of 0 for numeric codes between 1 and 9. For example, rather than submitting '01', they have only submitted '1'. The NHS Data Dictionary for A&E clinical codes states providers should submit a leading zero '0' before any numeric codes between '1' and '9'.

Analyses of the primary diagnosis field in this report are based on the first part (first two characters) of the field, which is the diagnosis condition. Appendix 4 provides a list and number of recorded diagnosis conditions available within the A&E primary diagnosis field, broken down by all providers (where submitted).

Time in department

The government has set an operational standard for A&E departments, whereby 98% of all patients attending A&E should wait no longer than four hours from arrival to admission, transfer or discharge. The QMAE aggregate data collection is used to monitor performance on the 4 hour standard and remains the official source of information on performance against the standard.

Duration time between arrival and departure at A&E can be derived from A&E HES. The definition of this differs in several areas from the duration time used in the QMAE four hour standard. These definitional differences provide a legitimate reason why there should be variations between the four hour performance figures reported via QMAE and the arrival to departure figures contained within this report.

The definitional differences are as follows:

- When recording arrival time within QMAE the guidance states that 'for ambulance cases arrival time is when hand over (of patient from ambulance to A&E staff) occurs or 15 minutes after the ambulance arrives at A&E, whichever is earlier'. The A&E Commissioning Data Set (CDS) definition of arrival time is 'the time of arrival in the A&E department or for urgent transport requests the time the vehicle arrives at the specified destination'. This means that arrival time for ambulance arrivals could be up to 15 minutes later within the QMAE figures than the A&E HES figures.
- The departure time as used by QMAE distinguishes between different groups of patients. Time of departure under QMAE can relate to the time a patient is discharged home. The QMAE guidance states 'patients awaiting family or "private" transport or who wish to make their own arrangements should be considered discharged once the clinical episode is complete whether or not they have actually left the department'. The CDS definition of departure time is 'the time that a patient leaves the A&E department after an A&E attendance has concluded and the department is no longer responsible for the care of the patient'. The A&E CDS cannot be used to distinguish this group of patients, which means the departure time available within A&E HES may be later than that used for the QMAE figures.

There are also a number of data quality issues that could have an impact upon the arrival to departure calculation using A&E HES data. One purpose of presenting the data is to highlight where there are differences, so providers can determine whether they are due to data quality issues and, if so, address them in subsequent submissions. The data quality issues are listed below:

- The data coverage differences between A&E HES attendance data and QMAE attendance data.
- There is a larger than expected number of arrival and departure times at 00:00 hours within the data submitted to A&E HES.
- Arrival and departure times submitted also show a level of rounding to the nearest five or ten minutes, especially on the hour (2008-09). When calculating the arrival to departure duration this issue could impact upon the percentages when comparing against the QMAE data.

Table 2.4 shows that 100% of attendances in A&E HES data had an arrival time and 97.5% of attendances had a departure time. This means that the duration between arrival time and departure time can be calculated for almost all attendances.

Time spent in A&E is derived from the HES dataset by subtracting the A&E departure time from the arrival time, both of which are available to the nearest minute.

Appendix 1 contains a table, at provider level, showing the percentage of all attendances that had an arrival to departure time of less than or equal to four hours for both A&E HES and QMAE during 2008-09.

Chart 3.8: Accident and emergency attendances in England: Distribution of A&E attendances by total time spent (by minute)

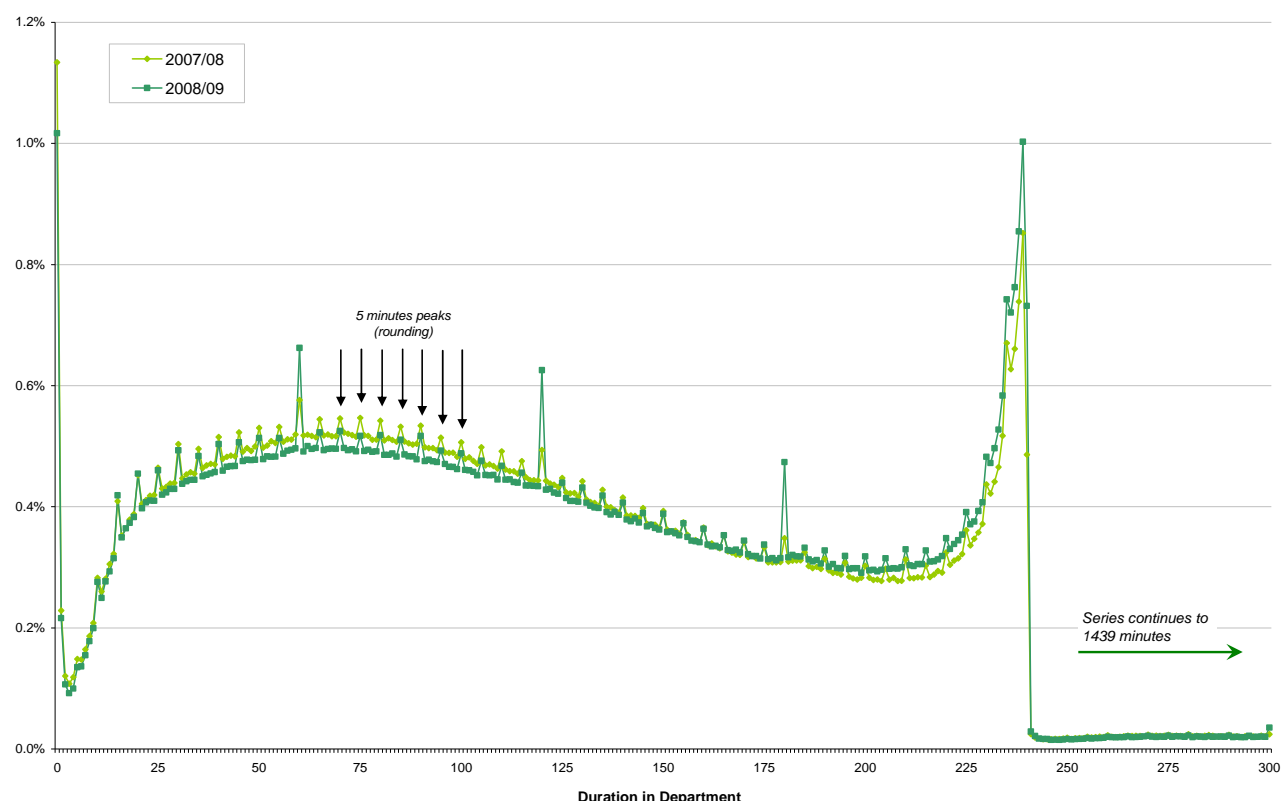


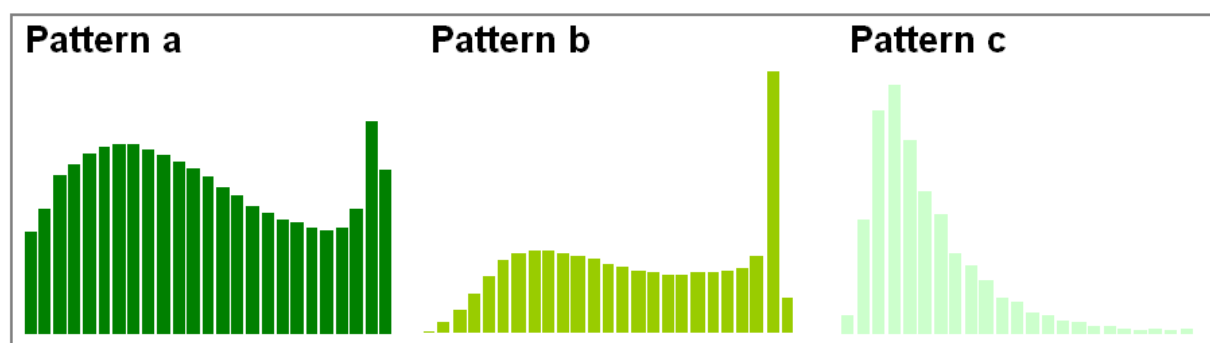
Chart 3.8 illustrates the derived (departure minus arrival) time patients spent in A&E in England. It is broken down into minute intervals to demonstrate the key underlying trends. Analysis of the underlying data shows that approximately three-quarters of patients depart A&E within three hours of arrival.

The large spike at zero minutes is likely to be due to a combination of two factors: patients who simply pass through A&E who are immediately admitted and data quality issues with certain providers submitting the default time of 00:00 on their systems. There are also spikes at 5 minute intervals, signalling that some providers are rounding to the nearest 5 minutes, and more pronounced spikes on the hour, which are due to a combination of 'general' five minute rounding and one provider that has rounded to the hour.

After zero minutes the graph climbs towards a peak of approximately 70 minutes as providers report an increase in the number of patients they are dealing with. Patient departures begin to fall off after the peak at 70 minutes. The fall continues until the 200 minute (03:20 hrs) mark when the number of departures starts to increase again, finally reaching a peak at 239 minutes (03:59 hrs), the most rapid increase happening between 231 and 239 minutes (03:51 and 03:59 hrs).

There is a significant drop off in the number of A&E patients with a reported duration in the department of 241 minutes or greater. This low level of departures continues through to a maximum of 1,439 minutes.

Chart 3.9: Key patterns: Distribution of A&E attendances by total time spent in department 2008-09



Key: The vertical axis represents the percentage of patients dealt with during the specific time block, while the horizontal axis represents the 10 minute time blocks, up to 4 hours (the final time block represents all time periods beyond 4 hours).

The three patterns in Chart 3.9 show the following:

- Pattern a: the proportion of patients dealt with increases as the length of time the patient has been in the A&E department moves towards the 4 hour target.
- Pattern b: fewer people are dealt with throughout the period between 0 minutes and 3 hours 50 minutes (compared to pattern a). In the last 10 minute time slot before the 4 hour target, there is a significant increase.
- Pattern c: most patients are dealt with quickly; very few wait longer than 3 hours.

Table 3.13 shows the average (mean) time of each A&E attendance is 132 minutes (or 2 hours 12 minutes) in 2008-09, within the 4 hour wait target.

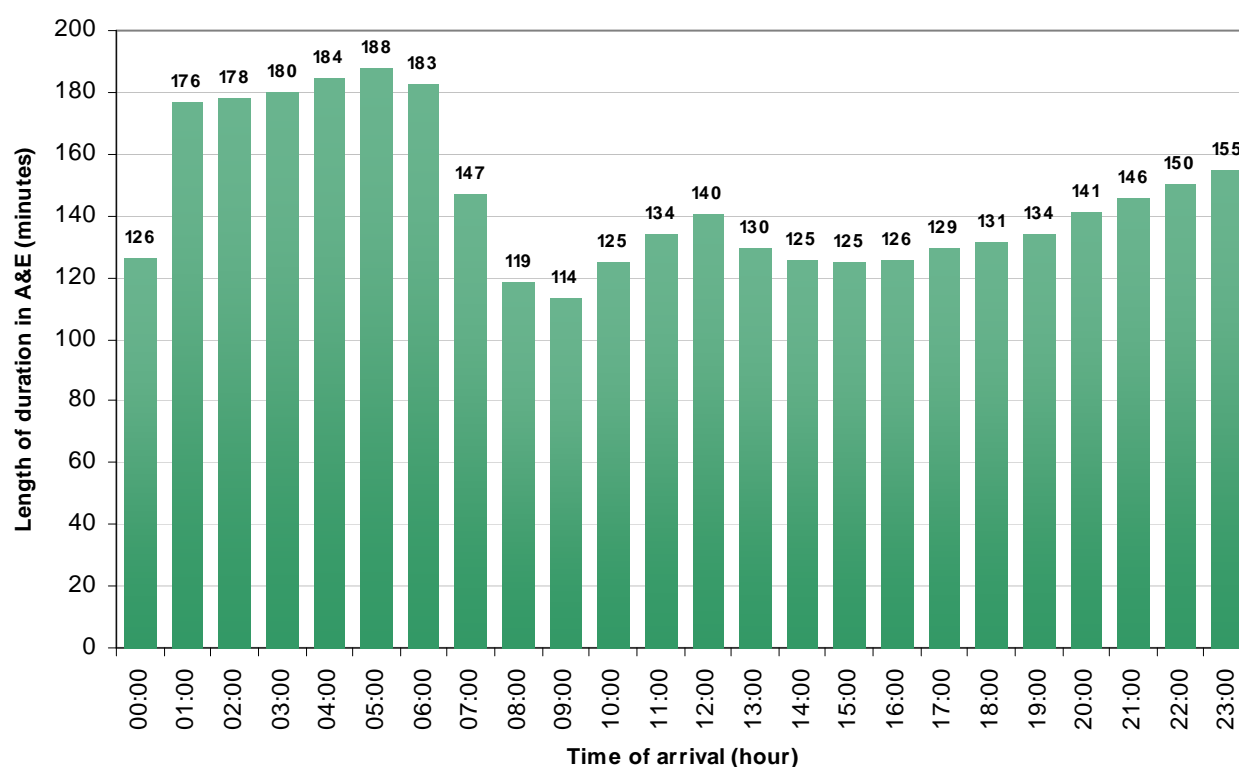
Table 3.13: A&E attendances by average duration in department (minutes), 2008-09 and 2007-08

| | 2008-09 | 2007-08 |
|---------------|---------|---------|
| Mean | 132 | 130 |
| Median | 115 | 112 |

The time of day that the attendance commences will drive how long on average the attendance is likely to last, based on the time of arrival to the time of departure from the A&E department. In general terms, attendances are likely to be shorter during 'normal' working hours (8:00 to 18:00). However, this is also when more attendances occur, therefore these average wait times are likely to drive the overall average.

Outside these hours (between 19:00 to 7:00) average wait times are likely to be increased. The longest average attendance duration is likely to occur between 5:00 and 5:59, despite there being fewer demands placed on the service.

Chart 3.10: Average (mean) duration to departure by arrival hour to A&E, 2008-09



Attendance disposal

Table 3.14 shows a breakdown of all attendances in A&E HES for 2008-09 and 2007-08 by the 'attendance disposal' code. The attendance disposal code is a mandatory field in the A&E Commissioning Data Set (CDS) and contains information on what happens to the patient on completion of an attendance.

More than half of all the patients were discharged (follow-up required and no follow-up required) following their attendance and 22% of all patients attending A&E were admitted into hospital, slightly up from 2007-08 when 21% were admitted.

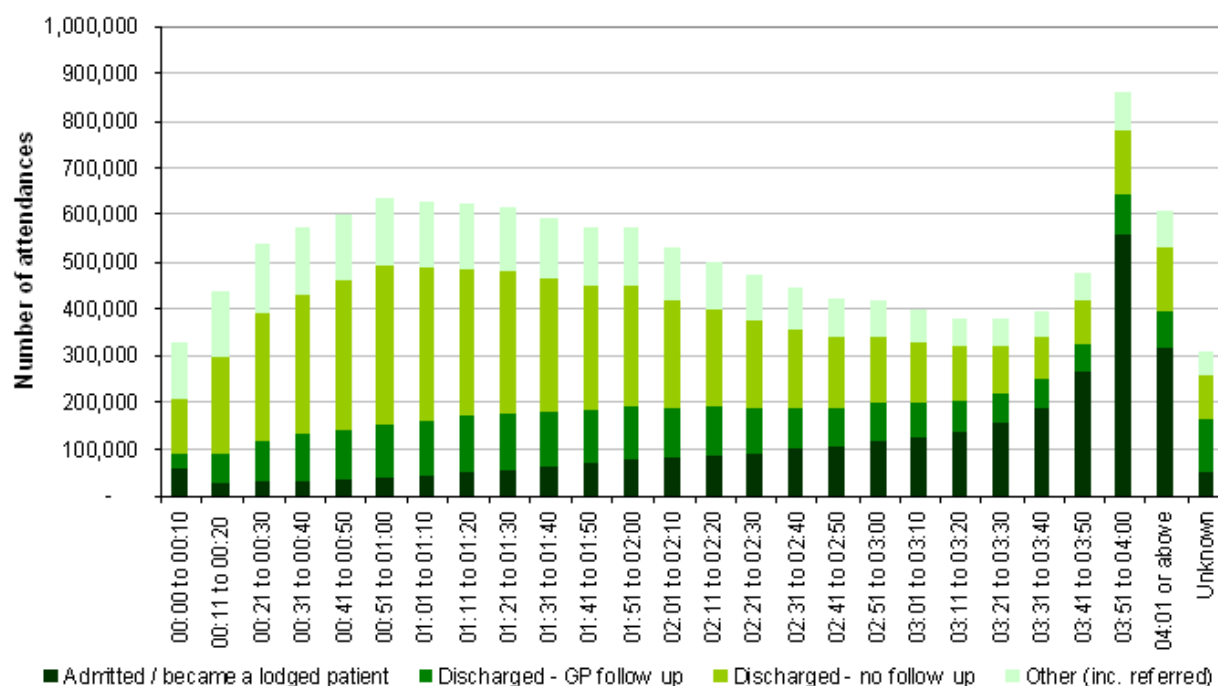
Table 3.14: Total number of attendances in A&E HES by attendance disposal method, 2008-09 and 2007-08

| Attendance disposal method | 2008-09 | | 2007-08 | |
|--|-------------------|--------------|-------------------|--------------|
| | Attendances | Percentage | Attendances | Percentage |
| 1. Admitted / became a lodged patient | 2,979,331 | 21.6% | 2,546,425 | 20.7% |
| 2. Discharged - follow up by GP | 2,447,969 | 17.8% | 2,099,339 | 17.0% |
| 3. Discharged - no follow up required | 5,473,967 | 39.7% | 5,072,014 | 41.2% |
| 4. Referred | 1,904,169 | 13.8% | 1,665,346 | 13.5% |
| Referred to A&E Clinic | 459,584 | 3.3% | 407,027 | 3.3% |
| Referred to Fracture Clinic | 563,927 | 4.1% | 515,487 | 4.2% |
| Referred to other OP Clinic | 550,190 | 4.0% | 466,907 | 3.8% |
| Referred to other health care professional | 330,468 | 2.4% | 275,925 | 2.2% |
| 5. Others | 988,636 | 7.2% | 934,927 | 7.6% |
| Left Department before being treated | 449,924 | 3.3% | 396,775 | 3.2% |
| Transferred to other Health Care Provider | 315,084 | 2.3% | 273,966 | 2.2% |
| Other | 122,455 | 0.9% | 160,119 | 1.3% |
| Left Department having refused treatment | 51,705 | 0.4% | 44,811 | 0.4% |
| Not known | 26,366 | 0.2% | 36,885 | 0.3% |
| Died in Department | 23,102 | 0.2% | 22,371 | 0.2% |
| Total | 13,794,072 | | 12,318,051 | |

Chart 3.11 shows that as the duration the A&E patient has spent in the A&E department increases, so does the likelihood that the patient will be admitted to hospital. Peaking in the 10 minute time slot, immediately prior to the government's 4 hour wait target.

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

Chart 3.11: Attendance disposal method by 10 minute time interval, 2008-09



Arrival by ambulance

Arrival to accident and emergency departments by ambulance

Within A&E HES there is a wealth of information available that can be manipulated and utilised to enhance health care provision. This section focuses specifically on A&E attendances where the patient arrived by ambulance.

In 2008-09, there were 13,794,072 attendances recorded in A&E HES. Of these, 3,379,694 (25%) arrived by ambulance, compared to 2007-08 when 2,867,180 (23%) of patients arrived by ambulance.

Table 4.1 shows that the number of attendances where the arrival method was 'ambulance' is greatest during the 12:00 hour, when 182,728 patients arrived at A&E providers by ambulance. However, these patients represent 20% of all attendances to A&E during the 12:00 hour. Most attendances (proportionally) where the arrival mode is ambulance are seen during the 3:00 hour, when 49% of all attendances arrived by ambulance.

Table 4.1: A&E attendances by hour of arrival, where arrived by ambulance, 2008-09 and 2007-08

| Arrival hour | 2008-09 | | 2007-08 | |
|--------------|---------|--|---------|--|
| | Number | Percentage of all A&E attendances who arrived by ambulance | Number | Percentage of all A&E attendances who arrived by ambulance |
| 00:00 | 176,654 | 36.1% | 160,491 | 33.4% |
| 01:00 | 119,052 | 47.2% | 100,209 | 45.3% |
| 02:00 | 101,078 | 48.3% | 85,275 | 46.6% |
| 03:00 | 88,574 | 49.2% | 73,103 | 47.0% |
| 04:00 | 76,104 | 48.9% | 61,926 | 46.7% |
| 05:00 | 67,480 | 47.3% | 54,055 | 44.5% |
| 06:00 | 63,710 | 40.4% | 51,766 | 38.3% |
| 07:00 | 65,515 | 27.1% | 54,170 | 25.7% |
| 08:00 | 101,124 | 20.0% | 83,875 | 18.9% |
| 09:00 | 148,968 | 16.8% | 123,926 | 15.6% |
| 10:00 | 173,436 | 17.9% | 143,965 | 16.6% |
| 11:00 | 181,862 | 18.7% | 150,847 | 17.5% |
| 12:00 | 182,728 | 20.0% | 152,255 | 18.8% |
| 13:00 | 181,605 | 20.7% | 155,916 | 19.9% |
| 14:00 | 182,517 | 21.3% | 156,899 | 20.5% |
| 15:00 | 178,664 | 22.2% | 151,522 | 21.2% |
| 16:00 | 174,935 | 21.8% | 149,172 | 20.9% |
| 17:00 | 172,337 | 22.1% | 146,488 | 21.1% |
| 18:00 | 170,281 | 21.1% | 145,025 | 20.1% |
| 19:00 | 156,455 | 20.9% | 134,173 | 19.9% |
| 20:00 | 164,447 | 25.0% | 140,769 | 23.7% |
| 21:00 | 159,310 | 28.4% | 137,027 | 27.0% |
| 22:00 | 151,618 | 33.0% | 131,192 | 31.7% |
| 23:00 | 141,240 | 38.8% | 123,134 | 37.5% |

During daytime hours (08:00 to 19:00), the proportion of attendances where the arrival method was 'ambulance' is generally around 20%, indicating that patients will use their own resources to attend the A&E department. Interestingly, as time progresses through the night it becomes more likely that the patient will arrive by ambulance, possibly indicating that these patients have more serious injuries / illnesses which require an emergency A&E attendance.

There is a dip in the underlying trend at the 00:00 hour, this is probably due to the known data quality issues surrounding this time of the day, as some providers default all attendance times to 00:00.

Chart 4.1: Number and percentage of A&E attendances, by hour of arrival, where arrival method is ambulance 2008-09

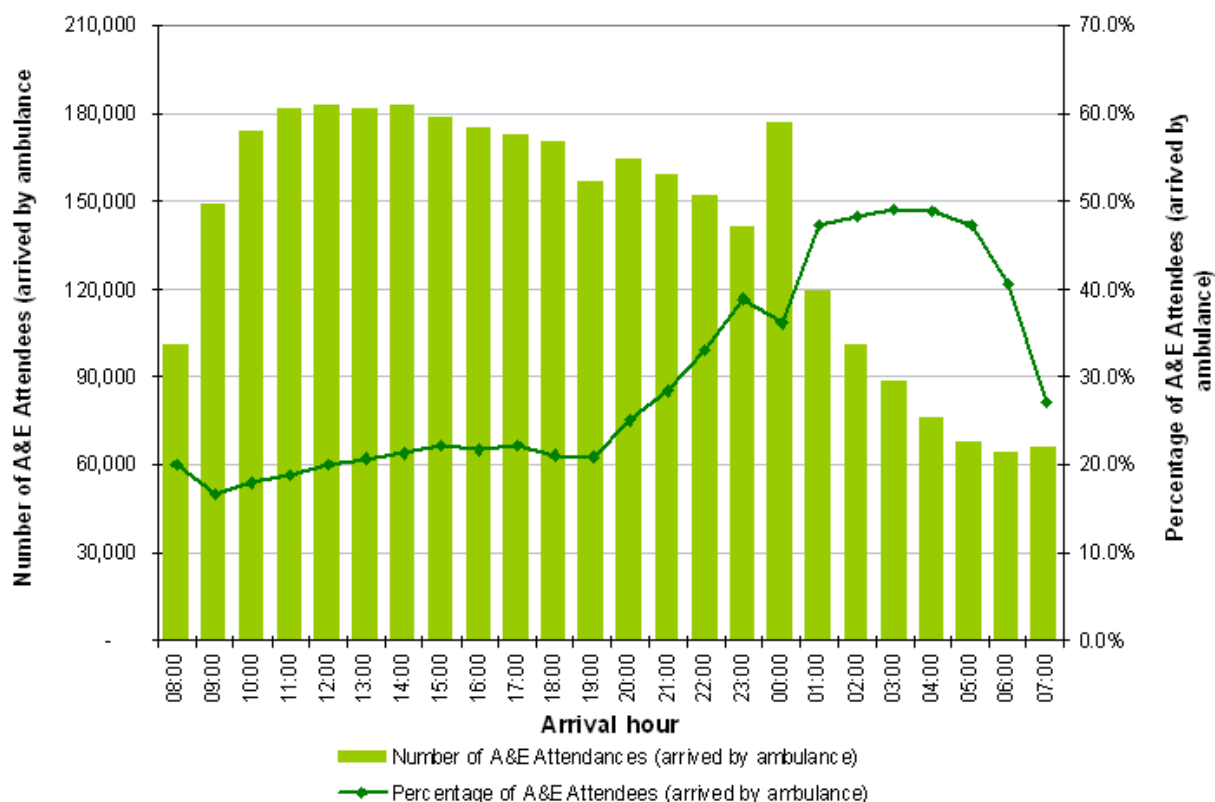


Chart 4.2 shows that males are more likely to attend A&E up to the age of 70 compared to females. However, from the age 71 onwards the number of female attendances is higher than male attendances; this is possibly linked to population demographics.

The age group with the highest proportion of A&E attendances (who arrived by ambulance) is the 81- to 90-year-old age group (545,342 or 16%). Closely followed by the preceding younger age group, those aged 71-80 (488,715 or 15%).

Chart 4.2: Number of A&E attendances, gender and age group, where arrival method is ambulance 2008-09

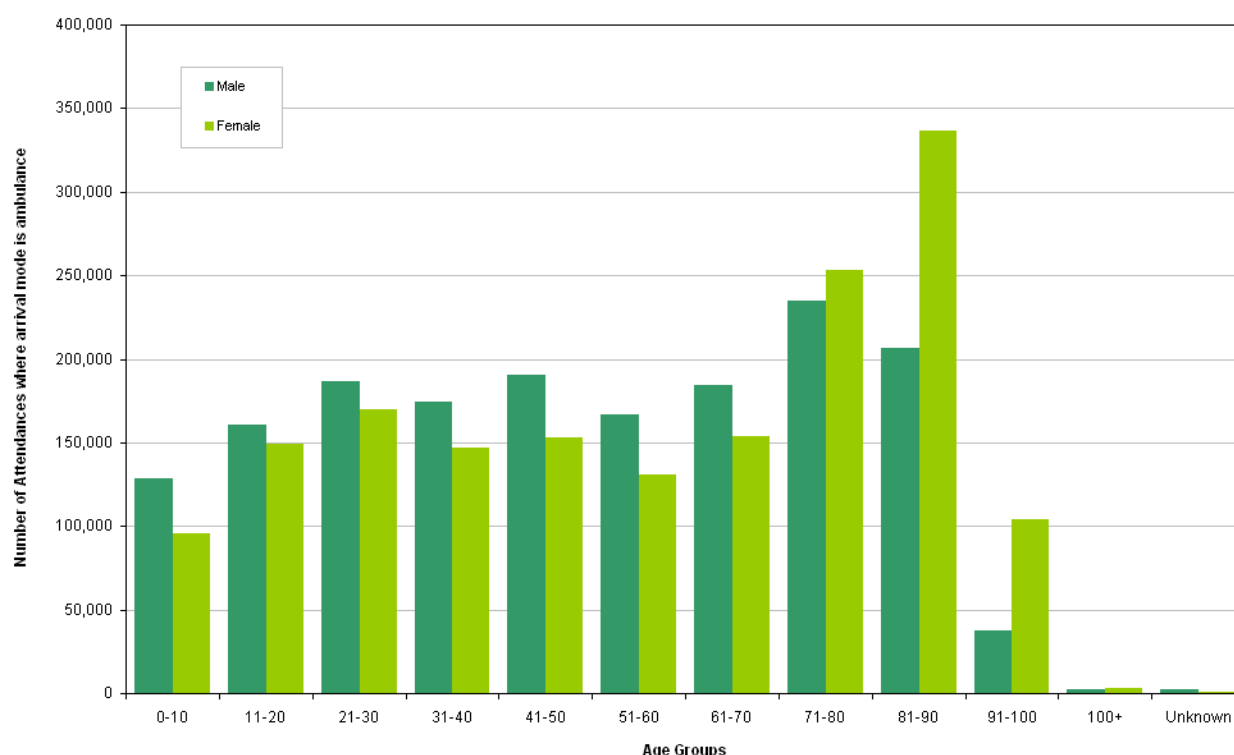
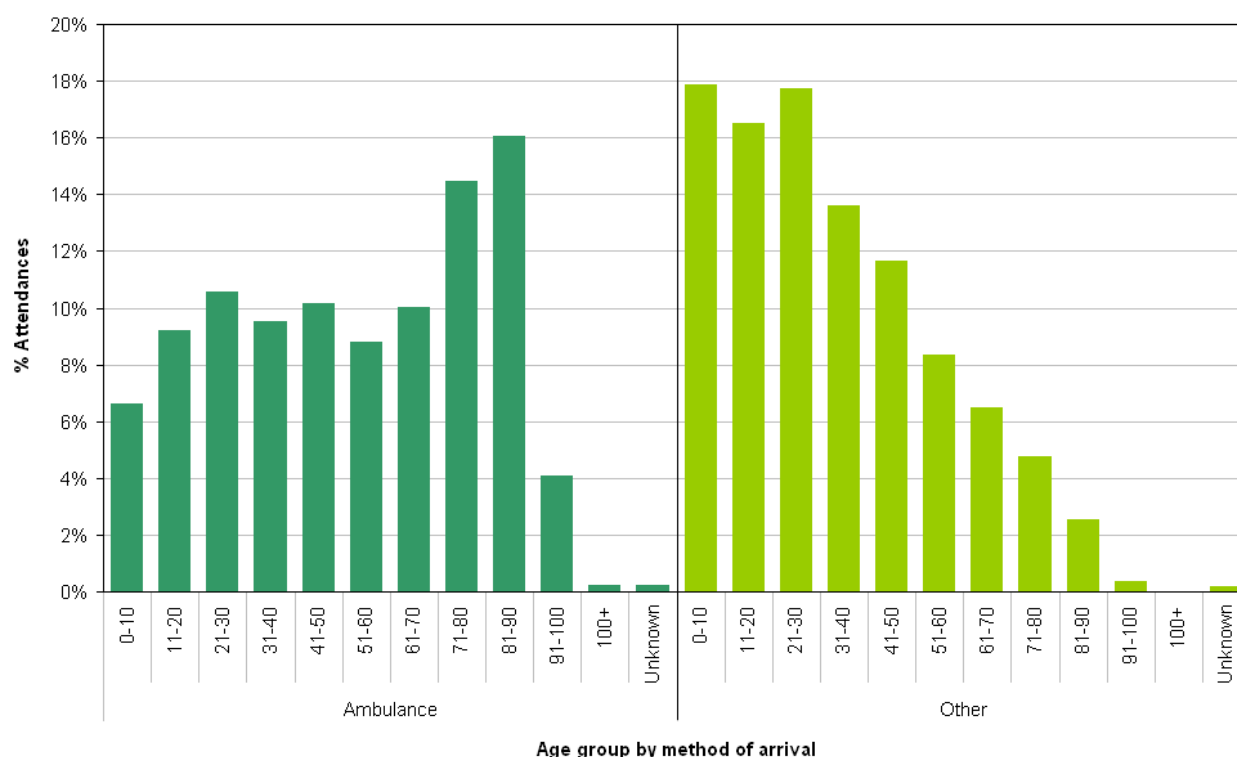


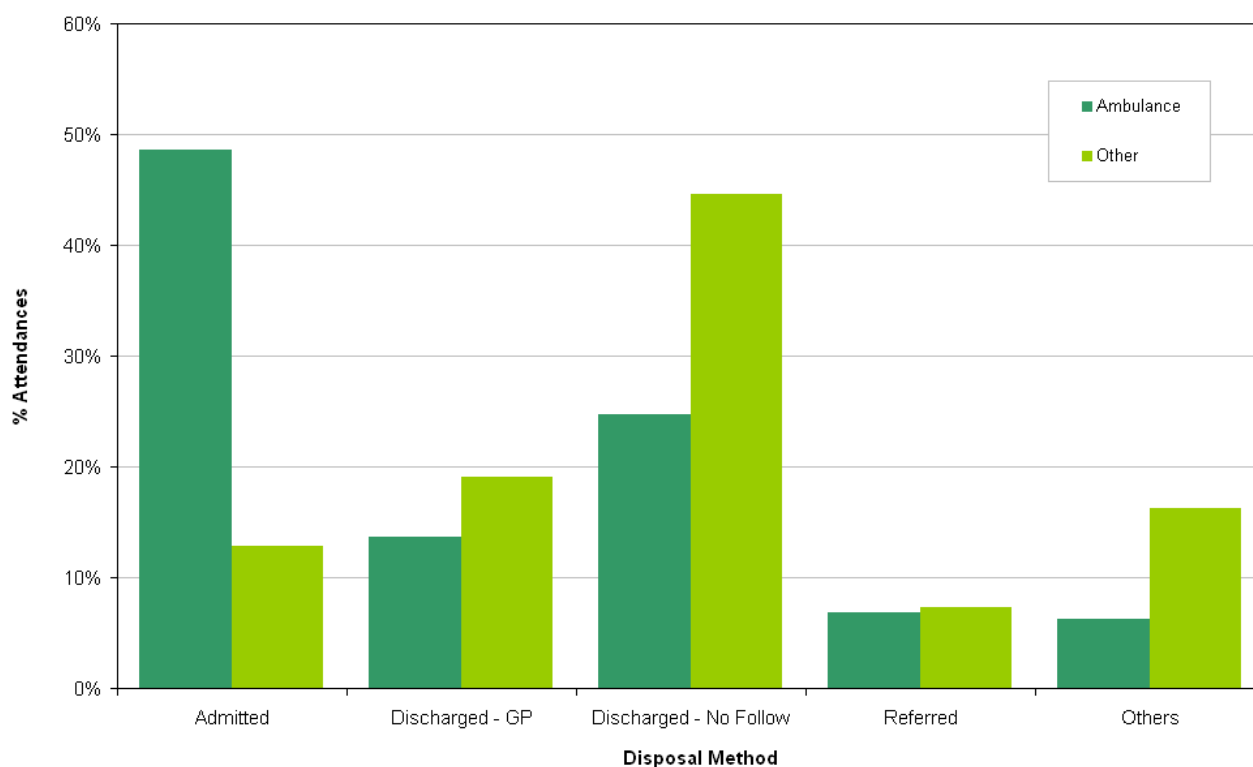
Chart 4.3 shows that of the 10 million A&E attendances where the patient made their own way to the A&E department, there is a clear pattern showing that younger people are more likely to arrive by another method. This decreases with age.

Chart 4.3: Percentage of A&E Attendances, by age group by arrival method, 2008-09



How a patient arrives at an A&E department can reflect the level of treatment / care required. Of patients who arrived at A&E by ambulance nearly 50% are admitted to hospital. Conversely, those who arrived by another method were most likely to be discharged with no follow-up required.

Chart 4.4: Disposal method (discharge) of A&E attendance by arrival method, 2008-09



Accessing HES

How to access A&E HES data

Freely available HES data, including this report, is accessible via the HESonline website [<http://www.hesonline.nhs.uk>].

Ad hoc tabulations and extracts based on experimental A&E HES data are available on request, subject to agreement of terms and conditions of use. Users requiring such access should refer to the information in the Request a tailor-made report area of the HESonline website.

Organisations can also request direct access to the full A&E HES data via the HES Interrogation System. Please note that there are restrictions on who can access HES data in this way. For further information on this service, please contact the NHS Information Centre (0845 300 6016 or enquires@ic.nhs.uk).

Feedback

Specific areas for feedback

The NHS Information Centre welcomes all feedback relating to any aspect of this publication.

In particular we would welcome feedback on the following issues highlighted within the publication:

- The underlying reasons behind providers not submitting data to A&E HES.
- Where large differences exist between the number of attendances submitted to A&E HES and QMAE, what are the reasons behind the A&E HES numbers being different?
- The reasons behind the current use of invalid codes in the clinical fields (diagnosis, investigation and treatment)
- The accuracy of the time fields, including the apparent rounding of times and the large number of arrival and departure times at midnight (00:00 hrs).

How to provide feedback

Feedback can be provided by going to the 'Contact us' section of the HES website [<http://www.hesonline.nhs.uk>].

Responsible statistician:

Tony Childs, Principal Information Analyst HES/SUS

Contact via enquiries@ic.nhs.uk or 0845 300 6016

Appendices

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Appendix 1: Number of A&E attendances recorded in A&E HES (excluding planned follow ups) compared to QMAE, and the percentage of attendances completed within 4 hours, 2008-09 and 2007-08

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Aintree University Hospitals NHS Foundation Trust | REM | 84,539 | 81,543 | 96.5% | 86,216 | 83,506 | 96.9% |
| Airedale NHS Trust | RCF | - | - | - | 50,872 | 50,212 | 98.7% |
| Alder Hey Children's NHS Foundation Trust | RBS | 59,393 | 58,202 | 98.0% | 59,387 | 58,549 | 98.6% |
| Ashford and St Peter's Hospitals NHS Trust | RTK | 110,441 | 106,446 | 96.4% | 118,877 | 114,876 | 96.6% |
| Ashton, Leigh and Wigan Primary Care Trust | 5HG | - | - | - | 57,342 | 57,309 | 99.9% |
| Barking and Dagenham Primary Care Trust | 5C2 | - | - | - | 55,152 | 55,152 | 100.0% |
| Barking, Havering and Redbridge Hospitals NHS Trust | RF4 | 181,647 | 169,287 | 93.2% | 181,612 | 169,365 | 93.3% |
| Barnet and Chase Farm Hospitals NHS Trust | RVL | 151,369 | 143,558 | 94.8% | 152,213 | 148,871 | 97.8% |
| Barnet Primary Care Trust | 5A9 | - | - | - | 105,515 | 105,479 | 100.0% |
| Barnsley Hospital NHS Foundation Trust | RFF | 71,700 | 70,275 | 98.0% | 71,695 | 70,294 | 98.0% |
| Barts and The London NHS Trust | RNJ | 124,635 | 109,352 | 87.7% | 119,453 | 113,834 | 95.3% |
| Basildon and Thurrock University Hospitals NHS Foundation Trust | RDD | 95,349 | 89,548 | 93.9% | 96,966 | 95,611 | 98.6% |
| Basingstoke and North Hampshire NHS Foundation Trust | RN5 | 16,769 | 11,386 | 67.9% | 43,557 | 42,943 | 98.6% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Bath and North East Somerset Primary Care Trust | 5FL | - | - | - | 26,104 | 26,065 | 99.9% |
| Bedford Hospital NHS Trust | RC1 | 26,940 | 26,513 | 98.4% | 64,120 | 63,019 | 98.3% |
| Berkshire East Primary Care Trust | 5QG | - | - | - | 39,980 | 39,980 | 100.0% |
| Berkshire West Primary Care Trust | 5QF | - | - | - | 18,354 | 18,353 | 100.0% |
| Birmingham Children's Hospital NHS Foundation Trust | RQ3 | 45,484 | 44,629 | 98.1% | 45,236 | 44,447 | 98.3% |
| Birmingham East And North Primary Care Trust | 5PG | - | - | - | 42,256 | 42,256 | 100.0% |
| Blackpool Primary Care Trust | 5HP | - | - | - | 60,230 | 60,230 | 100.0% |
| Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust | RXL | 90,961 | 76,640 | 84.3% | 91,546 | 90,566 | 98.9% |
| Bolton Primary Care Trust | 5HQ | - | - | - | 47,129 | 47,129 | 100.0% |
| Bradford Teaching Hospitals NHS Foundation Trust | RAE | - | - | - | 116,718 | 114,764 | 98.3% |
| Brighton and Sussex University Hospitals NHS Trust | RXH | 135,989 | 110,403 | 81.2% | 135,635 | 134,980 | 99.5% |
| Bristol Primary Care Trust | 5QJ | - | - | - | 55,149 | 55,149 | 100.0% |
| Bromley Hospitals NHS Trust | RG3 | 90,461 | 88,729 | 98.1% | 90,869 | 89,140 | 98.1% |
| Buckinghamshire Hospitals NHS Trust | RXQ | - | - | - | 112,876 | 110,385 | 97.8% |
| Burton Hospitals NHS Foundation Trust | RJF | 57,162 | 55,715 | 97.5% | 57,384 | 56,187 | 97.9% |
| Bury Primary Care Trust | 5JX | - | - | - | 60,599 | 60,599 | 100.0% |
| Calderdale and Huddersfield NHS Foundation Trust | RWY | 128,797 | 125,063 | 97.1% | 131,689 | 129,527 | 98.4% |
| Cambridge University Hospitals NHS Foundation Trust | RGT | 86,244 | 84,201 | 97.6% | 86,244 | 84,265 | 97.7% |
| Cambridgeshire Primary Care Trust | 5PP | - | - | - | 19,028 | 19,028 | 100.0% |
| Central Lancashire Primary Care Trust | 5NG | - | - | - | 29,295 | 29,295 | 100.0% |
| Central Manchester University Hospitals NHS Foundation Trust | RW3 | 200,734 | 194,681 | 97.0% | 203,025 | 196,906 | 97.0% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Chelsea and Westminster Hospital NHS Foundation Trust | RQM | 758 | 515 | 67.9% | 97,574 | 96,275 | 98.7% |
| Chesterfield Royal Hospital NHS Foundation Trust | RFS | 59,493 | 58,622 | 98.5% | 61,271 | 60,395 | 98.6% |
| City and Hackney Teaching Primary Care Trust | 5C3 | - | - | - | 10,415 | 10,415 | 100.0% |
| City Hospitals Sunderland NHS Foundation Trust | RLN | 93,493 | 89,735 | 96.0% | 102,404 | 98,927 | 96.6% |
| Colchester Hospital University NHS Foundation Trust | RDE | 81,599 | 78,271 | 95.9% | 82,132 | 79,269 | 96.5% |
| Cornwall And Isles Of Scilly Primary Care Trust | 5QP | - | - | - | 90,850 | 90,784 | 99.9% |
| Countess of Chester Hospital NHS Foundation Trust | RJR | 68,407 | 66,795 | 97.6% | 68,421 | 66,888 | 97.8% |
| County Durham and Darlington NHS Foundation Trust | RXP | 131,045 | 127,304 | 97.1% | 138,004 | 134,543 | 97.5% |
| Coventry Teaching Primary Care Trust | 5MD | - | - | - | 40,279 | 40,279 | 100.0% |
| Cumbria Primary Care Trust | 5NE | - | - | - | 43,298 | 43,279 | 100.0% |
| Darlington Primary Care Trust | 5J9 | - | - | - | 70,885 | 70,882 | 100.0% |
| Dartford and Gravesham NHS Trust | RN7 | - | - | - | 44,772 | 42,430 | 94.8% |
| Derby City Primary Care Trust | 5N7 | - | - | - | 37,681 | 37,679 | 100.0% |
| Derby Hospitals NHS Foundation Trust | RTG | 102,490 | 98,895 | 96.5% | 109,453 | 105,850 | 96.7% |
| Derbyshire County Primary Care Trust | 5N6 | 50,758 | 49,377 | 97.3% | 55,244 | 54,917 | 99.4% |
| Devon Primary Care Trust | 5QQ | 43,842 | 40,211 | 91.7% | 137,701 | 137,666 | 100.0% |
| Doncaster and Bassetlaw Hospitals NHS Foundation Trust | RP5 | 26,427 | 2,064 | 7.8% | 153,409 | 151,046 | 98.5% |
| Dorset County Hospital NHS Foundation Trust | RBD | 35,351 | 34,718 | 98.2% | 35,353 | 34,732 | 98.2% |
| Dorset Primary Care Trust | 5QM | 13,155 | 13,139 | 99.9% | 45,296 | 45,274 | 100.0% |
| Ealing Hospital NHS Trust | RC3 | 98,319 | 93,254 | 94.8% | 98,324 | 96,221 | 97.9% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| East and North Hertfordshire NHS Trust | RWH | - | - | - | 143,037 | 140,218 | 98.0% |
| East And North Hertfordshire Primary Care Trust | 5P3 | - | - | - | 6,462 | 6,462 | 100.0% |
| East Cheshire NHS Trust | RJN | 53,155 | 52,247 | 98.3% | 54,618 | 53,706 | 98.3% |
| East Kent Hospitals University NHS Foundation Trust | RVV | 188,765 | 177,700 | 94.1% | 191,334 | 187,831 | 98.2% |
| East Lancashire Hospitals NHS Trust | RXR | 65,541 | 60,458 | 92.2% | 145,055 | 137,673 | 94.9% |
| East Lancashire Primary Care Trust | 5NH | - | - | - | 69,970 | 69,929 | 99.9% |
| East Riding Of Yorkshire Primary Care Trust | 5NW | - | - | - | 14,493 | 14,491 | 100.0% |
| East Sussex Downs And Weald Primary Care Trust | 5P7 | - | - | - | 22,889 | 22,889 | 100.0% |
| East Sussex Hospitals NHS Trust | RXC | 100,086 | 84,715 | 84.6% | 119,529 | 117,254 | 98.1% |
| Eastern And Coastal Kent Primary Care Trust | 5QA | - | - | - | 89,526 | 89,453 | 99.9% |
| Epsom and St Helier University Hospitals NHS Trust | RVR | 129,810 | 127,308 | 98.1% | 129,786 | 127,276 | 98.1% |
| Frimley Park Hospital NHS Foundation Trust | RDU | 91,779 | 89,960 | 98.0% | 91,421 | 89,716 | 98.1% |
| Gateshead Health NHS Foundation Trust | RR7 | 61,630 | 60,606 | 98.3% | 61,634 | 60,627 | 98.4% |
| Gateshead Primary Care Trust | 5KF | - | - | - | 28,352 | 28,329 | 99.9% |
| George Eliot Hospital NHS Trust | RLT | 58,787 | 56,656 | 96.4% | 58,855 | 57,779 | 98.2% |
| Gloucestershire Hospitals NHS Foundation Trust | RTE | 99,064 | 94,622 | 95.5% | 100,628 | 96,221 | 95.6% |
| Gloucestershire Primary Care Trust | 5QH | 53,944 | 53,888 | 99.9% | 58,758 | 58,702 | 99.9% |
| Great Western Hospitals NHS Foundation Trust | RN3 | 62,634 | 61,541 | 98.3% | 62,628 | 61,537 | 98.3% |
| Great Yarmouth And Waveney Primary Care Trust | 5PR | - | - | - | 5,850 | 5,850 | 100.0% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Guy's and St Thomas' NHS Foundation Trust | RJ1 | 132,121 | 128,630 | 97.4% | 144,627 | 141,966 | 98.2% |
| Halton And St Helens Primary Care Trust | 5NM | - | - | - | 81,126 | 81,083 | 99.9% |
| Hammersmith and Fulham Primary Care Trust | 5H1 | - | - | - | 20,760 | 20,759 | 100.0% |
| Hampshire Primary Care Trust | 5QC | 14,494 | 13,941 | 96.2% | 19,968 | 19,955 | 99.9% |
| Haringey Teaching Primary Care Trust | 5C9 | - | - | - | 36,640 | 36,627 | 100.0% |
| Harrogate and District NHS Foundation Trust | RCD | 41,191 | 40,645 | 98.7% | 41,040 | 40,494 | 98.7% |
| Havering Primary Care Trust | 5A4 | - | - | - | 37,176 | 37,176 | 100.0% |
| Heart of Birmingham Teaching Primary Care Trust | 5MX | - | - | - | 20,243 | 20,243 | 100.0% |
| Heart of England NHS Foundation Trust | RR1 | 238,103 | 230,304 | 96.7% | 240,192 | 232,355 | 96.7% |
| Heatherwood and Wexham Park Hospitals NHS Foundation Trust | RD7 | 107,203 | 104,206 | 97.2% | 111,931 | 108,914 | 97.3% |
| Hereford Hospitals NHS Trust | RLQ | 43,110 | 42,223 | 97.9% | 43,624 | 42,765 | 98.0% |
| Herefordshire Primary Care Trust | 5CN | 9,164 | 9,137 | 99.7% | 8,739 | 8,738 | 100.0% |
| Heywood, Middleton And Rochdale Primary Care Trust | 5NQ | - | - | - | 37,865 | 37,865 | 100.0% |
| Hillingdon Primary Care Trust | 5AT | - | - | - | 30,754 | 30,754 | 100.0% |
| Hinchingbrooke Healthcare NHS Trust | RQQ | 34,730 | 34,020 | 98.0% | 35,711 | 35,001 | 98.0% |
| Homerton University Hospital NHS Foundation Trust | RQX | 109,137 | 105,825 | 97.0% | 109,526 | 107,781 | 98.4% |
| Hull and East Yorkshire Hospitals NHS Trust | RWA | - | - | - | 121,628 | 119,344 | 98.1% |
| Hull Teaching Primary Care Trust | 5NX | - | - | - | 8,164 | 8,162 | 100.0% |
| Imperial College Healthcare NHS Trust | RYJ | 113,226 | 104,599 | 92.4% | 216,716 | 212,248 | 97.9% |
| Ipswich Hospital NHS Trust | RGQ | 53,623 | 52,181 | 97.3% | 53,648 | 52,207 | 97.3% |
| Isle Of Wight NHS Primary Care Trust | 5QT | 39,188 | 38,514 | 98.3% | 37,232 | 36,557 | 98.2% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| James Paget University Hospitals NHS Foundation Trust | RGP | 61,474 | 60,212 | 97.9% | 61,765 | 60,588 | 98.1% |
| Kensington and Chelsea Primary Care Trust | 5LA | 7,584 | 7,522 | 99.2% | 17,323 | 17,268 | 99.7% |
| Kettering General Hospital NHS Foundation Trust | RNQ | 73,241 | 71,720 | 97.9% | 82,355 | 80,832 | 98.2% |
| King's College Hospital NHS Foundation Trust | RJZ | - | - | - | 141,856 | 139,486 | 98.3% |
| Kingston Hospital NHS Trust | RAX | 106,590 | 42,327 | 39.7% | 106,144 | 103,768 | 97.8% |
| Kirklees Primary Care Trust | 5N2 | - | - | - | 20,635 | 20,635 | 100.0% |
| Knowsley Primary Care Trust | 5J4 | - | - | - | 54,366 | 54,366 | 100.0% |
| Lancashire Teaching Hospitals NHS Foundation Trust | RXN | 114,970 | 112,642 | 98.0% | 115,057 | 113,101 | 98.3% |
| Leeds Teaching Hospitals NHS Trust | RR8 | 230,720 | 226,151 | 98.0% | 230,717 | 226,267 | 98.1% |
| Leicester City Primary Care Trust | 5PC | - | - | - | 8,755 | 8,755 | 100.0% |
| Leicestershire County And Rutland Primary Care Trust | 5PA | - | - | - | 78,559 | 78,448 | 99.9% |
| Lincolnshire Primary Care Trust | 5N9 | - | - | - | 17,363 | 17,362 | 100.0% |
| Liverpool Primary Care Trust | 5NL | - | - | - | 122,360 | 122,360 | 100.0% |
| Liverpool Women's NHS Foundation Trust | REP | 12,201 | 12,103 | 99.2% | 12,211 | 12,209 | 100.0% |
| Luton and Dunstable Hospital NHS Foundation Trust | RC9 | - | - | - | 58,582 | 56,163 | 95.9% |
| Luton Teaching Primary Care Trust | 5GC | - | - | - | 28,435 | 28,429 | 100.0% |
| Maidstone and Tunbridge Wells NHS Trust | RWF | 110,118 | 97,691 | 88.7% | 110,170 | 104,961 | 95.3% |
| Manchester Primary Care Trust | 5NT | - | - | - | 67,552 | 67,550 | 100.0% |
| Mayday Healthcare NHS Trust | RJ6 | 125,844 | 121,271 | 96.4% | 157,996 | 153,555 | 97.2% |
| Medway NHS Foundation Trust | RPA | - | - | - | 82,741 | 79,193 | 95.7% |
| Mid Cheshire Hospitals NHS | RBT | 76,496 | 75,025 | 98.1% | 76,593 | 75,141 | 98.1% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Foundation Trust | | | | | | | |
| Mid Essex Hospital Services NHS Trust | RQ8 | 72,650 | 71,373 | 98.2% | 73,703 | 72,766 | 98.7% |
| Mid Staffordshire NHS Foundation Trust | RJD | 52,076 | 50,468 | 96.9% | 73,929 | 72,330 | 97.8% |
| Mid Yorkshire Hospitals NHS Trust | RXF | 190,231 | 184,019 | 96.7% | 189,513 | 183,344 | 96.7% |
| Milton Keynes Hospital NHS Foundation Trust | RD8 | 69,063 | 64,996 | 94.1% | 69,707 | 67,597 | 97.0% |
| Milton Keynes Primary Care Trust | 5CQ | - | - | - | 41,533 | 41,527 | 100.0% |
| Moorfields Eye Hospital NHS Foundation Trust | RP6 | 65,025 | 64,759 | 99.6% | 64,487 | 64,198 | 99.6% |
| Newcastle Primary Care Trust | 5D7 | - | - | - | 13,233 | 13,233 | 100.0% |
| Newham Primary Care Trust | 5C5 | - | - | - | 39,637 | 39,637 | 100.0% |
| Newham University Hospital NHS Trust | RNH | 90,269 | 88,176 | 97.7% | 90,410 | 88,330 | 97.7% |
| NHS Walsall | 5M3 | - | - | - | 15,371 | 15,371 | 100.0% |
| Norfolk and Norwich University Hospitals NHS Foundation Trust | RM1 | 85,475 | 82,949 | 97.0% | 85,514 | 83,018 | 97.1% |
| Norfolk Primary Care Trust | 5PQ | - | - | - | 37,946 | 37,946 | 100.0% |
| North Bristol NHS Trust | RVJ | 90,171 | 87,548 | 97.1% | 101,884 | 99,612 | 97.8% |
| North Cumbria Acute Hospitals NHS Trust | RNL | 66,063 | 65,095 | 98.5% | 66,049 | 65,224 | 98.8% |
| North East Essex Primary Care Trust | 5PW | - | - | - | 54,868 | 54,866 | 100.0% |
| North East Lincolnshire Care Trust Plus | TAN | - | - | - | 1,435 | 1,435 | 100.0% |
| North Middlesex University Hospital NHS Trust | RAP | 108,320 | 103,039 | 95.1% | 111,270 | 108,350 | 97.4% |
| North Somerset Primary Care Trust | 5M8 | 22 | 0 | 0.0% | 6,508 | 6,507 | 100.0% |
| North Staffordshire Primary Care Trust | 5PH | 9,981 | 9,926 | 99.4% | 7,420 | 7,420 | 100.0% |
| North Tees and Hartlepool NHS Foundation Trust | RVW | 89,842 | 88,682 | 98.7% | 96,804 | 95,544 | 98.7% |
| North West London Hospitals NHS Trust | RV8 | 173,360 | 168,954 | 97.5% | 211,397 | 207,004 | 97.9% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| North Yorkshire And York Primary Care Trust | 5NV | - | - | - | 60,725 | 60,708 | 100.0% |
| Northampton General Hospital NHS Trust | RNS | - | - | - | 79,232 | 76,915 | 97.1% |
| Northamptonshire Primary Care Trust | 5PD | - | - | - | 6,330 | 6,330 | 100.0% |
| Northern Devon Healthcare NHS Trust | RBZ | 47,194 | 46,232 | 98.0% | 50,798 | 49,925 | 98.3% |
| Northern Lincolnshire and Goole Hospitals NHS Foundation Trust | RJL | 131,317 | 129,353 | 98.5% | 131,318 | 129,425 | 98.6% |
| Northumbria Healthcare NHS Foundation Trust | RTF | 157,764 | 154,919 | 98.2% | 162,419 | 159,705 | 98.3% |
| Nottingham City Primary Care Trust | 5EM | - | - | - | 60,306 | 60,306 | 100.0% |
| Nottingham University Hospitals NHS Trust | RX1 | 159,385 | 155,080 | 97.3% | 166,311 | 162,128 | 97.5% |
| Nottinghamshire County Primary Care Trust | 5N8 | - | - | - | 19,419 | 19,419 | 100.0% |
| Oldham Primary Care Trust | 5J5 | - | - | - | 43,897 | 43,897 | 100.0% |
| Oxford Radcliffe Hospitals NHS Trust | RTH | 104,361 | 102,085 | 97.8% | 117,922 | 115,813 | 98.2% |
| Oxfordshire Primary Care Trust | 5QE | - | - | - | 27,971 | 27,932 | 99.9% |
| Pennine Acute Hospitals NHS Trust | RW6 | 267,430 | 252,694 | 94.5% | 267,394 | 252,810 | 94.5% |
| Peterborough and Stamford Hospitals NHS Foundation Trust | RGN | 68,124 | 65,842 | 96.7% | 66,091 | 63,809 | 96.5% |
| Peterborough Primary Care Trust | 5PN | - | - | - | 73,856 | 73,812 | 99.9% |
| Plymouth Hospitals NHS Trust | RK9 | 82,895 | 61,201 | 73.8% | 93,606 | 90,336 | 96.5% |
| Plymouth Teaching Primary Care Trust | 5F1 | - | - | - | 14,696 | 14,696 | 100.0% |
| Poole Hospital NHS Foundation Trust | RD3 | 38,270 | 37,338 | 97.6% | 56,430 | 55,388 | 98.2% |
| Portsmouth City Teaching Primary Care Trust | 5FE | - | - | - | 58,143 | 58,134 | 100.0% |
| Portsmouth Hospitals NHS Trust | RHU | 102,451 | 100,168 | 97.8% | 116,793 | 114,421 | 98.0% |
| Queen Elizabeth Hospital NHS Trust | RG2 | 98,182 | 77,728 | 79.2% | 98,224 | 95,936 | 97.7% |
| Queen Mary's Sidcup NHS Trust | RGZ | 53,823 | 0 | 0.0% | 81,439 | 80,158 | 98.4% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Queen Victoria Hospital NHS Foundation Trust | RPC | 11,091 | 11,027 | 99.4% | 11,173 | 11,114 | 99.5% |
| Redbridge Primary Care Trust | 5NA | - | - | - | 33,688 | 33,688 | 100.0% |
| Redcar And Cleveland Primary Care Trust | 5QR | - | - | - | 25,503 | 25,503 | 100.0% |
| Richmond and Twickenham Primary Care Trust | 5M6 | - | - | - | 47,712 | 47,707 | 100.0% |
| Rotherham Primary Care Trust | 5H8 | - | - | - | 7,801 | 7,797 | 99.9% |
| Royal Berkshire NHS Foundation Trust | RHW | - | - | - | 104,827 | 104,337 | 99.5% |
| Royal Bolton Hospital NHS Foundation Trust | RMC | 110,108 | 104,583 | 95.0% | 110,489 | 104,944 | 95.0% |
| Royal Cornwall Hospitals NHS Trust | REF | 53,747 | 53,031 | 98.7% | 69,014 | 68,362 | 99.1% |
| Royal Devon and Exeter NHS Foundation Trust | RH8 | 23,604 | 22,205 | 94.1% | 83,401 | 81,177 | 97.3% |
| Royal Free Hampstead NHS Trust | RAL | 79,254 | 69,201 | 87.3% | 79,114 | 77,607 | 98.1% |
| Royal Liverpool and Broadgreen University Hospitals NHS Trust | RQ6 | 105,560 | 100,900 | 95.6% | 112,594 | 108,206 | 96.1% |
| Royal Surrey County Hospital NHS Trust | RA2 | 58,003 | 49,133 | 84.7% | 58,390 | 57,391 | 98.3% |
| Royal United Hospital Bath NHS Trust | RD1 | 66,781 | 56,373 | 84.4% | 66,791 | 63,591 | 95.2% |
| Royal West Sussex NHS Trust | RPR | 51,717 | 51,123 | 98.9% | 51,713 | 51,154 | 98.9% |
| Salford Primary Care Trust | 5F5 | - | - | - | 25,153 | 25,144 | 100.0% |
| Salford Royal NHS Foundation Trust | RM3 | 62,936 | 61,676 | 98.0% | 77,572 | 76,193 | 98.2% |
| Salisbury NHS Foundation Trust | RNZ | 41,812 | 40,991 | 98.0% | 40,813 | 40,017 | 98.0% |
| Sandwell and West Birmingham Hospitals NHS Trust | RXK | 221,089 | 0 | 0.0% | 221,934 | 217,473 | 98.0% |
| Scarborough and North East Yorkshire Healthcare NHS Trust | RCC | 48,039 | 47,286 | 98.4% | 48,841 | 48,070 | 98.4% |
| Sefton Primary Care Trust | 5NJ | - | - | - | 33,988 | 33,988 | 100.0% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| Sheffield Children's NHS Foundation Trust | RCU | 48,898 | 48,431 | 99.0% | 49,093 | 48,641 | 99.1% |
| Sheffield Teaching Hospitals NHS Foundation Trust | RHQ | 71,409 | 63,489 | 88.9% | 172,686 | 168,891 | 97.8% |
| Sherwood Forest Hospitals NHS Foundation Trust | RK5 | 95,534 | 93,720 | 98.1% | 98,904 | 97,077 | 98.2% |
| Shrewsbury and Telford Hospitals NHS Trust | RXW | 97,606 | 97,606 | 100.0% | 102,436 | 99,584 | 97.2% |
| Shropshire County Primary Care Trust | 5M2 | 15,128 | 15,108 | 99.9% | 26,604 | 26,589 | 99.9% |
| Solihull Care Trust | TAM | - | - | - | 8,860 | 8,860 | 100.0% |
| Somerset Primary Care Trust | 5QL | - | - | - | 68,874 | 68,828 | 99.9% |
| South Birmingham Primary Care Trust | 5M1 | - | - | - | 10,651 | 10,651 | 100.0% |
| South Devon Healthcare NHS Foundation Trust | RA9 | 69,398 | 68,113 | 98.1% | 72,138 | 70,896 | 98.3% |
| South Staffordshire Primary Care Trust | 5PK | 57,770 | 57,769 | 100.0% | 51,648 | 51,646 | 100.0% |
| South Tees Hospitals NHS Foundation Trust | RTR | 120,318 | 119,068 | 99.0% | 123,068 | 121,827 | 99.0% |
| South Tyneside NHS Foundation Trust | RE9 | 52,848 | 52,159 | 98.7% | 52,966 | 52,262 | 98.7% |
| South Warwickshire General Hospitals NHS Trust | RJC | 51,286 | 48,942 | 95.4% | 51,596 | 49,359 | 95.7% |
| South West Essex Primary Care Trust | 5PY | - | - | - | 21,459 | 21,457 | 100.0% |
| Southampton City Primary Care Trust | 5L1 | - | - | - | 132,263 | 132,263 | 100.0% |
| Southampton University Hospitals NHS Trust | RHM | 97,360 | 88,381 | 90.8% | 102,887 | 98,666 | 95.9% |
| Southend University Hospital NHS Foundation Trust | RAJ | 87,422 | 85,061 | 97.3% | 92,910 | 91,148 | 98.1% |
| Southport and Ormskirk Hospital NHS Trust | RVY | 79,837 | 77,534 | 97.1% | 81,673 | 79,380 | 97.2% |
| St George's Healthcare NHS Trust | RJ7 | 104,121 | 100,633 | 96.7% | 134,105 | 130,634 | 97.4% |

| Provider description | Code | HES | | | QMAE | | |
|---|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| St Helens and Knowsley Hospitals NHS Trust | RBN | 186,252 | 184,182 | 98.9% | 102,111 | 100,126 | 98.1% |
| Stockport NHS Foundation Trust | RWJ | 83,215 | 80,412 | 96.6% | 81,181 | 78,385 | 96.6% |
| Suffolk Primary Care Trust | 5PT | - | - | - | 32,410 | 32,408 | 100.0% |
| Sunderland Teaching Primary Care Trust | 5KL | - | - | - | 79,679 | 79,674 | 100.0% |
| Surrey and Sussex Healthcare NHS Trust | RTP | 45,909 | 43,623 | 95.0% | 60,120 | 57,856 | 96.2% |
| Surrey Primary Care Trust | 5P5 | - | - | - | 150,343 | 150,307 | 100.0% |
| Swindon Primary Care Trust | 5K3 | - | - | - | 54,947 | 54,896 | 99.9% |
| Tameside Hospital NHS Foundation Trust | RMP | 76,146 | 74,974 | 98.5% | 76,519 | 75,344 | 98.5% |
| Taunton and Somerset NHS Foundation Trust | RBA | 48,245 | 46,719 | 96.8% | 48,313 | 47,512 | 98.3% |
| Telford and Wrekin Primary Care Trust | 5MK | - | - | - | 3,075 | 3,075 | 100.0% |
| The Dudley Group of Hospitals NHS Foundation Trust | RNA | 87,416 | 84,213 | 96.3% | 96,415 | 92,440 | 95.9% |
| The Hillingdon Hospital NHS Trust | RAS | 98,212 | 95,806 | 97.6% | 99,112 | 96,698 | 97.6% |
| The Lewisham Hospital NHS Trust | RJ2 | 111,739 | 110,352 | 98.8% | 130,487 | 129,109 | 98.9% |
| The Newcastle Upon Tyne Hospitals NHS Foundation Trust | RTD | 72,780 | 71,315 | 98.0% | 130,693 | 129,374 | 99.0% |
| The Princess Alexandra Hospital NHS Trust | RQW | 79,612 | 77,219 | 97.0% | 80,423 | 78,662 | 97.8% |
| The Queen Elizabeth Hospital King's Lynn NHS Trust | RCX | 57,884 | 56,863 | 98.2% | 59,233 | 58,209 | 98.3% |
| The Rotherham NHS Foundation Trust | RFR | 74,711 | 66,750 | 89.3% | 74,708 | 72,819 | 97.5% |
| The Royal Bournemouth & Christchurch Hospitals NHS Foundation Trust | RDZ | 43,483 | 40,563 | 93.3% | 63,522 | 62,988 | 99.2% |
| The Royal Wolverhampton Hospitals NHS Trust | RL4 | 99,904 | 92,202 | 92.3% | 99,944 | 98,730 | 98.8% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| The Whittington Hospital NHS Trust | RKE | 76,868 | 75,423 | 98.1% | 89,388 | 87,933 | 98.4% |
| Torbay Care Trust | TAL | 6,590 | 6,559 | 99.5% | 9,153 | 9,148 | 99.9% |
| Tower Hamlets Primary Care Trust | 5C4 | - | - | - | 44,355 | 44,355 | 100.0% |
| Trafford Healthcare NHS Trust | RM4 | 57,344 | 54,136 | 94.4% | 57,754 | 56,727 | 98.2% |
| United Lincolnshire Hospitals NHS Trust | RWD | 173,235 | 167,854 | 96.9% | 182,802 | 177,409 | 97.0% |
| University College London Hospitals NHS Foundation Trust | RRV | 93,574 | 91,113 | 97.4% | 93,571 | 91,172 | 97.4% |
| University Hospital Birmingham NHS Foundation Trust | RRK | 83,051 | 81,331 | 97.9% | 83,061 | 81,454 | 98.1% |
| University Hospital of North Staffordshire NHS Trust | RJE | 99,034 | 93,913 | 94.8% | 145,096 | 140,032 | 96.5% |
| University Hospital of South Manchester NHS Foundation Trust | RM2 | 81,469 | 78,475 | 96.3% | 81,459 | 78,718 | 96.6% |
| University Hospitals Coventry and Warwickshire NHS Trust | RKB | 146,828 | 141,502 | 96.4% | 150,087 | 144,914 | 96.6% |
| University Hospitals of Bristol NHS Foundation Trust | RA7 | 111,066 | 104,187 | 93.8% | 111,066 | 107,180 | 96.5% |
| University Hospitals of Leicester NHS Trust | RWE | 156,025 | 152,498 | 97.7% | 156,054 | 152,524 | 97.7% |
| University Hospitals of Morecambe Bay NHS Trust | RTX | 103,114 | 101,048 | 98.0% | 103,984 | 101,920 | 98.0% |
| Wakefield District Primary Care Trust | 5N3 | - | - | - | 34,961 | 34,960 | 100.0% |
| Walsall Hospitals NHS Trust | RBK | 78,649 | 76,664 | 97.5% | 86,053 | 84,133 | 97.8% |
| Waltham Forest Primary Care Trust | 5NC | - | - | - | 45,147 | 45,069 | 99.8% |
| Wandsworth Primary Care Trust | 5LG | 21,843 | 21,835 | 100.0% | 48,042 | 48,040 | 100.0% |
| Warrington and Halton Hospitals NHS Foundation Trust | RWW | 91,556 | 89,902 | 98.2% | 91,548 | 89,892 | 98.2% |
| Warwickshire Primary Care Trust | 5PM | - | - | - | 21,462 | 21,462 | 100.0% |
| West Essex Primary Care Trust | 5PV | - | - | - | 51,798 | 51,797 | 100.0% |

| Provider description | Code | HES | | | QMAE | | |
|--|------|-------------------|---|--|-------------------|---|--|
| | | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E | Total Attendances | Number of patients who spent less than 4 hrs in A&E | % of patients who spent less than 4 hrs in A&E |
| England | | 13,266,413 | 12,352,871 | 93.1% | 19,588,017 | 19,208,874 | 98.1% |
| West Hertfordshire Hospitals NHS Trust | RWG | 110,851 | 107,545 | 97.0% | 120,378 | 118,007 | 98.0% |
| West Kent Primary Care Trust | 5P9 | - | - | - | 76,342 | 76,264 | 99.9% |
| West Middlesex University Hospital NHS Trust | RFW | 97,541 | 94,845 | 97.2% | 97,541 | 94,901 | 97.3% |
| West Suffolk Hospitals NHS Trust | RGR | 47,639 | 46,246 | 97.1% | 47,638 | 46,258 | 97.1% |
| West Sussex Primary Care Trust | 5P6 | 11,144 | 11,132 | 99.9% | 67,593 | 67,326 | 99.6% |
| Westminster Primary Care Trust | 5LC | - | - | - | 31,169 | 31,169 | 100.0% |
| Weston Area Health NHS Trust | RA3 | 45,949 | 43,743 | 95.2% | 46,960 | 45,915 | 97.8% |
| Whipps Cross University Hospital NHS Trust | RGC | 90,959 | 86,831 | 95.5% | 102,571 | 98,314 | 95.8% |
| Wiltshire Primary Care Trust | 5QK | 39,591 | 39,525 | 99.8% | 43,132 | 43,108 | 99.9% |
| Winchester and Eastleigh Healthcare NHS Trust | RN1 | 57,206 | 54,535 | 95.3% | 57,152 | 56,233 | 98.4% |
| Wirral Primary Care Trust | 5NK | - | - | - | 78,917 | 78,917 | 100.0% |
| Wirral University Teaching Hospital NHS Foundation Trust | RBL | 94,085 | 89,778 | 95.4% | 94,095 | 90,649 | 96.3% |
| Wolverhampton City Primary Care Trust | 5MV | - | - | - | 35,405 | 35,405 | 100.0% |
| Worcestershire Acute Hospitals NHS Trust | RWP | 135,560 | 131,523 | 97.0% | 135,570 | 131,534 | 97.0% |
| Worcestershire Primary Care Trust | 5PL | - | - | - | 32,776 | 32,773 | 100.0% |
| Worthing and Southlands Hospitals NHS Trust | RPL | 16,260 | 15,431 | 94.9% | 75,262 | 73,964 | 98.3% |
| Wrightington, Wigan and Leigh NHS Foundation Trust | RRF | 26,224 | 21,049 | 80.3% | 86,114 | 81,508 | 94.7% |
| Yeovil District Hospital NHS Foundation Trust | RA4 | 38,325 | 37,622 | 98.2% | 42,119 | 41,438 | 98.4% |
| York Hospitals NHS Foundation Trust | RCB | 67,973 | 64,306 | 94.6% | 68,287 | 66,069 | 96.8% |

Appendix 2: Number of A&E attendances by first A&E investigation '1-2 character description field', 2008-09 and 2007-08

| First A&E investigation | 2008-09 | | 2007-08 | |
|--|-----------------------|-----------------------------|-----------------------|-----------------------------|
| | Number of attendances | Percentage (valid records) | Number of attendances | Percentage (valid records) |
| Arterial/capillary blood gas | 22,220 | 0.2% | 10,299 | 0.1% |
| Bacteriology | 98,270 | 1.1% | 74,638 | 0.9% |
| Biochemistry | 546,038 | 6.1% | 415,811 | 5.3% |
| Blood culture | 5,296 | 0.1% | 3,305 | 0.0% |
| Cardiac enzymes | 10,434 | 0.1% | 1,505 | 0.0% |
| Clotting studies | 16,400 | 0.2% | 5,630 | 0.1% |
| Computerised tomography (exc genito urinary contrast examination/tomography) | 105,137 | 1.2% | 32,523 | 0.4% |
| Computerised tomography (retired 2006) | 28,749 | 0.3% | 37,114 | 0.5% |
| Cross match blood/group & save serum for later cross match | 84,377 | 0.9% | 64,622 | 0.8% |
| Dental investigation | 779 | 0.0% | 438 | 0.0% |
| Electrocardiogram | 362,776 | 4.0% | 367,663 | 4.7% |
| Genito urinary contrast examination/tomography | 4,609 | 0.1% | 5,325 | 0.1% |
| Haematology | 559,183 | 6.2% | 550,359 | 7.0% |
| Histology | 3,087 | 0.0% | 1,919 | 0.0% |
| Immunology | 3,428 | 0.0% | 897 | 0.0% |
| Magnetic resonance imaging | 27,798 | 0.3% | 44,204 | 0.6% |
| None | 2,266,170 | 25.2% | 1,479,094 | 18.7% |
| Other | 1,006,699 | 11.2% | 1,219,487 | 15.4% |
| Pregnancy test | 17,910 | 0.2% | 12,702 | 0.2% |
| Refraction, orthoptic tests and computerised visual fields | 40,424 | 0.4% | 21,913 | 0.3% |
| Serology | 2,095 | 0.0% | 808 | 0.0% |
| Toxicology | 3,253 | 0.0% | 2,312 | 0.0% |
| Ultrasound | 64,110 | 0.7% | 78,267 | 1.0% |
| Urinalysis | 246,545 | 2.7% | 266,843 | 3.4% |
| X-ray plain film | 3,482,978 | 38.7% | 3,198,790 | 40.5% |
| Total Valid records | 9,008,765 | 66.3% | 7,896,468 | 66.6% |
| Total Invalid records | 4,572,746 | 33.7% | 3,957,862 | 33.4% |
| Total | 13,581,511 | | 11,854,330 | |

Appendix 3: Number of A&E attendances by first A&E primary diagnosis '1-2 character description field', 2008-09 and 2007-08

| First A&E treatment | 2008-09 | | 2007-08 | |
|---|-----------------------|-----------------------------|-----------------------|-----------------------------|
| | Number of attendances | Percentage (valid records) | Number of attendances | Percentage (valid records) |
| Allergy (inc anaphylaxis) | 49,638 | 0.4% | 48,149 | 0.4% |
| Bites/stings | 60,861 | 0.4% | 58,832 | 0.5% |
| Burns and scalds | 87,863 | 0.6% | 94,054 | 0.8% |
| Cardiac conditions | 278,586 | 2.0% | 251,488 | 2.0% |
| Central nervous system conditions (exc stroke) | 179,500 | 1.3% | 130,269 | 1.1% |
| Cerebro-vascular conditions | 79,373 | 0.6% | 72,531 | 0.6% |
| Contusion/abrasion | 442,501 | 3.2% | 437,146 | 3.5% |
| Dermatological conditions | 62,833 | 0.5% | 61,239 | 0.5% |
| Diabetes and other endocrinological conditions | 33,191 | 0.2% | 29,774 | 0.2% |
| Diagnosis not classifiable | 1,266,514 | 9.2% | 1,247,456 | 10.1% |
| Dislocation/fracture/joint injury/amputation | 644,563 | 4.7% | 619,867 | 5.0% |
| Electric shock | 4,021 | 0.0% | 13,814 | 0.1% |
| ENT conditions | 135,411 | 1.0% | 127,202 | 1.0% |
| Facio-maxillary conditions | 31,757 | 0.2% | 36,981 | 0.3% |
| Foreign body | 105,243 | 0.8% | 103,115 | 0.8% |
| Gastrointestinal conditions | 413,656 | 3.0% | 388,367 | 3.2% |
| Gynaecological conditions | 91,951 | 0.7% | 92,028 | 0.7% |
| Haematological conditions | 26,210 | 0.2% | 28,099 | 0.2% |
| Head injury | 272,485 | 2.0% | 238,099 | 1.9% |
| Infectious disease | 86,024 | 0.6% | 77,481 | 0.6% |
| Laceration | 663,475 | 4.8% | 623,479 | 5.1% |
| Local infection | 204,313 | 1.5% | 209,372 | 1.7% |
| Muscle/tendon injury | 198,140 | 1.4% | 191,089 | 1.6% |
| Near drowning | 635 | 0.0% | 1,271 | 0.0% |
| Nerve injury | 8,095 | 0.1% | 7,448 | 0.1% |
| Nothing abnormal detected | 276,850 | 2.0% | 217,606 | 1.8% |
| Obstetric conditions | 30,940 | 0.2% | 28,925 | 0.2% |
| Ophthalmological conditions | 270,345 | 2.0% | 223,551 | 1.8% |
| Other vascular conditions | 40,597 | 0.3% | 34,323 | 0.3% |
| Poisoning (inc overdose) | 117,183 | 0.8% | 106,278 | 0.9% |
| Psychiatric conditions | 71,738 | 0.5% | 58,926 | 0.5% |
| Respiratory conditions | 357,481 | 2.6% | 323,342 | 2.6% |
| Septicaemia | 6,850 | 0.0% | 5,507 | 0.0% |
| Social problems (inc chronic alcoholism and homelessness) | 28,964 | 0.2% | 21,213 | 0.2% |
| Soft tissue inflammation | 473,055 | 3.4% | 433,500 | 3.5% |
| Sprain/ligament injury | 530,922 | 3.8% | 535,852 | 4.4% |
| Urological conditions (inc cystitis) | 161,050 | 1.2% | 149,445 | 1.2% |
| Vascular injury | 7,536 | 0.1% | 7,318 | 0.1% |
| Visceral injury | 4,920 | 0.0% | 13,771 | 0.1% |
| Valid records | 7,805,270 | 56.6% | 7,348,207 | 59.7% |
| Invalid records | 5,988,802 | 43.4% | 4,969,844 | 40.3% |
| Total | 13,794,072 | | 12,318,051 | |

Appendix 4: Number of A&E attendances by A&E treatment '1-2 character description field', 2008-09 and 2007-08

| A&E primary diagnosis | 2008-09 | | 2007-08 | |
|--|-----------------------|----------------------------|-----------------------|----------------------------|
| | Number of attendances | Percentage (valid records) | Number of attendances | Percentage (valid records) |
| Active rewarming of the hypothermic patient | 413 | 0.0% | 117 | 0.0% |
| Anaesthesia | 51,719 | 0.6% | 43,590 | 0.6% |
| Arterial line | 1,179 | 0.0% | 1,298 | 0.0% |
| Bandage/support | 157,837 | 2.0% | 122,470 | 1.6% |
| Blood product transfusion | 416 | 0.0% | 253 | 0.0% |
| Burns review | 3,472 | 0.0% | 2,775 | 0.0% |
| Central line | 21,529 | 0.3% | 26,394 | 0.3% |
| Chest drain | 867 | 0.0% | 9,874 | 0.1% |
| Continuous positive airways pressure/nasal intermittent positive pressure ventilation/bag valve mask | 2,390 | 0.0% | 4,131 | 0.1% |
| Cooling - control body temperature | 12,948 | 0.2% | 10,126 | 0.1% |
| Defibrillation/pacing | 714 | 0.0% | 635 | 0.0% |
| Dental treatment | 1,701 | 0.0% | 130 | 0.0% |
| Dressing | 279,632 | 3.5% | 291,920 | 3.7% |
| Dressing/wound review | 12,429 | 0.2% | 6,694 | 0.1% |
| Epistaxis control | 2,787 | 0.0% | 1,467 | 0.0% |
| Eye | 19,345 | 0.2% | 13,556 | 0.2% |
| Fracture review | 5,090 | 0.1% | 1,089 | 0.0% |
| Guidance/advice only | 3,020,024 | 37.7% | 2,801,648 | 35.9% |
| Incision and drainage | 12,058 | 0.2% | 12,280 | 0.2% |
| Infusion fluids | 38,576 | 0.5% | 20,696 | 0.3% |
| Intravenous cannula | 357,366 | 4.5% | 336,022 | 4.3% |
| Intubation & Endotracheal tubes/laryngeal mask airways/rapid sequence induction | 2,040 | 0.0% | 2,254 | 0.0% |
| Joint aspiration | 795 | 0.0% | 479 | 0.0% |
| Lavage/emesis/charcoal/eye irrigation | 5,345 | 0.1% | 4,094 | 0.1% |
| Loan of walking aid (crutches) | 25,732 | 0.3% | 14,897 | 0.2% |
| Lumbar puncture | 89 | 0.0% | 23 | 0.0% |
| Manipulation | 27,154 | 0.3% | 58,010 | 0.7% |
| Medication administered | 363,302 | 4.5% | 195,965 | 2.5% |
| Minor plastic procedure/splint skin graft | 121 | 0.0% | 79 | 0.0% |

| A&E primary diagnosis | 2008-09 | | 2007-08 | |
|---|-----------------------|-----------------------------|-----------------------|-----------------------------|
| | Number of attendances | Percentage (valid records) | Number of attendances | Percentage (valid records) |
| Minor surgery | 9,915 | 0.1% | 9,077 | 0.1% |
| Nasal airway | 19,480 | 0.2% | 12,928 | 0.2% |
| Nebulise/spacer | 37,354 | 0.5% | 36,738 | 0.5% |
| None (consider guidance/advice option) | 967,931 | 12.1% | 1,291,831 | 16.5% |
| Observation/electrocardiogram,pulse oximetry/head injury/trends | 508,521 | 6.4% | 456,636 | 5.8% |
| Occupational therapy | 1,223 | 0.0% | 1,116 | 0.0% |
| Oral airway | 313 | 0.0% | 95 | 0.0% |
| Other (consider alternatives) | 550,421 | 6.9% | 664,555 | 8.5% |
| Other parenteral drugs | 85,702 | 1.1% | 81,184 | 1.0% |
| Parenteral thrombolysis | 6,083 | 0.1% | 1,983 | 0.0% |
| Pericardiocentesis | 224 | 0.0% | 10 | 0.0% |
| Physiotherapy | 11,734 | 0.1% | 13,376 | 0.2% |
| Plaster of Paris | 120,976 | 1.5% | 112,071 | 1.4% |
| Prescription (retired 2006) | 267,461 | 3.3% | 365,882 | 4.7% |
| Prescription/medicines prepared to take away | 232,482 | 2.9% | 172,898 | 2.2% |
| Recall/x-ray review | 9,462 | 0.1% | 7,974 | 0.1% |
| Recording vital signs | 206,493 | 2.6% | 132,663 | 1.7% |
| Removal foreign body | 39,332 | 0.5% | 36,025 | 0.5% |
| Resuscitation/cardiopulmonary resuscitation | 7,700 | 0.1% | 7,884 | 0.1% |
| Sling/collar cuff/broad arm sling | 50,205 | 0.6% | 33,670 | 0.4% |
| Social worker intervention | 516 | 0.0% | 476 | 0.0% |
| Splint | 122,264 | 1.5% | 117,827 | 1.5% |
| Supplemental oxygen | 26,774 | 0.3% | 14,544 | 0.2% |
| Sutures | 64,405 | 0.8% | 62,496 | 0.8% |
| Tetanus | 13,157 | 0.2% | 14,886 | 0.2% |
| Urinary catheter/suprapubic | 14,590 | 0.2% | 11,815 | 0.2% |
| Wound cleaning | 73,631 | 0.9% | 40,268 | 0.5% |
| Wound closure (exc sutures) | 127,581 | 1.6% | 122,136 | 1.6% |
| Valid records | 8,003,000 | 58.0% | 7,806,010 | 63.4% |
| Invalid records, unmatched | 5,791,072 | 42.0% | 4,512,041 | 36.6% |
| Total | 13,794,072 | 100.0% | 12,318,051 | 100.0% |

Appendix 5: Data submissions to A&E HES

A list of mandatory and optional fields for submission in the A&E Commissioning Data Set (CDS) are provided by Connecting for Health within the CDS data dictionary [http://www.datadictionary.nhs.uk/data_dictionary/messages/cds_v6/cds_v6_type_010_fr.asp?shownav=1].

CDS V6 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 6: Glossary of terms

| | |
|---------|--|
| A&E | Accident and Emergency |
| A&E HES | <p>'Accident and Emergency Hospital Episodes Statistics' is a name given to the data set that contains data on individual A&E attendances. A&E HES is one of a number of data sets available from the family of HES products.</p> <p>More information on HES products is available on the HESonline website [http://www.hesonline.nhs.uk].</p> |
| CDS | Commissioning Data Set |
| DH | Department of Health |
| HES | Hospital Episode Statistics is a brand that holds a collection of data sets produced from regular CDS submissions, these data sets include, admitted patient care, outpatients and now A&E. |
| NHS IC | The NHS Information Centre for health and social care |
| MIU | Minor Injury Unit |
| NHS | National Health Service |
| ONS | Office for National Statistics |
| OP | Outpatient |
| PAS | Patient Administration Systems |
| PCT | Primary Care Trust |
| QMAE | Quarterly Monitoring of Accident and Emergency |
| SUS | Secondary Uses Service |
| WIC | Walk-in Centre |

| | |
|--|---|
| <p>Accident and Emergency Attendances in England (Experimental Statistics), 2008-09</p> <p>Price: Free</p> | <p>e NHS Information Centre nment Statistical Service</p> <p>36-377-1</p> <p>may be requested in large print or</p> <p>ation contact:</p> <p>website: www.ic.nhs.uk telephone: 0845 300 6016 email: enquiries@ic.nhs.uk</p> <p>Copyright © 2010, Health and Social Care Information Centre, All rights reserved.</p> |
|--|---|

HES 2008-09¹ A&E Data Quality Note

The data quality note will be updated in the event of issues arising post-publication. A summary of changes made will appear in the table below.

| Version control | |
|-----------------|---|
| Date | Summary of Update |
| 26/01/2010 | 2008-09 A&E Data Quality Note published |

For the most recent version of this data quality note, please see the 'Data quality notes' area of HESonline [<http://www.hesonline.nhs.uk>].

Introduction

The following issues have been identified are present in the yearly data:

Experimental dataset

The A&E dataset is an experimental dataset which has a number of continuing issues regarding quality and coverage of certain key fields. For more information about the 2008-09 A&E HES data please refer to the Accessing the data area of HESonline [<http://www.hesonline.nhs.uk>].

Diagnosis codes

CDS v6 introduces the ability to submit more than two A&E diagnoses. Although these are rarely used due to time pressures in A&E departments, where they are used they are currently not being processed into SUS or hence HES.

Impact: only two providers (RPR and RWW) are known to have submitted more than two diagnosis codes with CDS v6. This means that the number of affected records will be very small, so the impact is minimal.

Age at CDS Activity Date / Age on Admission

There are unusually high counts in both fields for the values '8' and '9' which do not correspond with HES-derived age fields, such as Age at End of Episode. This is currently being investigated and the data quality note will be updated in due course.

Impact: these fields have been removed until the issue has been fully investigated.

¹ Data submitted to SUS by 12 June 2009.

Known provider issues: coverage issues

The following organisations have shortfalls; their data should be interpreted with caution:

| Organisations with shortfalls / missing data | | | |
|---|-----------|----------------------|--------------------------------|
| Organisation name | Org. code | Months affected | Approx. no. of records missing |
| Kensington And Chelsea PCT | 5LA | Apr - Jul, Oct - Nov | 9,000 |
| Wandsworth PCT | 5LG | May - Feb | 55,000 |
| North Somerset PCT | 5M8 | Apr - Mar | 7,200 |
| Yeovil District Hospital NHS Foundation Trust | RA4 | Mar | 3,500 |
| Bedford Hospital NHS Trust | RC1 | Sep - Mar | 35,000 |
| Scarborough And North East Yorkshire Health Care NHS Trust | RCC | Feb | 800 |
| Poole Hospital NHS Foundation Trust | RD3 | Dec - Mar | 18,000 |
| The Royal Bournemouth And Christchurch Hospitals NHS Foundation Trust | RDZ | Dec - Mar | 17,000 |
| Sheffield Teaching Hospitals NHS Foundation Trust | RHQ | Nov - Mar | 40,000 |
| The Dudley Group Of Hospitals NHS Foundation Trust | RNA | Nov - Dec | 8,000 |
| Doncaster And Bassetlaw Hospitals NHS Foundation Trust | RP5 | Jun - Mar | 130,000 |