

# **BRIEFING PAPER**

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# Accident and Emergency Statistics: Demand, Performance and Pressure

LONDON A MBULANCI

By Carl Baker

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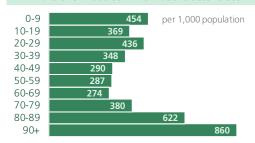
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# Pressure on A&E in England: summary

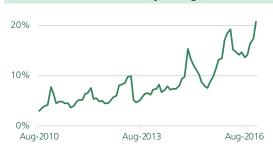
In 2016 there were an average of 2,210 more attendances at major A&Es every day compared with 2015. That is a 5.5% increase.



People aged 80+ have the highest rates of A&E attendance. In terms of raw numbers, ages 20-24 are the most common adult attendees.



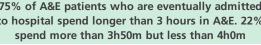
In the last year, 16.2% of people spent more than 4 hours in major A&E departments. This has risen from 4.8% five years ago.

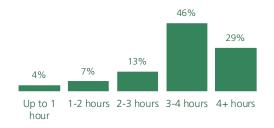


Over the last year, Hillingdon Hospitals had the highest % of patients spending over 4 hours in major A&Es. Luton & Dunstable had the lowest.

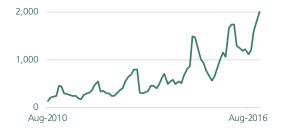


75% of A&E patients who are eventually admitted to hospital spend longer than 3 hours in A&E. 22%

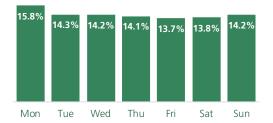




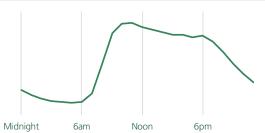
In 2016, an average of 1,477 people each day waited 4+ hours for admission to hospital via A&E. Five years ago the figure was 270 per day.



Monday has the most attendances at A&E. On average is 14% busier than Friday, which has the lowest attendances.

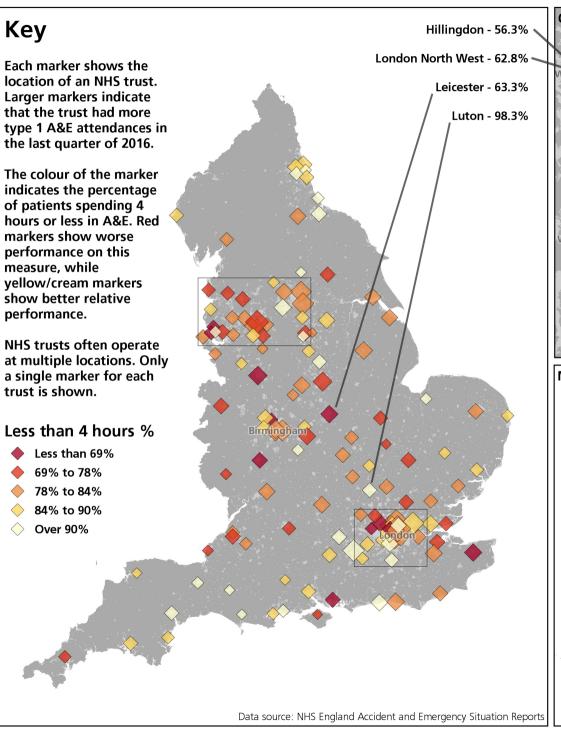


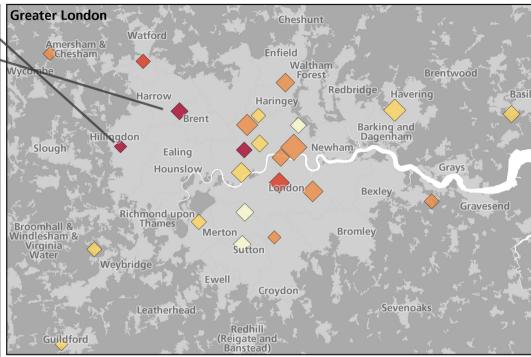
Three-fifths of A&E attendances arrive between 9am and 6pm. 9% are between midnight and 6am. The early hours are busiest on Sundays.

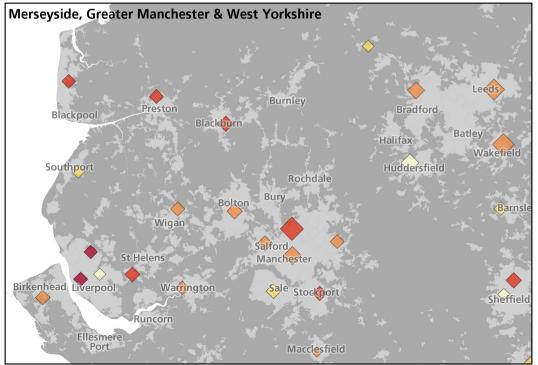


The above data refers to England only. Equivalent data for Scotland, Wales and Northern Ireland (where available) is given in sections 5-7 below.

# Accident and Emergency Waiting Times: Performance of English NHS Trusts in Q4 2016







# 1. Introduction

# 1.1 Summary statistics

### Attendance & Admissions

- In 2016 there were 23.57 million attendances at England's A&E departments, of which 65% were at major emergency departments ('type 1') which operate a consultant-led 24 hour service. The remainder were at minor injury units, walk-in centres, and single speciality facilities.<sup>1</sup>
- Total attendance increased by 5.2% compared with 2015 equivalent to an average of 3,216 more people attending A&E each day. Attendance at A&E appears to be increasing at a faster rate than population growth.
- In 2016 at major A&E departments, the increase in attendance was 5.5% – an average of 2,210 more attendances each day.
- There were 4.26 million emergency admissions to hospital via A&E in 2015/16 – up 4.5% on the previous year and up 17% on five vears ago.
- Those aged 80+ are most likely to attend A&E. Of working age adults, those aged 20-24 have the highest rate of attendance at A&E.
- Most A&E attendances occur between 9am and 6pm, with 10am being the time with the highest attendances. Monday is the busiest day in terms of attendance levels.
- Dislocation/joint injury/fracture/amputation is the most common category of first diagnosis for A&E patients, followed by gastrointestinal conditions.

### **Performance**

- There are a variety of measures of waiting times at A&E, including average time to treatment, average time spent in A&E, and percentage of patients spending less than four hours in A&E.
- The number and percentage of patients spending over four hours in A&E has risen in recent years. In 2016, over 16.2% of patients in type 1 departments spent over 4 hours in A&E – the highest for over a decade. The target for 95% of all attendees to be discharged, admitted or transferred within 4 hours has not been met in the monthly data since July 2015.
- Long waits for admission have also become more common, with twelve hour 'trolley waits' - the numbers waiting over 4 hours for admission after a decision to admit – doubling in 2016 compared with 2015.

### **UK Countries**

Relative to population size, Northern Ireland has the highest rate of attendance at major A&E departments of UK countries. Once we include minor A&E departments, England's total rate of attendance is higher.

<sup>&</sup>lt;sup>1</sup> NHS England, A&E Attendances and Emergency Admissions

On the four-hour measure, recent performance at hospital A&Es in Scotland is slightly better than in England. Wales has a higher proportion of A&E episodes lasting over 4 hours than England or Scotland. Northern Ireland has the highest percentage in the UK, with over a quarter of patients spending over 4 hours in major A&E departments in 2015/16.

Data in this briefing paper is presented at a national level with some regional and provider-level summaries. Data for individual local providers or NHS regions is available for many of the measures discussed here, and can be obtained by contacting the Library or consulting the sources referenced in this document.

# 1.2 Types of emergency care

Emergency care departments are divided into a number of types corresponding to different levels of care provision.<sup>2</sup>

Type 1 (or 'major') departments are defined as those with a consultant led 24-hour service with full resuscitation facilities and designated accommodation for the reception of accident and emergency patients.<sup>3</sup> They are sometimes known as 'major' A&E departments, and are the kinds of large facilities that are traditionally associated with A&E. Type 1 departments make up around two-thirds of all A&E attendances in England.

Type 2 departments are consultant led facilities with a single speciality, such as ophthalmology or dentistry. An example of this is Moorfields Eye Hospital in London.

Type 3 departments are other types of A&E/minor injury unit with designated accommodation. They may be doctor-led or nurse-led and treats at least minor injuries/illnesses. They can be routinely accessed without appointment. They exclude services which are mainly or entirely appointment-based (e.g. GP Practice or Out-Patient Clinic). NHS walk-in centres are also excluded. Type 3 departments make up around a third of all A&E attendances.

When considering A&E statistics it is important to know which types of department are being discussed. A&E data sometimes refers only to Type 1 (major) departments, and such data is not comparable with data which refers to all A&E departments. Two key differences, which will be explored further below, are as follows: first, waiting times at type 1 departments are typically higher than at other departments; second, very few patients are admitted to hospital from type 2 or 3 departments.



Figure 1: A campaign from Bristol, Somerset & Gloucestershire designed to reduce unnecessary attendance at type 1 A&E departments

<sup>&</sup>lt;sup>2</sup> NHS Data Dictionary

<sup>&</sup>lt;sup>3</sup> In England and Northern Ireland these are called 'Type 1'. In Wales they are known as 'Major A&E'. Scotland has a category called 'Emergency Department' which is broadly similar but more loosely defined: 'larger A&E services that **typically** provide a 24-hour consultant led service' (emphasis mine)

In England, providers vary in their provision of emergency care. Some (e.g. community health trusts) provide only minor emergency services such as walk-in centres. Some (e.g. many acute health trusts) provide only major A&E units. However, some providers offer a range of service levels – i.e. a major A&E unit plus some other minor

It is important to keep this distribution in mind while considering A&E performance figures. Figures for type 1 departments only are often given separately to figures for all departments, for reasons that will be discussed below. But for some providers there is no distinction between type 1 provision and all A&E provision, and their performance for 'type 1 only' and 'all departments' will be identical. On the other hand, some A&E providers will not appear at all in 'type 1 only' statistics since they operate no type 1 facilities.

# A&E Attendance: Who, When, Why, How Many?

The following three sections of this briefing focus on data for England. Sections 5-7 cover data on A&E services in Scotland, Wales and Northern Ireland.

# 2.1 How many people attend A&E?

In 2016 there were 23.5 million attendances at England's A&E departments, of which 15.4 million (around two-thirds) were at type 1 (major) emergency departments.<sup>4</sup> Total attendance increased by 5.2% compared with 2015 – equivalent to an average of 3,200 more people attending A&E each day in England. Attendance at major emergency departments was up 5.5% on 2015, equivalent to an extra 2,210 people attending major emergency departments each day.

**Chart 1** looks at longer-term annual trends over the past decade. It shows that most of the rise in total attendance is due to minor departments – mostly type 3 departments such as minor injury units and urgent care centres. Attendance at such departments nearly doubled between 2004/05 and 2014/15, while attendance at major emergency departments rose 10%. However, some of the increase in type 3 attendance is due to better recording and changes in classification of existing services rather than new attendance.

In recent years the increases in attendance at major and minor departments have been of a similar scale. Attendance at type 2 (single speciality) departments has not changed substantially over this period.

<sup>&</sup>lt;sup>4</sup> NHS England, A&E Attendances and Emergency Admissions

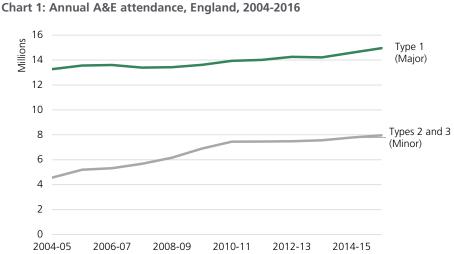
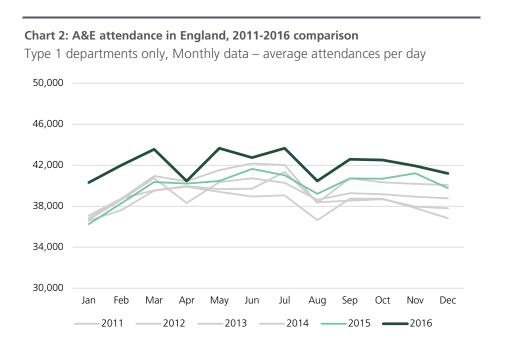


Chart 2 shows a detailed comparison of monthly A&E attendance since 2011. The dark green line shows 2016, the light green line shows 2015, and other years are coloured grey. As the chart shows, attendances in early 2016 markedly higher than recent years. The chart also shows clear annual trends in attendance, with peaks in the late spring and summer, and troughs in August, January and (sometimes) April.



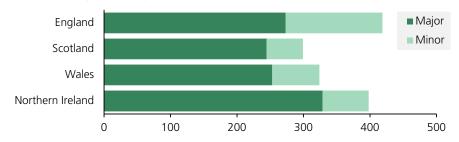
When population size is taken into account, overall A&E attendance is higher in England than in other UK countries, as **Chart 3** shows. This is mainly because attendance at minor A&E departments (e.g. walk in centres) is markedly higher in England than elsewhere in the UK. If we consider only major emergency departments, e.g. hospital A&E

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departments, Northern Ireland has attendance rates 19% higher than England. <sup>5</sup>

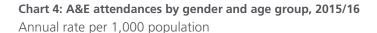
Chart 3: A&E attendance per 1,000 population: comparison of UK countries, 2015/16

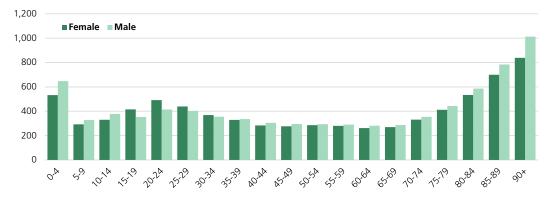
Calculated using ONS mid-year population estimates 2015



### 2.2 Who attends A&E?

Tendency to attend A&E varies by age. **Chart 4** (below) shows the number of attendees in each age group relative to population size (the number of attendances per 1,000 population). It is also broken down by gender.<sup>6</sup>





People aged 80+ are most likely to attend A&E. Of working age adults, however, those aged 20-24 are more likely to attend than any other age bracket. As **Chart 5** shows, however, the sharp rise in attendance rates among those older than 65 does not reflect a higher *number* of attendances among members of this age. Rather, it reflects that there are fewer people in older age groups, so the number of attendances relative to the number of people is higher in those age categories. In practice this means that on average, one-fifth of A&E attendees are aged 65 or above and one-guarter are aged 19 or younger.

<sup>&</sup>lt;sup>5</sup> ONS Mid-Year Population Estimates, 2015

<sup>&</sup>lt;sup>6</sup> Accident and Emergency Attendances in England - 2014-15

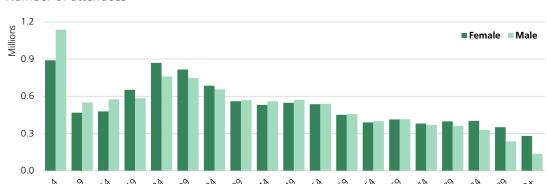


Chart 5: A&E attendance by gender and age group, 2015/16 Number of attendees

Gender differences in A&E attendance vary by age group. As **Chart 5** shows, among children aged 0-14, boys are more likely to attend A&E. Among those aged 15-34, women are more likely to attend A&E. From age 35 upwards, the rate of men attending A&E is slightly higher than women.

# 2.3 When do people attend A&E?

As discussed above, Chart 3 shows trends in A&E attendance across the year – with the peak in late spring and early summer and troughs in August and January. 7

In terms of days of the week, Monday is the busiest day at A&E with attendance 10% above the daily average and also 10% above the nextbusiest day, Tuesday. 10am on Monday is the single busiest hour.

Figures 2 and 3 illustrate this and other trends for all days and times in a week – showing also that the early hours of Saturday and Sunday are busier than other nights. The quietest time is 5am on Wednesday. Note that "busier" and "quieter" here refer only to the number of attendees. Whether a department is perceived as "busy" at any given time will also depend on other factors such as staffing levels. These figures represent the pattern throughout the year and that there will be significant divergence between particular days and weeks.

<sup>&</sup>lt;sup>7</sup> Accident and Emergency Attendances in England - 2014-15

Figure 2: Heatmap of A&E attendance by day and time, 2015/16

Darker shading indicates higher attendance

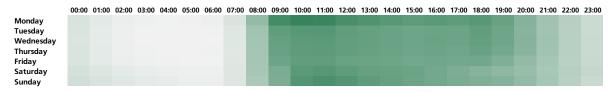
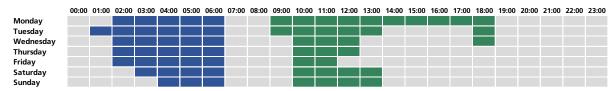


Figure 3: Highest and lowest hours by total A&E attendance

Green = highest 20%, Blue = lowest 20%



9% of attendances are between the hours of midnight and 7am, while 58% occur between 9am and 6pm.

As one would expect, the attendance pattern at A&E is not the same for all types of patients. Figures 4 and 5 show heatmaps for attendances related to road accidents and assault. Road accident-related attendances are highest at around 18:00 on weekdays. Attendances after assault are much higher in the early hours of Sunday than at any other time. They are also higher throughout the weekend than during the week except Mondays.

Figure 4: Heatmap of A&E attendance for road accidents, 2015/16

Darker shading indicates higher attendance

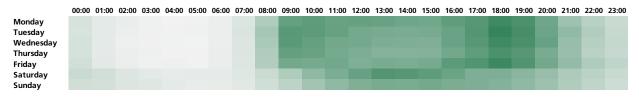


Figure 5: Heatmap of A&E attendance after assault, 2013/14

Darker shading indicates higher attendance



# 2.4 Why do people attend A&E?

The Hospital Episode Statistics data contains some information on A&E attendances by 'patient group'. This shows that in 2013/14 1.2% of attendances came after a road traffic accident, 18.8% after an 'other accident' 1.7% after a sports injury, 0.7% after assault and 0.6% after deliberate self-harm. 75% of attendances were recorded as 'other', i.e. not given a specific category among the above. 8

Further information is given on the primary diagnosis which patients receive in emergency departments, as summarised in **Table A**. This gives some insight into the kinds of conditions for which people attend A&E.

Table A: Most common first recorded diagnoses at A&E, 2015/16

Diagnosis	Number	Change since 2014/15	Diagnosis	Number	Change since 2014/15
Diagnosis not classifiable	3,081,515	+3%	Head injury	430,725	+9%
Dislocation/fracture/joint injury/amputation	891,155	+6%	Nothing abnormal detected	394,271	+12%
Gastrointestinal conditions	781,358	+8%	ENT conditions	376,707	+14%
Soft tissue inflammation	720,044	+9%	Urological conditions (inc cystitis)	376,250	+9%
Sprain/ligament injury	710,763	+4%	Local infection	311,020	+5%
Laceration	703,147	+1%	Central nervous system conditions (exc stroke)	281,052	+6%
Respiratory conditions	676,079	+12%	Muscle/tendon injury	280,808	+6%
Cardiac conditions	494,217	+9%	Infectious disease	249,863	+24%
Contusion/abrasion	493,437	+1%	Poisoning (inc overdose)	182,175	+11%
Ophthalmological conditions	455,104	+6%	Gynaecological conditions	170,303	+7%

The recent QualityWatch report on A&E found little evidence that the complexity of cases in A&E has increased. The proportion of people with one or more long-term conditions attending A&E has not changed notably.

**Table B** summarises the most common recorded first treatments of those attending A&E. Of all valid records, almost 38% of attendances resulted in guidance or advice, and a further 11% resulted in no treatment - totalling almost half of recorded attendees.

Table B: Most common first recorded treatments at A&E, 2014/15

Treatment	Number	Change since 2014/15	Treatment	Number	Change since 2014/15
Guidance/advice only	7,346,215	+7%	Infusion fluids	225,869	+15%
None (consider guidance/advice option)	2,164,828	-5%	Splint	222,001	-2%
Recording vital signs	1,850,257	-1%	Plaster of Paris	168,463	-9%
Observation/electrocardiogram pulse oximetry	1,534,724	+7%	Wound closure (exc sutures)	163,926	-10%
Medication administered	1,376,024	-1%	Bandage/Support	146,720	-8%
Intravenous cannula	870,112	+17%	Wound cleaning	144,698	+1%
Prescription/medicines prepared to take away	611,831	-2%	Sling/colar cuff/broad arm sling	94,980	-8%
Other parenteral drugs	608,779	+3%	Nebulise/spacer	90,295	+2%
Other (consider alternatives)	399,477	+6%	Sutures	79,624	-9%
Dressing	391,575	-2%	Anaesthesia	78,644	-2%

<sup>&</sup>lt;sup>8</sup> Accident and Emergency Attendances in England - 2014-15

# 3. How long do patients spend in A&E?

This section describes the data available for measuring waiting times in A&E departments: different measures, how they relate to each other, and the limitations of each measure for estimating waiting times.

# 3.1 How are A&E waiting times measured?

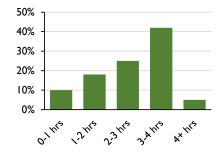
### The Four-Hour-Measure

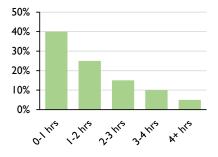
The most familiar measure of A&E performance is the 'four-hour measure', i.e. the percentage of patients who spend less than four hours between their arrival at A&E and either their discharge, their admission to hospital, or their transfer to another institution. This is the only data point on A&E waiting times published in England's monthly data.9

The NHS in England has a target that 95% of patients at A&E departments should be discharged, admitted or transferred within four hours of their arrival. This is measured on a quarterly basis against all A&E departments.

One weakness of this statistic is that it is not sensitive to all differences in waiting times. Simply knowing what percentage of patients spend less than four hours in A&E does not conclusively tell us anything about waiting times. Two A&E departments who both met the four-hour target of 95% could nevertheless have very different waiting times, as **Charts 6** shows. Both of the (imaginary) providers in this chart have 5% of patients waiting over four hours. But waiting times at the second provider are clearly lower, since 40% of patients spend less than one hour in A&E, whereas for the first provider only 10% of patients spend less than one hour in A&E. This means that while the four-hour measure is a useful measure of pressures on A&E departments, it does not tell us the whole story about waiting times.

Chart 6: Illustration of two different waiting times profiles showing identical performance on the four-hour measure





There is also a measure on those waiting over four hours between decision to admit and admission – this will be covered in the section on admissions, below.

Also, because this target measures the entire period a patient spends in A&E, it doesn't only measure 'waiting' time – it also measures the time spent in treatment.

The remaining waiting times measures detailed below are all found in the Hospital Episode Statistics (HES) publications.

### Time to initial assessment

This indicator measures the time from arrival in A&E to the start of full initial assessment. 10 The routinely published data covers only those patients who arrive by emergency ambulance. The following measures are published:

- Median
- 95<sup>th</sup> percentile
- Longest wait

The target for this measure is that 95% of patients who arrive by emergency ambulance should receive their initial assessment within 15 minutes of arrival. This indicator is aimed at reducing the clinical risk associated with the time that a patient spends unassessed in the A&E department.

There are data quality issues with this measure since it can be difficult for staff to enter the time of initial assessment for patients in real-time. The published data also contains data quality indicators such as the percentage of attendances with an unknown duration to assessment.

This indicator cannot tell us a full story about waiting times since it only makes up a small proportion of the time that patients typically spend in A&E. Moreover, it may not account for the entirety of a patient's time waiting in A&E: after initial assessment, a patient will typically have to wait for treatment.

### Time to treatment

This indicator measures the time from arrival in A&E to the start of a definitive treatment from a decision-making clinician. The following measures are published:

- Median
- 95<sup>th</sup> percentile
- Longest wait

The target for this measure is that the median wait for treatment should be below 60 minutes.

This measure offers a fuller picture of A&E waiting times than time to initial assessment. However, it does not reflect any divergences in the time spent being treated, which may also be relevant to assessing A&E performance in some cases.

<sup>&</sup>lt;sup>10</sup> Accident and Emergency Attendances in England - 2014-15

# Total time spent in A&E

This indicator measures the time from arrival in A&E to departure, whether through admission, transfer or discharge. The following measures are published:

- Median (Admitted patients)
- 95<sup>th</sup> percentile (Admitted patients)
- Longest wait (Admitted patients)
- Median (Non-Admitted patients)
- 95<sup>th</sup> percentile (Non-Admitted patients)
- Longest wait (Non-Admitted patients)
- Median (All patients)
- 95<sup>th</sup> percentile (All patients)
- Longest wait (All patients)

The target for this measure is that 95% of patients should spend less than four hours in A&E. This corresponds to the target on the four-hour measure discussed above.

Like the four-hour target, this data measures the entire period a patient spends in A&E. As such, it does not only measure time spent 'waiting'.

### A Balanced View

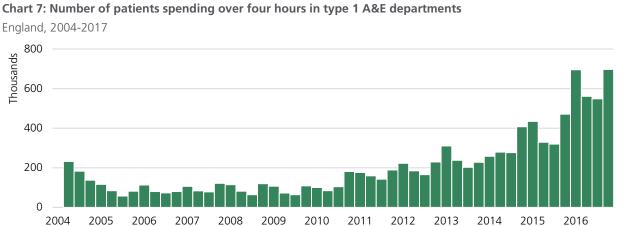
While each indicator tells us a part of the story regarding A&E waiting times, we should be cautious about isolating any particular measure as the sole representative of A&E performance. Rather, any judgement about the performance of A&E departments should be made on the basis of careful consideration and triangulation of all indicators while keeping the limitations of each measure in mind.

### 3.2 The Four-Hour Wait: Trends

While the four-hour and its associated target concern all A&E departments, almost all waits over four hours are in major (type 1) departments – almost 98% in the most recent guarter.

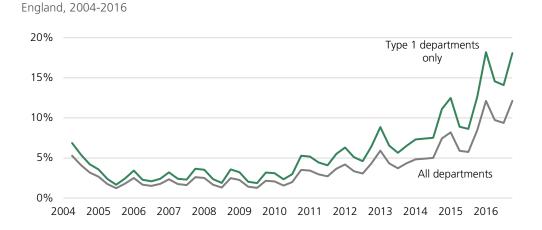
**Chart 7** shows quarterly data since 2004 on the number of patients spending over 4 hours in major A&E departments. This is not adjusted for changes in attendance over the period. It shows that the number of patients spending over 4 hours in type 1 A&E departments was seven times higher in in 2016 than in 2005, and over almost four times as high as 2011. In the guarter ending December 2016, a record 697,000 patients spent over 4 hours in A&E. There were an average of 2,600 extra 4-hour waits each day in 2015/16 compared with 2014/15. 11

<sup>&</sup>lt;sup>11</sup> NHS England, A&E Attendances and Emergency Admissions



**Chart 8** shows these changes relative to attendance – that is, as a percentage of all patients attending A&E in a given guarter. Rates underwent only small changes between 2005 and 2010 save for seasonal variation. Between 2010 and 2014 there was been a gradual rise in waiting times on the four-hour measure, both for type 1 departments and for all departments. From 2014 onwards there has been a substantial rise in the proportion of patients spending over 4 hours in A&E. The official target – 95% of patients waiting less than four hours at all A&E departments, measured quarterly – has been breached in the nine most recent quarters. There is no official target which applies just to type 1 departments. On both measures, the guarter ending March 2016 was a new record high for 4-hour waits: 12.1% in all departments, and 18.2% in type 1 departments. These figures were matched in the quarter ending December 2016.

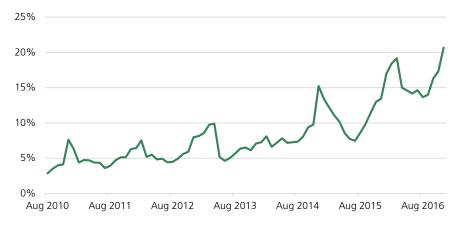
Chart 8: Percentage of patients spending over four hours in A&E departments



Monthly data tells a more detailed story of the four-hour measure. **Chart 9** shows data for major (type 1) A&E departments. There is a clear seasonal effect, with most winters seeing a rise in the percentage of patients waiting over four hours despite (typically) a fall in overall attendance. In December 2016, over 20% of type 1 A&E attendees

spent over 4 hours from arrival to discharge or admission – the first time that this has happened in the current data series. 12

Chart 9: Percentage of patients spending over four hours in A&E, type 1 departments -- England, 2010-2016



## Patients spending 4+ hours in A&E, England, 2011-2016, all departments

	2011	2012	2013	2014	2015	2016	
Jan	4%	4%	5%	5%	9%	11%	
Feb	3%	5%	6%	5%	8%	12%	
Mar	3%	3%	6%	4%	7%	13%	
Apr	3%	4%	7%	5%	7%	10%	
May	3%	3%	3%	5%	6%	10%	
Jun	3%	3%	3%	5%	5%	9%	
Jul	2%	3%	3%	5%	5%	10%	
Aug	3%	3%	4%	5%	6%	9%	
Sep	3%	3%	4%	5%	7%	9%	
Oct	3%	4%	4%	6%	8%	11%	
Nov	3%	4%	4%	7%	9%	12%	
Dec	4%	5%	5%	10%	9%	14%	
Key							
	2.0%-3.5%						
	Meeting target 3.5%-5.0%						
	5.0%-7.0%						
	7.0%-9.0% Breaching target						
	9.0% -	11.0%					
	11.0% or more						

The table to the left shows a comparison of performance year-onyear for all departments. Each column represents a year, with every month represented as a square. Green squares represent performance above the 95% 4-hour target and orange squares represent performance below the target. Reading from left to right allows comparison of equivalent months in different years – so, for instance, the 95% target was met in December 2011 but not in December 2012. Note that the percentages shown are rounded to the nearest whole percentage.

<sup>&</sup>lt;sup>12</sup> NHS England, A&E Attendances and Emergency Admissions

### Twelve hour waits

Data has recently been published on twelve-hour waits in A&E, broken down by the age of the patient. Chart 10 below shows trends over the past five years. The percentage of patients spending over 12 hour in A&E has more than doubled over this period, However, the increase has been larger among older age groups.

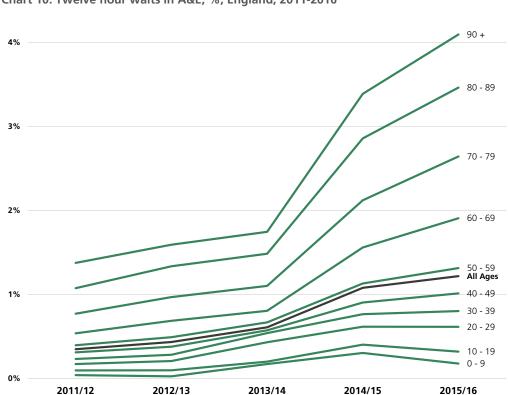


Chart 10: Twelve hour waits in A&E, %, England, 2011-2016

### Provider-level data

In the guarter ending September 2016, 101 of 233 providers met the 95% target for all A&E departments, including 60 who recorded less than 0.1% (one-thousandth) of their patients waiting for over four hours. These 60 are all providers operating only minor A&E services. 132 providers did not meet the target, including 95 whose performance was below 90% on the four-hour measure and 21 whose performance was below 80%. The ten providers with the lowest performance on this standard in 2016 as a whole are shown in **Table C**. 13

<sup>&</sup>lt;sup>13</sup> NHS England, A&E Attendances and Emergency Admissions

Table C: Providers with the highest percenta	age of patients spending more than
four hours in A&E	All departments, 2016

The Princess Alexandra Hospital NHS Trust (Harlow)	26.2%
Nottingham University Hospitals NHS Trust	24.4%
Stockport NHS Foundation Trust	23.2%
Portsmouth Hospitals NHS Trust	22.5%
North Bristol NHS Trust	22.3%
University Hospitals Of North Midlands NHS Trust	22.0%
North Middlesex University Hospital NHS Trust	21.6%
Medway NHS Foundation Trust	21.3%
Weston Area Health NHS Trust	21.0%
University Hospitals Of Leicester NHS Trust	21.0%

**Table D** shows the four-hour wait for type 1 departments only. Almost all 4-hour waits are in type 1 departments, so this may be regarded as a more meaningful figure There is no official target referring only to type 1 departments, but it is still useful to focus on these departments in order to compare providers. Some providers operate only type 1 A&E facilities while some also operate type 2 or 3 facilities, so we can only compare the performance of these trusts when we focus on type 1 attendance only. Otherwise, differences in performance might otherwise be explained by differences in service composition.

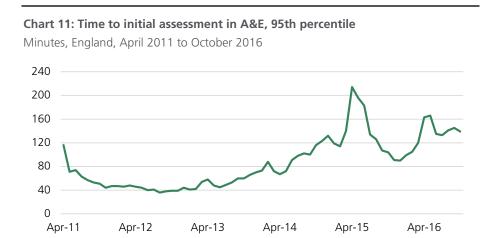
Table D: Providers with the highest and lowest percentage of patients spending over 4 hours in A&E Type 1 departments only, 2016

The Hillingdon Hospitals NHS Foundation Trust	38.3%
University Hospitals Of Leicester NHS Trust	33.3%
University Hospitals Of North Midlands NHS Trust	30.4%
Aintree University Hospital NHS Foundation Trust	28.9%
Portsmouth Hospitals NHS Trust	28.9%
West Hertfordshire Hospitals NHS Trust	28.1%
Blackpool Teaching Hospitals NHS Foundation Trust	27.4%
Nottingham University Hospitals NHS Trust	27.0%
London North West Healthcare NHS Trust	27.0%
Imperial College Healthcare NHS Trust	26.9%
Gateshead Health NHS Foundation Trust	6.6%
Surrey And Sussex Healthcare NHS Trust	6.3%
Harrogate And District NHS Foundation Trust	6.1%
Homerton University Hospital NHS Foundation Trust	5.8%
Epsom And St Helier University Hospitals NHS Trust	5.8%
Western Sussex Hospitals NHS Foundation Trust	5.5%
Birmingham Children's Hospital NHS Foundation Trust	5.5%
South Warwickshire NHS Foundation Trust	5.0%
Sheffield Children's NHS Foundation Trust	2.9%
Luton And Dunstable University Hospital NHS Foundation Trust	1.8%

### 3.3 Time to initial assessment

This measure is routinely published only for patients arriving at A&E by ambulance. The median time to initial assessment for ambulance cases was 3-4 minutes between 2011 and 2014, but has now risen to 7 minutes. <sup>14</sup>

The 95<sup>th</sup> percentile – i.e. the time that the longest-waiting 5% of patients had to wait more than – was 2h20m in July 2016. This has risen from a stable 40-50 minutes between 2011 and 2013. There are quality concerns about this data point since it is particularly sensitive to outliers and to incorrect recording of data.

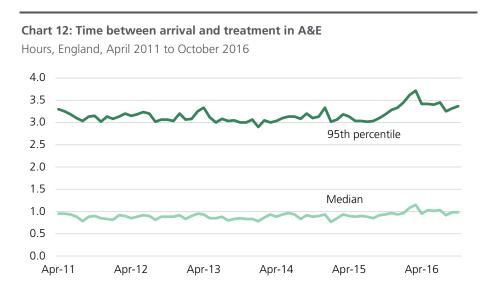


### 3.4 Time to treatment

The time to treatment measures the time between arrival and first treatment. The median time to treatment – the time which half of patients wait more than and the other half patients wait less than -- is a little over one hour, as **Chart 12** shows. This has risen slightly over the last two years. The 95<sup>th</sup> percentile time to treatment has risen from just over 3 hours to around 3.5 hours. <sup>15</sup>

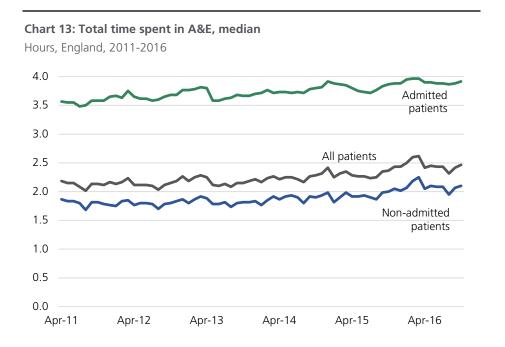
<sup>&</sup>lt;sup>14</sup> Accident and Emergency Attendances in England - 2014-15

<sup>&</sup>lt;sup>15</sup> Accident and Emergency Attendances in England - 2014-15



### 3.5 Total time in A&E

Chart 13 shows the median total time in A&E since 2011. Patients who are eventually admitted to hospital typically spend 60% more time in A&E than those who are not admitted. In October 2016, the median total time in A&E was two and a half hours – just under four hours for admitted patients and around 2h5m for non-admitted patients. 16



<sup>&</sup>lt;sup>16</sup> Accident and Emergency Attendances in England - 2014-15

Chart 15 shows the 95th percentile time spent in A&E since 2011. This measure has seem greater change than the median values since 2015. 5% of admitted patients now spend longer than 12 hours in A&E. 5% of non-admitted patients spend more than 5 hours in A&E.

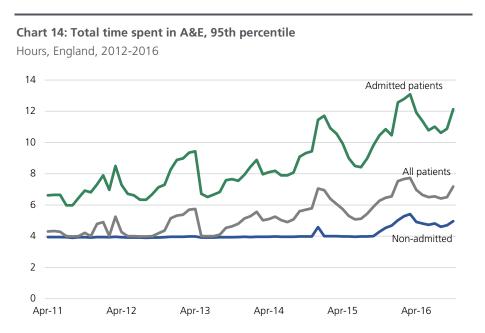
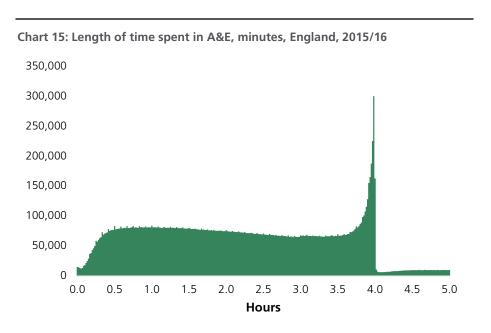
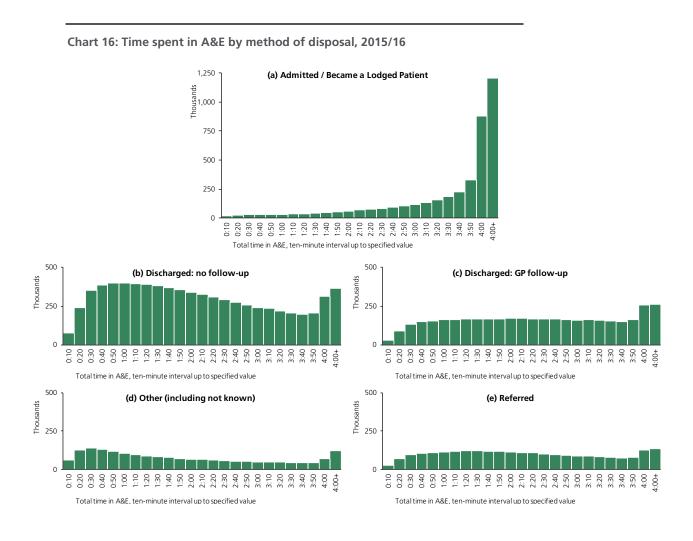


Chart 15 below shows more detailed data on the minute at which people leave A&E after their arrival. The most notable aspect of the chart is the large spike in discharges and admissions just before the four hour mark.



# Time spent in A&E by method of departure

Time spent in A&E varies substantially depending on the patient's eventual 'method of disposal' – that is, the way in which they leave A&E. Chart 16 and Table E illustrate this. Three quarters of patients who are eventually admitted to hospital spend longer than 3 hours in A&E, compared with 23% of those who are discharged with no followup and 33% of those who are discharged with a GP follow-up. Of patients who are referred elsewhere, 26% spend longer than 3 hours in A&E. Almost a quarter of all admitted patients are recorded as leaving A&E in the ten-minute period between 3h 50m and 4 hours of their arrival. The percentage of admitted patients spending more than 4 hours in A&E has rose from 17% to 29% between 2013/14 and 2015/16. 17



<sup>&</sup>lt;sup>17</sup> Accident and Emergency Attendances in England - 2014-15

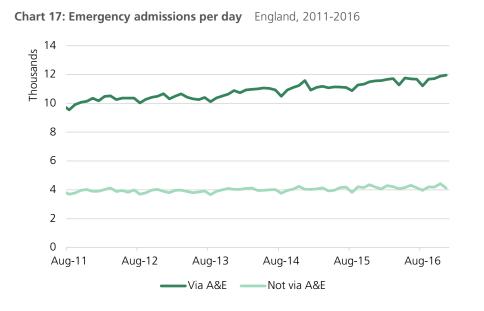
	Method of disposal						
% departed within time	Admitted / became a lodged patient	Discharged - GP follow up	Discharged - no follow up	Referred	Other (Inc. not known)		
Less than 1 hour	4%	18%	25%	21%	35%		
1-2 hours	7%	25%	30%	29%	25%		
2-3 hours	13%	25%	23%	24%	18%		
3-4 hours	46%	26%	18%	21%	16%		
4+ hours	29%	6%	5%	5%	6%		
% of total patients	20%	20%	37%	12%	10%		

Table E: Total time spent in A&E by method of disposal, 2015/16

# 4. Emergency Admissions

Around three-quarters of all emergency admissions come via A&E departments. Of these, almost 99% are via type 1 (major) A&E departments. In, 4.3 million patients were admitted to hospital via A&E - a year-on-year rise of 4.4%, and a five-year rise of 19%. 18

**Chart 16** shows the trend in emergency admissions since 2011. In December 2016 a new monthly record high of 11,953 emergency admissions per day via A&E was set. This was 3.4% higher than December 2015.



There has been a marked rise in the number of patients waiting more than 4 hours for admission after a decision had been made to admit them. Chart 19 shows trends. Average rates in summer 2016 were more than double the rates in winter 2011. In 2016, an average of

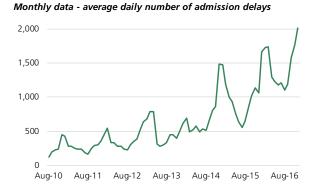
<sup>&</sup>lt;sup>18</sup> NHS England, A&E Attendances and Emergency Admissions

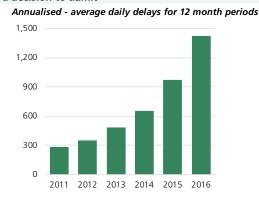
1,400 people waited over 4 hours for admission each day – compared with 280 each day five years ago.

Chart 18: Patients waiting over 4 hours for admission to hospital after a decision to admit was made

England, 2011-2016

# Long waits for admission - patients waiting for 4+ hours after a decision to admit





The trend is even starker when we consider only those patients who waited over 12 hours for admission after a decision to admit was made. Between August 2010 and November 2014 – a period of 52 months – a total of 747 patients waited more than 12 hours for admission. In the quarter ending March 2015 – a period of 3 months – 987 waited over 12 hours for admission.

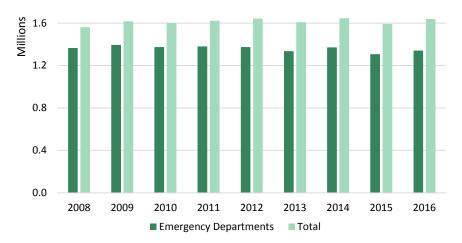
In 2016, almost 2,600 people waited twelve hours or more for admission – compared with 1,200 in 2015.

# 5. Scotland

In 2015, 1.34 million patients attended Scotland's emergency departments, up 3% on 2015. A further 300,000 patients accessed Scotland's minor injury units and other urgent care services – up 3% on 2013. **Chart 19** illustrates the annual trend since 2008. 19

### Chart 19: A&E attendance in Scotland

Annual data, 2008-2015

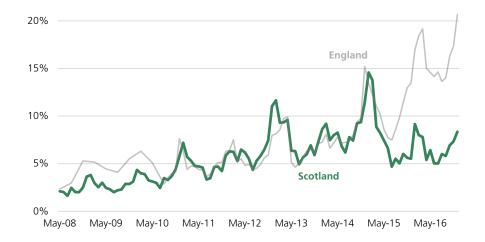


In 2016, 6.8% of those attending Scotland's emergency departments had a total stay of over 4 hours. This is an improvement on 2015's figure of 7.6%.

**Chart 20** shows the trend in Scotland's emergency departments since 2007. It also shows performance at England's type 1 departments for comparison. Until 2015 the two been largely comparable in performance. Since then Scotland's waiting times have improved and England's have declined.

### Chart 20: Patients spending over 4 hours in A&E, Scotland

With comparison to England; 2008-2016



<sup>&</sup>lt;sup>19</sup> ISD Scotland Waiting Times

Among Scottish NHS boards in 2016, Tayside & Western Isles had the lowest percentage spending more than 4 hours in emergency departments. Greater Glasgow & Clyde had the highest percentage spending over 4 hours. The table below shows trends since 2012. The colour scale is equivalent to the England chart in the previous section, with values below 5% coloured green and those above 5% coloured orange.

Chart 21: Patients spending over 4 hours in A&E, 2012-2016

Scotland, emergency departments only, by NHS health board

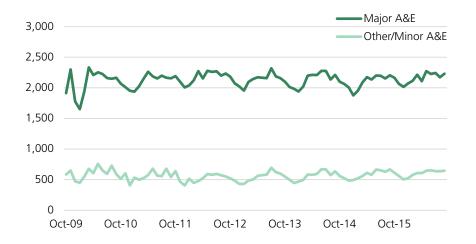
	2012	2013	2014	2015	2016
Scotland	6.3%	7.4%	8.3%	7.6%	6.8%
<b>Greater Glasgow &amp; Clyde</b>	6.2%	9.4%	11.7%	11.4%	9.3%
Ayrshire & Arran	6.8%	8.6%	7.0%	9.9%	7.4%
Lanarkshire	7.0%	9.0%	12.0%	8.4%	7.3%
Forth Valley	8.9%	9.2%	8.3%	6.9%	7.2%
Fife	7.5%	5.4%	6.9%	5.9%	6.3%
Lothian	8.7%	7.3%	5.6%	5.7%	5.9%
Highland	3.0%	3.6%	4.6%	4.4%	5.2%
Grampian	4.8%	4.8%	7.0%	6.2%	5.1%
Borders	3.7%	2.4%	4.3%	5.0%	4.9%
<b>Dumfries &amp; Galloway</b>	5.9%	5.3%	3.5%	3.2%	4.7%
Shetland	0.6%	1.0%	3.2%	3.1%	4.4%
Orkney	N/A	N/A	1.3%	1.8%	1.7%
Tayside	1.6%	1.4%	1.2%	1.5%	1.6%
Western Isles	2.3%	1.9%	2.3%	1.7%	0.8%

# 6. Wales

In the year to September 16 there were 790,000 attendances at Welsh major A&E departments – up 3.2% on the previous year. Chart 22 shows monthly trends in the average number attending each day since 2009.20

Chart 22: Attendance at Welsh major A&E departments

Monthly data, average attendances per day, 2009-2016



Performance on the four-hour measure tends to be lower in Wales than in England or Scotland. In September 2016, 21% of patients in Welsh major A&E departments had a total stay of over 4 hours. Chart 23 shows trends in Wales since 2009 with a comparison to England. Despite the difference in performance, peaks and troughs in performance are roughly matched between England and Wales.

Overall in 2015/16, 22.9% major A&E attendees in Wales spent longer than 4 hours in the department. This is up from 17.9% in 2013/14.

Chart 23: Patients spending over 4 hours in major A&E departments, Wales 2009-2015, with comparison to England



<sup>&</sup>lt;sup>20</sup> StatsWales, A&E Waiting Times

Waiting times vary between local health boards, as does the size of the increase between 2014/15 and 2015/16. As Chart 24 shows, Abertawe Bro Morgannwg (Swansea, Neath Port Talbot & Bridgend) had the highest percentage of 4-hour waits in the three most recent years. Cwm Taf (with A&Es in Merthyr Tydfil and Llantrisant) had the lowest waiting times in the last two years.

Chart 24: Patients spending over 4 hours in major A&E departments, by local health board

	2015/16	2014/15	2013/14
WALES	22.2%	17.9%	12.3%
Cwm Taf LHB	15.2%	11.6%	10.9%
Hywel Dda LHB	17.0%	13.7%	9.6%
Aneurin Bevan LHB	18.5%	12.2%	9.6%
Cardiff & Vale University LHB	20.2%	16.5%	9.0%
Betsi Cadwaladr University LHB	25.7%	23.6%	14.5%
Abertawe Bro Morgannwg Uni LHB	33.4%	25.6%	18.0%

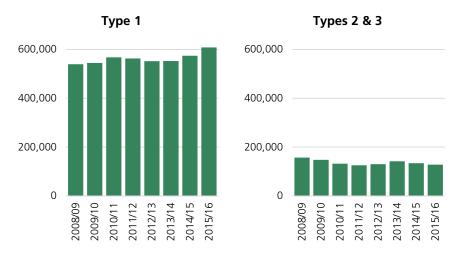
Wales publishes data on the mean and median time that patients spend in A&E departments.<sup>21</sup> In June 2016, the median time spent in A&E in Wales was 2.2 hours while the mean was 3.1 hours.

<sup>&</sup>lt;sup>21</sup> Time spent in NHS A&E, Wales

# 7. Northern Ireland

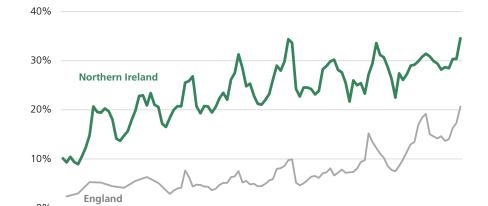
In 2015/16 there were 608,000 attendances at major (type 1) A&E departments in Northern Ireland. This is an increase of 6% on 2014/15. Meanwhile there were 128,000 attendances at type 2 and 3 departments in 2014/15 – down 5% on 2014/15. Chart 25 illustrates these trends since 2008.22





Among UK countries, Northern Ireland typically has the highest percentage of patients spending over 4 hours in A&E. In 2015/16, 28% of patients spent over 4 hours in Northern Irelands type 1 departments. In 2014/15 the figure was 26%. Chart 26 shows trends since 2008 for type 1 departments, with a comparison to England. Unlike other UK countries, performance did not significantly worsen in winter 2014/15 compared with previous years.

Chart 26: Patients spending over 4 hours in type 1 A&E Northern Ireland 2008-2016, with comparison to England



Apr-12

Apr-13

Apr-14

Apr-15

Apr-16

Apr-09

Apr-10

Apr-11

Apr-08

<sup>&</sup>lt;sup>22</sup> Health NI, Hospital Waiting Times

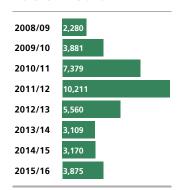
Performance on the four-hour measure varies across Northern Ireland. At three hospitals in 2015/16, more than one-third of patients spent over 4 hours in A&E. At the Royal Belfast Hospital for Sick Children the figure was just over 1 in 10. Chart 27 shows the figure for each hospital operating a type 1 emergency department.

Chart 27: Patients spending over 4 hours in type 1 A&E departments, 2014/15 by hospital

	2015/16	2014/15
Northern Ireland	28%	26%
Royal Belfast Hospital for Sick Children	11%	9%
Daisy Hill Hospital, Newry	17%	17%
South West Acute Hospital, Fermanagh	18%	11%
Mater Hospital, Belfast	25%	29%
Craigavon Area Hospital	28%	22%
Ulster Hospital, Dundonald	29%	27%
Altnagelvin Area Hospital	30%	26%
Causeway Hospital, Coleraine	33%	27%
Royal Victoria Hospital, Belfast	35%	34%
Antrim Area Hospital	38%	36%

The number of patients spending over 12 hours in Northern Ireland's A&E departments has fallen in the last four years after substantial increases between 2008/09 and 2011/12. In 2015/16, twelve-hour waits represented around 0.6% (1 in 156) of attendances at type 1 departments. Chart 28 shows trends since 2008/09.

Chart 28: Patients spending over 12 hours in A&E, **Northern Ireland** 



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