Data resource: May 2018

# NHS hospital data for winter 2017/18

#### **Elizabeth Fisher**

Using the <u>Winter Daily Situation Reports</u> data<sup>1</sup> and monthly data from NHS England and NHS Digital, we have tried to answer the question 'Has the winter of 2017/18 been the worst winter ever for hospitals in England?'.

We analysed comparative time periods (1 December to 28 February  $^2$ ) of 2017/18 with 2016/17 and 2015/16 $^3$  for Winter Daily Situation Reports (and 2014/15 where there is no comparable data in the other previous years) and December to February of 2013/14 to 2017/18 for monthly data.

This resource is published alongside a <u>long-read blog</u> on the Nuffield Trust website. Here we provide you with more detail on the facts and figures the long read is based on.

Data prior to 2015/16 wasn't included in the Winter Daily Situation Reports data analysis, as previous analysis by the Nuffield Trust through QualityWatch, a joint research programme with the Health Foundation, has already analysed earlier data. The <u>report</u> showed that while the winter of 2014/15 was mild, in some areas the performance of the NHS deteriorated, and in others it held up. It also demonstrated that indicators that have traditionally shown poor er performance only in winter, were declining in summers as well



A daily data collection covering a variety of measures and published weekly four days after the week end (Sunday).

The dates were selected so that there is data in each year. There are weekly patterns observed within the data, for example differences in the data between the weekdays and the weekend. Therefore taking equivalent dates will mean that the time periods start on different days of the week and might mean that one year might have more weekdays or weekends than another. However, it is hope that using a long time period for analysis that any differences between different parts of the week will be minimised.

# Demand for emergency care

### Patients arriving by ambulances

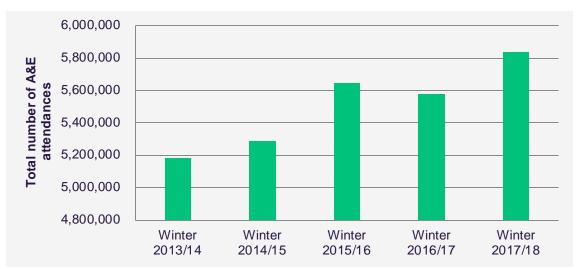
Table 1: Number of ambulances at A&E departments<sup>4</sup> arriving during winter months from 2015/16 to 2017/18

Time period	Number of ambulances
Winter 2015/16	1,225,133
Winter 2016/17	1,244,328
Winter 2017/18	1,215,828

Source: NHS England, Ambulance Quality Indicators

### People attending A&E departments

Figure 1: Total number of A&E attendances during winter months from 2013/14 to 2017/18<sup>5</sup>



Source: NHS England, A&E Attendances and Emergency Admissions

<sup>4</sup> Defined as type 1 and 2 in the data set. For definitions of different types of A&E departments see the supporting information at NHS Digital's report into 2016/17 Hospital accident and emergency activity.

Please note that 2015/16 was a leap year which means one additional day where A&E attendances would be included compared to previous years. Data for 2015/16 in figure 1 was adjusted to reflect this and make it comparable to other years and so is not the total number of A&E attendances for that time period.

Table 2: Differences between years in the number of A&E attendances during winter months

Comparison	Absolute change	Percentage change	
2013/14 to 2017/18	+653,298	+13%	
2016/17 to 2017/18	+361,222	+5%	

Source: NHS England, A&E Attendances and Emergency Admissions

### Patients in hospital

Table 3: Levels of activity <sup>6</sup> at hospitals during winter months from 2013/14 to 2017/18<sup>7</sup>

	Emergency admissions	Emergency admissions via A&E	Total number of non- elective G&A admissions (FFCEs)	Total number of elective G&A total admissions (FFCEs)	Non- elective and elective G&A admissions (FFCEs)	Total number of ordinary episodes (FCEs)
Winter 2013/14	1,340,293	976,017	1,422,636	1,920,540	3,343,176	2,964,500
Winter 2014/15	1,372,396	1,008,322	1,423,631	1,949,981	3,373,612	3,006,240
Winter 2015/16	31,950	984	29,117	41,281	70,399	30,102
Winter 2016/17	1,437,876	1,060,149	1,493,059	2,017,923	3,510,982	3,098,809
Winter 2017/18	1,522,855	1,134,664	1,596,528	1,989,337	3,585,865	3,159,326

Sources: NHS England, A&E Attendances and Emergency Admissions, NHS England, Monthly Hospital Activity Data, NHS Digital, Provisional Monthly Hospital Episode Statistics for Admitted Patient Care

 $<sup>^6</sup>$  Definition of the measures of the levels of activity for patients in hospital:

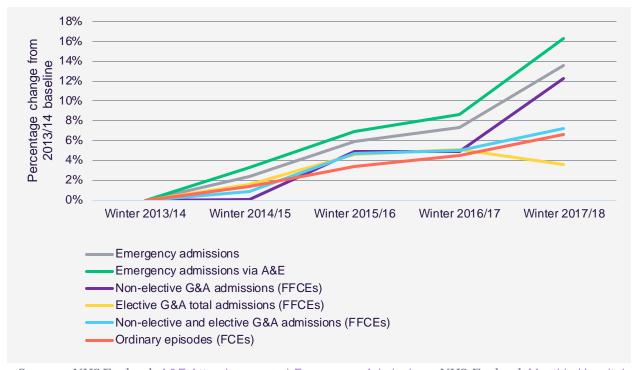
<sup>1.</sup> Non-elective G&A admissions - where a first finished consultant episode (FFCEs) from an ordinary (i.e. where there is an expectation that the patient will stay overnight) general and acute (G&A) admission is recorded as either an emergency admission, maternity admission or other admission (codes 21-83).

<sup>2.</sup> Elective G&A admissions - FFCEs for G&A ordinary and day case elective admissions, which includes admissions from the waiting list, those that are booked and those that are planned.

<sup>3.</sup> Number of ordinary episodes - all Finished Consultant Episodes (FCEs) (i.e. each individual episode of consultant led care through out a patients spell in hospital) when it was an ordinary admissions.

<sup>&</sup>lt;sup>7</sup> 2015/16 data has been adjusted for leap year.

Figure 2: Percentage change in the levels of activity at hospital during winter months from 2013/14 to 2017/18<sup>8</sup>



Sources: NHS England, A&E Attendances and Emergency Admissions, NHS England, Monthly Hospital Activity Data, NHS Digital, Provisional Monthly Hospital Episode Statistics for Admitted Patient Care

<sup>&</sup>lt;sup>8</sup> 2015/16 data has been adjusted for leap year.

# **Bed capacity within the NHS**

Table 4: Number of beds open, occupied and occupancy rate during winter months from 2015/16 to 2017/18

Time period	Daily average number of total (core and escalation) beds open	Daily average number of total beds occupied	Daily average occupancy rate
Winter 2015/16	99,813	94,544	94.7%
Winter 2016/17	98,284	92,291	93.8%
Winter 2017/18	97,535	92,061	94.4%

Source: NHS England, Winter Daily Situation Reports

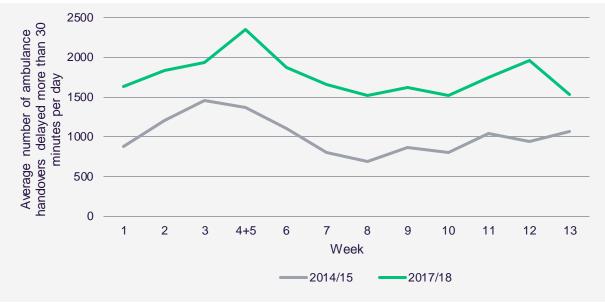
Table 5: Number of beds unavailable due to D&V/norovirus like symptoms

Time period	Number of beds closed
Winter 2015/16	34,520
Winter 2016/17	63,491
Winter 2017/18	74,031

Source: NHS England, Winter Daily Situation Reports

# Waiting times for emergency care

Figure 3: Average number of ambulance handovers delayed by more than 30 minutes per day between 1<sup>st</sup> December (week 1) and 28<sup>th</sup> of February (week 13) in 2014/15 and 2017/18<sup>9</sup>



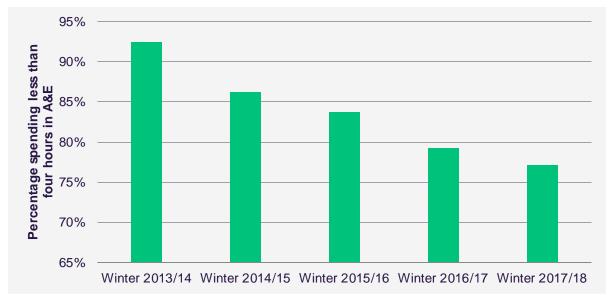
Source: NHS England, Winter Daily Situation Reports

In 2014/15 the data for the  $27^{th}$  and  $28^{th}$  of February and  $1^{st}$  of March were combined into a total number of ambulances delayed by 30 m inutes or more over that time period. Therefore to make 2014/15 data relate just up to the  $28^{th}$  of February, and therefore comparable with the 2017/18 data, the daily average for the  $27^{th}$  of February to the  $1^{st}$  of March was calculated. This average was then used for the values of the  $27^{th}$  and  $28^{th}$  of February when calculating the total between the  $1^{st}$  of December 2014 and the  $28^{th}$  of February 2015.

Weeks four and five were analysed together as in 2014/15 several days over these two weeks were reported on collectively. Week 13 for both time periods only had 6 days. The first day of each week was different between the two different years; 2014/15 started on a Monday and 2017/18 started on a Friday. There are daily peaks and troughs observed in the data throughout the week, with peaks usually occurring on Monday and Tuesday of each week, but both years had equal numbers of Mondays and Tuesdays.

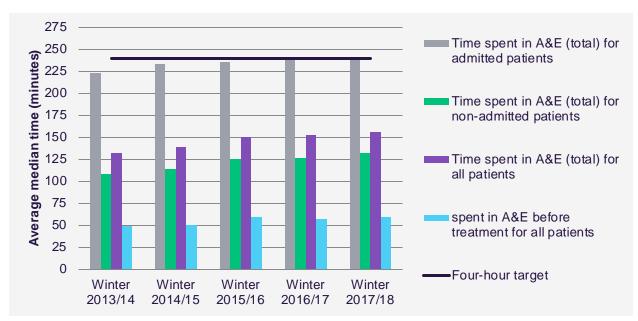
 $<sup>^{9}</sup>$  This data wasn't collected in 2016/17 or 2015/16.

Figure 4: Percentage of patients waiting less than four hours in A&E before being admitted, transferred or discharged during the winter months from 2013/14 to 2017/18



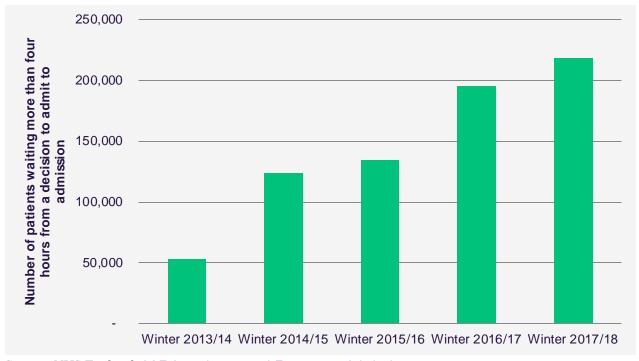
Source: NHS England, A&E Attendances and Emergency Admissions

Figure 5: Time spent in A&E during the winter months from 2013/14 to 2017/18



Source: NHS Digital, Accident & Emergency Quality Indicators

Figure 6: The number of patients waiting more than four hours from a decision to admit to admission during the winter months from 2013/14 to 2017/18



Source: NHS England, A&E Attendances and Emergency Admissions

# The NHS's response to pressure

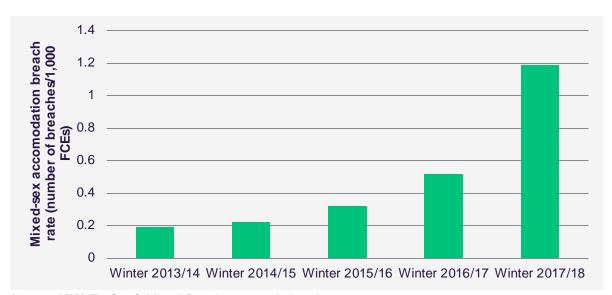
#### Measures to increase the beds available

Table 6: Number of escalation beds opened during winter months from 2015/16 to 2017/18

Time period	Daily average number of escalation beds opened
Winter 2015/16	3,479
Winter 2016/17	3,660
Winter 2017/18	3,908

Source: NHS England, Winter Daily Situation Reports

Figure 7: Mixed-sex accommodation breaches in hospital during winter months from 2013/14 to 2017/18



Source: NHS England, Mixed-Sex Accommodation data

Table 7: Delayed transfer of care

Time period	Total number of delayed days	Difference from previous year	Percentage change from previous year
Winter 2013/14	349,763	7,215	2%
Winter 2014/15	423,770	74,007	21%
Winter 2015/16	471,530	47,760	11%
Winter 2016/17	579,446	107,916	23%
Winter 2017/18	437,507	-141,939	-24%

Source: NHS England, Delayed Transfers of Care

Measures to restrict activity

Table 8: Number of A&E diverts during winter months from 2015/16 to 2017/18

Time period	Number of A&E diverts
Winter 2015/16	265
Winter 2016/17	493
Winter 2017/18	329

Source: NHS England, Winter Daily Situation Reports

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