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# Chair of the UK Statistics Authority, Sir Andrew Dilnot CBE

Rt. Hon. Andy Burnham MP House of Commons LONDON SW1A 0AA

29 July 2014

Dear Mr Burnham

### WAITING TIMES IN ACCIDENT AND EMERGENCY DEPARTMENTS

Thank you for your letter dated 4 July 2014 regarding the Prime Minister's statements in Prime Minister's Questions on 2 July 2014 referring to average waiting times in accident and emergency departments in England. You asked the UK Statistics Authority to review the following statements by the Prime Minister:

"Let me tell the right hon. Gentleman exactly how long people are waiting. When the shadow Secretary of State was Secretary of State for Health, the average waiting time was 77 minutes; under this Government, it is 30 minutes."

"The average waiting time is down by more than half. That is better."2

In addition, you asked us to review the Secretary of State for Health's statement:

"NHS staff are working incredibly hard to see and treat these patients within four hours, and it is a tribute to them that the median wait for an assessment is only 30 minutes under this Government, down from 77 minutes under the last Government."<sup>3</sup>

Table 1 in the attached annex is extracted from data in the Health and Social Care Information Centre (HSCIC) Hospital Episode Statistics (HES) database, which were passed as management information to the Department of Health in November 2013, and subsequently published on the HSCIC website as ad hoc official statistics in July 2014 following a request by the King's Fund. These data show provisional time to assessment, treatment and departure of all patients from 2007-08 to 2012-13. The *mean* time to assessment in 2012-13 was 30 minutes, and in 2009-10 the corresponding figure was 77 minutes. I note that the Secretary of State for Health referred to this figure being the *median* time to assessment; and that the published official statistics report this, instead, as 9 minutes in 2009-10, and 8 minutes in 2012-13. The Secretary of State may wish to take advice on whether it is necessary to correct the parliamentary record.

<sup>&</sup>lt;sup>1</sup> HC Deb 02.07.2014, c883

<sup>&</sup>lt;sup>2</sup> HC Deb 02.07.2014, c883

<sup>&</sup>lt;sup>3</sup> HC Deb 09.06.2014, c288

Accident and emergency waiting times data is complex, with both the median and mean published in the HES official statistics. Three different lengths of time are presented: time to assessment, time to treatment, and time to departure. In addition, official statistics that track performance against the NHS England standard<sup>4</sup> are published (shown in Table 2 in the attached annex). Taken together these sources provide a useful indication about patient experience in accident and emergency departments in England, although HSCIC has told us that it generally supplies the 'duration to departure' measure when asked to provide data to respond to Parliamentary Questions as this is closest to the NHS England standard. The mean duration to departure time in 2009-10 was 135 minutes and in 2012-13 it was 141 minutes. The median duration to departure in 2009-10 was 122 minutes, and 128 minutes in 2012-13. The chart below shows the recent trends in mean and median times to assessment, treatment and departure.

160 140 120 Minutes waited 100 80 60 40 20 0 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 Assessment median Assessment mean Treatment mean Treatment median Departure mean --- Departure median

Activity in English NHS Hospitals and English NHS commissioned activity in the independent sector

Source: Hospital Episode Statistics (HES), Health and Social Care Information Centre

Statistics are often described in abbreviated terms, particularly during public debate, and caveats are not always repeated or indeed possible. However, it is important for statistics to be described carefully. Where possible, time periods should be specified, the source data should be identified, and particular care should be taken if the mean and median are substantively different.

Tables 1 and 2 in the attached annex are different ways of presenting information about the same phenomenon. When summarising a distribution that is skewed, such as this, the mean and median differ. We think that it would be helpful if HSCIC were to publish more

<sup>&</sup>lt;sup>4</sup> The NHS England standard, according to the NHS Constitution, is that 95 per cent of people attending an accident and emergency department in England should be admitted, transferred or discharged within four hours of their arrival. During 2009-10 the target was 98 per cent.

information on the distribution of these data, to better illustrate the range of waiting times which patients experience in accident and emergency departments.

The Authority notes that the denominators used to calculate the mean and median times to assessment, treatment and departure differ in each year. For example, according to the estimates for 2012-13, 16 million people were assessed, 16.6 million people were treated, and 18 million people departed from accident and emergency departments. HSCIC told us that the likely reason for this discrepancy is that not all patient information is captured at each stage. The particular fields in question are not mandatory fields that the data providers must supply. HSCIC advised that the time to departure estimate is likely to be the most complete.

I am copying this letter to the Prime Minister, the Secretary of State for Health, the National Statistician, and the Cabinet Secretary.

Yours sincerely

Sir Andrew Dilnot CBE

### **ANNEX**

Table 1: Activity in English NHS Hospitals and English NHS commissioned activity in the independent sector

	Assessment			Treatment			Departure		
Year	Denominator (millions)	Mean	Median	Denominator (millions)	Mean	Median	Denominator (millions)	Mean	Median
2007-08	9.1	52	7	9.9	90	49	11.5	130	112
2008-09	10.4	61	7	11.1	116	55	13.0	136	117
2009-10	12.1	77	9	12.9	102	55	15.0	135	122
2010-11	13.0	64	10	13.6	98	58	15.8	146	130
2011-12	15.3	33	8	15.9	75	52	17.2	138	125
2012-13	16.0	30	8	16.6	74	53	18.0	141	128

#### Notes:

### 1. Duration to Assessment

The total amount of time in minutes between the patient's arrival and their initial assessment in the Accident and Emergency department. This is calculated as the difference in time from arrival at A&E to the time when the patient is initially assessed.

#### 2. Duration to Treatment

The total amount of time in minutes between the patient's arrival and the start of their treatment. This is calculated as the difference in time from arrival at A&E to the time when the patient began treatment.

#### 3. Duration to Departure

The total amount of time in minutes spent in the Accident and Emergency department. This is calculated as the difference in time from arrival at A&E to the time when the patient is discharged from A&E care. This includes being admitted to hospital, died in the department, discharged with no follow up or discharged - referred to another specialist department.

## 4. Assessing growth through time (Accident & Emergency)

HES figures are available from 2007-08 onwards. Changes to the figures over time need to be interpreted in the context of improvements in data quality and coverage and changes in NHS practice. For example, changes in activity may be due to changes in the provision of care.

Source: Health and Social Care Information Centre, Hospital Episode Statistics (HES), Accident and Emergency in England. The mean and median duration (in minutes) to assessment, treatment and departure by year, 2007-08 and 2012-13, July 2014, available at:

http://www.hscic.gov.uk/media/14745/Accident-and-Emergency-Attendances---England-2007-08-to-2012-13-provisional---National-Summary/doc/Accident\_and\_Emergency\_Attendances\_--England\_2007-08\_to\_2012-13\_(provisional)\_-\_National\_Summary.docx

Table 2: Accident and emergency attendances more than 4 hours from arrival to admission, transfer or discharge: England

Year	Quarter	Type 1 Departments - Major A&E	Type 2 Departments - Single Specialty	Type 3 Departments - Other A&E/Minor Injury Unit	Percentage in 4 hours or less (type 1)	Percentage in 4 hours or less (all)
2009-10	Q1: Apr – Jun	71,918	339	2,436	98.0%	98.6%
	Q2: Jul - Sep	64,026	257	1,740	98.1%	98.7%
	Q3: Oct - Dec	108,800	251	1,687	96.8%	97.8%
	Q4: Jan - Mar	100,028	221	1,914	96.9%	97.9%
2010-11	Q1: Apr – Jun	84,418	400	1,854	97.7%	98.4%
	Q2: Jul - Sep	104,395	436	1,968	97.0%	98.0%
	Q3: Oct - Dec	180,940	431	2,892	94.7%	96.5%
	Q4: Jan - Mar	176,052	485	2,843	94.8%	96.6%
2011-12	Q1: Apr – Jun	159,256	868	2,224	95.6%	97.0%
	Q2: Jul - Sep	142,246	499	2,098	95.9%	97.3%
	Q3: Oct - Dec	189,038	451	2,431	94.5%	96.3%
	Q4: Jan - Mar	222,749	424	2,659	93.7%	95.8%
2012-13	Q1: Apr - Jun	184,483	511	2,758	94.9%	96.6%
	Q2: Jul – Sep	165,139	444	2,338	95.4%	96.9%
	Q3: Oct - Dec	228,920	545	2,504	93.5%	95.7%
	Q4: Jan – Mar	310,035	729	3,005	91.1%	94.1%
2013-14	Q1: Apr – Jun	237,553	816	2,916	93.4%	95.7%
	Q2: July - Sep	202,551	600	2,648	94.4%	96.3%
	Q3: Oct – Dec	227,400	336	2,756	93.5%	95.6%
	Q4: Jan – Mar	257,815	551	3,244	92.7%	95.2%
2014-15	Q1: Apr - Jun	279,517	656	4,541	92.6%	95.1%

Source: NHS England, A&E Quarterly activity statistics, NHS and independent sector organisations in England, July 2014, available from:

http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2014/04/Quarterly-time-series-2004-05-onwards-with-Annual.xls