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**Director General for Regulation**

Scott Heald  
Head of Profession for Statistics  
Information Services Division,  
NHS Scotland (By email)

28 March 2018

Dear Scott,

I have considered the National Statistics status of Scotland's Accident and Emergency (A&E) Waiting Time Statistics<sup>1</sup>. Your team has been helpful throughout the review process and I am reassured that ISD are committed to meeting the high standards of the Code of Practice for Statistics. However, if this publication is to retain National Statistics designation I would like ISD to meet the recommendations outlined in this letter within three months.

It is apparent that NHS Lothian<sup>2</sup> has not been following national guidance on how to accurately record a patient's wait in A&E and steps have since been taken by NHS Lothian to rectify this. Whilst it is the NHS Boards' responsibility to ensure data are accurate and high quality before passing the data on to ISD for publication, ISD also have an important quality assurance role. Part of ISD's responsibility is to understand how data are captured across Scotland to make steps to resolve data issues or provide people with the best advice on how to use the statistics published.

It is clear to me that ISD failed to understand that the waiting time data captured in NHS Lothian were inconsistent with the national guidance. Weaknesses in quality assurance procedures led to a situation where ISD published statistics that were not accurately (in accordance to national guidance) reflecting the time waited in A&E in NHS Lothian.

I was glad to hear that your team have subsequently identified additional steps to address weaknesses in ISD's quality assurance processes. These steps include reviewing and investigating unusual waiting times distributions (which could have indicated that NHS Lothian's waiting time data needed further investigation; as illustrated in Annex 1) and engaging with NHS Boards to ensure there are no problems applying the national guidance. However, I also think that more can be done to ensure any future issues with the data might be picked up in a more timely manner.

**Requirement 1:** ISD needs to better assure itself and users of the quality of data provided by NHS Boards, to help prevent future issues being missed. Given the importance of these statistics, we would like ISD to establish a process - in agreement with NHS Boards and Scottish Government - where concerns arising from internal NHS Board audits are flagged up to ISD. This is in accordance to T4.6 of the Code of Practice for Statistics and encouraged in the standards recommended in the Quality Assurance of Administrative Data. There may be other ways that ISD could better assure themselves of the data, and we suggest ISD explore ways to strengthen their quality assurance further.

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<sup>1</sup> [www.isdscotland.org/Health-Topics/Emergency-Care/](http://www.isdscotland.org/Health-Topics/Emergency-Care/)

<sup>2</sup>NHS Lothian Board Paper, 06 December 2017.

[www.nhsllothian.scot.nhs.uk/OurOrganisation/BoardCommittees/LothianNHSBoard/BoardPapers/Lists/BoardPapers/LHB%20Papers%2006-12-17.pdf](http://www.nhsllothian.scot.nhs.uk/OurOrganisation/BoardCommittees/LothianNHSBoard/BoardPapers/Lists/BoardPapers/LHB%20Papers%2006-12-17.pdf)

I note ISD were quick to publish a notice for users of these statistics advising caution. But ISD could also do more to explain how users should use the statistics, given the limitation identified. Furthermore, the recent drop in NHS Lothian performance against the four-hour target could have been better explained – it came at a time where staff using new guidance, subject to NHS Lothian’s internal review findings, and during the winter period where demand is expected to increase.

**Requirement 2:** Provide relevant advice to users on how to use A&E waiting time statistics. This information can be updated as and when ISD gains further insight after Scottish Government’s external reviews findings. This is in accordance to Q1.7 of the Code of Practice for Statistics.

**Requirement 3:** Provide interpretation of NHS Lothian’s waiting time statistics, so that changes in waiting time performance cannot be misunderstood. This is in accordance to V3 of the Code of Practice for Statistics.

Finally, I know ISD are waiting for Scottish Government’s external review findings<sup>3</sup> before considering revisions of NHS Lothian waiting time statistics. With these revisions ISD will be in a better place to explain the impact of the divergence away from national guidance. We would like you to keep us up to date in terms of your plans for the weekly and monthly A&E waiting time statistics.

**Requirement 4:** Provide an update to my team on how ISD plans to consider Scottish Government’s external reviews findings and if needed, revising published statistics, and explaining the impact of the divergence away from national guidance in terms of accurately capturing patient waits. This update should specifically be in consideration of Q1.5 to Q1.7, Q2.4, Q3 of the Code of Practice for Statistics.

Your sincerely



Ed Humpherson

Director General for Regulation

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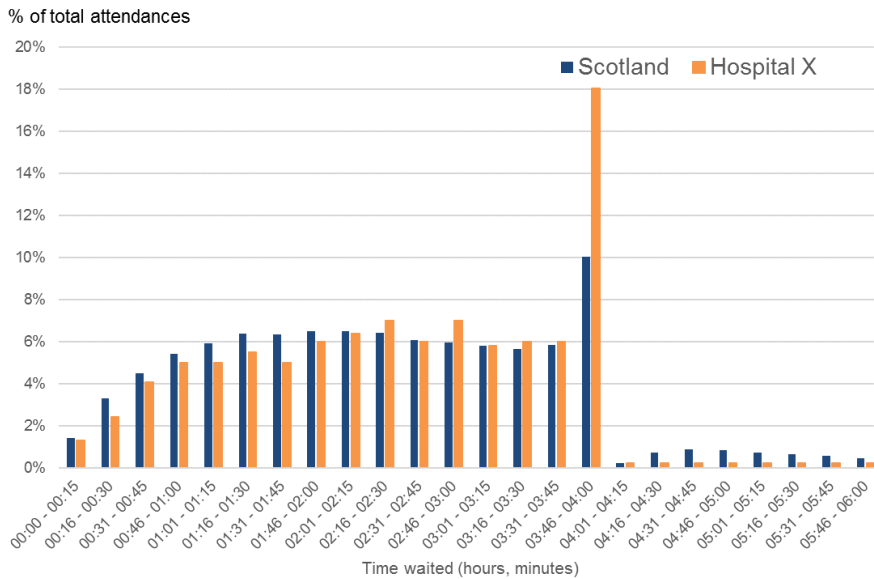
<sup>3</sup> <https://news.gov.scot/news/waiting-times-at-nhs-lothian>

## Annex 1

There are different ways to use waiting times data to understand the experience of patients waiting in accident and emergency services. One way is to look at the distribution of time that patients spend in accident and emergency services (as illustrated in Figure 1). Statisticians can do this for different populations (for example, for all waits in a hospital, NHS Board, or country) to gain insight into waiting times.

For example, Figure 1 shows a peak at 3 hours 46 minutes to 4 hours, where around 10% of waits in Scotland were completed just before the four-hour waiting time target in November 2017. This isn't an unusual distribution but shows how Scottish health care services are managing waiting times to ensure patients get seen within the four-hour target.

**Figure 1: Time waited in accident and emergency services, Scotland, November 2017**



Source: Data for Scotland provided by ISD from their waiting times data mart. Data for waits over 6 hours has been omitted. Data for Hospital X are for illustrative purposes only and are not real data.

An unusual distribution should be investigated further by a statistician to see whether the data are accurately portraying waiting times. So, for example, if a hospital (like the illustrative Hospital X in Figure 1) had an unusually high peak compared with similar hospitals statisticians might want to investigate why this is the case. There may be a valid reason for the unusual distribution or there may be a problem with the data that needs to be explained or resolved. Determining whether a distribution is unusual can be difficult as contextual information needs to be considered (e.g. demand for health care services, time of year, hospital location, health care services offered, and health care needs of a population).