
Deputy Director for Regulation

Scott Heald
Head of Profession for Statistics
Information Services Division (ISD)
NHS National Services Scotland
(by email)

2 May 2018

Dear Scott,

As you know the Office for Statistics Regulation committed to reviewing a selection of ISD publications. This commitment was under a programme of planned [code compliance checks](#), and was subsequently expanded to consider concerns raised with us¹ about whether ISD had been changing key points in summary publications to hide unfavorable news stories for the Scottish Government or NHS Scotland.

Having now completed the review, we have seen many areas of strength across your outputs along with some areas for improvement. Your work transforming the publishing process has been very positive, especially the considerable amount of user engagement you undertook to really understand how a wide range of people use the statistics you publish. This engagement is helping ISD establish a new way of publishing that should circumvent some of the limitations current publication formats present. Whilst this programme of work is in its early stages we can see evidence filtering through to your current publications. For example, the charts in the waiting times publications are now much clearer and easier to interpret.

We considered whether there appears to be an attempt to suppress unfavourable news stories. There was no evidence of systematic bias and the main reports and data tables published alongside the summary publications provide commentary on favourable and unfavourable news stories. In some cases, summary publications showed a less complete picture, due to the size of the publication or topic, and ISD should continue to monitor the content of the summary publications to ensure a balanced picture is presented to audiences that only access its data through the summary reports.

There are two further areas where you could consider improvements (as outlined in Annex 1) in terms of ensuring accessibility and coherence within ISD publications. We understand these are being addressed through your transforming publishing work and look forward to seeing the outcomes of this work.

- 1) Simplifying language used in publications so it can be understood by those outside health policy and the health service. ISD plays an important role in publishing statistics which support transparency and accountability within health services and policy. The commentary and

¹ <https://www.statisticsauthority.gov.uk/correspondence/nhs-scotlands-information-services-division-isd-chronic-pain-waiting-time-statistics/>; <https://www.statisticsauthority.gov.uk/correspondence/delayed-discharge-statistics-published-by-nhs-scotlands-information-services-division/>

information accompanying the statistics needs to be simple to ensure the highest public value and avoid misunderstanding and misuse.

- 2) More routinely considering what questions users have in an area and utilizing the different data sources available to produce coherent thematic publications answering these questions. Rather than focusing on reporting specific series in independent publications reflecting the data collection process.

The Government Statistical Services Good Practice Team would be happy to work with you to help you in your continued development across the range of your publications.

This review was delayed considerably due to resourcing demands within the UK Statistics Authority, I would like to thank you for your patience and look forward to continuing to work with you.

Yours sincerely

A handwritten signature in black ink that reads "M. Gregory". The signature is written in a cursive, slightly slanted style.

Mary Gregory

Deputy Director for Regulation

What approach did we take when reviewing the publications?

Last year we committed to reviewing a selection of summary publications produced by NHS Scotland's Information Services Division (ISD). These publications are often used by people wanting a short summary of a more detailed publication or/and of data found in excel tables.

We used the Code of Practice for Statistics as a framework guiding this high-level review, and have highlighted areas of good practice and areas that ISD should consider further in terms of Trustworthiness and Public Value. To review the summary publications, we also considered the longer more detailed publications that are available for most statistics published by ISD. As part of this review we looked at how the main points have changed over time (looking across the three most recent publications).

We chose a selection of publications relating to a broad range of topics, and looked at a mix of official and National statistics as the code of practice applies to official statistics as well as National Statistics. The publication summaries reviewed were:

- A. [Colorectal cancer quality performance indicators](#) (Official Statistics)
- B. [Infant feeding statistics](#) (National Statistics)
- C. [Cancer mortality statistics](#) (National Statistics)
- D. [Cancelled planned operations](#) (Official Statistics)
- E. [Hospital waiting times statistics](#) (National Statistics)

Findings

ISD committed to adhering to the Code of Practice for Statistics as a framework that when followed will ensure statistics that are of public value, are high quality and are produced in a way worthy of trust. To strengthen the statistical service ISD delivers we have suggested three broad areas that ISD should consider in line with the code. These points should be considered by any organization publishing statistics.

1. Strengthening accessibility

ISD play an invaluable role in society, publishing statistical data that provides insight into how the health service is serving and meeting the needs of Scotland's population. This insight is and can be used by a variety of different people and organizations, who all have differing needs in terms of the information required to understand the topic area and interpret/use the statistics appropriately.

ISD's statistics are used for a variety of reasons, for example:

- patients trying to understand the health services they are accessing
- media outlets who can spread the messages found in statistical data to a wider audience
- organizations and groups of people who are asking for changes in the way services are run and are holding the health service and government to account
- people delivering health services to help them run and improve the services delivered to patients
- government officials making health care policy decisions
- those checking to see whether data used in public debates are fair and accurate
- those looking across the UK or internationally to compare the services provided in each country

There are some users (e.g. NHS Scotland; Scottish Government) who can access data and insight on the health services within internal systems, but also some users who can't access the insight without the service ISD provides by publishing official/National Statistics publications. It is important that ISD provide the relevant information needed in a suitable and accessible way for a wide range of users.

We acknowledge that ISD has committed to [transforming their publishing](#) process to ensure that all statistics meet the different needs of users. We have [highlighted this programme of work as good practice](#) to statisticians in England. However, currently, ISD are relying on PDF documents/excel tables to publish their statistics, so our focus has been on the current method of publishing rather than on the ambitions set out in the transforming publishing programme.

A key part of the Code of Practice (particularly principle V3 and V4) is to ensure statistics are accessible. This requires the commentary and data visualizations to be presented in a way that can be easily understood. In some of the publications we can see ISD have made steps to meet different user needs by developing different statistical products. For example, providing interactive data visualizations to help users answer the questions they need without reading the summary/report – like in the infant feeding statistics as well as cancer mortality statistics.

We can also see evidence of ISD making steps to improve the accessibility of their publications. For example, between the three publications reviewed the charts have improved in terms of accessibility in the main report of the [Inpatient, Day Case and Outpatient Stage of Treatment Waiting Times publication](#). To take this a step further ISD might want to consider how they can convey the messages in a chart for those who use a screen reader. So, for example, the key information (that the treatment time guarantee is 100% and that performance varies by NHS Health Board across Scotland) gained from chart 1 of the [waiting times publication](#) summary will be missed by screen readers as it is not referred to in the text provided in the summary.

There are also other areas where ISD could improve. For example, the language used and detail provided in the main report for [Colorectal cancer quality performance indicators](#) is targeted at an expert audience (for example, those working in NHS cancer network services). We commend ISD for collating these statistics together to provide a national picture of colorectal cancer care and then publishing these statistics, which ensures transparency and accountability within the health care system. But, simplifying the commentary surrounding these statistics could help to widen the understanding of the quality of cancer care provided in Scotland.

2. Demonstrating trustworthiness

As part of this short review we committed to look at how the key messages published in the short summaries changed over time. Specifically, at whether the key points were changed over time to focus on 'good' news over 'bad' news.

It is important to note that changing information presented in statistical commentary is not unusual, and in many cases encouraged. Government Statistical Service (GSS) guidance on writing about statistics encourages statisticians to avoid simply inserting new figures into standard, unchanging text and promotes the need for commentary that provides valuable insight to users. Any changes made should of course be appropriate, with the core principles of the Code of Practice for Statistics in mind. We are aware that ISD do refresh their commentary through a group of senior staff who review all statistical summaries before publication to keep the commentary useful and interesting for users

When looking at the five ISD publications we found that for the:

A. [Colorectal cancer quality performance indicators](#) summary

Only one of the 12 performance indicators were highlighted in the summary publications. This performance indicator has consistently met the target over time, and across the different areas in Scotland. Performance for the other 11 cancer quality indicators varied but this was not commented on. Commentary included in the longer main publication highlights the variation in performance, but the summary does not draw this point out.

When we spoke to ISD about the decision to focus on this indicator they stated that it was difficult to comment on all indicators in a short summary due to the number reported on. The indicator was chosen to highlight outcomes for patients, rather than indicators directly measuring the care provided. However, we do think that ISD could have provided a short description or visualization of performance overall for other indicators to provide a more balanced overview of cancer quality care in the short summary publication.

In the main report a foreword is provided by the leading cancer clinicians, highlighting the fact that these performance indicators were established collaboratively. The collaboration benefits the interpretation of statistics in terms of provision of context. It is important that ISD continues to work closely with the clinicians to ensure that the Foreword accompanying the release (and the other cancer quality indicator publications) remains robust and meets the Code of Practice in terms of Honesty and Integrity (Principle T1).

Furthermore, ISD told us the more recent cancer quality indicator summary publications have moved away from publishing summary publications to avoid presenting only a partial picture. For those wanting a short summary of the longer report there are main points highlighted in the Foreword. We are pleased to see the collaboration with the clinicians to ensure the Foreword covers the key points from a clinical perspective, but we consider the checks in place by the ISD senior team to be extremely important in demonstrating the impartiality of these key points.

B. Infant feeding statistics summary

Core points are consistently reported over time. Statisticians have highlighted various points over time, which highlights the different breakdowns that can be explored in the underlying data tables.

C. Cancer mortality statistics summary

Consistently reported over time.

D. Cancelled operations summary

Consistently reported over time. We recommend that ISD continues to highlight the entire time series of data in the chart provided rather than the previous 12 months. This recommendation is good practice, as it highlights the wider context in terms of past trends.

E. Waiting time statistics summary

The main messages about changes in performance over time were removed for 18-week referral for treatment standard and 12-week treatment standard but kept in for the 6-week diagnosis standard. Performance across Scotland has fallen in terms of meeting waiting time standards, and this is highlighted in the main commentary but not in the summary publication. When we spoke to ISD about the decision to remove they stated it was because not all the NHS Boards are currently able to provide data through ISD's data collection system, which has an impact on making comparisons over time. Changes over time are focused on in the main commentary because more space can be used to explain caveats, but to include these caveats in the short summary would lengthen it.

We do not believe ISD removed the changes in performance to purposely hide bad news and note that ISD did provide a signpost to users to the main report to find the comparisons. However, it

would be better to see ISD go one step further and mention the overall fall in performance over time in the main points, without the need to reference all the statistics and caveats.

3. Enhancing coherence

ISD tends to focus commentary describing statistics compiled from one main data source. But, the insight provided in one publication will often be part of a bigger picture, in terms of:

- Considering the wider context. For example, waiting times provide a barometer of how the health service is coping with the demand for its health services, but will be considered alongside a variety of different indicators (for example, patient outcomes and experiences and other health service indicators like delayed discharges and staffing levels) to help gain an understanding of why waiting times are increasing or decreasing in length.
- Considering how other statistics that measure the same concept fit together. For example, ISD measure how infants are fed through data collected by health professionals visiting parents and Scottish Government uses a survey methodology to collect similar and additional data on infant feeding.

We are encouraging statistical producers to consider areas where bringing together different parts of a data story would benefit users. This goes beyond signposting users to related publications but encourages providing a coherent narrative that answers the key questions users have on a topic. ISD does do this to a certain degree, for example, the infant feeding statistics publication highlights Scottish trends against the rest of the UK, and brings in insight from similar data sources. Another example, is ISD has developed a useful interactive visualization related to cancer mortality where key questions have been identified and answered.

Yet we can see that more can be done to link related topics together to help users understand the statistics published by ISD in context. We have seen efforts to achieve this, for example with the [cancer summary](#), which is updated each time new data are released. We have also seen a good start in this in the early phases of ISD's transforming publishing work, with the interactive cancer mortality statistics visualization which brings in other data relating to cancer incidence. We are aware that this is the first in a series of improvements and welcome efforts to develop this further both for this visualization and across other themes which ISD publishes data on. We would encourage ISD to continue to seek user views to gauge how users are finding the new approach.