

Monitoring Brief

Monitoring Brief 8/11
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Findings from the Authority's Assessment Programme, 2009 to 2011

Introduction

The Statistics Authority has published three previous Monitoring Briefs summarising the findings of the Assessment Programme^{1 2 3}. This Brief focuses on those reports published up to the end of December 2011; 168 reports completed of a planned 250.

Five main themes are now evident:

1. *The need to improve the text that accompanies the first release of official statistics.*
2. *The need to better understand and communicate the use made of official statistics.*
3. *The need to improve the documentation of sources and methods.*
4. *The need to maximise the use of existing administrative data for statistical purposes.*
5. *The need to improve comparability between some statistics produced by the four administrations of the UK.*

This Brief explains these points and gives some examples of good practice.

The Statistics Authority is planning to complete the first programme of assessment under the *Statistics and Registration Service Act 2007* in the summer of 2012. During 2012, we will also publish a review of the entire programme and the way forward with the statutory assessment programme.

1. Improve the text of releases

For official statistics to be understood and used in ways that deliver value, it is important that appropriate written advice ('commentary') be published alongside the figures when they are first released. This text should be seen as the heart of the statistical release, not just an introduction for the less expert user.

The Authority has published a *Statement on Standards for Statistical Releases*⁴ outlining good practice in relation to commentary, including the following expectations:

- A summary of the main messages – those points that the informed reader would regard as the most interesting and relevant to public debate about the subject of the statistics.
- Language that is straightforward and widely understood and does not need to be 'translated' by journalists or commentators into more familiar terms. Where technical terms are needed, they should be explained immediately in the text, not just in a footnote.

¹ <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/monitoring---assessment-note-2-2010--findings-of-the-2009-assessment-programme.pdf>

² <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/monitoring-brief-4-2010---findings-from-the-first-50-assessment-reports.pdf>

³ <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/monitoring-brief-2-2011---findings-from-the-first-100-assessment-reports.pdf>

⁴ <http://www.statisticsauthority.gov.uk/news/standards-for-statistical-releases.html>

- Explanation of the statistics that goes further than simply describing rises and falls. A narrative that brings to life the story the statistics contain, making suitable comparisons – over time, between areas within the country, and internationally. Use of graphs, tables and maps to illustrate these.
- Factual information about the policy and administrative context of the statistics; why they are important, to whom, and for what they are likely to be used. Include comment on the strengths and limitations of the statistics in relation to those uses.

The essence of good commentary lies in statisticians bringing to bear their expertise and knowledge about the subject matter, policy context and history of the statistical series, in explaining in straightforward terms the main messages contained in the statistics. Authors need to know why the statistics matter, and how they are likely to be used. They should help users to understand the strengths and limitations of the statistics in relation to the main uses – for example, the limitations of small sample sizes ought to be explicitly mentioned where appropriate, as ought any changes in context which may affect the interpretation of the statistics. Guidance about the preferred sources of statistics to meet particular uses is helpful.

This topic has attracted more ‘requirements’ (formal recommendations) in the assessment process than any other aspect of the Code. Some official statistical outputs lack commentary altogether, but more often it is the limited helpfulness of what is written that causes concern.

Experience of the assessment process suggests that staff writing statistical releases do not always have sufficient knowledge of the subject matter, or the likely use of the statistics, to be able to offer the insights that would help guide users. It is also quite common for authors to tell us that the most important users do not need advice. This is often not the case. The most important users – the ones that take the ‘biggest’ decisions – are likely to be political or administrative institutions which, by their nature, are often far from expert in their understanding of the relevance of the statistics.

Several of the assessments that have reviewed bundles of statistics in the same topic area have commented on the large number of different releases, and the absence of an overview to serve as an introduction to the topic. In some topic areas, the assessment team felt that in spite of the range of outputs, some important and obvious issues were not being discussed. In such cases we saw merit in developing a conceptual framework for the portfolio of products, in consultation with users, and using it to identify and discuss interrelationships within the set of statistics.

Since Assessment Report 124 (published in July 2011), we have included more detail on aspects of commentary. These more recent reports include an annex that presents a more detailed account of the various releases of the sets of statistics being assessed. These annexes are provided to give producer bodies more specific guidance on how to improve their releases.

Good practice examples

Several recent assessments have highlighted aspects of good practice in relation to the provision of commentary within statistical releases. Some specific examples:

- In Assessment Report 102 on **Crime Statistics in England and Wales**, produced by the Home Office, we noted that “The Crime in England and Wales annual report draws together the [British Crime Survey] and [Police Recorded Crime] statistics to present a more complete picture of crime, whilst also discussing the remaining gaps. The commentary draws on other data sources and research to explain trends, with appropriate caveats. All the annual releases include detailed, informed supporting commentary to aid user interpretation.”
- In Assessment Report 128 on **Statistics on Offender Management in Scotland**, produced by the Scottish Government, we noted that “The Prisons Projections release includes useful commentary about the policy and operational context of these statistics and provides information on the main drivers of change and other potential influences to help aid user interpretation.”

- The Welsh Government is currently reviewing the commentary in its statistical releases. Its latest First Release on New House Building in Wales⁵ includes much more extensive commentary than previous releases. This includes contextual information, more information about the uses of the statistics, and descriptions of some of the limitations of the statistics. The release also includes a wider range of supporting tables, charts and maps. This is one of the releases covered by Assessment Report 133 on **Housing Statistics in Wales**.
- Tables and charts included in an Excel package relating to **Fertility Cohorts** produced by the Office for National Statistics (ONS) included comprehensive information to help users understand how to interpret each table within the package. The usefulness of this information was mentioned specifically by some of those users who we contacted as part of the assessment. (Assessment Report 137)
- Assessment Report 149 covers the assessment of the Scottish Government's **Agriculture Statistics for Scotland**. The Scottish Government seeks to maximise the value of its agriculture statistics publications by including a high level of detail and analysis in its reports. As part of the 2010 review of its Agriculture Statistics Unit, the Scottish Government consulted stakeholders about the detail and format of its statistics publications and subsequently made substantial changes to its outputs. The Scottish Government reduced the level of duplication between the publications, and improved the layout and content of the publications by including more background information, better graphics and more helpful and insightful commentary. *Results from the 2010 December Agriculture Survey*⁶, for example, gives a wide range of easily accessible contextual information about farming as part of the explanation of the statistics presented.
- Assessment Report 152 covers the assessment of ONS's **Statistics on Marriage and Divorce**. In response, ONS included within *Divorces in England and Wales 2010*⁷ greater explanation of some contextual issues that could explain the statistics presented within the release. Of particular note is the way that ONS linked the recent small rise in the number of divorces and the divorce rate to the economic downturn in 2008-09. ONS then further explained the two competing theories about that relationship and linked the theories to the statistics presented.

2. Understand and communicate use

Statistics realise their full potential only when they are used in ways that serve the public good. To achieve this, more systematic engagement with organisations and individuals whose understanding, decisions or actions are informed by official statistics is required. Without a well-developed understanding of *use*, it is difficult for anyone to make judgements about the adequacy or quality of statistics; or indeed the need to continue to produce them. The Statistics Authority recognises that the use of official statistics is diffuse, often at several removes from the original data. But the fact that it cannot be comprehensively researched does not lessen the value of finding out as much as possible. And normally all that is needed is a generic understanding of the uses, not detailed information about exactly how the statistics are used. For example, it may be enough to know that some public health statistics are relevant to some local government planning decisions. That tells the producer body to bear in mind their suitability for that kind of use – in particular whether there are issues about geographic consistency that should be flagged up to such users.

The assessment process has found that the use of statistics within government departments in relation to developing, monitoring and evaluating policy is generally well understood by those producing statistics. And users of statistics within central government are well placed – particularly

⁵ <http://wales.gov.uk/docs/statistics/2011/111214sdr2332011en.pdf>

⁶ <http://www.scotland.gov.uk/Publications/2011/03/09134651/0>

⁷ http://www.ons.gov.uk/ons/dcp171778_246403.pdf

given the decentralised structure of the UK statistical service – to make their needs known and to ensure that they are met.

However, we take the term ‘user’ of statistics to mean any organisation or person whose understanding, decisions or actions are influenced by official statistics; and similarly, ‘potential user’ is anyone who might be so influenced. This need not mean that the user directly inspects statistics or performs calculations. It may be more a matter of being influenced by messages derived from the statistics – for example, if crime statistics suggest that thefts of mobile phones are increasingly common, steps to prevent such thefts are deemed to be a use of statistics, regardless of whether those taking the steps have ever looked at the figures. Such uses matter because they create additional demand for statistical data to be available in particular forms and levels of detail.

Users outside central government – in Parliament, business, local government, academia, and charities, for example – seem to find it more difficult to engage with government statisticians; and this may be exacerbated by the decentralised structure. In aggregate the use of official statistics by these external bodies and individuals is of immense importance and value.

Engagement with users outside central government is likely to require more effort and imagination but will be repaid in terms of added public value from the statistics. The Authority’s recommendations relating to engagement with users can be found in the Monitoring Report, *Strengthening User Engagement*⁸. The Authority has also published guidance⁹ about documenting the use made of statistics; and this will be further developed in 2012.

Good practice examples

- As reported in Assessment Report 113, National Records of Scotland (NRS) engages with users of its **Population and Demography** statistics through its Population and Migration Statistics Committee (Scotland) (PAMS). The needs and experiences of users are well-documented in the minutes and papers from these meetings, which NRS publishes on its website. The committee includes representatives from Scottish Government, local authorities, academics, Information Services Division of NHS National Services Scotland (ISD) and the Office for National Statistics (ONS). NRS consults PAMS about the development, production and dissemination of population statistics and responds to its views. NRS also targeted a wider range of users in its recent consultation about its workplan. NRS told the Assessment team that it will consider inviting users from under-represented sectors to PAMS and other fora.
- The NHS Information Centre for Health and Social Care (NHS IC) has included an appendix in its statistics on *Registered Blind and Partially Sighted People*¹⁰ which is the subject of an ongoing assessment of its **Social Care Statistics for England**. The appendix describes the use made of the statistics by a range of bodies within and outside government. These comments include direct quotes from some of those users about how they use the statistics. NHS IC also included some summary material about its efforts to seek feedback from those unknown users who access its statistics, including asking about the statistics are used.
- ISD (part of the Scottish NHS) has a good understanding of the users and uses of its **delayed discharge and continuing care statistics**. As part of the Assessment of health and social care statistics in Scotland, ISD told us that it was planning to investigate the needs of users and the type of uses made of the statistics (Assessment Report 135).
- In response to Requirements in Assessment Report 127 on **Scottish Sea Fisheries Statistics**, and Assessment Report 131 on **Scottish Patient Experience Statistics**, the Scottish Government has published documents¹¹ describing the use made of those statistics.

⁸ <http://www.statisticsauthority.gov.uk/reports---correspondence/reports/strengthening-user-engagement--final-report.pdf>

⁹ <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/monitoring-brief-6-2010---the-use-made-of-official-statistics.pdf>

¹⁰ <http://www.ic.nhs.uk/default.asp?sID=1172577414129&sPublicationID=1314718081843&sDocID=6943>

¹¹ <http://www.scotland.gov.uk/Resource/Doc/1061/0122214.doc>

- HM Revenue & Customs (HMRC) has developed a guide¹³ for users of its **Trade Statistics** in response to Assessment Report 93. This describes a range of the users and uses made of these statistics. It also includes some users' experiences of the statistics and information about how HMRC seeks to engage with the users of its Trade Statistics.
- The Department for Communities and Local Government (DCLG) consulted users about its statistics on *Social Housing Statistics for Sitting Tenants*¹⁴ in response to the Requirement made in Assessment Report 117 on **Statistics on Housing in England**. As a result, several changes are to be made to the release.

3. Improve documentation

The *Code* requires the publication of supporting documents intended to improve understanding of different aspects of the statistics – including details of methods and sources used to produce the statistics, the uses made of the statistics and a statement detailing the use of administrative sources for statistical purposes. Although in many cases such documentation is already available for internal use, this is still an area where *Code* compliance needs to be strengthened.

Good practice examples

- ONS has published a *Summary Quality Report for Families and Households (SQR)*¹⁵ that provides information about methods and data quality, including the limitations of the Labour Force Survey (LFS), along with links to further information. Statistics on households and families are available from other sources – for example, from other household surveys and DCLG's household projections. The SQR provides useful information about these alternative data sources and the reasons for choosing to base the statistics on data from the LFS. (Assessment Report 140)
- As noted in Assessment Report 134, the Welsh Government has published a 'Frequently Asked Questions' document to provide users with additional information about how the various **NHS Wales waiting times statistics** it produces relate to each other.
- NHS IC's **Community Health in England** publications (covered in Assessment Report 159) include statements which present information about the different dimensions of quality¹⁶. The statements provide a useful and orderly snapshot of the key aspects of the quality of the statistics. The information about quality provided in *NHS Immunisation Statistics England*¹⁷ includes an appendix that explains in detail some problems that Primary Care Trusts (PCTs) have experienced with the Child Health Information System database (CHIS)¹⁸, and the implications for the accuracy of the statistics.

4. Maximise the use of existing data

Data from administrative systems (such as hospital or school records) are used in the production of the majority of official statistics. The use of sample surveys is still important but has been overtaken by the ready availability of computerised administrative records. Such data have some well-documented strengths, compared with data collected from sample surveys, including the

¹² <http://www.bettertogetherscotland.com/bettertogetherscotland/files/Uses%20and%20decisions%20informed.doc>

¹³ <https://www.uktradeinfo.com/index.cfm?task=euearlypub&hasFlashPlayer=true>

¹⁴ <http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/socialhousingsales/>

¹⁵ <http://www.ons.gov.uk/ons/rel/family-demography/families-and-households/2001-to-2010/summary-quality-report.pdf>

¹⁶ The six dimensions of the European Statistical System Quality Framework are: relevance; accuracy; timeliness and punctuality; accessibility and clarity; comparability, and coherence

¹⁷ <http://www.ic.nhs.uk/default.asp?sID=1172577414129&sPublicationID=1316783415427&sDocID=7052>

¹⁸ The problems are mainly experienced by PCTs in London and relate to technical issues associated with implementing the new CHIS databases; as a result of these issues some PCTs were unable to supply complete data sets in previous years. In 2009-10, all 152 PCTs were able to supply complete datasets and there was a reduction in the number of PCTs reporting issues with CHIS.

potential to produce better quality statistics (or indeed any statistics at all) for small geographic areas, lower burdens on data suppliers and low production costs.

However, the use of such data for producing statistics is not always straightforward:

- It is often difficult for statisticians to identify administrative sources that have potential to be used to produce valuable statistics.
- Once appropriate sources have been identified, gaining access to administrative data held in organisations other than the one the statistician happens to work in can be difficult.
- The quality of the data may not be immediately sufficient for use in the production of statistics. Administrative data are simply a by-product of administrative processes and may not exactly match the needs of the statistician. So there are several different aspects to ensuring quality:
 - a) The underlying concepts and definitions may differ from those of statistical interest and judgements need to be made as to how reliable the eventual statistics are going to be.
 - b) The way in which the administrative systems are operated, or definitions interpreted, may affect the value of the data for statisticians. So it is important to be able to check that all the administrative data (which might come from schools, hospitals or offices all over the country) are using the same definitions and procedures.
 - c) The statisticians also need to be sure that having identified any concerns about definitions or consistency in the administrative data system, they will have sufficient influence over the management of the system to ensure that matters that need to be addressed can be resolved. It is not uncommon for statisticians to know of problems with administrative systems they are using to produce statistics but not be in a position to ensure that they are resolved.

These issues will be explored more fully in the Authority's forthcoming Monitoring Brief *Maximising the Value of Administrative Data for Statistical Purposes*.

Evidence from the assessments suggests that many producer bodies are not researching sufficiently carefully the quality of data from administrative sources. However, we have noted a range of work across departments to increase the use of existing data, which is to be welcomed.

Good practice examples

- The Ministry of Justice (MoJ) has replaced a survey with administrative data in the production of some of its **Courts Statistics** (Assessment Report 36). The statistics on the **timeliness of criminal cases in the magistrates' courts** have previously been based on data collected in the quarterly Time Intervals Survey (TIS). The most recent wave of the survey took place in June 2011 with results published in August 2011.

Due to recent improvements in the quality of data held on the magistrates' courts administrative systems, these statistics will instead be based on the administrative data rather than the bespoke TIS. These data cover *all* criminal proceedings dealt with in magistrates' courts. The use of the new comprehensive data source has allowed MoJ to develop estimates for local areas, which it proposes to publish from 2012.

Not only are the new statistics likely to be more robust and allow lower level detail to be published, but discontinuing the quarterly TIS has been estimated to save £1m per year in court staff time. In addition, MoJ is also now able to link together records held on the two courts' administrative systems, from which it can publish new statistics giving the overall time from offence to completion in the criminal courts, irrespective of whether cases conclude in the magistrates' courts or in the Crown Court. This will, for the first time, give users a full understanding of the overall lifetime of cases in the criminal justice system.

MoJ also took the opportunity to integrate these statistics into its primary *Court Statistics Quarterly*¹⁹ (CSQ) bulletin. MoJ published a Statistical Notice²⁰ explaining this. The Notice also explains that MoJ created a consistent back series from the administrative data as far as the quality of the data would allow. The first CSQ in the new format also contained a separate one-off annex providing users with information about how the new statistics have been derived, along with a summary analysis of how the administrative-sourced data compare with the previous survey data from the TIS.

- National Records for Scotland is proactive in identifying and using new administrative sources. NRS has a team responsible for investigating the potential use of alternative sources in the production of **population estimates**. This Alternative Sources Branch was established in 2005 to begin investigating options to replace the Census. NRS statisticians told us that the Branch aims to develop knowledge of administrative systems and to establish possibilities for data linkage, which might be used to produce demographic statistics. For example, NRS is currently investigating whether administrative data from the Ministry of Defence's (MoD) could be used to replace its Station Commanders return.
- Assessment Report 139 addressed the **statistics produced on hours and earnings in Northern Ireland**. The Northern Ireland Statistics and Research Agency (NISRA) benefits from the work undertaken by ONS in respect of the **Annual Survey of Hours and Earnings (ASHE)** to reduce the burden on businesses through the introduction of electronic, rather than paper, data collection. Some large employers are able to respond electronically to ONS with information about all of their employees who have been included in the ASHE sample.

NISRA has taken some additional steps to minimise the burden on businesses; NISRA is willing to accept administrative data from employers and works with large organisations to help develop systems that could streamline data provision. One such example is that the statisticians at NISRA have worked with the Education and Library Boards in Northern Ireland to ensure that their new payroll system could provide information for ASHE.

- Relating to Statistics on Domestic Abuse in Scotland (Assessment Report 119), the Scottish Government consulted with the police forces that provide data for the **domestic abuse statistics**. The consultation gave data providers the opportunity to discuss the recording practices and definitions they use, and to highlight any differences or inconsistencies that may impact upon the statistics.

The Scottish Government is also involved in two further projects, one to develop a central database that will store **data on homicides and deaths in Scotland** and one to develop a **data warehouse of police administrative data**. The Scottish Government has been involved in discussions about the potential design of this warehouse and has suggested that built-in validation mechanisms are incorporated.

- MoD has taken steps to reduce the costs of producing its statistics on the **attitudes of Armed Forces** (Assessment Report 162) by linking responses to the Armed Forces Continuous Attitudes Survey (using Service number) to demographic data held on its Joint Personnel Administration system in order to reduce the number of questions on the survey.

5. Improve comparability of statistics between the four administrations of the UK

Many equivalent sets of statistics are produced by organisations in the four administrations of the UK. Sometimes these statistics are comparable but, in some cases, they are not because different methods have been used to produce the statistics, or because concepts and policies vary from one administration to another. While the statistics may be the best possible for each of the four

¹⁹ <http://www.justice.gov.uk/publications/statistics-and-data/courts-and-sentencing/judicial-quarterly.htm>

²⁰ <http://www.justice.gov.uk/publications/statistics-and-data/courts-and-sentencing/magistrates-times.htm>

administrations, the different approaches make it difficult for those users who want totals for either GB or the UK, and for those who want to compare one country with another.

A range of Requirements has been made in Assessment reports. They fall into three broad groups:

- Better signposting of equivalent statistics from the other countries;
- Better explanation of differences between the equivalent statistics from the other countries; and
- Working with the other countries to improve comparability.

It is important that each producer of country-specific statistics takes into account the type of user who would want to compare its statistics with those for other countries, or would be interested in consistent totals for GB or the UK. It is therefore important to provide links to equivalent statistics from the other countries, and explain any differences in methods and concepts, so that users are informed about the extent of comparability of the statistics.

In October 2011, the Statistics Authority agreed to address issues of comparability and cross-referencing of statistics between the four UK administrations by referring such matters to the Government Statistical Service's Inter-Administration Committee (IAC) and seek reports back to the Authority's Committee for Official Statistics.

Good practice examples

- One of the sets of statistics included in the assessment of NHS IC's **Statistics on Community Health in England** (Assessment Report 159), *NHS Immunisation Statistics England*, includes data tables and a section of commentary that compares the statistics for England with equivalent statistics for Wales, Scotland and Northern Ireland. NHS IC told us that it is currently investigating the availability of international data on immunisation coverage and plans to include these data in the forthcoming release.

Methodological differences cause difficulty in making direct comparisons between the four administrations of the UK of the statistics presented in some of NHS IC's other releases about **Community Health**, but NHS IC told us that it is currently in discussions with the producers of equivalent statistics elsewhere in the UK to identify differences between the statistics.

- Some statistics are comparable across the UK because UK statistics have to be provided to Eurostat under EU regulations. To promote ease of comparability, the Scottish Government publishes some comparisons with the other UK administrations in some of its **Agriculture Statistics** releases: *Economic Report on Scottish Agriculture*²¹ and *Agriculture Facts and Figures*²² and includes links or signposting in its publications to Defra's website (for UK statistics) and relevant EU regulations. The Scottish Government's agriculture statisticians have regular discussions with their counterparts elsewhere in the UK about methods and definitions (Assessment Report 149).

²¹ <http://www.scotland.gov.uk/Publications/2011/06/15143401/0>

²² <http://www.scotland.gov.uk/Publications/2011/06/09104215/0>