

MAX REPORTING GUIDE

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PLEASE NOTE THAT YOU WILL NEED TO BE LOGGED IN TO THE MAX TOOLKIT TO ACCESS THE GUIDES AND TOOLS LINKED IN THE MAX REPORTING GUIDE.

Terms used in this guide: ASCOF (Adult Social Care Outcomes Framework); ASCS (Adult Social Care Survey); PSS SACE (Personal Social Services Survey of Adult Carers in England [or Carers' survey]).

INTRODUCTION

Reports are a valuable tool of communication which use a combination of words, numbers and visual images (e.g. charts, graphs, tables) to convey specific information and/or key messages to a target audience.

If designed to fulfil the information needs and reporting preferences of the target audience, a report can encourage readership and, by doing so, facilitate communication. If designed badly, conversely, a report can lead to disengagement and communication failure.

Adult Social Care Survey (ASCS) and Carers Survey (PSS SACE) reports can be of interest and value to a wide range of groups both within and beyond the local authority (LA)¹ and, if designed and disseminated well, can inform local decision-making and service improvements (e.g. via strategic planning, outcomes-based commissioning). Informative reports can also encourage both current and future engagement with the ASCS and PSS SACE and, by doing so, streamline survey processes (e.g. by making it easier to identify and fulfil local information needs) and support information-sharing and knowledge exchange between different teams and organisations.

Our earlier activities and consultations with 139 staff from 95 LAs across England found that reports of ASCS and PSS SACE analysis findings were often long and text-heavy, and focused on describing the survey data (e.g. by summarising the frequency and percentages of different survey questions). Interviews with report recipients, such as managers and commissioners, confirmed that this style of reporting was not useful and often resulted in the reports being overlooked in favour of alternative sources of information (in particular, the findings from local research).

¹ For example, LA managers, commissioners and practitioners (within the LA) and service users, carers and other organisations (within the wider community).

They've literally gone through each question and just kind of reported on it, but, by the time it goes through to the commissioners, it doesn't work. It's kind of 50 pages of graphs and pie charts and it doesn't work [Commissioner]

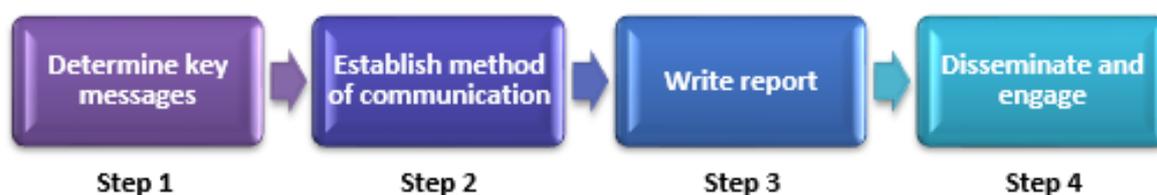
In light of the considerable time and resources allocated to collecting, analysing and reporting ASCS and PSS SACE data – and the fact that both surveys provide a huge and potentially valuable source of adult service user and carer feedback – ensuring reports are useful and fulfil the information needs of report-recipients is a vital activity. But:

What are the features of a useful or informative report?

How are useful or informative reports created?

The MAX reporting guide aims to answer these questions and provide you with strategies that may help you to create more focused and relevant reports of ASCS and PSS SACE data. Both were developed in response to the reporting practices and challenges described by local authority (LA) staff during the initial fact-finding phase of the MAX project,² and summarise the relevant strategies drawn from the report-writing and data-visualisation literature (particularly about the description and display of quantitative information). The current guide is structured around the four steps summarised in Figure 1 and provides links to the other relevant elements of the MAX toolkit where appropriate.

Figure 1: key steps outlined in the MAX reporting guide



² See Heath et al. (2015) *How can MAX help local authorities to use social care data to inform local policy?*, available at www.maxproject.org.uk

TRANSFORMING SURVEY DATA INTO MEANINGFUL MANAGEMENT INFORMATION

ABOUT THIS GUIDE

The MAX reporting guide forms part of the third and final element of the MAX toolkit. It is accompanied by a [supplementary guide](#) that provides additional information on the strategies and reporting practices recommended by writers in the field of report writing and data visualisation.

The guides and tools for the other two elements of the MAX toolkit (planning and analysis & interpretation) can be accessed [here](#).

RECOMMENDED STRATEGIES

The fields of report writing and data visualisation propose a wide range of tactics that even the most experienced report producer might find useful. The aim of this section, therefore, is to summarise some of the strategies that may help you to produce more focused and accessible reports of your ASCS and PSS SACE analysis findings.

ADOPT A STRATEGIC APPROACH TO REPORT WRITING

Producing useful and informative reports involves more than just knowing about how to write clearly and create effective tables and charts. Producing useful or informative reports also involves knowing what report recipients want to know (i.e. their **information needs**) and how they want this to be presented (i.e. their **reporting preferences**).

Adopting a strategic approach to report writing might help you to identify local information needs and reporting preferences and, by doing so, enable you to conduct more focused analysis and create more accessible and useful reports of analysis findings. The barriers and

facilitators to creating focused and accessible ASCS and PSS SACE reports noted during earlier project activities are summarised in Box 1 and may help to get you started.

Box 1: facilitators and barriers to creating focused and accessible ASCS and PSS SACE reports

FACILITATORS	BARRIERS
<ul style="list-style-type: none">• Establishing information needs and reporting preferences of intended report recipients before drafting reports (and ideally before analysis)• Engaging report recipients in the reporting process (e.g. by requesting feedback)	<ul style="list-style-type: none">• Including irrelevant information, omitting relevant information and/or using poorly-designed tables and charts• Using unsuitable reporting formats (e.g. full report when only 'headline' data is required)

The seven-step approach to describing quantitative data proposed by the data visualisation expert Stephen Few, summarised in Box 2 below, may also be useful to consider when approaching the task of creating an ASCS or PSS SACE report.

Box 2: the seven tenets of quantitative data presentation

<ol style="list-style-type: none">1. Know your data2. Know your audience3. Determine your message4. Reduce the data to what's needed to communicate the message5. Determine the best means of expression6. Design the display to communicate simply, clearly and accurately7. Suggest a way to respond
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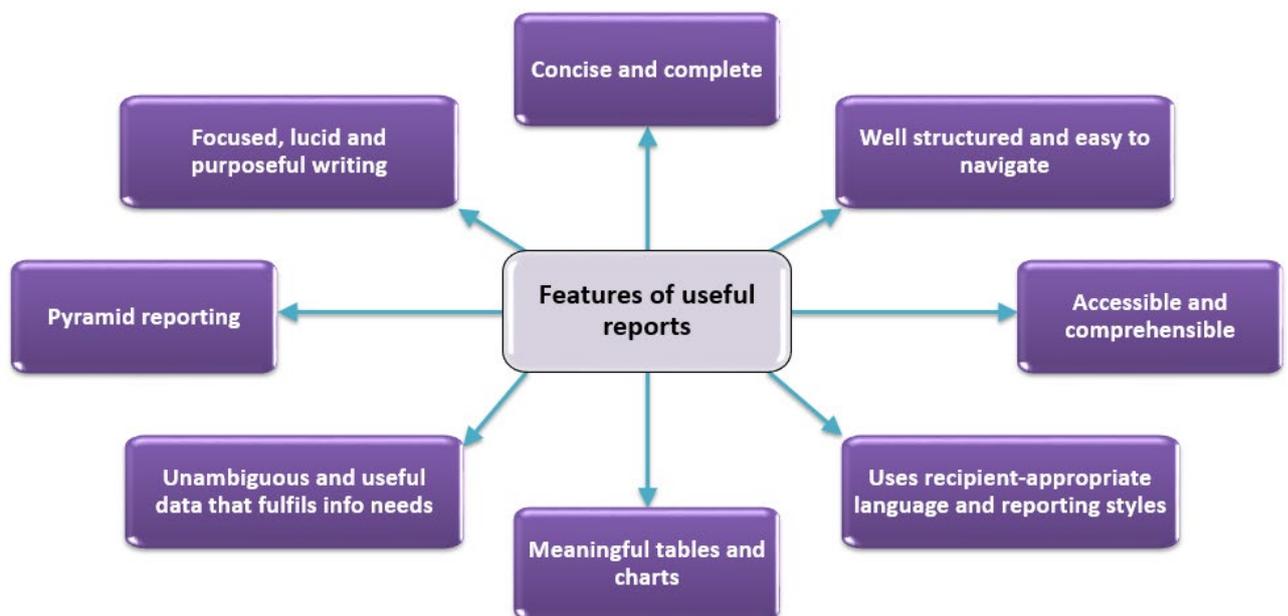
Available at <https://www.perceptualedge.com/blog/?p=1668>

KNOW THE FEATURES OF A USEFUL REPORT

A useful report **fulfils the information needs or interests of the target audience(s)** by **presenting relevant message(s) and supporting data concisely and accurately**, using **accessible and considered text and clear tables and charts**.

The key features of useful reports, drawn from the wider literature on report writing, are summarised in Figure 2.

Figure 2: Features of useful reports summarised in the wider literature



See References and further reading section for information sources.

ASCS and PSS SACE report-recipients (e.g. managers, commissioners) and some report-producers (usually analysts) involved in earlier fact-finding activities described similar **reporting style preferences**. These are summarised in Table 1 and can be used to guide the style of your ASCS and PSS SACE analysis reports.

Table 1: reporting-preferences of report-recipients noted during earlier MAX project activities

Feature	Reports should...
Usable	<ul style="list-style-type: none"> • Provide data that can inform decision-making (e.g. quantitative analysis findings on headline findings and notable trends, <u>and</u> contextual detail from thematic analysis and/or supplementary data sources)
Concise and focused	<ul style="list-style-type: none"> • Be short (max 6 pages) • Focus on what LA decision-makers need to know (e.g. are any service users reporting unmet needs, and why)
Accessible and easy to read	<ul style="list-style-type: none"> • Start with headline findings • Include navigational features (e.g. contents page, section headings) to facilitate the swift review of survey findings • Findings should be explained in unambiguous terms • Graphs and charts should be clearly linked to text

DISPLAY DATA APPROPRIATELY

The following tips on handling data have been adapted from the guidance provided by Bigwood and Spore (2003, see Chapter 2).

1. **Put figures in order** (e.g. smallest to largest, chronologically)
2. **Add focus to figures** (e.g. use *averages* to illustrate patterns in data, *totals* to provide the context or bigger picture, and/or *percentages* to give a sense of proportion; use separate tables as required)
3. **Keep comparisons close** (e.g. using columns and single scales rather than rows and multiple scales)
4. **Round figures for clarity** (e.g. up or down 2-3 digits)
5. **Provide a succinct summary** (e.g. emphasising trends, anomalies and patterns in the data)
6. **Use the layout to guide the eyes** (see [supplementary guide](#) for further detail)

AVOID COMMON REPORTING ERRORS

Reporting errors are surprisingly common and the following myths, summarised by Bigwood and Spore (in Table 2), may help you to avoid the most frequently made mistakes.

Table 2: common reporting myths

Myth	Explanation
Gridlines help the viewer	Gridlines hinder scanning and comparisons
People prefer pie charts	Most people think linearly, thus tables are more appropriate
Graphs can explain complex ideas	Graphs show simple trends and comparisons. Tables are more appropriate for displaying complex ideas
Rounded figures mislead	Rounded figures facilitate comprehension, manipulation and recall

Available at http://www.plainfigures.com/downloads/four_myths_of_data_presentation.pdf



Additional guidance is also provided in the presentation, [Creating engaging reports of analysis findings](#), and the [supplementary reporting guide](#).

STEP 1: DETERMINE KEY MESSAGES

Before you can determine how to effectively present a message, you must first know what the message is

Stephen Few, 2004b

Determining the key messages from your analysis is an important, yet often overlooked, step in the report-writing process. Therefore, **take time to establish and verify your key messages from your data analysis.**

The key messages of the report may be *guided* by the information needs of report-recipients, if established during the previous step, but will be *determined* by the data itself once the relevant analysis of ASCS or PSS SACE data has been conducted and reviewed. Messages can be based on the findings of quantitative analysis and/or the general themes and issues to emerge from qualitative analysis, and may be supported by supplementary sources of data (e.g. LA records, audit data).³ Examples of key messages are provided in Table 3.

Table 3: examples of key messages (based on ASCS analysis)

Message	Example
General trends in performance data	With the exception of 2012/13, all ASCOF scores for LA X have steadily increased since 2010/11. As can be seen in Table 1 below, the most notable improvements (year on year comparisons) are satisfaction [ASCOF 3A], safety [ASCOF 4A] and impact of services on safety [ASCOF 4B].
Contextual data	The marked improvements in ASCOF 4B may be attributed to recent changes in safeguarding procedures (add detail). These improvements are also reflected in the comments provided by respondents in the additional box added to the safety question (add detail).
Areas of interest	Despite these improvements, some service users are still reporting unmet safety needs (ASCOF 4A). Further analysis uncovered a statistically significant association between unmet safety and activities of daily living (ADLs). In particular, service users who feel less than adequately safe or not safe at all (see Q7a) also report difficulties in performing daily living tasks by themselves (e.g. getting out of a chair). Analysis of comments provided by some of these respondents uncovered a fear of falling and neighbourhood crime (add detail).

³ Examples of how LAs have used supplementary sources of data to make sense of ASCS and PSS SACE analysis can be found in the further analysis case study report available for download at <http://www.maxproject.org.uk/reports/>

Implications	While the perceived or actual levels of neighbourhood crime are beyond the control of adult social care services, these findings may be of interest to the adult safeguarding and home adaptations teams.
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 The ASCS and PSS SACE exploratory and further analysis guides in the [MAX toolkit](#) may help you with this activity.

STEP 2: ESTABLISH MOST APPROPRIATE METHOD OF COMMUNICATION

Messages from ASCS and PSS SACE analysis can be communicated in reports using a combination of text, tables and charts.⁴ The most appropriate method of communicating ASCS and PSS SACE data should be determined by the number of values you want to display or summarise, the type of message you would like to convey, and the information needs of your report-recipients.

Be aware that reporting errors are common so take care to ensure you select the most suitable method of communication.

The guidelines summarised in Table 4 and in more detail in [the supplementary reporting guide](#) are drawn from the wider literature and may help you to determine and select the most appropriate method.

⁴ The MAX reporting guide and associated tools uses the term ‘chart(s)’ to refer to charts and graphs.

Table 4: guidelines for selecting the most appropriate data presentation method

Method	When to use
Text	<ul style="list-style-type: none"> • Describing two values • Summarising patterns in larger data sets (e.g. data displayed in tables)
Table	<ul style="list-style-type: none"> • Communicating the <i>quantitative</i> aspects of the data • Describing three or more values • Displaying large amounts of data and/or more than one unit of data • Readers need to know the numbers
Chart	<ul style="list-style-type: none"> • Communicating the <i>qualitative</i> aspects of the data • Describing three or more values • Conveying a specific message about what the data means • Readers need to know the general trends or patterns

Key source: Ehrenberg (1978)



Common mistakes in data presentation discusses the importance of approaching the data presentation process with a clear message. Available at https://www.perceptualedge.com/articles/ie/data_presentation.pdf

STEP 3: WRITE REPORT

The reporting preferences of your report-recipients, if known, will determine how you write or draft your ASCS or PSS SACE report. If you have been unable to establish these preferences, the general guidelines provided in this section and elsewhere in this guide may be useful.

1. **Keep reports short and relevant:** Report-recipients involved in earlier project fact-finding activities and consultations identified a number of features of useful ASCS and PSS SACE reports (see Figure 2). Ensuring reports were concise and contained information of potential value for local decision-making was considered particularly

important, as was the use of navigational tools (e.g. contents pages and subheadings) and well-constructed and appropriately labelled tables and charts.



Focus your report or presentation on conveying what the recipient wants to know – not what you know – and keep it as short as possible.

2. **Ensure statistical findings and technical jargon can be easily understood:** the background knowledge (e.g. about the surveys) and data-literacy levels of your report-recipients may vary, so you must ensure that your report is accessible. Technical terms and acronyms must be explained in full when first used (or put in a glossary), and statistical findings should be summarised in lay terms (the actual analysis results can be included in the appendices if required).



How to communicate statistical findings: an expository writing approach provides a well-illustrated overview of how to communicate statistics to a lay audience. Available at <http://bloustein.rutgers.edu/wp-content/uploads/2014/10/Chance06.pdf>

3. **Consider using an “inverted pyramid style” of writing:** described as a “*simple, effective model for producing eye-catching, quickly digestible content*”,⁵ this approach starts with a short summary of the key messages or details. Further details and/or explanations are then provided after the summary, but this structure ensures that the reader is provided with the information that they need to know (or may be interested in) from the outset.

⁵ Quote taken from the article Inverted Pyramid Writing written by the Mind Tools team, available at <https://www.mindtools.com/pages/article/inverted-pyramid-writing.htm>



The article **Inverted Pyramid Writing** written by the Mind Tools team provides an accessible introduction to this style of writing and is available at <https://www.mindtools.com/pages/article/inverted-pyramid-writing.htm>

The suggested report structure summarised in the **Appendix** is based loosely on the inverted pyramid style of writing and includes recommendations drawn from the earlier fact-finding activities and also the wider literature (see References and Further Reading section).

STEP 4: DISSEMINATE AND ENGAGE

The strategy you use to disseminate your ASCS or PSS SACE analysis report or presentation will be influenced by a number of overlapping factors and will determine whether you:

- Provide report-recipients with opportunities to request further information or analysis, provide feedback and/or suggest additions or changes to the content of the report;
- Circulate a draft or final report or presentation; and
- Use email and/or face-to-face methods (or both) to disseminate your report or presentation.

The guidelines provided in Table 5 may help you to establish the most appropriate dissemination strategy.

Table 5: approaches to creating and disseminating reports

Purpose of report	Dissemination strategy	Comments
Information	Final reports or presentations are circulated via email and/or presented at meetings to interested parties. No further action or discussions.	The quickest and simplest dissemination strategy but may result in little or no ASCS and PSS SACE data being used locally.
Communication	As above but where report-recipients are provided with opportunities to request further analysis and/or provide feedback or ideas to the report-producer (usually the analyst). Reports can be used to initiate group discussions or exchange of ideas and to transform stakeholder engagements into a consultation.	This strategy enables report recipients to engage directly with you and may help you to establish a stakeholder reference. Encourage engagement by providing ideas for further analysis and/or ideas of how findings can be used locally.
Consultation	As above but where report-recipients and report-producers jointly review the data or data analysis as a group and [1] determine areas of interest, concerns and/or further analysis, [2] consider possible causes of noted outcomes and trends, [3] exchange ideas and knowledge, and/or [4] agree upon the next steps (e.g. initiate remedial action). Draft reports can be amended because of these collaborations and circulated again.	This approach enables report recipients to collaborate on the analysis, interpretation and reporting stages of the ASCS and PSS SACE process and, by doing so, maximises the local relevance, value and use of analysis findings. Such collaborations may also encourage other potential stakeholders to engage with the surveys and may therefore justify the effort required to establish and liaise with report-recipients.

DISCLAIMER

The MAX toolkit and website are based on independent research commissioned and funded by the NIHR Policy Research Programme (Maximising the value of survey data in adult social care (MAX) project and the MAX toolkit implementation and impact project). The views expressed on the website and in publications are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health and Social Care or its arm's length bodies or other government departments.

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APPENDIX: POTENTIALLY USEFUL APPROACH TO STRUCTURING AN ASCS OR PSS SACE REPORT

This structure is not intended to be prescriptive, and you may wish to adapt this to fit the information needs and/or reported preferences (if known) of your report-recipients.

Introduction	
Keep it short (ideally, 2-3 sentences) and aim to grab the attention of the reader. For example, by highlighting the potential value of ASCS or PSS SACE data for local policy and service improvement and/or summarising the key messages from the analysis.	
Methodology	
A lot of information is needed here to verify the robustness of the data collected the surveys. Summarising key details in a table and providing links to further information in appendices (e.g. about the development of the surveys) will help you to keep this section short.	
Key information	
Survey	
Year	
Eligible population	
Predicted response rate	
Margin of error	
Surveys sent out	
Surveys returned completed	
Surveys returned blank	
Actual response rate	

Key messages

Summarise the main messages from the ASCS or PSS SACE data or analysis findings (e.g. in bullet point form). Focus on the areas of local interest, if specified by report-recipients, and/or:

- ASCOF scores and comparisons (e.g. with previous years and against comparator LAs and the national average)
- Notable areas of improvement and/or concern
- Potential explanations provided by further analysis, if conducted (e.g. differences between groups, relationships between variables)

Main body of report (optional)

This section can include data tables and charts to demonstrate key messages (alternatively, these can be provided in the appendices) and references to supplementary sources of data (if any) that may facilitate interpretation.



The ASCS and PSS SACE are completed by a sample of service users and carers. It is therefore good practice to present confidence intervals alongside means scores, rather than assuming sample means (e.g. average SCRQoL score for data collected) are equal to population means (e.g. average SCRQoL score for all service users in the LA).

If this section is long, use clear subheadings to facilitate navigation. You may also want to consider including a contents page.

Next steps (recommended)

This section can help report recipients understand how the survey data and/or analysis can be used locally. Provide an outline of the types of further analysis or investigation that could be conducted on the survey data and, where possible, a summary of how the findings can – or will – be used.⁶

⁶ Details about how ASCS or PSS SACE data or analysis findings could – or will – be used to inform local policy and service improvements may be established during consultations with report-recipients (if conducted). Alternatively, provisional ideas may be drawn from a review of other local reports (e.g. the Local Account, previous survey reports).



Always provide report recipients with an opportunity to contact the report producer (usually the analyst) to request further information or analysis and/or to provide feedback about the content of the report or presentation.

Appendices

You can include other information of potential interest to report recipients in this section.

This may include:

- Further details about the survey methodology,
- Explanations of the Adult Social Care Outcomes Framework (ASCOF) and the Social Care Related Quality of Life (SCRQoL) score,
- Data tables and charts of further analysis (if main body of report is not used)