WRITING AN EFFECTIVE QUESTIONNAIRE
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The formula for effective survey research involves three key elements:

- Asking the right questions
- Asking those questions of the right sample of people (representative and appropriate)
- Using the data correctly (accurately, and without misrepresentation).

This guide focuses on the first of these: what to consider when designing the content and structure of your questionnaire. It is intended to help anyone who is planning a survey to collect more useful insight or feedback on health services from patients or staff.

Where do I start?

It is always tempting to ask more questions than you really need to. On the other hand, there are some things that you really must include. To get the right balance, it is worth thinking about:

- **What am I really trying to find out?** Your research objectives should be the primary consideration when deciding which questions to include and which to leave out.

- **How long does the questionnaire need to be?** As a general rule of thumb, try only to ask about things that you need know. Avoid making the questionnaire – whether printed or online – overly long as this can be off-putting for some potential respondents. It can also be unhelpful to seek views on topics that will ultimately not influence the decisions we make or the priorities we set, as this could create unrealistic expectations.

- **Who will be answering the questions?** Will the people who read the questionnaire be mixed in terms of their knowledge of the subject, their literacy and language skills, their health conditions and their backgrounds? If so, it is particularly vital to make questions simple and easy to understand and to avoid any technical or specialist language. If you need to explain things in too much detail, perhaps it isn’t relevant to the person you are asking and you might be targeting the wrong people. Consider how you can make the questions as accessible to as broad a range of people as possible.

- **What order should the questions be in?** You need them to flow naturally rather than jumping from one thing to another. You might want to start by understanding the person’s familiarity with the topic of the questionnaire section – e.g. frequency of contact with a particular service – before you ask about their experience or view of it. Within each section the questions should start broad, before narrowing in focus, so that you can understand the specifics. If required, “summate” questions – such as a patient’s overall experience of their care – should go at the end of the section.

- **What do I need to know about the individuals who respond?** You should consider asking some demographic questions so you understand more about the person and can analyse the data by a variety of characteristics. There is a duty to consider equality and how we can end health inequalities, so information about protected characteristics – such as race, gender, sexual orientation, disability, and age – is usually included as a way to identify where this is a potential factor in the quality of their experience. However, some people prefer not to be asked for this kind of personal information, so it is worth taking steps to explain why we are asking and to reassure them about anonymity. As a rule of thumb, more personal or more sensitive questions should be positioned towards the end of the questionnaire, since people are less likely to complete the other questions if they are put off straight away.
Writing good questions

The best questions are those which most easily elicit a clear and honest response from the person who is completing your questionnaire. You want all of your potential respondents to understand exactly what the question is asking about, with little or no room for alternative interpretation. You also want to minimise the possibility that the answers will be unduly influenced by the way in which the question is asked.

You can achieve this by thinking about the following rules:

- **Keep language simple** and questions short. If you need to explain anything, avoiding leading the respondent to any particular answer.
- **Avoid using jargon**, acronyms, abbreviations and specialist terms.
- **Be specific** when you ask about factors like frequency, so saying “daily”, “more than once a week” and so on, rather than “regularly”.
- **Avoid phrasing in the negative**, particularly where you are asking how much someone agrees or disagrees with a statement. It is simpler to answer the question, “To what extent do you agree that people should pay for their prescriptions?” than “To what extent do you agree that people should not have to pay for prescriptions?”
- **Avoid double-barrelled questions** that create ambiguity and complexity that could leave a respondent unclear of what you are asking. For example, consider a question which asks whether you agree or disagree with this statement: “In a GP practice, doctors should spend more time on face-to-face appointments and home visits than on telephone consultations.” This actually consists of three separate statements, which could be asked about or compared in different ways: doctors should spend more time on face-to-face appointments; doctors should spend more time on home visits; and doctors should spend less time on telephone consultations. Think about exactly what you want to know and what you need to ask to find out about it.
- **Avoid any question wording that could “lead”** the respondent to a particular answer. For example, people can be drawn towards something that looks like the “right” answer (this is sometimes known as ‘social desirability bias’). For this reason it is important to avoid suggesting one response is more desirable than another. Do not lead them by descriptions such as “How often do you watch quality current affairs programmes on TV?” or “People at NHS England love their jobs. How much do you love your job at NHS England?”

- **Read the questions out loud** to see whether the wording is natural or can be improved.
- **Test understanding and clarity** of the questions on someone who is not involved in the project and who can look at it with fresh eyes. Try to ensure that you seek views on the survey from some (current or former) patients or service users - test the questions with a mixed group of people of the kind you are inviting to take part in the research so that you can find out early which questions work as you intended and which need revision. For example, a questionnaire about experience of an Emergency Department should be tested with a small number of people who have recently used this service. This process is sometimes called ‘cognitive testing.’ Ideally, and especially if you are investing a lot of effort and / or money in the survey, aim to co-produce it with a patient group, for example local Healthwatch or a service-specific support group.

It is also important to be aware that there is a lot of goodwill towards the NHS, which can influence how people respond to questions about services. Patients who are grateful for the treatment they have received can often be reluctant to say things that might appear to criticise the staff who helped them. This is called ‘gratitude bias’. You can avoid this to some extent by asking about specific aspects of their experience rather than just asking general questions about their overall experience – that way we can also get a better understanding of areas that might need improvement.

If you want to check unprompted awareness of something, be careful not to bias the outcome by mentioning or describing that thing earlier in the questionnaire or in any covering letter that you send out with it to
invite the person to take part.

Number your questions and do it sequentially for the full questionnaire rather than starting the numbering afresh for each new section or page. This makes it possible to redirect respondents to further relevant questions depending on how they answer the questions (this is known as ‘routing’). For example, “If you answered NO, please go straight to question 7.” This is especially important when there are sections of the questionnaire that may not be relevant for all of the people you are inviting to complete it.

Open and closed questions

There are broadly two different ways you can ask questions and the choice you make will have a big impact on how easy it is to analyse the responses, and what you will be able to learn from the information you collect. There are pros and cons to asking questions in each of these ways.

Closed questions

Closed questions provide respondents with a list of answers to choose from and are the easiest kind to analyse afterwards because everyone is choosing from the same group of possible answers.

Make sure your list is comprehensive, is ordered in a sensible way, and has enough detail to match your objectives without being overly long: select the most important/frequent options and then provide other catch-all codes, such as ‘Other’.

For example:

Which of the following TV channels did you watch for at least five minutes yesterday? (Tick all that apply.)

- □ BBC1
- □ BBC2
- □ ITV1
- □ Channel 4
- □ Channel 5
- □ Sky 1
- □ Other (please specify) _______
- □ None of these

It is good to bear in mind that respondents are more likely to choose items from the top of a list rather than the bottom. To counter this, it is standard practice to reverse or rotate the response options on online or telephone surveys, though the order should remain logical to help people find the response they are looking for.

Closed questions often measure a range of options so that respondents can pick the one that most closely matches their position on issues, such as: their agreement or disagreement with a statement, the level of their satisfaction with something, how they would rate something, the extent to which they find something appealing, or how likely they are to do something in the future.

If the range goes from positive to negative, it is called a bipolar scale because it has two polar opposites with balanced options on each side of neutral.

An example of a bipolar scale is:

<table>
<thead>
<tr>
<th>Q. To what extent were you satisfied with the service you experienced?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Very satisfied</td>
</tr>
<tr>
<td>□ Fairly satisfied</td>
</tr>
<tr>
<td>□ <em>Neither satisfied or dissatisfied</em></td>
</tr>
<tr>
<td>□ Fairly dissatisfied</td>
</tr>
<tr>
<td>□ Very dissatisfied</td>
</tr>
</tbody>
</table>

Some ranges of options are about the degree to which the respondent feels the presence or absence of something. This will not have opposite options, and will instead start from a ‘zero’ option (e.g. ‘Not at all’). It is called a unipolar scale.
An example of a unipolar scale is:

<table>
<thead>
<tr>
<th>Q. Did you enjoy the experience?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Enjoyed very much</td>
</tr>
<tr>
<td>□ Enjoyed somewhat</td>
</tr>
<tr>
<td>□ Enjoyed a little</td>
</tr>
<tr>
<td>□ Did not enjoy at all</td>
</tr>
</tbody>
</table>

Open questions

Open questions allow someone to give any answer rather than pick from your list of options. In other words, there is an element of ‘free text’.

These can provide richer and more individual responses and can be useful when you are not quite sure what the responses will be, or in situations when you want to encourage more detailed feedback. As such, they can be good for bringing out the fine detail of the varied experiences of different individuals, and can be used to generate quotes, which can help bring the research to life.

There are, however, a number of possible downsides:

- It is more **time-consuming** to analyse free text feedback - You may still be able to numerical data from open response questions, but you will first have to “code” the responses, which means classifying them into different groups.
- Responses may **go off on a tangent** that is not relevant to the research.
- It can be **difficult to draw firm conclusions** that can be applied to the general population.
- It is **harder to compare findings** across repeated surveys as the form of the responses will differ.
- Free text questions are **more time consuming** to answer and they often require more thought than closed questions, which could be off-putting.

What’s wrong with this question?

By way of a quick exercise, consider this question and its response options.

<table>
<thead>
<tr>
<th>Q. Do you support the idea that charities should not pay tax?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes</td>
</tr>
<tr>
<td>□ No</td>
</tr>
<tr>
<td>□ Don’t know</td>
</tr>
</tbody>
</table>

What problems can you see with this question?

First of all, we do not know whether the public is aware of whether charities pay tax or not. A prior question is needed to establish current level of knowledge.

The question needs to be more balanced to avoid biasing the response.

There are problems with the negative phrasing “should not pay” as it adds complexity.

An alternative approach to getting an accurate and unbiased response would be this:

Q1 As far as you know, which of these statements, if any, is true?

- □ All charities have to pay the full amount of tax.
- □ Some charities are exempt from paying the full amount of tax.
- □ All charities are exempt from paying the full amount of tax.

Q2 Thinking about charities in general, do you think they should or should not have to pay the full amount of tax?

- □ Charities should pay the full amount of tax.
- □ Charities should not have to pay the full amount of tax.
- □ I’m undecided.
Making your questionnaire accessible

The NHS is used by everyone, and our feedback work should reflect this. Good surveys hear from a representative cross-section of the population of interest. By making questionnaires easy to complete and accessible to the diverse range of people who use services, we can be sure that any conclusions we make represent the fullest range of views and experiences.

There can be many barriers to feeding back on services via a questionnaire. These barriers could be linked to language, sensory loss, or issues around privacy and confidentiality, to name a few. This will affect different groups of people disproportionately, based on ethnicity, gender, disability and other factors. It is important to think about how you can remove barriers and reduce any sensitivities so that you gain the benefit of more diverse feedback. For example, could you offer one-to-one interviews or focus groups instead? Although these options might be more labour intensive, they could open up access to some communities that don’t or can’t engage in questionnaires.

If you do use a questionnaire, consider working with a patient or community group to help you get the wording right for diverse communities. You should also make sure that you consider providing the questionnaire in alternative formats such as large print and easy read, and translated into other languages. The Accessible Information Standard provides further direction about accessible information for people with a disability, impairment or sensory loss.

NHS England is trying to make its set of national surveys more accessible to all kinds of people as part of the drive to promote equality and reduce health inequalities. They are written in plain English but, increasingly, are also offered in a range of other formats to make them more inclusive. For the 2017 GP Patient Survey, for example, the questionnaire was translated into 14 languages and was also explained in British Sign Language.

You can find more about accessibility on the GP Patient Survey website.

Conclusion

Simple, clear questions that are offered in accessible formats are likely to produce more accurate and reliable information, and also encourage more people to complete the questionnaire. If you use the right kind of questions for your topic then this will make your analysis easier, help you to meet the objectives of your research, and provide you with more reliable evidence on which to base your decisions.

CONTACT US

This guide is part of a short series intended to help healthcare providers and commissioners to make greater use of patient insight: http://www.england.nhs.uk/ourwork/insight/insight-resources

The work is overseen by the Insight & Feedback team.

Contact us at: england.insight-queries@nhs.net

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This information can be made available in alternative formats, such as easy read or large print and may be available in alternative languages upon request. Please contact 0300 311 2233 or email england.contactus@nhs.net