The first 6 steps for successful questionnaire design

Designing a health survey questionnaire whether it’s for clinical or market research is more than simply writing some questions expecting survey participants to understand them and provide reliable and relevant answers.

Designing a health survey questionnaire requires initiating a relationship with your participants that stimulates their interest and encourages them to provide the best answers possible. It’s also knowing what your research question is.

Collecting information using a survey questionnaire to measure patient outcomes, satisfaction, experience and health is now common practice. There is a variety of questionnaire types that can be used. Whichever way survey questionnaires are used and for whatever purpose, the same design rules should apply in their construction to ensure that they are appropriate for the intended use and provide reliable and valid data.
1. Start at the end

Without a clear aim as to the purpose of the survey it will not be possible to identify the information required and how it will be managed. Tailoring the content to meet the aims of the survey ideally includes undertaking of a small-scale qualitative study to identify the range of behaviours, attitudes and issues relevant to the objectives of the survey.

2. Getting participant input

This is an essential part of survey questionnaire design to ensure that its content is based around the health survey's aims and objectives and importantly your participants' experiences, views and behaviours etc. This can be achieved through a small-scale qualitative research involving 6-20 open-ended interviews with respondents selected from your target group.

3. Choose the question type

Choosing the correct type of question will involve making decisions such as whether to use an open or closed question, a 'don't know' response option, rating scales or grids etc. First however, it is important to specify whether the questions are about the patient’s attitude, behaviours, experiences etc. as this can have a significant impact on the choice of type of question.
4. Keep it simple

The principle aim in writing a question is to ensure that each question means the same to all the respondents, who should be able to respond with an accurate response as possible. This will include for example: using simple language, avoiding the use of technical terms and abbreviations as well as only asking questions that are relevant to the participant.

5. Don’t ask the impossible

Making demands on participants memory or assuming that they have the knowledge to answer the questions should be avoided at all times as this can lead to incorrect information or lead to participant drop-off. The more mundane the behavior or experience, the more difficult for participants to recall. Whenever, use short time frames.

6. Layout & sequencing

Attention to the design and layout of a questionnaire is an important stage in its development and includes length, question and answer format, font and typeface, instructions and routing. When sequencing questions it is important to remember for example: questions should be blocked by topic when possible.
In summary

Following these six basic rules will certainly help you develop a more reliable and valid questionnaire. These tips however, are just the basics as there is a significant number of issues to be considered that contribute to a well-designed questionnaire.

We strongly recommend you carry out a “pre-test” with a representative sample of your survey population rather than getting colleagues’ to review the questionnaire.

Asking for feedback will help you correct errors or any confusion. If you have the resources, we would suggest you arrange to carry out cognitive de-briefing with a group of participants that will provide you with a depth of feedback on how well your questionnaire is working.

Above all you must keep your research objective and how you intend to use the data at the top of your mind. However, these basic tips will improve your chances of collecting reliable and relevant data to help you answer your research questions.

If you are about to start or already have started to build your survey questionnaire and would like to have some support CLICK HERE for a free consultation.
Test your expertise:

How good are you at questionnaire design?

Test yourself by checking out the design errors in the three questions below. Each question has two or more errors. How many can you identify?

**Q.1**
During the past week, do you feel pain along with your itching due to PV?
- All the time
- Much of the time
- Some of the time
- Not much of the time

**Q.2**
Which of the following illnesses /conditions do you suffer from?
- Hypertension
- Cancer
- Breast cancer
- Diabetes
- Leukemia

**Q.3**
How many times over the past six-months have you visited your local general practice?
- 1 – 2
- 2 - 4
- 5 – 6
- 6 - 7
Q.1

The reference period “During the past week” is vague and requires clarification.

During the past week, do you feel pain along with your itching due to PV?
- All the time
- Much of the time
- Some of the time
- Not much of the time

Question is phrased incorrectly with both past and present tense i.e. "in the past week do you feel pain"?

PV is a technical abbreviation and will not be understood by participants.

No response option for "None of the time"

No option available for those who made more than 7 visits. "Don't know" option missing.

Q.2

Using "/" is confusing. Use "and" or "or"

The term hypertension may be unfamiliar to some people. Use high blood pressure.

Breast cancer and leukemia are also cancer. Which should people check?

Which of the following illnesses /conditions do you suffer from?
- Hypertension
- Cancer
- Breast cancer
- Diabetes
- Leukemia

"None of these" option is missing.

Q.3

How many times over the past six-months have you visited your local general practice?
- 1 – 2
- 2 – 4
- 5 – 6
- 6 – 7

Both “six-months” and “visited” are unclear. Should visited be just to see the GP or should other visits such as collecting medicine and seeing a nurse be included?

Overlapping scales.

No option available for those who made more than 7 visits. "Don’t know" option missing.
Our award winning proprietary evidenced-based expert review diagnostic tool which benchmarks your questionnaire against key design parameters of questionnaire design good practice which ensures your questionnaire will provide you with the information you want.

Health Outcomes Insights Suite provides a powerful platform of research tools and methodologies that help healthcare agencies and pharmaceutical companies across a range of conditions - including diabetes - get targeted answers to patient behaviour and experiences whenever health outcomes are part of your programme.

Working with you and using our multi-stage design platform, we will apply industry best practice and our fast-track questionnaire development process that will ensure you get gold quality research results. Tell us what you want, and we will make it happen.

Consulting Service

Whatever your requirements, we are happy to act in an advisory capacity. We can provide occasional, regular or even continuous assistance with your research. Our services include: Questionnaire design, Story-telling, Data visualization, Experience sampling and Behavioural Economics.

Clinical Outcome Assessment

Developing and testing a new COA takes time, therapeutic and psychometric expertise, as well as ensuring that the construct that measures the right thing is captured. We will apply our expertise in developing your COA from Phase I to Phase IV.

Improving Patient Recruitment

Achieving high levels of patient recruitment and retention in clinical trials is essential for successful completion. We’ll help you devise a patient recruitment strategy by applying peer reviewed and proprietary models of behaviour and decision making that will enhance patient recruitment and retention.

Helping you improve your forecasting

Leveraging high quality data from survey-based forecasting - whether it’s expert judgement an opinion survey or Delphi study - is an essential part of the forecasting process. Working with you we use our evidence-based questionnaire design platform to help you make more effective and realistic forecasting decisions.

Training & coaching

Health Outcomes Solutions provides a range of coaching for clinical teams, clinical practice and researchers in making sound decisions.