

Appendix 5: Field test approaches, instruments and instructions

The purpose of field test is to determine how the core questions, as set out in the question battery and Q X Q specifications, are functioning in different countries. There are different approaches that can be used and different sets of additional questions as well. These are discussed in this section.

This section does not discuss the processes of pre-testing (including expert review) and pilot testing discussed in the section on sample design. Please refer to the relevant section on "Sample design" in the main document of the implementation protocol for details on these processes.

The two questions each testing country should ask themselves are:

1. What set of questions should be used in the field test?
2. What approach will be used for the field test?

Questions sets:

For different sets of question options are proposed and each country can decide which option to choose in their field test. The first is compulsory, the second is highly recommended as part of the field test, while the other two are optional depending on country needs and possibilities. Every set should include the core set of questions.

Whatever option is chosen, the order of administration should always be the core questions first and then followed by the detailed questions on the core set of domains. The order of any other additional questions sets can be decided by the individual countries

A. Core question set (Compulsory)

The core questions as set out in the question battery are the questions to be tested. These therefore should be administered in all of the options for field testing as they represent the minimum set. There are 6 questions covering 6 domains of human functioning. These include seeing, hearing, communication, walking, self care and cognition. They are as follows:

Introductory phrase:

The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

Core Questions:

1. Do you have difficulty seeing, even if wearing glasses?
2. Do you have difficulty hearing, even if using a hearing aid?
3. Do you have difficulty walking or climbing steps?
4. Do you have difficulty remembering or concentrating?

Additional Questions:

5. Do you have difficulty (with self-care such as) washing all over or dressing?
6. Because of a physical, mental or emotional health condition, do you have difficulty communicating, (for example understanding others or others understanding you)?

B. Additional questions on core domains (highly recommended)

In order to have a better sense of how these are functioning and to determine the proportion of the target population that is identified by the 6 core questions, it is useful to test a further set of questions that can then be compared to the core set. These would include asking the questions below in addition to the core set. These questions would be asked after the initial core set has been asked. The structure of this option is as follows:

- 1i the core set of questions as set out in the section on the questions battery followed by
- 1ii the additional questions on core domains as set out below:

Vision

- i. Do you have difficulty seeing and recognizing a person you know from 7 meters (or 20 feet) away?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty seeing and recognizing an object at arm's length
 No difficulty Some difficulty A lot of difficulty Can't do at all

Hearing

- i. Do you have difficulty hearing someone talking on the other side of the room in a normal voice?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty hearing what is said in a conversation with one other person in a quiet room?
 No difficulty Some difficulty A lot of difficulty Can't do at all

Mobility

- i. Do you have difficulty moving around inside your home?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty going outside of your home?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- iii. Do you have difficulty walking a long distance such as a kilometer (or equivalent)?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- iv. Do you have difficulty in using your hands and fingers, such as for picking up small objects or opening and closing containers?
 No difficulty Some difficulty A lot of difficulty Can't do at all

Remembering

- i. Do you have difficulty concentrating on doing something for ten minutes?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty remembering to do important things?
 No difficulty Some difficulty A lot of difficulty Can't do at all

Self-care

- i. Do you have difficulty washing your whole body?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty getting dressed?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- iii. Do you have difficulty feeding yourself?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- iv. Do you have difficulty staying by yourself for a few days?
 No difficulty Some difficulty A lot of difficulty Can't do at all

Communicating

- i. Do you have difficulty generally understanding what people say?
 No difficulty Some difficulty A lot of difficulty Can't do at all
- ii. Do you have difficulty starting and maintaining a conversation?
 No difficulty Some difficulty A lot of difficulty Can't do at all

C. Further additional questions:

In addition to the core set and the detailed questions for each domain, if space permits, questions on a further two domains can be added to complement the range of human functioning covered in the core set. The two additional domains proposed are those of learning and applying knowledge, and interpersonal interactions. These questions are as follows:

Learning

- i. Do you have difficulty learning a new task, for example learning how to get to a new place? (*Countries to think of appropriate examples of a new task*)
- ii. Do you have difficulty analyzing and finding solutions to problems in day to day life?

Interpersonal interactions

- i. Do you have difficulty dealing with people you do not know?
- ii. Do you have difficulty maintaining a friendship?
- iii. Do you have difficulty getting along with people who are close to you?
- iv. Do you have difficulty making new friends?

The same responses should be used for these additional domains;

- No difficulty Some difficulty A lot of difficulty Can't do at all

Finally, it would be useful to be able to include questions that tap into the psychological domain if that is culturally acceptable. The following set of questions can be used for that purpose. Instructions for analysis of these questions will be forthcoming in the finalized draft of the protocol.

How much, during the past 4 weeks....

		All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
mhi1	Did you feel very nervous?	1	2	3	4	5	6
mhi2	Have you felt so down in the dumps, nothing could cheer you up?	1	2	3	4	5	6
mhi3	Have you felt calm and peaceful?	1	2	3	4	5	6
mhi4	Have you felt down-hearted and depressed?	1	2	3	4	5	6
mhi5	Have you been happy?	1	2	3	4	5	6

D. Country's own set of questions

A last addition to the core questions is that of the country's own set of questions. Including these would allow for a comparison to be made of these to those proposed by the WG. The question set would include the individual country questions as they were asked in that country.

Field test approaches

The choice of question set is dependent to some extent on the field test approach to be used, as different approaches will allow for more or less questions to be asked. Three approaches are discussed. The one is to piggy-back the chosen question set onto a planned Census or national survey, a second is to develop a special study design to test the questions using a small sample of purposively chosen respondents, and a third is to do a special survey to test the questions using a population based sample. Each has advantages and disadvantages and sampling implications which are discussed below.

Census or survey approach

This approach would use an existing Census run or national survey into which the disability question would be inserted.

The advantage of this approach is that it provides a large sample from which to obtain test results¹. The approach uses principles of sampling for a survey or asking the whole population as in a Census. The sampling approach would be determined by the original survey design and not be dictated by the disability questions test. A further advantage would be that there would be minimal cost of doing the disability question test as the data collection would be happening anyway.

The disadvantage of this approach is that it might not allow sufficient space to add all the additional questions that would make the test most effective. If space is limited to using only the core questions, a sub-sample should be identified and the additional question set and cognitive testing administered to this sub-sample. This would have some costing implications as there would be additional data collection time involved and some special training.

¹ This assumes that the national survey would involve a large sample of respondents, e.g. between 5000 and 10 000 households.

Special study approach using a small purposively selected sample (see discussion of “quota sample”; “Internal validation”; “Sample Design” section of main implementation document)

A second approach is to test the questions on a sample that is selected based on the probability of responding ‘yes’ to one or more of the Census questions (same as a quota sample). This would involve designing a special study that will focus primarily on the disability questions.

The sample selected is purposive where the disability status of the respondent is known prior to administering the question set, although this status would not be known by the interviewer to avoid bias. A large enough sample of people with and without a disability would be selected through various networks.

The questions are administered and a 2 X 2 table constructed to measure the rate of identification of true positives and negatives using the known status of the respondent as a ‘gold standard’ of sorts.² A suggested sample size is 200 true positives and 200 true negatives. There must be a clear definition provided for who counts as a true positive or negative and some means of assessing this status beyond the use of the questions.

The advantage of this approach is that it allows for a larger set of questions to be administered and the situation is more controlled in terms of being able to observe both the interviewers and respondent more closely than in a Census or survey approach. A further advantage is that the cost should not be prohibitive. However, the cost of establishing a person’s ‘true’ positive or negative status should be considered.

Special study approach using a sufficiently large population based sample

A third approach is to devise a special study using a population based sample. The sample size should be calculated based on the expected prevalence rates for the different types of disabilities in the country population. For example, in South Africa, the prevalence rate for visual difficulties is estimated to be around 1.3 - 1.7% of the total population (including all ages). The sample size must be big enough to identify enough people with visual disabilities to yield useful information about how effective the questions are. So in South Africa, to identify at least 130 people with visual disabilities, a sample size of around 10 000 respondents would be required. The next decision to be made by a statistician is whether 130 cases is a large enough number to be useful in the analysis. This question is not addressed in this document.

The advantage of this approach is that it provides a large data set with possibility of including a very detailed set of questions on disability.

The disadvantage is that it is costly and time consuming an exercise.

Relationship between the cognitive test and field test

The cognitive test and the field test are administered to separate samples. The core questions are included in both the cognitive and field tests. The basic extended questions for each functioning domain that are included in the field test are also included in the cognitive test but the cognitive test includes questions that are not on the field test. The cognitive test will take longer to complete than the field test. If the complete cognitive test cannot be administered, the core questions and the basic set of additional questions should always be administered. Please refer to the cognitive testing protocol for more details on this aspect.

Treatment of non-response and refusals

For results from a data collection/statistical test to be regarded as valid, responses must be obtained from a sufficiently large proportion of the sample to keep possible sample loss bias to an acceptable level, and the final sample achieved must be large enough to produce the test

² We need to be clear on what we mean by a ‘known status’ – a more detailed assessment or a self report or some form of confirmation by a rehabilitation professional or physician or by observation?

significance required. This is a particular problem for any data collection where response is dependent on the willing cooperation of randomly selected household respondents.

There are a number of factors that can significantly reduce the size of the final respondent non-response and refusal rates:

1. Use of an up-to-date sample frame will assist in reducing sample loss due to demolished, or non existent dwellings;
2. Having clearly defined reasons for the data collection and identifying benefits to be obtained will facilitate respondent cooperation;
3. Making initial contact with selected households prior to interviewer contact: where possible this should be done by mailing an explanatory letter/brochure to selected households prior to interviewer contact, or in areas where this is not practical, contact with someone such as a village elder or other 'significant person' who can be informed of the nature and importance of the collection and can in turn use this information to assist in gaining cooperation of selected householders;
4. Adequate interviewer training, including ability to explain the purpose and importance of the interview, and sufficient practice interviewing and training to become proficient with the wording and sequencing;
5. Allowance within budget and time constraints for call-backs to households with no contact at initial visit, and spread of call-back times at households to cover different times of day/days of week to maximize possibility of contact;
6. Having a plan for further non-response follow-up where possible within time/cost constraints, if sufficient response/sample take has not been achieved within the initial interviewer timeframe.

It is important to identify the reasons for non-response. Separation of refusals/part-refusals from non-contacts and from sample loss (e.g. vacant/demolished dwellings) is important. Sample loss will not impact on data interpretation /accuracy other than by reducing the final effective sample size, and the initial sample should allow for sample loss to achieve the required sample size for the analysis accuracy required. Non-contacts and refusals can potentially bias the results to the extent that non-contact and/or refusal respondents differ in their characteristics from the responding sample component. For the initial test phase it will be very important for interviewers to record the reasons for a person's refusal, and in particular to identify if it was the subject matter and/or particular questions which resulted in the refusal. This information should be recorded in detail at the time of occurrence, reported back to the office, and also discussed at interviewer debriefing.

Interviewer debriefing

Well trained field interviewers are in a unique position to evaluate the merits of survey training, design, survey question structure and wording. Not only do they obtain very useful observed feedback from respondents in the course of administering questionnaires, more experienced interviewers can also draw on their accumulated knowledge to identify, during the pre-testing stage of questionnaire development, questions that are likely to be difficult for interviewers to read and/or for respondents to comprehend.

There are a variety of techniques that can be used to obtain information from interviewers about problems with a questionnaire. Interviewers can be debriefed in a group setting, through interviewer rating forms, or through standardized interviewer questionnaires (also referred to as structured post interview evaluations). These techniques are frequently used in conjunction with each other.

Debriefing interviewers in a group setting (similar to a focus group) is the most common method used during pretests. Interviewers who conduct the pretest are brought together after the interviewing is completed and asked about their experiences administering the questionnaire. Typically, the moderator of the debriefing will review the questionnaire item by item to identify any

problems interviewers found with question wording, question sequencing and the overall flow of the interview.

If not all interviewers can participate in the debriefing, then where possible those that do participate should consist of interviewers with varying years of experience and levels of interviewing skill. This is important because newer interviewers, or interviewers who have not acquired good interviewing skills, may have different concerns about a questionnaire than experienced or well-skilled interviewers.

During interviewer focus groups it is critical that the moderator encourage participation of all attendees. He/she must ensure that a few participants do not dominate. It may be necessary for the moderator to solicit comments from the more timid participants, to insure that all views are represented. Group debriefing sessions should generally be held within a few days after interviewing is completed.

Another technique to obtain information from interviewers regarding pretest questionnaires is the use of interviewer rating or debriefing forms. After the pretest is completed, interviewers complete a standardized rating form and rate each question in the pretest questionnaire on selected characteristics of interest to the researchers. The focus is to quantify the extent of problems, and information about the reasons for the problems may or may not also be obtained.

The exact content of the debriefing form can vary according to the needs of the study. It would be beneficial to examine at a minimum the following three characteristics:

1. Interviewer has trouble reading the question as written;
2. Respondents don't understand words or ideas in the question;
3. Respondents have trouble providing answers to the question; and to obtain written feedback from the interviewers as to their perception of why problems/difficulties might have occurred. The frequency of occurrence should also be identified, as a rare problem would be less of an issue for correction than a common one.

Interviewer debriefing forms can be used in conjunction with group debriefings. When used in this way, they should be completed by interviewers prior to the group debriefing. Ideally the forms should be collected and examined before the face-to-face debriefing session, as this will give the debriefing staff time to use the information to frame discussion points for sessions within the debriefing meeting.

Debriefing questionnaires are designed to be self-administered and they are an extremely cost-efficient way to collect data from all interviewers participating in a field test. Both the design of the questionnaire and the structure of the debriefing process are affected by the number of interviewers involved in the field test. If the field test involves a small number of interviewers (less than 15), then the questionnaire can be designed with open-ended questions, since it will be possible for each questionnaire to be reviewed individually. Given the small number of interviewers and the open-ended design of the questions, the resulting analysis will be qualitative in addition to quantitative. However, if a field test involves a large number of interviewers and each questionnaire will not be individually reviewed, then the debriefing questionnaire should be designed with closed-ended questions, and the data should be entered into a database and quantitatively analyzed.

For the purposes of the WG testing, countries should instruct their interviewers to record their observations 'as they happen' to facilitate later summarizing and reporting in either a structured debriefing form, at a formal interviewer face-to-face debriefing session, or if time and funding allow, both procedures.