

# Multiple Indicator Cluster Survey (MICS4)

With Malaria Biomarkers

Field Editor's Manual

**GHANA STATISTICAL SERVICE**  
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## **Introduction to the MICS Approach**

Field editors for the Multiple Indicator Cluster Survey have an important position. They are responsible for ensuring the quality of fieldwork.

These instructions provide the information needed by field editors to carry out their duties. Candidates for the position of field editor for the MICS should study these instructions carefully during their training. They should also study the Instructions for Interviewers, since it is necessary to thoroughly understand the questionnaire and the procedures for completing it. Individuals selected to serve as field editors should continue to refer to these instructions throughout the fieldwork period.

## **Responsibilities of the Editor**

The primary duty of the editor is to monitor interviewer performance. Close supervision of interviewers and editing of completed interviews is essential to assure that accurate and complete data are collected. Since the collection of high-quality data is crucial to the success of the survey, it is important that mature, responsible individuals be recruited as editors and that they execute their duties with care and precision. This is especially important during the initial phases of fieldwork, when it is possible to eliminate interviewer error patterns before they become habit.

### **Monitoring interviewer performance requires that the editor:**

- 1) Observes several interviews every day.
- 2) Edits all completed questionnaires in the field. Editing must be completed prior to leaving the cluster or enumeration area. To the extent possible, the field supervisor should assist the editor in performing this task so that all interviews are field edited while still in the cluster.
- 3) Conducts regular review sessions with interviewers and advises them of any problems found in their questionnaires.
- 4) Puts completed questionnaires from an enumeration area in order and packs them up to be sent to the headquarters.

## **Monitoring Interviewer Performance**

Controlling the quality of the data collection is the most important function of the editor. Throughout the fieldwork, he/she will be responsible for observing interviews and carrying out field editing. By checking the interviewers' work regularly, the editor can ensure that the quality of the data collection remains high throughout the survey. It may be necessary to observe the interviewers more frequently at the beginning of the survey and again toward the end. In the beginning, the interviewers may make errors due to lack of experience or lack of familiarity with the questionnaires; these can be corrected with additional training as the survey progresses. Toward the end of the survey, interviewers may become bored or lazy in anticipation of the end of the fieldwork; lack of attention to detail may result in carelessness with the data. To maintain the quality of data, the editor should check the performance of interviewers thoroughly at these times.

## **Observing Interviews**

The purpose of the observation is to evaluate and improve interviewer performance and to look for errors and misconceptions that cannot be detected through editing. It is common for a completed questionnaire to be technically free of errors, but for the interviewer to have asked a number of questions inaccurately. Even if the field editor does not know the language in which the interview is being conducted, he/she can detect a great deal from watching how the interviewer conducts herself, how she/he treats the respondent and how she/he fills out the questionnaire. The field editor should observe each interviewer many times throughout the course of the fieldwork. Each interviewer should be observed during the first two days of the fieldwork so that any errors made consistently are identified immediately. Additional observations of each interviewer's performance should be made during the rest of the fieldwork. The field editor should observe at least one full interview per interviewer per day during the course of the fieldwork, with the heaviest observation at the beginning and end of fieldwork period. If the interview was observed, this needs to be indicated in the space for recording the observations at the end of the questionnaire.

During the interview, the field editor should sit close enough to see what the interviewer is writing. This way, she can see if the interviewer interprets the respondent correctly and follows the proper skip patterns. It is important to make notes of problem areas and points to be discussed later with the interviewer. The field editor should not intervene during the course of the interview and should try to conduct herself in a manner that does not make the interviewer or respondent nervous or uneasy. Only in cases where serious mistakes are being committed by the interviewer should the field editor intervene.

After each observation, the field editor and interviewer should discuss the interviewer's performance. The questionnaire should be reviewed, and the field editor should mention the interviewer's strong points as well as problems and mistakes.

## **Evaluating Interviewer Performance**

The editor should meet daily with the interviewers to discuss the quality of their work. In most cases, mistakes can be corrected and interviewing style improved by pointing out and discussing errors at regular meetings. At team meetings, the editor should point out mistakes discovered during observation of interviews or noticed during questionnaire editing. Discuss examples of actual mistakes, but be careful not to embarrass individual interviewers. Reread relevant sections from the Instructions for Interviewers with the team to resolve problems. Also, encourage the interviewers to talk about any situations they encountered in the field that were not covered in training. The group should discuss whether or not the situation was handled properly and how similar situations should be handled in the future. Team members can learn a lot from one another in these meetings and should feel free to discuss their own mistakes without fear of embarrassment.

The editor and supervisor should expect to spend considerable time evaluating and instructing interviewers at the start of the fieldwork. If they feel that the quality of work is not adequate, the interviewing should stop until errors and problems have been fully resolved. In some cases, an

interviewer may fail to improve and will have to be replaced. This applies particularly in the case of interviewers who have been dishonest in the recording of ages of women and/or children.

## **Editing Questionnaires**

Ensuring that questionnaires are edited for completeness, legibility and consistency is one of the most important tasks of the editor. **The survey requires that every questionnaire be thoroughly checked in the field. This means that no cluster can be closed and departed from unless all questionnaires are edited.** This is necessary because even a small error can create much bigger problems after the information has been entered into the computer and tabulations have been run. Timely editing permits correction of questionnaires in the field.

### **General Instructions for editing the questionnaires**

- (1) As you go through the questionnaires, mark any problem areas with a **black** pen and note the page number or the question number on the back page; then, the interviewer can quickly see whether there are any observations. Upon completion of editing, discuss with each interviewer, individually, the problems encountered **black** and review errors that occur frequently with the whole team.
- (2) If the problems are major, it will be necessary to go back to interview the respondent again.

### **NOTE: UNDER NO CIRCUMSTANCES SHOULD YOU MAKE UP AN ANSWER**

- (3) In checking through each questionnaire, be sure that the numbers entered in boxes are legible and that the circles used by the interviewer to select the pre-coded numbers clearly mark only one of the choices (except in cases where more than one code is allowed). Also make sure that when the 'Other' category is selected, the answer is clearly specified in the area provided.
- (4) In checking each questionnaire, make sure that the respondent was asked all questions appropriate for him/her (for example, that the interviewer followed the skip instructions). You will need to look for:
  - (a) Questions for which there is a response when it appears there should be no response
  - (b) Questions for which there is no response when it appears there should be a response.Mark these skip errors with a **black** pen and try to determine the correct response as described in paragraph (2) above. Correct errors following the system described in the Interviewer's manual, for example, drawing two lines through the existing code and circling or writing the new code. **ALWAYS USE A BLACK PEN IN MAKING CORRECTIONS.**
- (5) Check the ranges for all variables that are not pre-coded (for example, a 34-year-old woman cannot have a 24 year old son living with her) and carry out the other consistency checks that are listed. Mark any inconsistencies with a **black** pen and try to determine the correct responses as described in paragraph (2) above.
- (6) The field editor should advise the field supervisor about questionnaires that have been returned to interviewers for further work.

## Editing the Household Questionnaire

In editing the Household Questionnaire, be sure to:

- (1) Check, in the Household Information Panel, that the household identification information has been completed correctly.
- (2) Code the information on the Information Panel if the interviewer has not done so. If the final result code is not '1', check to see that the remaining pages are blank. If the final result code is '1', continue to check the following pages of the Household Questionnaire.
- (3) Check for complete information for each line number in columns HL3, HL4, HL5, and HL6 of the Household Listing Form. There should be no blanks in these columns.
- (4) Also in the Household Listing Form, check that the line numbers of all women ages 15 to 49 have been circled in column HL7, that all men ages 15-59 have been circled in column HL7A (if HH5A=1) and that in columns HL8 and HL9 the line number of the mother/caretaker of children five to 14 and children under 5 years of age, respectively, were inserted. If you find errors regarding eligible women, men, or children in the household, check with the interviewer to make sure the correct number of interviews have been conducted in the household.
- (5) Check that there is information in columns HL11 through HL14 for each person under 18 years of age included in the Household Listing Form.
- (6) If the response in column HL11 of the Household Listing Form is 'No' or 'DK', then column HL12 should be blank. If the response in column HL11 is 'Yes', then there must be information in column HL12. Likewise, if the response in column HL13 is 'No' or 'DK', then column HL14 should be blank. If the response in column HL13 is 'Yes', then there must be information in column HL14.
- (7) In the Education module, check that the questions of columns ED3 and ED4 have been filled for each person aged three years and older. Column ED4 must be blank if the household member is less than 3 years of age or if the answer in column ED3 is 'No'.
- (8) Also in the Education module and for persons 3 to 24 years of age, check that questions ED5 to ED8 are completed following the appropriate skips. For example, if ED5 = 2, then ED6 must be blank. Similarly, if ED7 = 2 or 8, then ED8 must be blank.
- (9) In the Water and Sanitation module, check that there are answers for questions WS1 through WS11 when appropriate for each household in the sample. Notice that depending on the skip patterns for each question, some questions should be blank (for example, if WS1 = 11, 12, or 13, then WS2, WS3, WS4, and WS5 must be blank). Also make sure that when the 'Other' category is selected, the answer is clearly specified in the area provided.
- (10) In the Salt Iodization module, verify that the salt test was implemented in each household and that the result is recorded in the questionnaire. Also, if HH5A=1, a salt sample must have been collected for further testing.
- (11) Check that the number of Questionnaires for Individual Women and Men and for Children Under Five returned with each Household Questionnaire is the same as the number of eligible women (HH12), men (HH15A) (if HH5A=1) and children under five (HH14) reported on the cover page. Speak with the interviewer when there is any inconsistency.

## Editing the Questionnaire for Individual Women

- (1) Check that the identification information for the Individual Women Questionnaire has been completed correctly. Information for cluster and household number must be the same as that on the Household Information Panel of the Household Questionnaire. The line number of the woman should be consistent with her line number in the Household Listing in the Household Questionnaire.
- (2) Code the information on the Questionnaire for Individual Women if the interviewer has not done so. If the questionnaire is incomplete, verify the reason for the result. If the interview is completed, continue to check the remaining pages of the questionnaire.
- (3) In the Woman's Information Panel, check the answer to WB1 (Date of birth). The month of birth should be between '01' and '12', or '98'; the year of birth should be not less than '1961' and not greater than '1996' (if all the fieldwork will be conducted in 2011), or '9998'; and WB2 (Age) should be from '15' to '49'. Question WB2 must have an answer, even if it is the interviewer's best estimate. It can never be left blank. Also check that, when provided, the date of birth and age are consistent. If these responses are inconsistent, discuss the problem with the interviewer.

If at all possible, an effort should be made to revisit the respondent to resolve the inconsistency since age is one of the most important pieces of information collected in the questionnaire. If a revisit cannot be scheduled, it may be necessary to look at other information in the household and individual questionnaires in an effort to resolve the inconsistency. Items that should be considered include:

- Age recorded for respondent in Household Questionnaire;
- Number of live births;
- Date of birth of respondent's first child.

If the respondent's age is either less than '15' or more than '49', write 'NOT ELIGIBLE' on the cover of the Questionnaire for Individual Women. This questionnaire should not be processed. Also check, and correct if necessary, the eligibility status of this woman in the Household Questionnaire. Remember that corrections to the Household Questionnaire can only be made on the basis of information in individual questionnaires if the information collected changes the eligibility status.

- (4) In the Child Mortality module, check that CM10 is equal to the sum of the six values in CM5, CM7 and CM9. CM10 must have a code filled in and must match the BH line number of the last birth recorded. If the respondent has never had any births, the interviewer should have recorded '2' in CM1 and left the rest of the questions blank, including all BH questions.
- (5) In the Birth History module, make sure that all dates and ages are completed, in order, and consistent. For instance, it is almost impossible that two births could have occurred 6 months or less apart – and highly unlikely that they occurred within 9 months of each other. Similarly, a common error is that the first birth has been recorded before the woman had her first intercourse (SB1). Another common error is a woman reporting a birth at a much too young age. In a typical household survey sample, you will not find a single birth to any woman aged 10 or less. Any births reported before age 12 should be verified by the interviewer. Inconsistencies between the age of the respondent and the date of the first birth generally arise from the following circumstances:

- a. The child is not the respondent's own (biological) child
  - b. The respondent's birth date/age (WB1 and/or WB2) are incorrect
  - c. The birth date or age of the first child (CM2 and/or CM3) is incorrect.
- (6) Make sure that any edits in the BH Module are legible. Some edits can be quite substantial and will be confusing to the data processing team unless completely clear.
  - (7) If you find any information missing, including correct recording in CM13, the interviewer should be sent back to the household to determine the missing information. CM13 on last birth is determining eligibility for the following modules. In any spot-check you perform, always confirm the last birth, as it is known to be a major source of error/cheating by interviewers.
  - (8) Please verify that all line numbers recorded in BH8 are consistent with the line numbers recorded in HL1 in the Household Questionnaire.
  - (9) In the Maternal and Newborn Health module, verify that the answer to MN7 is properly used in the filter before MN9. If the response to MN7 is 2 or greater, then MN9 through MN11 must be blank. Likewise, if the answer to MN7 is less than 2, then MN9 through MN11 must have information. If MN10 applies, verify that MN9 has one information recorded.
  - (10) In the Maternal and Newborn Health module, if other answers are provided for MN2 and MN17, verify that answers were clearly specified. Also for MN22, check that the appropriate code was circled before the weight of the child in kilograms.
  - (11) In the Contraceptive Use module, make sure that CP1 is completed and that the skip instruction was followed. If the woman is currently pregnant (CP1 = 1), CP2 and CP3 must be blank. CP3 must also be blank when the woman indicated no use of contraception (CP2 = 2). If the answer to CP3 is 'Other', verify that the method is clearly specified in the space provided.
  - (12) In the FGM Module, please ensure consistency in ages (FG13 and FG16) and that living daughters listed in the BH module are all recorded.
  - (13) In the Marriage/Union module, verify that MA1 to MA9 are completed and that the skip instructions were used. If the woman is not in a union (MA1 = 3), MA2 must be blank. MA5 and MA6 only apply to women not in union (MA1=3). However, MA6 must be blank if MA5 = 3. MA9 must have a response when either month or year of marriage/union is not known (MA8 = 9998).
  - (14) In the Sexual Behaviour module, please check internal consistency with the BH module (if the woman has had children). Please also check consistency with the Marriage module. Age at first intercourse is usually never higher than age at first marriage unless the woman was very young at marriage.

### **Editing the Questionnaire for Children Under Five**

- (1) Check that the identification information for the Questionnaire for Children Under Five has been completed correctly. Information for cluster and household number must be the same as that on the Household Information Panel of the Household Questionnaire and the Questionnaires for Individual Women and Men. Verify that the 'Child's name' and the 'Child's line number' (UF3 and UF4 in the Under-five Child Information Panel) are the same as reported in the Household Listing Form.
- (2) In the Age Module, check for consistency between AG1 (Date of birth) and AG2 (Age). Note that 'DK' is only allowed for day of birth in AG1. If the age calculated from the

date of birth is different from the age in AG2, and BR1 = 1 (Birth certificate seen), then correct AG2, otherwise check with the interviewer and, if necessary, send her back to the household for correction. Also check for age/DOB consistency with the BH module in the Women's Questionnaire if available for the mother.

- (3) In the Breastfeeding/Diet Diversity module, check that, when applicable, BF3 through DD1 have answers.
- (4) When reviewing the Care of Illness module, if CA10, CA12, CA14, and/or CA16 have 'Other' as a response, verify that these are clearly specified in the spaces provided.
- (5) For each child with an immunization record that was seen by the interviewer ('Yes' in IM1 in the Immunization module), check that the date of each vaccination is consistent with the child's date of birth. For example, it cannot be prior to the date of birth. Check also that the dates for the three Polio and the three Penta vaccinations are in chronological order.
- (6) In the same module, check that IM19C is filled only after the campaign has started.
- (7) In the Anthropometry module, the measures of the children should lie within the ranges specified in the table below. If a measure falls outside the acceptable range, the measurer should revisit the household, re-measure the child, and check that the child's age has been correctly recorded. If AN2 = 6, that is, an 'Other' response was identified as a result for the measurement, verify that this is clearly specified in the space provided.
- (8) For the Anaemia and Malaria Testing module, ensure that proper skips have been followed and confirm recordings with Measurer/Technician on a daily basis.

### **Editing the Questionnaire for Individual Men**

- (1) Confirm whether the household has been selected for the male survey (HH5A in Household Questionnaire).
- (2) Check that the identification information for the Questionnaire for Individual Men has been completed correctly. Information for cluster and household number must be the same as that on the Household Information Panel of the Household Questionnaire. The line number of the man should be consistent with her line number in the Household Listing in the Household Questionnaire.
- (3) Code the information on the Questionnaire for Individual Men if the interviewer has not done so. If the questionnaire is incomplete, verify the reason for the result. If the interview is completed, continue to check the remaining pages of the questionnaire.
- (4) In the Man's Information Panel, check the answer to MB1 (Date of birth). The month of birth should be between '01' and '12', or '98'; the year of birth should be not less than '1951' and not greater than '1996' (if all fieldwork is conducted in 2011), or '9998'; and MB2 (Age) should be from '15' to '49'. Question MB2 must have an answer, even if it is the interviewer's best estimate. It can never be left blank. Also check that, when provided, the date of birth and age are consistent. If these responses are inconsistent, discuss the problem with the interviewer.

If at all possible, an effort should be made to revisit the respondent to resolve the inconsistency since age is one of the most important pieces of information collected in the questionnaire. If a revisit cannot be scheduled, it may be necessary to look at other information in the household and individual questionnaires in an effort to resolve the

inconsistency. The age recorded for respondent in the Household Questionnaire is particularly useful. Another potential source of information is in the Marriage module in the Women's Questionnaire, especially if the wife resides in the household and was eligible for the individual interview.

If the respondent's age is either less than '15' or more than '59', write '**NOT ELIGIBLE**' on the cover of the Questionnaire for Individual Men. This questionnaire should not be processed. Also check, and correct if necessary, the eligibility status of this woman in the Household Questionnaire. Remember that corrections to the Household Questionnaire can only be made on the basis of information in the individual questionnaires, if the information collected changes the eligibility status.

- (5) In the Marriage/Union module, verify that MU1 to MU9 are completed with the complex skip instructions followed and questions are properly answered. You may often take advantage of the household listing, as many men are listed as heads of households and you may therefore, have some information on his spouse(s). Again here, you can take advantage of any individual questionnaire for women potentially answered by the heads – here, age at first sexual intercourse can be verified. This is usually never higher than age at first marriage.
- (6) In the Sexual Behaviour module please check internal consistency with the Marriage module. Age at first intercourse is usually never higher than age at first marriage unless the woman was very young at marriage.
- (7) Do not under any circumstances try to reconcile inconsistent information between time of last sex (MS3) with information from a questionnaire filled with a wife. The information provided is strictly confidential and any probing across questionnaires on such a sensitive subject is not allowed.

After editing is completed, the Editor discusses possible issues with interviewers and measurers. If need be, they are sent back to the household to validate, re-measure, or collect missing information. Once the Editor is fully satisfied with the questionnaire, she/he fills HH16, WM8, UF10, and MM8 in all questionnaires and hands over to the Supervisor who will now also ensure the data quality and discuss any issues with the individual and later with the whole team. Once the Supervisor is satisfied, she/he will hand back questionnaires to the Editor.

### **Organizing Questionnaires for Return to the Office**

- (1) Put all the Questionnaires for Individual Women, Individual Men, and for Children Under Five inside their respective Household Questionnaires. If there is more than one individual questionnaire in a household, organize them sequentially in ascending order of the line numbers of the respondents.
- (2) Organize all questionnaires in numerical order by household number within the cluster. Also, any continuation questionnaires (for example, if there are more than 15 people in a household) should be inside the primary questionnaire and should have '**CONTINUATION**' written across the top of the cover sheet. The primary questionnaire for that set should say '**SEE CONTINUATION**' across the top of the cover sheet. The continuation questionnaire should have all identification information written on it on the cover page.

- (3) Check the questionnaires in the cluster against the Supervisor's Control Sheet to make sure that:
  - (a) The correct number of Household Questionnaires are present;
  - (b) The household final result codes are correct;
  - (c) The correct number of individual questionnaires are present.

Remember, there must be a questionnaire assigned for each eligible woman, man, and each child under five, except when the interview has not been conducted yet. The number of cases in which an individual questionnaire was not assigned (for women, men, and children under five) needs to be closely monitored to avoid high non-response percentages. As a reference, the total response rates for individual questionnaires, estimated as the product of the Household Questionnaire response rate times the individual questionnaire response rate for women, men and children, respectively, should not be below 90 percent.

### **Forwarding Questionnaires to the Head Office**

Once all the checking described above has been completed, and any differences have been reconciled, the questionnaires are ready to be sent to the GSS headquarters. Field monitors will be assigned to your team will be responsible in conveying the completed questionnaires to the MICS4 secretariat. It is very important that questionnaires are packed and labeled properly, and protected from dampness and dust. Follow these instructions to the letter to avoid the loss of questionnaires or information.

Note that only GSS monitors have been instructed to pick up your questionnaires for data processing. Regional Statisticians may also pick up questionnaires to the regional office for final delivery. In any case, there should be a constant communication between your team and the MICS4 monitors/secretariat to ensure that completed questionnaires get to the headquarters as quickly as possible.

### Limits for Length and Weight of Children

In editing the length and weight of children to ensure that no data entry errors are made, the following values are used as the minimum and maximum expected values. The ranges are dependent on the sex and age of the child and are given in centimetres for the length (height) of the child and kilograms for the weight of the child.

If any measurement falls outside these ranges, the editor must ensure re-measurement if possible.

Age in Months	LENGTH/HEIGHT (cm)				WEIGHT (kg)			
	Males		Females		Males		Females	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
0–2	36.0	74.0	36.0	72.0	0.5	10.0	0.5	9.0
3–5	45.0	83.0	44.0	80.0	1.0	13.0	1.0	12.0
6–8	51.0	87.0	50.0	86.0	2.0	15.0	2.0	14.0
9–11	56.0	91.0	54.0	90.0	3.0	16.5	2.5	15.5
12–14	59.0	96.0	57.0	95.0	4.0	17.5	3.0	16.5
15–17	62.0	100.0	60.0	99.0	4.0	18.5	3.5	17.5
18–20	64.0	104.0	62.0	102.0	4.0	19.5	3.5	18.5
21–23	65.0	107.0	64.0	106.0	4.5	20.5	4.0	19.5
24–26	67.0	108.0	66.0	107.0	4.5	23.0	4.5	21.5
27–29	68.0	112.0	68.0	111.0	5.0	24.0	5.0	23.0
30–32	70.0	115.0	69.0	114.0	5.0	24.5	5.0	24.5
33–35	71.0	118.0	71.0	117.0	5.0	25.5	5.0	25.5
36–38	73.0	121.0	72.0	120.0	5.0	26.0	5.0	27.0
39–41	74.0	124.0	74.0	122.0	5.0	27.0	5.0	28.0
42–44	75.0	127.0	75.0	124.0	5.0	28.0	5.5	29.0
45–47	77.0	129.9	77.0	126.0	5.0	29.0	5.5	30.0
48–50	78.0	132.0	78.0	129.0	5.0	30.0	5.5	31.0
51–53	79.0	134.0	79.0	131.0	5.0	31.0	5.5	32.0
54–56	80.0	136.0	81.0	133.0	5.5	32.0	6.0	33.0
57–5	82.0	139.0	81.0	136.0	5.5	33.0	6.0	34.5