Template for Requests for Revisions to the DHS Model Questionnaires, Optional Modules, and Biomarkers for DHS-8 (2018-2023)

Section I. Information about the requesting party

1. Is this request being submitted on behalf of a group? If so, please provide the name of the group and the participating parties.

    Health equity and social inclusion interdisciplinary research group (HESI |IRG)

Section II. Indicator definition and rationale

2. Please define the indicator or indicators you are requesting The DHS Program to incorporate. *Multiple indicators derived from a single set of questions should be included in the same submission.* (Response required)

Distance to the nearest healthcare facility

We propose to add the following questions related to accessibility of healthcare:

> How long does it take from your home to the nearest healthcare facility which could be a hospital, a health clinic, a medical doctor, or a first aid post (in hours and minutes)?

> NOTE: This question should be asked for all women who gave the birth in the last 5 years preceding the date of the survey, <u>regardless of whether they used or not used healthcare facilities</u>. The best place to ask this question is just before the set of the questions related to prenatal healthcare utilization.

3. What is the rationale for measuring this indicator (each of these indicators) in DHS surveys? (Response required)

Multiple studies reported that distance to the nearest healthcare facility is one of the strongest determinants of maternal and child health, and prenatal and postnatal healthcare utilization.

Say, L. and R. Raine (2007), 'A systematic review of inequalities in the use of maternal health care in developing countries: examining the scale of the problem and the importance of the context', Bulletin of the World Health Organizations, 85: 812–819.

Sepehri, A., S. Sarma, W. Simpson and S. Moshiri (2008), 'How important are individual, household and commune characteristics in explaining utilization of maternal health services in Vietnam?', Social Science and Medicine, 67: 1009–1017.

Sharma, B. (2004), 'Utilisation of antenatal care services in Nepal', Nepal Population Journal, 11(10): 79–97.

Simkhada, B., E. van Teijingen, M. Porter and P. Simkhada (2008), 'Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature', Journal of Advanced Nursing, 61(3): 244–260.

Fan, L., & Habibov. N. (2009). 'Determinants of maternity health care utilization in Tajikistan: Learning from a national living standards survey'. Health & Place, 15(4), 952-960.

Habibov, N., & Fan, L. (2008). 'Modeling prenatal health care utilization in Tajikistan using two-stage model: Implication for policy and research'. Health Policy and Planning, 23(6), 443-451.

Section III. Proposed additions/revisions to the questionnaires or biomarkers

4. Please describe the requested addition or revision.
   If the requested change is the addition of new questions to the DHS questionnaires or modules, complete questions 4.1 and 4.1.1. If the requested change is a revision to existing questions, complete question 4.2. If the change relates to anthropometry or a biomarker, please complete question 4.3.

   4.1. **For additions**: If you have developed a question or set of questions to measure the indicator(s), please provide them in the space below or in a separate file attached with your submission.

      How long does it take from your home to the nearest healthcare facility such as hospital, health clinic, doctor, first aid, or ambulance (in hours and minutes)?

      4.1.1 If requesting multiple questions, please specify the relative priority of each new question.

   4.2. **For revisions to existing questions**: Please specify the DHS-7 question number, the proposed revision to the question, and the rationale.

DHS-7 question number	DHS-7 question text	Proposed new question	Rationale

    4.3. **For anthropometry and biomarkers**: Please describe the measurement procedures or specimen collection procedures, point-of-care or laboratory testing procedures (as relevant), and any recommendations for return of results.

5. Can any related questions be deleted from the questionnaire to make room for the proposed new content? If so please specify which questions using the DHS-7 question numbers.

6. What are the implications of these requested changes on measurement of trends using DHS data?

Section IV. Indicator calculation

7. Indicate how to calculate the indicator(s). Include detailed definitions of the numerator and denominator of each individual indicator. If you have developed a tabulation plan for the indicator(s), please attach a file including the suggested table(s) with your submission.

8. Is the indicator useful when measured at the national level, or is it useful only when disaggregated to specific subnational areas, such as endemicity zones or project intervention regions?

For each indicator, select one of the three options by clicking in the appropriate box.

Indicator	Useful only for subnational endemicity zones or project intervention regions. A single estimate at the national level is not meaningful.	Useful at both national and subnational regions, as sample size allows.	Useful only at the national level. Subnational estimates are not needed.
Distance to the nearest healthcare facility	☐	☒	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Section V. Prior testing of the proposed question(s)

9. Have the proposed questions undergone any formal validation; i.e., have the questions been tested against a "gold standard" to assess their accuracy? If yes, please describe how well or poorly the questions performed and/or provide a publication or report of the validation exercise (or a link).

10. Have the questions undergone any other kind of testing; e.g., cognitive testing, pilot testing. If so, please describe the results of the testing and/or provide a publication or report of the findings (or a link).

This question has been extensively used in Living Standard Measurement Surveys by the World Bank, for instance, in Tajikistan 2003, 2007, 2009 and found to be effective in predicting maternal, prenatal, postnatal healthcare utilization. http://microdata.worldbank.org/index.php/catalog/lsms#_r=&collection=&country=&dtype=&from=1890&page=2&ps=&sid=&sk=&sort_by=nation&sort_order=desc&to=2018&topic=&view=s&vk=

Section VI. Other considerations

11. Please provide information relevant to the kinds of questions below, and/or anything else you wish to share with us about this indicator (these indicators).

The available evidence points out that distance to the nearest healthcare facility significantly affect prenatal healthcare utilization. Women who have shorter time to reach healthcare facilities start their prenatal healthcare earlier, have relatively higher number of prenatal visits, receive higher quality of care (e.g. weighted, ultrasound, blood test, vaccinations, pregnancy advice, etc). Women who has shorter time to healthcare facilities also more likely to give births assisted by healthcare personnel as compared with women who lived further away from healthcare facilities.

As a result, the information about the proposed indicator will be used by policy-makers, healthcare administrators, and international donors who will be able to efficiently distribute limited funds for the maternal and child health in order to get equitable outcomes for maternal and children health and healthcare utilization. For instance, policy makers could provide a special subsidy to pregnant mothers who live far away from the nearest healthcare facilities in order to help them to offset transportation costs associated with visiting healthcare professionals. Alternatively, changes in allocation of healthcare funds could be made to encourage outreach to mountains, remote, and rural areas which currently located far away from the existing healthcare facilitates.

It must be stressed that the proposed indicator is found to be important in developing countries of Africa and Asia as well as post-communist countries.

DHS is uniquely positioned to provide decision makers with high quality data about equitable healthcare outcomes especially in the fields of maternal and child health. DHS surveys are often the only available source of information about effectiveness of the existing healthcare services and asked a very detailed battery of questions about maternal and child health. Adding the question about distance to healthcare facilities will be a logical addition to

this question and will allow shedding light on interplay between distribution of healthcare facilities and maternal and child outcomes.