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.

This request is submitted on behalf of the Countdown 2030 Coverage Technical Working Group: Agbessi Amouzou (Johns Hopkins University), Lara Vaz (Save the Children), Shams El Arifeen (ICDDRB), Sennen Hounton (UNFPA), Liliana Carvajal (UNICEF), Margaret Kruk (Harvard TH Chan School of Public Health), Hannah Leslie (Harvard TH Chan School of Public Health), Doris Chou (World Health Organization), Honorati Masanja (Ifakara Health Institute), Purnima Menon (IFPRI-New Delhi), William Weiss (Johns Hopkins University), Allisyn Moran (World Health Organization), Ties Boerma (University of Manitoba), Jennifer Requejo (UNICEF), Lois Park (Johns Hopkins University), Chika Hayashi (UNICEF), and Safia Jiwani (Johns Hopkins University).

It has been reviewed and endorsed by members of the Mother and Newborn Information for Tracking Outcomes and Results (MoNITOR) technical advisory group, Child Health Accountability Tracking (CHAT) technical advisory group, and the Improving Coverage Measurement (ICM) Group. These members include Jennifer Requejo, Kate Strong, Agbessi Amouzou, Shams El Arifeen, Emily Carter, and Melinda Munos.

The Countdown Coverage Technical Working Group plans to prepare similar recommendations when the Service Provision Assessments are also open for comment in order to ensure clear linkages between health facility types as requested below.

Section II. Indicator definition and rationale

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)

We request addition of a question on **usual source of health care** and revisions to response options for sources of health care used throughout the men's and women's questionnaires in order to define likely source of health care. These requested changes pertain to indicators of health service coverage and effective coverage as part of the monitoring for the achievement of universal health coverage (Sustainable Development Goal 3.8). Defining likely source of care enables linkage to health system data such as Service Provision Assessments for calculation of effective coverage for key services, including:

- proportion of women seeking antenatal care at health facilities equipped to provide all essential care

- proportion of children with fever seeking care at health facilities with malaria diagnostics and treatment
- proportion of women giving birth in facilities that meet basic emergency obstetric care standards

Defining usual source of care enables calculation of essential health care coverage beyond individual services.

We provide below examples of revised response options for sources of care, but note that our overall recommendation is to ensure alignment between the categories of facility managing authority and general facility level between the DHS Surveys and country-specific health facility information such as the Service Provision Assessment such that the DHS Survey response options can be matched uniquely with groupings of facilities in SPA. We identify areas where the current response options are not differentiated, e.g. "Private hospital/ clinic," "Health clinic / health post," "Fieldworker/CHW."

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

Monitoring the Universal Health Coverage in the Sustainable Development Goal (SDG 3.8) will require improved measure of effective coverage, which account for the quality of services receive beyond just a contact with a health provider. In addition, measures of access to health care must go beyond simple measure availability of facilities and incorporate the capability of the facility to deliver appropriate quality care. Our request will catalyze linking of DHS data to available facility-based data to allow computation of these measures at national and subnational levels.

These minor changes to the DHS surveys improve the linkage function between DHS results and external data such as the Service Provision Assessment surveys, other health facility assessments, or master facility lists maintained by national government. Linking the source of health care as sought by individuals to information on the readiness of that facility or that type of facility to provide care enables estimation of effective coverage, not just whether an individual sought care but whether they did so at a facility equipped to provide quality care. Increasing evidence, including from DHS, suggests that gaps in effective coverage are critical barriers to achieving global development goals.(1)

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.

For addition to men's questionnaire

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Usual source of care (men)
MQ1. Is there a doctor or place that you usually go if you are sick or in need of advice about your
health?
        Yes
        No
        Don't know
[If yes]
    MQ2. What type of facility is the place where you would usually go if sick or in need of advice about
         health? Options to align with broad categories of SPA facilities and managing authorities
        Public sector
             Hospital
             Health center
             Health post
             Family planning clinic
             Mobile clinic
             Other (specify)
        Private sector
             Hospital
             Health center
             Health post
             Family planning clinic
             Mobile clinic
             Other (specify)
        Other
             Shop
             Friend/relative
             Church
             Other (specify)
        Don't know
     MQ3. Is this the closest facility to this household?
        Yes
        No
        Don't know
     MQ4. If not, why do you not go to the closest facility? Select all that apply
        Was referred
        Health care workers often absent
        Facility hours not convenient
        Waiting time too long
        Poor quality of care
        Service I need not available there
        Drugs not available
        I do not trust the health care workers
        Health care workers treat patients poorly
        Prefer to remain anonymous
        Too expensive
        Other (specify)
After each use of health services question (436 (condom), 715 (HIV test), 735 (STI)):
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MQ5. Is this the place you would usually go if you are sick or in need of advice about health?

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Do not have a usual source of care
                Don't know
For addition to women's questionnaire
Usual source of care (women)
WQ1. Is there a doctor or place that you usually go if you are sick or in need of advice about your
health?
        Yes
        No
        Don't know
[If yes]
    WQ2. What type of facility is the place where you would usually go if sick or in need of advice about
         health? Options to align with broad categories of SPA facilities and managing authorities
        Public sector
             Hospital
             Health center
             Health post
             Family planning clinic
             Mobile clinic
             Other (specify)
        Private sector
             Hospital
             Health center
             Health post
             Family planning clinic
             Mobile clinic
             Other (specify)
        Other
             Shop
             Friend/relative
             Church
             Other (specify)
        Don't know
     WQ3. Is this the closest facility to this household?
        Yes
        No
        Don't know
     WQ4. If not, why did you not go to the closest facility? Select all that apply
        Was referred
        Health care workers often absent
        Facility hours not convenient
        Waiting time too long
        Poor quality of care
        Service I need not available there
        Drugs not available
```

Yes No

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I do not trust the health care workers
Health care workers treat patients poorly
Prefer to remain anonymous
Too expensive
Other (specify)
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After each use of health services question (307 (sterilization), 316 (first contraception),325 (current method), 430 (last birth), 444 (postpartum check after discharge), 448 (postnatal check after discharge), 452 (first postpartum check), 456 (first postnatal check), 730 (condom), 1017 (HIV test in ANC), 1030 (HIV), 1050 (STI)):

WQ5. Is this the place you would usually go if you are sick or in need of advice about health?

Yes

No

Do not have a usual source of care

Don't know

Usual source of care (children)

WQ6. Is there a doctor or place that you usually go if your child(ren) are sick or in need of advice about health?

Yes No Don't know

[If yes]

WQ7. What type of facility is the place where you would usually go if your child(ren) are sick or in need of advice about health?

Public sector
Hospital
Health center
Health post
Family planning clinic
Mobile clinic
Other (specify)
Private sector
Hospital

Health center
Health post
Family planning clinic
Mobile clinic

Other (specify) Other

Shop Friend/relative

Church

Other (specify)

Don't know

WQ8. Is this the closest facility to this household?

Yes No

Don't know

WQ9. If not, why did you not go to the closest facility? Select all that apply

Was referred

Health care workers often absent

Facility hours not convenient

Waiting time too long

Poor quality of care

Service I need not available there

Drugs not available

I do not trust the health care workers

Health care workers treat patients poorly

Prefer to remain anonymous

Too expensive

Other (specify)

4.1.1 If requesting multiple questions, please specify the relative priority of each new question. Please note the single highest priority request is the revision on response options related to health service utilization, detailed below. Of the new questions, the priorities are: First tier

• WQ 1-3, WQ 6-8 (usual source of care for women and children)

Second tier

• MQ 1 – 4, WQ 4, WQ 9 (usual source of care for men, reason for bypassing all)

Third tier

- WQ5 after women's Q430 last birth, women's Q1030 HIV test.
- MQ5 after men's Q715 HIV test

Fourth tier

- WQ5 after Women's Q307, Q316, Q325, Q444, Q448, Q452, Q456, QQ730, Q1017, Q1030, Q1050.
- MQ5 after men's Q436, Q735.
- 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
Women's:	All questions ask	Proposed revision to	Calculating effective
307, 316,	respondents about type	response options to	coverage to monitor
325, 410,	of facilities used for a	broadly align with	progress towards the SDGs
430, 444,	given service or visit	categories of managing	requires understanding
448, 452,	Response options follow	authority and facility	source of health care in a
456, 612,	pattern of:	level in Service Provision	way that enables linkage to
625, 730,		Assessment or Service	information about that
1017,	Public sector:	Availability and	source. We suggest minor
1030,	government hospital,	Readiness Assessment,	revision to the DHS
1050	government health	particularly removing any	response categories to
Men's	center, family planning	double-barreled options	enable a clean matching
436, 715,	clinic, mobile clinic, other	like 'Private	with the detailed facility
735	public sector	hospital/clinic', 'Health	types used in the Service

	clinic/health post'	Provision Assessment
Private medical sector:	emme, neuran pose	surveys or other health
private hospital/clinic,	Public sector	facility assessments and in
private doctor's office,		master facility lists for each
•	Hospital	'
mobile clinic, other	Health center	country.
private medical sector	Health post	
	Family planning	
Other sector:	clinic	
Friend/relative	Mobile clinic	
Church	Other (specify)	
Shop	Private sector	
	Hospital	
	Health center	
	Health post	
	Family planning	
	clinic	
	Mobile clinic	
	Other (specify)	
	Other	
	Shop	
	Friend/relative	
	Church	
	Other (specify)	
	Other (specify)	
	Don't know	
	DOILCKHOW	

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.

Not applicable

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?

The requested modifications simply clarify facility response options and would still permit calculation of health care seeking at formal health facilities in the same manner as previous surveys – the coding of the classification of formal care may change slightly, but if done properly any impact would be negligible.

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.

Calculation of health service coverage remain as currently calculated, with revised grouping of health facility types.

Calculation of effective coverage requires linkage to external data

Numerator: individuals seeking care at health facility likely to have capacity to provide effective care (e.g. women seeking antenatal care at health facility with syphilis diagnostic capacity)

Denominator: individuals in need of service (e.g. women with recent live birth)

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 <u>only</u> for subnational endemicity zones or project intervention regions. A single estimate at the national level is <u>not</u> meaningful.	Useful at both national and subnational regions, as sample size allows.	Useful only at the national level. Subnational estimates are not needed.
Effective coverage of essential services		\boxtimes	

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).

Studies in Uganda and Côte d'Ivoire tested ecological linking of health facility data to population data and found that including provider category (e.g. facility type as provided by the respondent) improved validity of aggregate estimates.(2)

Studies linking DHS data to health facility assessment data have noted the challenges in matching health facilities used by individuals to health system information, including the possibility of bypassing closest facility and imprecise categories such as 'Private hospital/clinic' in the DHS response options.(3, 4)

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).

Usual source of care (USC) has been widely administered, including as part of the Medical Expenditure Panel Survey in the United States(5) and the Primary Care Assessment Tool (PCAT) developed by the Johns Hopkins Primary Care Policy Center; the PCAT has been validated globally in countries such as China, Taiwan, Argentina and Brazil.(6-9) Questions on using the closest source of care and reasons for bypassing have been used in population surveys such as the DLHS in India as well as on the Service Provision Assessment itself (among health system users).(10)

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).
- Describe how the data for this indicator are being used (or will be used).
 - Are the data produced by this indicator actionable?
 - O Who will use the data?
 - O What kinds of decisions will be made using these data?
- For what kinds of countries would the indicator(s) be most useful?

Data for these indicators will be used to 1) understand health system utilization and barriers to utilization and 2) calculate effective coverage of health services. These data are useful to countries pursuing universal health coverage to inform decision making on strengthening health service availability and health service quality, to understand population decisions on utilization of care, and to monitor change in effective coverage over time. Data will further be useful to researchers refining indicators of effective coverage and health system utilization.

• Does the DHS survey offer any particular advantage over other available data sources for measuring this indicator? If so, what?

The DHS survey offers a key benefit over the SPA surveys in asking about utilization of health services, usual source of care, and bypassing of nearest clinics because it reaches the full population rather than health system users on the day of the SPA survey. DHS surveys are already extremely useful in calculating effective coverage due to their detailed questions on health service utilization; the revisions proposed will enhance the utility of this information in conjunction with health system information.

Works Cited

- 1. Wang W, Mallick L, Allen C, Pullum T. Effective Coverage of Facility Delivery in Bangladesh, Haiti, Malawi, Nepal, Senegal, and Tanzania. Rockville, Maryland: ICF; 2018.
- 2. Munos MK, Maiga A, Do M, Sika GL, Carter ED, Mosso R, et al. Linking household survey and health facility data for effective coverage measures: a comparison of ecological and individual linking methods using the Multiple Indicator Cluster Survey in Côte d'Ivoire. Journal of global health. 2018;8(2).
- 3. Leslie HH, Malata A, Ndiaye Y, Kruk ME. Effective coverage of primary care services in eight highmortality countries. BMJ Global Health. 2017;2(3).
- 4. Do M, Micah A, Brondi L, Campbell H, Marchant T, Eisele T, et al. Linking household and facility data for better coverage measures in reproductive, maternal, newborn, and child health care: systematic review. Journal of global health. 2016;6(2):020501.
- 5. AHRQ. Children's Usual Source of Care: Insurance, Income, and Racial/Ethnic Disparities, 2004 2014. Agency for Healthcare Research and Quality; 2017 March 2017.
- 6. Harzheim E, Duncan BB, Stein AT, Cunha CR, Goncalves MR, Trindade TG, et al. Quality and effectiveness of different approaches to primary care delivery in Brazil. BMC Health Serv Res. 2006;6:156.
- 7. Lee JH, Choi YJ, Sung NJ, Kim SY, Chung SH, Kim J, et al. Development of the Korean primary care assessment tool--measuring user experience: tests of data quality and measurement performance. International journal for quality in health care: journal of the International Society for Quality in Health Care / ISQua. 2009;21(2):103-11.
- 8. Pongpirul K, Starfield B, Srivanichakorn S, Pannarunothai S. Policy characteristics facilitating primary health care in Thailand: A pilot study in transitional country. International journal for equity in health. 2009;8:8.
- 9. Berra S, Audisio Y, Manataras J, Nicora V, Mamondi V, Starfield B. Adaptacion al contexto argentino del conjunto instrumentos PCAT para la evaluacion de la atencion primaria de la salud. Revista Argentina de Salud Publica. 2011.
- 10. Malawi Service Provision Assessment 2013–2014. Lilongwe and Rockville: Government of Malawi and ICF International; 2015.