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Handbook for Research on the Family Planning Market

Volume 2: Tools and Resources for an In-depth Analysis of the Family Planning Market

Dominique Meekers Sarah C. Haynes Kathryn Kampa

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MEASURE Evaluation

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The Evidence Project uses implementation science—the strategic generation, translation, and use of evidence—to strengthen and scale up family planning

and reproductive health programs to reduce unintended pregnancies worldwide. The Evidence Project is led by the Population Council in partnership with INDEPTH Network, International Planned Parenthood Federation, Management Sciences for Health, PATH, Population Reference Bureau, and a University Research Network.



PATH is driven by an unshakeable commitment to health equity and a bold belief in the power of innovation to improve health and save lives. For nearly 40 years, PATH has been a pioneer in translating bold ideas into breakthrough health solutions, with a

focus on child survival, maternal and reproductive health, and infectious diseases.



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© 2014 Jignesh Patel/Valsad, courtesy of Photoshare. A man watches a street show on gender equality with his daughter in Ahmedabad, India.

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Total number of each type of family planning product/service sold, distributed, or provided across all supply sectors (market volume)	139
Percentage of sexually active women currently using each type of family planning method	140
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ABBREVIATIONS

API	amenities and possessions index
CLMIS	computerized logistics management information system
CPR	contraceptive prevalence rate
CWI	comparative wealth index
СҮР	couple years of protection
DCDM	De Chazal Du Mée
DHS	Demographic and health surveys
FP	family planning
IRB	institutional review board
IUD	intrauterine device
IWI	international wealth index
LAM	lactational amenorrhea method
LQAS	lot quality assurance sampling
MICS	multiple indicator cluster surveys
NGO	nongovernmental organization
OC	oral contraceptives
PSI	Population Services International
RHSC	Reproductive Health Supplies Coalition
SFH	Society for Family Health
TMA	Total Market Approach
TMASCT	Total market approach stewardship capacity tool
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UoN	universe of need
USAID	US Agency for International Development

PREFACE

To thoroughly plan for a total market approach for family planning, it is advisable to conduct an in-depth analysis of the family planning market. Volume 1 of this handbook covers key TMA indicators, data requirements and measurement issues for the key indicators, data sources, how to analyze patterns and trends in key indicators, measurement of government capacity to steward the TMA process, and approaches to advocate and disseminate findings from an in-depth analysis of the family planning market.

This second volume includes several tools and resources (such as computer syntax to calculate various wealth indices, model questionnaires, etc.) that can help facilitate such an in-depth analysis of the family planning market. The tools and resources are intended to be used in conjunction with the main body of the handbook (Volume 1).

1. DATA SOURCE MAPPING

Data source mapping can be a useful tool to provide an overview of the different data sources that are available for a TMA analysis, and to identify gaps in information that may require primary data collection. A data mapping exercise will make a catalogue of all available data sources, and will identify which TMA indicators and relevant stratification variables are available in each source (World Health Organization, 2013). Data source mapping typically involves four steps.

Step 1: A list of all the available data sources that are potentially useful for a TMA analysis is produced, organized by type of source. The resulting list may look like the illustration below:

Data source type	Data source	Years	Notes
Household surveys	DHS	2005, 2010	
	MICS	2012	
Service statistics	PSI sales statistics	1990-present	Quarterly; sales to the trade
	DKT social marketing statistics	1990-present	Annual; sales to the trade
	IMS sales data		Available for a fee
	Ministry of Health		Family planning commodi- ties purchased/donated
Retail audits, distribution surveys	-	-	No known sources available

TABLE 1: ILLUSTRATIVE LIST OF DATA SOURCES, BY TYPE (PARTIAL TABLE)

Source: Adapted from World Health Organization (2013).

Step 2: The list of data sources is expanded by adding information about the specific TMA indicators that can be calculated using each data source (recognizing that some indicators may require using data from more than one source). Because the content of a particular data source can change over time, it may be necessary to list some of the data sources by year. This expanded list may take the following format:

TABLE 2: ILLUSTRATIVE EXAMPLE OF EXPANDED LIST OF DATA SOURCES AND TMA INDICATORS (PARTIAL TABLE)

TMA indicator	DHS 2005	DHS 2010	MICS 2012	PSI/IMS/MOH sales data
% of women who use each FP method	\checkmark			
% of women who have an unmet need for FP	\checkmark	\checkmark	\checkmark	
% of women who report lack of access as reason for non-use	\checkmark	\checkmark		
Total number of products or services sold, distributed, or provided				\checkmark

Source: Adapted from World Health Organization (2013).

Step 3: The list of data source is expanded by recording information about potential stratification variables that are available in the data sources.

TABLE 3: ILLUSTRATIVE EXAMPLE OF EXPANDED LIST OF DATA SOURCES AND STRATIFICATION VARIABLES (PARTIAL TABLE)

Stratification variable	DHS 2005	DHS 2010	MICS 2012	PSI/IMS/MOH sales data
Wealth				
Rural-urban	\checkmark	\checkmark		
Region	\checkmark	\checkmark		
Children ever born	\checkmark	\checkmark	\checkmark	
Fertility preferences	\checkmark	\checkmark		

Source: Adapted from World Health Organization (2013).

Step 4: A final data source map is produced that combines information from steps 2 and 3. The starting point is the list of TMA indicators. For each TMA indicator, the map shows which data sources contain the relevant data, along with available stratifier information, as shown in the table below. The numbers in the table refer to the unique data sources listed in steps 2 and 3.

TABLE 4: DATA SOURCE MAP (PARTIAL TABLE)

Stratification variables				
Wealth	Rural-urban	Region	Fertility	Fertility prefs
1,2,3	1,2,3	1,2,3	1,2	1,2
1,2,3	1,2,3	1,2,3	1,2	1,2
1,2	1,2 4	1,2	1,2	1,2
	1,2,3 1,2,3 1,2	Stratifie	End E	Stratification variables Hogo Logo Lift 1,2,3 1,2,3 1,2,3 1,2 1,2,3 1,2,3 1,2,3 1,2 1,2,3 1,2,3 1,2,3 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2

Source: Adapted from World Health Organization (2013).

The data source map shows which specific indicators can be analyzed with existing data and which indicators would require primary data collection.

2. SPSS SYNTAX TO CALCULATE THE DHS WEALTH INDEX

************ * ILLUSTRATIVE SPSS SYNTAX FOR 2010 ETHIOPIA DHS * Reproduced from Rutstein (2015) * (variable creation omitted) ***** *** Common Factor Analysis. FILTER OFF. USE ALL. EXECUTE. **** removing area-specific variables ****. FACTOR /VARIABLES QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH110H QH110I QH110J QH110K _ QH110L QH118A QH118B QH118C QH118D QH123 DOMESTIC HOUSE LAND h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell h2opspg h2ouspg h2orain h2otruck h2ocart h2osurf h2obot h2ooth flushs flusht flushp flushe latvip latpits latpit latcomp latpail lathang latbush latoth latshare dirtfloo woodfloo prqfloo vinlfloo tilefloo latcomp latpail athfloo nouvell naturall mudwall stonwall adobwall plywall cardwall rwoodwal centfilo rugfio othfloo nowall natwall mudwall stonwall adobwall plywall cardwall rwoodwall cmtwall brkwall cmtbwall cadobwall woodwall othwall noroof natroof matroof bambroof wproof cardroof metroof woodroof asbroof cmtroof shngroof othroof cookelec cooklpg cookgas cookbio cookkero cookchar cookwood cookstraw cookcrop cookdung cooknone cookoth /MISSING MEANSUB /MIAIYSIS QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH110H QH110I QH110J QH110K _QH110L QH118A QH118B QH118C QH118D QH123 DOMESTIC HOUSE LAND h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell h2opspg h2ouspg h2orain h2otruck h2ocart h2osurf h2obot h2ooth flushs flusht flushp flushe latvip latpits latpit latcomp latpail lathang latbush latoth latshare dirtfloo woodfloo profloo vinlfloo tilefloo cemtfloo rugfloo othfloo nowall natwall mudwall stonwall adobwall plywall cardwall rwoodwall centrated by the provided of the provided and the provide /ROTATION NOROTATE /SAVE REG(ALL COM) /METHOD=CORRELATION. ** Urban Area. USE ALL USE ALL. COMPUTE filter_\$=(qhtype = 1). VARIABLE LABEL filter_\$ 'qhtype = 1 (FILTER)'. VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE . WEIGHT OFF. FACTOR ACTOR /VARIABLES QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH110H QH110I QH110J QH110K QH110L QH118A QH118B QH118C QH118D QH119 QH120 QH121 QH122A QH22B QH122C QH122D QH122E QH122F QH122G QH123 DOMESTIC HOUSE LAND h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell h2opspg h2ouspg h2orain h2otruck h2ocart h2osurf h2obot h2ooth flushs flusht flushp flushe latvip latpits latpit latcomp latpail lathang latbush latoth latshare dirtfloo woodfloo prqfloo vinlfloo tilefloo cemtfloo rugfloo othfloo nowall natwall mudwall stonwall adobwall plywall cardwall rwoodwall cmtwall brkwall cmtbwall cadobwall woodwall othwall noroof natroof matroof bambroof wproof cardroof metroof woodfoof asbroof cmtroof shngroof othroof cookelec cooklpg cookgas cookbio cookkero cookchar cookwood cookstraw cookcrop cookdung cooknone cookoth landarea /MISSING MEANSUB /MISSING MEANSUB /ANALYSIS QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH110H QH110I QH110I QH110K /ANALYSIS QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH120C QH ANALYSIS CHILDS metroof woodroof asbroof cmtroof shngroof othroof cookelec cooklpg cookgas cookbio cookkero cookchar cookwood cookstraw cookcrop cookdung cooknone cookoth landarea /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE /CRITERIA FACTORS(1) ITERATE(25) /EXTRACTION PC **/ROTATION NOROTATE** /SAVE REG(ALL URB)

/METHOD=CORRELATION.

** Rural Area.

USE ALL. COMPUTE filter_\$=(qhtype = 2). VARIABLE LABEL filter_\$ 'qhtype = 2 (FILTER)'. VALUE LABELS filter_\$ '0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE .

FACTOR

QH100 QH1104 QH108 QH1105 QH1101 QH1101 QH1107 QH1105 QH105 QH1	
/ANALYSIS QH108 QH110A QH110B QH110C QH110D QH110E QH110F QH110G QH110H QH110I QH110J QH110K QH110L QH118A QH118B QH118C QH118D QH119 QH120 QH121 QH122A QH122B QH122C QH122D QH122E QH122F QH122G QH123 DOMESTIC HOUSE LAND h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell h2opsg h2ouspg h2orain h2otruck h2ocart h2obot h2ooth flushs flush flush flushe latvip latpits latpit latcomp latpail lathang latbush latoth latshare dirtfloo woodfloo prqfloo vinlfloo tilefloo cemtfloo rugfloo othfloo nowall natwall mudwall stonwall plywall cardwall rwoodwall cmtwall brkwall cmtbwall cadobwall woodwall othwall noroof natroof matroof bambroof wproof cardroof metroof woodroof asbroof cmtroof shngroof othroof cookelec cooklpg cookbio cookkero cookchar cookwood cookstraw cookcrop cookdung cooknone cookoth landarea /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE /CRITERIA FACTORS(1) ITERATE(25) /EXTRACTION PC /ROTATION NOROTATE /SAVE REG(ALL RUR) /METHOD=CORRELATION.	
* Calculate regressions with total score. ** Urban Area.	
USE ALL. COMPUTE filter_\$=(qhtype = 1). VARIABLE LABEL filter_\$ 'qhtype = 1 (FILTER)'. VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE .	
REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PINI.OS) POUT(.10) /NOORIGIN /DEPENDENT COM1 /METHOD=ENTER URB1 .	
** Rural Area.	
USE ALL. COMPUTE filter_\$=(qhtype = 2). VARIABLE LABEL filter_\$' (qhtype = 2 (FILTER)'. VALUE LABELS filter_\$' 0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE .	
REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT COM1 /METHOD=ENTER RUR1 .	
FILTER OFF. USE ALL. EXECUTE .	
*** Calculate combined wealth score from Urban and Rural Scores.	

compute combscor=0. print formats combscor (F11.5).

** Urban. if (qhtype = 1) combscor=1.232+0.856* URB1. ** Rural. if (qhtype = 2) combscor=(-0.544)+0.352* RUR1. execute. *Calculate quintiles and scores for data file. compute hhmemwt=qhweight*hv012/1000000. weight by hhmemwt. VARIABLE LABELS hhmemwt 'HH members weighting for Index' . ** Urban Area. USE ALL. COMPUTE filter_\$=(qhtype = 1). VARIABLE LABEL filter_\$ 'qhtype = 1 (FILTER)'. VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EVECUTE RANK VARIABLES=urb1 (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN . ** Rural Area. USE ALL. USE ALL. COMPUTE filter \$=(qhtype = 2). VARIABLE LABEL filter_\$ 'qhtype = 2 (FILTER)'. VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'. FORMAT filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE . RANK VARIABLES=rur1 (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN . ** National combined score. FILTER OFF. USE ALL. EXECUTE . RANK VARIABLES=combscor (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN . FREQUENCIES VARIABLES=combscor /FORMAT=NOTABLE /NTILES= 5 STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SKEWNESS SESKEW KURTOSIS SEKURT /ORDER= ANALYSIS . save outfile="c:\hnp2a\Ethiopia 2010\et10assets.sav". WEIGHT OFF. *** Write out scores file. write formats combscor (f11.5). WRITE OUTFILE='c:\hnp2a\Ethiopia 2010\et10scores.dat' TABLE /qhclust qhnumber combscor ncombsco urb1 nurb1 rur1 nrur1. EXECUTE. save outfile="c:\hnp2a\Ethiopia 2010\et10assets.sav".

Source: Rutstein (2015). For additional SPSS syntax examples, see: <u>http://dhsprogram.com/topics/wealth-index/Wealth-Index-Construc-tion.cfm</u>.

3. INSTRUCTIONS FOR ADDING AN INTERNATIONAL WEALTH INDEX DATASET TO AN EXISTING DHS DATASET

* ILLUSTRATIVE SPSS SYNTAX TO ADD AN IWI DATASET TO A DHS DATASET

- **************
- * Obtain the relevant IWI dataset from the Global Data Lab. The dataset that contains the IWI for the 2013 Nigeria DHS is * called "Nigeria2013-addIWI.sav".

* Open the IWI database and sort it by household ID.

GET

FILE='c:\Nigeria2013-addIWI.sav'.

* The HHID variable is defined as 36 character string (alphanumeric) variable, which include 24 leading blank spaces.
* We first change this to a 12-character string variable

alter type HHID(A12).

SORT CASES BY HHID(A). execute.

SAVE OUTFILE='c:\Nigeria2013-addIWI-sorted.sav' /COMPRESSED.

* Open the DHS women's database.
 * Create the household ID variable by concatenating v001 and v002.
 * Sort by HHID.

GET FILE='c:\Nigeria DHS\NGIR6AFL.SAV'.

* The HHID variable must be created by concatenating v001 and v002. To ensure that the new variable has the same format as * the HHID variable in the IWI database we first convert the variables v001 and v002 to string variables with 9 and 3 characters.

string a001(a9). compute a001=string(v001,f9.0). string a002(a3). compute a002=string(v002,f3.0).

* Now combine concatenate the two variables into a single 12-character string variable.

string HHID(a12). compute HHID=CONCAT (a001,a002). execute.

*Sort the dataset by the new HHID variable.

SORT CASES BY HHID(A). execute.

SAVE OUTFILE='c:\NGIR6AFL-sorted.SAV' /COMPRESSED.

* merge the two sorted datasets.

GET FILE='c:\NGIR6AFL-sorted.SAV'.

MATCH FILES /FILE=* /TABLE='c:\Nigeria2013-addIWI-sorted.sav' _/BY_HHID. EXECUTE.

SAVE OUTFILE='c:\Nigeria 2013.SAV' /COMPRESSED.

4. COEFFICIENTS FOR CALCULATING THE INTERNATIONAL WEALTH INDEX (IWI)

Indicator variable	IWI formula weight
Consumer durables	
Television	8.612657
Refrigerator	8.429076
Phone	7.129699
Car	4.651382
Bicycle	1.846860
Cheap utensils	4.118394
Expensive utensils	6.507283
Housing characteristics	
Floor material	
Low quality	-7.558471
Medium quality	1.227531
High quality	6.107428
Toilet facility	
Low quality	-7.439841
Medium quality	-1.090393
High quality	8.140637
Number of rooms	
Zero or none	-3.699681
Two	0.384050
Three or more	3.445009
Public utilities	
A second se	0.054444
Access to electricity	8.056664
Water source	
Low quality	-6.306477
Medium quality	-2.302023
High quality	7.952443
Constant	25,004470

Source: Smits and Steendijk (2015, table 1).

5. SPSS SYNTAX TO CALCULATE THE INTERNATIONAL WEALTH INDEX (IWI)

* SPSS MACRO FOR CREATING IWI * CREATED 7 JANUARY 2013 BY JEROEN SMITS. * IMPROVED 20 SEPTEMBER 2014 BY JEROEN SMITS. * CONTACT: INFO@GLOBALDATALAB.ORG. TO RUN THIS MACRO AN SPSS DATA (.SAV) FILE SHOULD BE AVAILABLE CONTAINING THE FOLLOWING VARIABLES:. Quality of water supply with three categories, coded: 1 low quality, 2 intermediate quality, 3 high quality, -9 Missing. Quality of toilet facility with three categories, coded: 1 low quality, 2 intermediate quality, 3 high quality, -9 Missing. Quality of floor material with three categories, coded: 1 low quality, 2 intermediate quality, 3 high quality, -9 Missing. WATER TOILET FLOOR FLOOR Quality of floor material with three categories, coded: 1 low quality, 2 intermediate quality, 3 high quality, -9 Missing.
 SROOM Number of sleeping rooms, with three categories, coded: 1 zero or one sleeping room, 2 two sleeping rooms, 3 three or more sleeping rooms, -9 Missing.
 TV Household or one of its members owns a tv, coded: 0 Not, 1 Yes, -9 Missing.
 FRIDGE Household or one of its members owns a phone, coded: 0 Not, 1 Yes, -9 Missing.
 CAR Household or one of its members owns a car, coded: 0 Not, 1 Yes, -9 Missing.
 BICYCLE Household or one of its members owns a bicycle, coded: 0 Not, 1 Yes, -9 Missing.
 CHEAPUTEN Household or one of its members owns a car, coded: 0 Not, 1 Yes, -9 Missing.
 EXPUTEN Household or one of its members owns a car, coded: 0 Not, 1 Yes, -9 Missing.
 EXPUTEN Household or one of its members owns a cheap utensil, coded: 0 Not, 1 Yes, -9 Missing.
 ELECTR Household or one of its members owns an expensive utensil, coded: 0 Not, 1 Yes, -9 Missing. * ELECTR * The CHEAP UTENSIL variable indicates the possession of any cheap (roughly under \$50) item, like a chair, table, clock, watch, water * cooker, radio, fan, mixer, etc.
 * This variable can already be created with information on only one of these items, but it improves in quality (has less false negatives) if there is information on more items. * Similarly the EXPENSIVE UTENSILS variable indicates the possession of any expensive (roughly over \$300) item, like a motorbike, * computer, washer, dryer, etc.
 * This variable can already be created with information on only one of these items, but it improves in quality (has less false negatives) if
 * there is information on more items. * FURTHER INFORMATION ON THE CREATION OF THE VARIABLES CAN BE FOUND IN:.
 * Smits, J & R. Steendijk (2012). "The international wealth index (IWI)" NICE Working Paper 12-107.
 * To be downloaded from iwi.globaldatalab.org. * TO USE THIS MACRO YOU MAY READ IN THE ASSET VARIABLES FROM AN SPSS DATA FILE. * get file='c:\xxxxxx\file with asset variables.sav'. * OR YOU MAY INCLUDE THIS MACRO IN A SYNTAX FILE BY USING THE 'INSERT' COMMAND. *GIVE STANDARD LABELS TO THE VARIABLES. var lab water 'Quality main source of drinking water' /toilet 'Quality of toilet facility' /floor 'Quality of main floor material' /sroom 'Nr of rooms for sleeping' /electr 'Household has electricity' /tereful Household or member owns a TV' /fridge 'Household or member owns a TV' /fridge 'Household or member owns a phone' /bicycle 'Household or member owns a bicycle' /car 'Household or member owns at least one cheap utensil' /cheaputen 'Household or member owns at least one cheap utensil' /exputen 'Household or member owns at least one expensive utensil'. value lab water toilet floor 1'Low quality' 2'Medium quality' 3'High quality' -9'Variable not available' /sroom 1'Zero or one' 2'Two' 3'Three or more' -9'Variable not available' /electr tv fridge phone bicycle car cheaputen exputen 0'No' 1'Yes' -9'Variable not available'. *RECODE THREE-CATEGORY VARIABLES INTO DUMMIES. recode water (1=1)(-9=-9)(else=0) into water1. recode water (2=1)(-9=-9)(else=0) into water2. recode water (3=1)(-9=-9)(else=0) into water3. recode toilet (1=1)(-9=-9)(else=0) into toilet1. recode toilet (2=1)(-9=-9)(else=0) into toilet2. recode toilet (3=1)(-9=-9)(else=0) into toilet3. recode floor (1=1)(-9=-9)(else=0) into floor1. recode floor (2=1)(-9=-9)(else=0) into floor2. recode floor (3=1)(-9=-9)(else=0) into floor3. recode sroom (1=1)(-9=-9)(else=0) into sleepr1. recode sroom (2=1)(-9=-9)(else=0) into sleepr2. recode sroom (3=1)(-9=-9)(else=0) into sleepr3. *IF HOUSEHOLD HAS A MORE EXPENSIVE UTENSIL IT IS ASSUMED TO HAVE ALSO A CHEAPER UTENSIL. if (cheaputen=0 and (tv=1 or fridge=1 or phone=1 or bicycle=1 or car=1 or exputen=1 or toilet=3 or floor=3)) cheaputen=1. if (exputen=0 and car=1) exputen=1. *CHECK VARIABLES. freq water water1 water2 water3 toilet toilet1 toilet2 toilet3 floor floor1 floor2 floor3 tv fridge phone electr car bicycle cheaputen

exputen sroom sleepr1 sleepr2 sleepr3.

exputen sroom sleepr1 sleepr2 sleepr3. *COMPUTATION OF IWI. compute iwi=-9. do if (water ne -9 and toilet ne -9 and floor ne -9 and tv ne -9 and fridge ne -9 and phone ne -9 and electr ne -9 and car ne -9 and bicycle ne -9 and theaputen ne -9 and exputen ne -9 and sroom ne -9). compute iwi=25.00447 -6.306477*water1 -2.302023*water2 +7.952443*water3 -7.439841*toilet1 -1.090393*toilet2 +8.140637*toilet3 -7.558471*floor1 +1.227531*floor2 +6.107428*floor3 +8.612657*tv +8.612657*tv +8.612657*tv +8.612664*electr +4.651382*car +1.84686*bicycle +4.118394*cheaputen +6.507283*exputen -3.699681*sleepr1 +0.38405*sleepr1 +3.445009*sleepr3. end if. value labels iwi -9'Missing'. end if. value labels iwi -9'Missing'. var lab iwi 'International Wealth Index (IWI)'. freq iwi.

Source: Global Data Lab, http://ddw.ruhosting.nl/iwi/downloads.php.

6. CALCULATING THE COMPARATIVE WEALTH INDEX (CWI)

To make a wealth index comparable across surveys, a baseline is needed (Rutstein & Staveteig, 2013, 2014). The experimental Comparative Wealth Index (CWI) uses the DHS Wealth Index from the 2002 Vietnam DHS surveys as the baseline. A baseline survey conducted around the year 2000 was deemed appropriate because it was roughly in the middle of the time period for which DHS Wealth Index data are available (roughly from 1990 onward). Vietnam was selected because its per capita Gross National Income was close to the average for countries that have DHS surveys.

Common items in the DHS survey are used as 'anchoring' points and the proportion of households at given levels of the anchors are used as cutoff points. For households at the lowest economic levels, the following indicators of unsatisfied basic needs are used:

- Dwelling with inadequate walls (natural/rustic materials) or dirt flooring;
- Crowding, defined as having more than 3 persons per sleeping room;
- Inadequate sanitation, defined as having either inadequate toilet facilities (no toilet facility, pit latrine without a slab, bucket, or hanging toilet, sharing of a toilet with other households) or an inadequate source of drinking water. For urban households, water piped into the dwelling or yard and use of bottled water were considered adequate. For rural households, any protected water source was defined as adequate;
- High economic dependency, defined as having more than three household members per worker and no working-age adult who had completed primary education.

Subsequently, the wealth scores cutoffs are determined for households that have four unsatisfied basic needs, at least three, at least two, and at least one unsatisfied basic need. These specific wealth scores then serve as the anchoring points for the relative wealth index.

For households at the middle and upper economic levels ownership of a TV, refrigerator, car/truck, and a fixed (non-mobile) phone were used as anchor points. For each of these four items, a logistic regression was run to identify the wealth index score for which half of the households had the item. For each item, a regression is run with the dichotomous variable for the item as the dependent variable and the wealth score as the predictor variable. The predicted value of the wealth score is a calculated using the formula:

$$\ln(p/1-p) = a + b * wealthscore$$

where *p* is the percentage of households that owns the asset. The wealth score when half of the households own the asset will therefore equal: *wealthscore* = -a/b

These procedures were applied for the 2002 Vietnam DHS baseline survey and for each specific DHS survey, generating a total of 8 wealth score values for the baseline survey, as well as for every other survey. A linear regression is run with the baseline anchor points as the dependent variable and the specific survey anchor points

as the predictor variable. The regression coefficient β and constant α are used to convert to DHS Wealth Index score for each household into the CWI. The CWI score for a household is equal to the DHS Wealth Index score for that household is multiplied by the regression coefficient β , plus the constant α :

$CWI = \alpha + \beta * wealthscore$

To create comparative wealth quintiles, all surveys use the cutoff points for the quintiles for the baseline survey. These cutoff points are as follows:¹

Quintiles 1-2: -0.90802 Quintiles 2-3: -0.38583 Quintiles 3-4: -0.01189 Quintiles 4-5: 0.74156.

¹ Source: Rutstein, Shea, web posting Jan.23, 2015, <u>http://userforum.dhsprogram.com/index.php?t=msg&th=1828&goto=6988&S=-7fab22e416ccc81fbf1a26572a25769a</u>

7. PARAMETERS TO CONVERT THE DHS WEALTH INDEX TO THE COMPARATIVE WEALTH INDEX

Country	Year	α	β
Benin	2006	-0.6688	0.8117
Nepal	2001	-1.0876444	0.6696379
	2006	-0.8041832	0.8550128
	2011	-0.3603931	1.3088343

Sources: Rutstein and Staveteig (2014), Rutstein, S., web posting Jan.23, 2015, <u>http://userforum.dhsprogram.com/index.php?t=ms-g&th=1828&goto=6988&S=7fab22e416ccc81fbf1a26572a25769a</u>

8. USING SURVEY DATA TO ESTIMATE THE NUMBER OF CONTRACEPTIVE USERS

The number of contraceptive users in the population can be estimated based on the contraceptive prevalence rate found in a health survey using the *svy total* command in STATA (Stata Corporation, 2013). The estimation requires that the necessary details about the sampling procedures are included in the dataset. Typically, this will require that the dataset includes variables that identify the sampling stratum, the cluster or primary sampling unit (PSU), and the analysis weight. We will use the women's file of the 2008 Egypt DHS (Ministry of Health and Population [Egypt], El-Zanaty and Associates [Egypt], & ICF International, 2015) to illustrate the steps involved in using the STATA program to estimate the total number of contraceptive users in the population.

Step 1: Identify the variables that provide details about the sampling procedures and the variables that need to be analyzed. In the 2014 Egypt DHS, the following variables will be needed:

- v021: primary sampling unit (PSU)
- v022: sampling strata
- v005: women's individual sample weight
- v313: type of current contraceptive method (0= none; 1=folkloric; 2=traditional; 3=modern)
- v025: type of place of residence (1= urban; 2= rural)

Step 2: Calculate a sampling weight that equals the inverse of the probability of selection for each respondent. For DHS surveys, this needs to be done in two parts. Per DHS instructions, the variable that specifies the sampling weight (variable V005) needs to be divided by 1,000,000. However, the DHS sampling weight only corrects for over- and undersampling of certain areas; so it must be multiplied by the inverse of the probability of selection. The probability of selection equals the number of women included in the DHS survey (21,762) divided by the total number of women aged 15-49 in the country. Data on the latter can be obtained from the United Nations Population Prospects database (United Nations, 2015).

The STATA commands to calculate the weight is as follows:

```
generate wgt1 = v005/1000000
generate wgt2 = 23090000/21762
generate wgt = wgt1 * wgt2
```

Step 3: We need to tell STATA how to weight the data. Without weighting the data, all of our estimates would be biased toward oversampled subpopulations. Our estimates will be more precise if our calculations take into account that DHS uses a multi-stage stratified sampling procedure. In STATA, this is done with the *svyset* command, which specifies the variables that contain information about the survey design, such as the primary sampling unit, analysis weight, and stratum:

```
svyset v021 [pweight=wgt], strata (v022)
```

Once the *svyset* command has been used, knows how to weight the data. However, not all STATA commands are able to account for the complex sampling procedures. The commands that do have the survey prefix *svy*.

Step 4: Calculate the weighted percentage of modern contraceptive users in the sample using the *svy: proportion* command. To do this we first create a dichotomous variable that indicates whether or not the respondent is currently using a modern method of contraception:

```
gen modernfp=v313
recode modernfp 0 1 2=0 3=1
svy: proportion modernfp
```

This will produce the output below, which shows that after correcting for the complex sampling, 53.5% of women report currently using a modern method of contraception.

Number of str Number of PSU	ata = 47 s = 883	Numbe: Popula Design	r of obs = ation size = n df =	21762 23090002 836
	Proportion	Linearized Std. Err.	[95% Conf.	Interval]
modernfp 0 1	 .465202 .534798	.0053209 .0053209	.4547582 .5243542	.4756458 .5452418

Step 5: Estimate the total number of contraceptive users in the population using the *svy: total* command:

svy: total modernfp

The output shows that the analysis included 47 strata and 883 primary sampling units, and that in total an estimated 12.3 million Egyptian women are using modern contraceptives.

Number of Number of	strata PSUs	= 47 = 883	Number Popula Design	of obs tion size df	= 21762 = 23090002 = 836
		Total	Linearized Std. Err.	[95% Conf	. Interval]
moderr	nfp	1.23e+07	231625.6	1.19e+07	1.28e+07

Step 6: Estimate the total number of contraceptive users in different subpopulations, using the *over* subcommand. The example below estimates the total number of users of modern contraceptives in rural and urban areas:

The results show that of the total 12.3 million women who use modern contraceptives, 4.5 million live in urban areas, and 7.9 million in rural areas.

9. MERGING DATASETS FROM DIFFERENT SURVEY WAVES

*** * * Illustrative SPSS syntax to merge three waves of Nigeria DHS surveys * This syntax will add cases from the 2008 and 2003 datasets to the 2013 dataset. SPSS will automatically merge * all variables that have identical names, but it does not verify whether the variables are actually identical. It essential * that the user verifies that the variable with the same name actually have the same meaning (i.e. are based on identical * questions) and that they are coded in exactly the same way. *** * Open the 2013 Nigeria DHS dataset. GET FILE='c:\Nigeria 2013.SAV'. * Add the 2008 dataset. ADD FILES /FILE=* /FILE='c:\Nigeria 2008.SAV' /IN=source01. VARIABLE LABELS source01 'Case source is c:\Nigeria 2008.SAV'. EXECUTE. * Add the 2003 dataset. ADD FILES /FILE=* /FILE='c:\Nigeria 2003.SAV' /IN=source01. EXECUTE. * verify that the merged data set includes all three surveys. freq v007. SAVE OUTFILE='c:\Nigeria 2003-13.SAV' /COMPRESSED.

10. ILLUSTRATIVE EXAMPLE OF DHS DATA MINING (NIGERIA DHS, 2003-13)

For many countries, existing DHS data contain a lot of important information about the family planning market and trends in the market. Such data can be used describe the profile of family planning users, and to assess whether consumer profiles vary by family planning method and/ or by supply sector. DHS data are also useful for measuring the overall demand for family planning, the demand for specific methods or specific brands, and to assess whether that demand varies across subgroups (e.g., by region or wealth level). This section illustrates such analyses using data from the 2003, 2008, and 2013 Nigeria DHS surveys.

The Nigerian National Policy on Population for Sustainable Development aims to reduce the total fertility rate by at least 0.6 children every five years. The target of the Federal Ministry of Health is to increase the contraceptive prevalence rate to 36% by 2018. To help meet the unmet need for family planning, public health facilities distribute free family planning supplies (National Population Commission (NPS) [Nigeria] & ICF International, 2014). In addition, social marketing of contraceptives is provided by DKT International (www.dktinternational. org) and the Society for Family Health (www.sfhnigeria.org).

FAMILY PLANNING CONSUMER PROFILES

Data from sexually active women aged 15-49 in the 2013 Nigeria DHS survey enable us to examine profiles of the several types of consumers, including:

- Users of modern family planning (any method)
- Users of specific methods (oral contraceptives, injectables, and condoms)
- Users of public sector oral contraceptives and private sector oral contraceptives
- · Users of public sector injectables and private sector oral injectables
- Users of public sector condoms, socially marketed condoms, and commercial condoms

Although information on use of other types of modern methods is also available in the DHS surveys, in Nigeria those methods are considerably less popular than oral contraceptives, injectables, and condoms. Because of the small sample size, no detailed user profiles are developed for users of other methods.

In theory, it is possible to identify consumers from each sector using data on the last source of supply (public vs. private source) and the brand name of the product. However, while the 2013 Nigeria DHS includes a question about the brand of oral contraceptives used, Combination 3, the brand distributed by the leading social marketing organization (the Society for Family Health) is not listed among the pre-coded answer categories. Therefore, it is not possible to distinguish between users of socially marketed oral contraceptive and commercial contraceptives. However, it is still possible to compare the profiles of public sector oral contraceptive users and private sector oral contraceptive users. This is also the case for injectable users.

To distinguish between users of public sector, socially marketed, and commercial condoms, condom users were classified based on information about the last source of supply (public vs. private) and the condom brand, using the following assumptions. If the last source was a public sector source, we classified the user as a user of public sector condoms. If the last source was not a public sector source and the condom brand was "Gold Circle" (the

flagship condom brand of the Society for Family Health), we coded the respondent as a user of socially marketed condoms. All other condom users were classified as commercial sector brand users. Although this classification is not perfect, it should be sufficient to detect broad differences in consumer profiles.²

The DHS surveys include information on several useful stratification variables. The consumer profiles in this example use several commonly used stratification variables. Specifically, we include age, marital status, fertility (number of surviving children), fertility preferences, religion, region, type of place of residence (rural/urban) and level of education. We also include the International Wealth Index, which was obtained from the Global Data Lab and added to the DHS dataset.

Profile of users of modern contraceptives (females only)

Table 5 shows profile of female users of modern planning methods in Nigeria. The results show that nearly one in four users of modern family planning (38%) are ages 25-34, and that about two out of every three (63%) are married or cohabiting. Nearly one in three users of modern family planning methods have no living children, which suggests that they are using these methods to delay the onset of childbearing. Breakdown according to women's desire for additional children shows that only 28% of users of modern family planning report they do not want to have any more children. The large majority of modern family planning users are Christian (79%) and live in the southern regions (70%). A large proportion of modern family planning users (63%) live in urban areas and have secondary or higher education (74%). Classification according to the International Wealth Index indicates that most users of modern family planning, the condom is the most common method (41% of users), followed by injectables (22%) and the pill (17%). Nearly two out of every three (63%) users of modern family planning reported that they last obtained the method from a private sector source (including NGOs).

Profile of users of oral contraceptives, injectables, and condoms (females only)

Table 6 shows separate profiles for users of oral contraceptives, injectables, and condoms. The results show that the profile of users of oral contraceptives does not differ much from the profile of all modern contraceptive users, the most notable exception being that 75% of pill users report that they last obtained the product from a private sector source.

By contrast, injectable users have a very different profile. Over half (52%) of injectable users are aged 35 or older and 92% are married or cohabiting. The large majority of injectable users have three or more children (80%), suggesting that they are largely using the method for family limitation. This is further confirmed by the finding that 48% of injectable users report that they want no more children, and an additional 30% do not want a child in the next two years. It is also noteworthy that 51% of injectable users are living in a rural area, have somewhat lower levels of education (11% have no education; 32% have primary only), and are somewhat poorer (31% have an IWI below 40). The majority of injectable users (59%) report obtaining the product from the public sector.

Condom users stand out because they tend to be younger (50% are under age 25), unmarried (67%) and childless (61%). Only 10% of condom users report that they want no more children; nearly half (47%) report that they want children but are unsure about the timing. The large majority of condom users (71%) live in urban areas, are highly educated (61% have secondary education; 28% have tertiary education). The large majority of condom users (79%) report that they last obtained condoms from a private sector source, while only 5% obtained them from the public sector. The remaining 16% obtained them from other people, such as friends or relatives.

² The available data do not permit an exact classification of all condom users. For example, because there are no data on other socially marketed condom brands, such as Lifestyles, users of these less popular socially marketed brands end up being coded as commercial brand users.

Profile of users of public and private sector oral contraceptives and injectables (females only)

Since the three supply sectors (the public, nongovernmental organization (NGO), and commercial sectors) target different groups of consumers, it would be particularly informative for TMA planning purposes to have profiles of each group of consumers. The results presented in Table 7 show that consumers of private sector oral contraceptives are more likely than public sector users to be younger (26% are under age 25), to be unmarried (37%), and to be childless (28%). Users of private sector oral contraceptives tend to be highly educated (74% have at least secondary education), and the large majority live in the South South or South West regions (32% and 39%). Interestingly, users of private sector oral contraceptives are no more likely than public sector users to live in urban areas (64% vs. 61%). Interestingly, breakdown according to the International Wealth Index shows that there are no clear wealth differences between the two groups of consumers. Among users of private sector oral contraceptives. However, only 8% of public sector pill users have an IWI of at least 80, compared to 15% for the private sector. Table 8 shows the profiles of consumers of public and private sector injectables. The results show that the two groups have very similar profiles.

Profile of users public sector, private sector, and commercial condoms (females only)

Table 9 describes the profiles of users of public sector condoms, socially marketed condoms, and commercial condoms. The results show that there are notable differences in the consumer profiles of the three sectors. Compared to users of public sector condoms, users of socially marketed condoms are much more likely to be under 25 years of age (52% vs. 40%, to be unmarried (64% vs. 51%), and not to have any living children (58% vs. 44%). Although users of socially marketed condom are only slight more likely to live in urban areas (69% vs. 65%), by are much more likely to live in the South West (40% vs. 15%) and less likely to live in the South East (24% vs. 40%). Users of socially marketed condom brands are more likely than public sector users to have secondary or higher education (89% vs. 77%). They are also more likely to fall in the upper middle wealth category (34% vs. 22%). Interestingly, only 12% of users of socially marketed condom are in the wealthiest category, compared to 24% for public sector users. The profile of users of commercial sector condom brands shows that this group is young (47% under 25), largely unmarried (80%), and childless (72%). The large majority of commercial brand users live in urban areas (78%), have at least secondary education (92%), and are either upper middle class or wealthy (57%).

Key findings from the user profiles

- Nigerian women use modern family planning to delay childbearing, space births, and to limit family size, which indicates a need for short-term as well as long-term methods
- Two thirds of users of modern family planning are middle-class (high SES, urban, secondary education), suggesting that only a fraction need free or subsidized family planning methods
- Injectable users are older and many half are using the method for family limitation. Injectable users tend to have a lower SES and are more dependent on the public sector, suggesting they may not be able to afford unsubsidized products.
- Condom users tend to be young and unmarried and tend to use the method to delay childbearing. Condom users tend to have an above average SES and the large majority obtain supplies from the private sector, suggesting the need for fully subsidized condoms is fairly low

- Users of public and private sector OCs have very similar SES, as do public and private sector injectable users. Nearly half of public sector OC users and 40% of public sector injectable users are upper middle class or wealthy. This findings indicate that fully subsidized OCs and injectables are not being adequately targeted to the poor.
- Comparison of the profiles of condom users from each of the three supply sectors shows that users of private and commercial sector condoms are somewhat more likely to be urban, have at least secondary education, and to have a slightly higher SES. Nevertheless, over 45% of public sector and private sector condom users are upper middle class or wealthy. This indicates that the public sector and the private sector subsidize users who should be able to afford commercial condoms.

TABLE 5: PROFILE OF USERS OF MODERN CONTRACEPTIVES (NIGERIA, 2013)

	Use far	ers of modern nily planning
Age		
15-24	29.2	
25-34	38.0	
35-49	32.7	1000/(0) = 1.420
Marital status		100% (1 N-4,4 20)
Not in union	37.4	
Married/cohabiting	62.6	
. 0		100% (N=4,426)
Surviving children		
None	30.8	
1-2	20.9	
5-4 5+	20.4 21.0	
51	21.7	100% (N=4 426)
Desire for children		10070 (11 1,120)
Wants within 2 years	10.9	
Wants after 2+ years	26.1	
Wants, unsure timing	25.6	
Undecided	6.2	
Wants no more	28.4	
Sterile/infecund	2.8	1000/ OI-4260
Religion		100% (IN=4,364)
Catholic	171	
Other Christian	61.5	
Islamic	20.6	
Other	0.9	
		100% (N=4,426)
Region		. /
North Central	15.1	
North East	3.6	
North West	11.2	
South East	14.8	
South West	∠1.0 33.5	
oodui west	55.5	100% (N=4 426)
Place of residence		10070 [17-7,120]
Urban	63.2	
Rural	36.8	
		100% (N=4,426)
Education		/
None	5.8	
Primary	19.9	
Secondary	53.0	
Higher	21.3	100% (N=4.426)
International Wealth Index		10070 (IN-4,420)
Very poor (0-199)	48	
Lower middle (20-39.9)	17.5	
Middle (40-59.9)	32.3	
Upper middle (60-79.9)	31.4	
Wealthy `(80-100)	14.0	
		100% (N=4,401)
Current contraceptive method	14.7	
	16.7	
IUD Injection	/.4 22.2	
Condom	22.2 20.8	
Implants/Norplant	+0.0 2.6	
Other	10.3	
	- 0.0	100% (N=4,426)
Last source		
Public	29.4	
Private	63.1	
Friends etc.	7.5	1000/ (NI-4.02.4)
		100% (IN=4,034)

TABLE 6: PROFILE OF ORAL CONTRACEPTIVE USERS, INJECTABLE USERS, AND CONDOM USERS (NIGERIA, 2013)

	Oral co	ontraceptive users	I	njectable users		Condom users
Age 15-24 25-34	23.2 39.6		9.7 38 5		50.2 37 5	
35-49	37.2	00% (N=762)	51.8	100% (N=987)	12.3	100% (N=1.837)
Marital status Not in union	29.4		8.1		67.2	10070 (11 1,007)
Married/cohabiting	70.6 1	00% (N=762)	91.9	100% (N=987)	32.8	100% (N=1,837)
Surviving children None	21.9		1.7		60.9	
1-2 3-4	23.8 28.3		18.4 40.9		21.8 12.7	
5+	26.0 1	00% (N=762)	39.1	100% (N=987)	4.6	100% (N=1,837)
Desire for children Wants within 2 years	14.0		11.3		10.5	
Wants after 2+ years Wants, unsure timing	29.5 18.1		29.5 4.2		24.3 47.5	
Undecided Wants no more	6.2 32.2		6.3 48.2		7.3 10.3	
Sterile/infecund	0.0	00% (N=751)	0.4	100% (N=962)	0.1	100% (N=1,825)
Religion Catholic	11.7		10.3		22.3	
Other Christian Islamic	61.0 25.9		63.8 24.7		61.9 15.2	
Other	1.3	00% (N=762)	1.2	100% (N=987)	0.6	100% (N=1,837)
Region North Central	13.5		19.6		12.0	
North East North West	3.6 9.8		6.2 19.0		1.7 5.8	
South East South South	8.6 28.6		6.1 18.4		25.2 21.3	
South West	35.8	00% (N=762)	30.7	100% (N=987)	33.9	100% (N=1,837)
Place of residence Urban	62.7		49.4		70.5	
Rural	37.3	00% (N=762)	50.6	100% (N=987)	29.5	100% (N=1,837)
Education None	6.4	· · · ·	10.8		1.4	
Primary Secondary	24.0 51.7		31.5 47.7		9.5 60.9	
Higher	17.8	00% (N=762)	10.0	100% (N=987)	28.2	100% (N=1.837)
International Wealth Index Very poor (0-19.9)	3.7		6.5		3.8	
Lower middle (20-39.9) Middle (40-59.9)	16.1 34.4		24.1 30.9		14.9 33.0	
Upper middle (60-79.9) Wealthy (80-100)	32.8 12.9		28.7 9.8		33.4 14.9	
Current contraceptive method	1	00% (N=760)		100% (N=981)	0.0	100% (N=1,829)
Pill IUD	$100.0 \\ 0.0$		$0.0 \\ 0.0$		0.0	
Injection	0.0		100.0		100.0)
Implants/Norplant Other	0.0		0.0		0.0	100% (N=1 837)
Last source	1	00% (N=762)	0.0	100% (N=987)	4 9	
Public Private	23.2 74.9		59.4 40.6		79.0 16.1	
Friends etc.	1.9	00% (N=745)	0.0	100% (N=969)	10.1	100% (N=1,813)
	1	(CT) (11-13)		100/0 (14-707)		

TABLE 7: PROFILE OF ORAL CONTRACEPTIVE USERS, BY SECTOR (NIGERIA, 2013)

	Users of public sector oral contracentives	Users of private sector oral contraceptives
Age	10.0	
15-24	12.3	26.4
25-34	41./	39.3
35-49	46.0	34.3 1000(QI-5(0)
	100% (N=164)	100%(N=569)
Marital status	1.0	277
Not in union	4.9	30.0
Married/conabiting	95.1 1000/ (NI=164)	1000/(NI - 500)
Summining shildren	100% (IN-104)	10070(1N-309)
None	3 7	27.8
1.2	22.6	27.0
3.4	34.1	27.0
5-4	39.6	21.0
51	100% (N=164)	100%(N=569)
Desire for children	10070 (14-104)	
Wants within 2 years	13.9	14.0
Wants after 2+ years	34.8	27.2
Wants unsure timing	6.3	22.2
Undecided	10.1	5.0
Wants no more	34.8	31.7
Sterile/infecund	0.0	0.0
	100% (N=159)	100%(N=563)
Religion		
Catholic	6.7	11.6
Other Christian	50.3	65.6
Islamic	39.9	22.4
Other	2.5	0.4
	100% (N=164)	100%(N=569)
Region		
North Central	14.7	13.3
North East	9.2	2.1
North West	17.8	7.0
South East	11.0	6.6
South South	18.4	31.7
South West	28.8	39.3
	100% (N=164)	100%(N=569)
Place of residence	(1.0	() F
Urban	61.0	0.5.5
Rural	39.0 1000/ (NI=164)	30.3 $1000/(NI-E(0))$
Education	100% (IN-104)	100%(1N-309)
None	7 4	6.1
Drimony	7.4 25.0	0.1
Secondary	35.0	57.0
Higher	22.1	17.3
Tilgilei	100% (N=164)	100%(N=560)
International Wealth Index	10070 (11-104)	100/0(14-30))
Very poor (0-199)	5.5	3.2
Lower middle (20-39.9)	15.3	17.0
Middle (40-59.9)	30.7	34.1
Upper middle (60-79.9)	40.5	30.7
Wealthy (80-100)	8.0	15.0
- / (/)	100% (N=164)	100%(N=567)
	x - 7	

TABLE 8: PROFILE OF INJECTABLE USERS, BY SECTOR (NIGERIA, 2013)

	pı i	Users of Jblic sector njectables	pr	Users of ivate sector njectables	
Age	10 F		77		
25-34	39.0		38.3		
35-49	50.5	100% (N=601)	54.2	100% (N=368)	
Marital status	7.0		8.0		
Married/cohabiting	92.2		91.1		
Surviving children		100% (N=601)		100% (N=368)	
None	1.2		2.3		
1-2	18.7		18.0		
3-4 5+	41.1 39.0		40.4		
5.	57.0	100% (N=601)	57.5	100% (N=368)	
Desire for children	0.4		110		
Wants within 2 years Wants after 2+ years	9.4 33.5		14.2		
Wants, unsure timing	3.1		5.8		
Undecided	5.9		6.6		
Wants no more	47.3		50.3		
Sterne/ infecund	0.7	100% (N=583)	0.0	100% (N=362)	
Religion					
Catholic	7.7		14.3		
Other Christian Islamic	65.3 26.0		61.8 22.6		
Other	1.1		1.3		
		100% (N=601)		100% (N=368)	
Region	20.5		10.2		
North East	20.5		10.5		
North West	22.5		14.6		
South East	5.5		6.8		
South South	16.2		21.7		
South west	27.3	100% (N=601)	55.2	100% (N=368)	
Place of residence					
Urban	49.3		49.7		
Kural	50.7	100% (N=562)	50.3	100% (N=384)	
Education		10070 (11-302)		10070 (19-507)	
None	11.7		9.1		
Primary	29.7		34.1		
Higher	12.1		49.7		
8	12.1	100% (N=601)	7.0	100% (N=368)	
International Wealth Index	E O			. ,	
Very poor $(0-19.9)$ Lower middle $(20-39.9)$	5.9 24.6		/.6 23.6		
Middle (40-59.9)	30.1		31.8		
Upper middle (60-79.9)	30.8		25.2		
Wealthy (80-100)	8.7	100% (NI-500)	11.8	100% (NI-365)	
		100/0 (11-399)		10070 (19-303)	
TABLE 9: PROFILE OF CONDOM USERS, BY SECTOR (NIGERIA, 2013)

	Users public s condo	of ector oms	р	Users of rivate sector condoms	C	Users of ommercial condoms
Age 15-24	39.5		52.1		46.8	
25-34 35-49	43.0 17.4	0/ 01-04)	35.1 12.8	1000(01-1245)	43.1 10.1	1000/ 0 1-2(7)
Marital status	51.0	%0(IN=84)	(1.2	100%(IN=1,345)	70.5	100%(N=367)
Not in union Married/cohabiting	51.2 48.8	0/(NI - 0.4)	64.3 35.7	1000/(NI-1.245)	79.5 20.5	1000/(NI-277)
Surviving children	100	%0(1 N− 84)	50.2	100%(1N-1,545)	72.1	100%(IN-367)
1-2	30.2		22.7		17.8	
3-4	11.6		14.3		8.0	
5+	14.0	$0/(\Delta I - 0.4)$	4.7	1000/ (01-1.245)	2.1	1000/(01-277)
Desire for children	100	%0(1N-84)		100%(IN-1,345)		100%(IN-367)
Wants within 2 years	9.4		10.5		10.1	
Wants after 2+ years	24.7		26.4		18.6	
Wants, unsure timing	30.6		45.8		56.1	
Wants no more	16.5		0.0		6.5 6.6	
Sterile/infecund	0.0		0.2		0.0	
,	100	%(N=83)		100%(N=1,336)		100%(N=366)
Religion	20.0		20.4		27.0	
Catholic Other Christian	20.9		20.6		27.9	
Islamic	14.0		16.3		12.2	
Other	0.0		0.7		0.5	
	100	%(N=84)		100%(N=1,345)		100%(N=367)
Region	10 5		10.4		10.1	
North Central North East	10.5		12.4		10.1	
North West	9.3		3.1		13.8	
South East	39.5		23.8		26.6	
South South	18.6		20.0		24.5	
South West	15.1	0/(N I - 0.4)	39.9	1000/(NI-1.245)	21.8	1000/(NI-27)
Place of residence	100	70(1 N -04)		100%(IN-1,345)		100%(1N-307)
Urban	65.1		69.2		77.7	
Rural	34.9		30.8		22.3	
Education	100	%(N=84)		100%(N=1,345)		100%(N=367)
None	3.4		13		0.3	
Primary	19.5		9.3		7.7	
Secondary	43.7		63.7		55.9	
Higher	33.3		25.7		36.2	
International Wealth Index	100	%(N=84)		100%(N=1,345)		100%(N=367)
Very poor (0-199)	0.0		4 1		4.0	
Lower middle (20-39.9)	18.6		16.1		10.3	
Middle (40-59.9)	34.9		33.9		28.4	
Upper middle (60-79.9)	22.1		34.0		34.5	
wealthy (80-100)	24.4	0/(N - 84)	11.8	100%(N=1 339)	22.8	100%(N=367)
	100	(T) (T)		100/0(11-1,009)		100/0(19-30/)

DIFFERENTIALS IN USE OF FAMILY PLANNING AND UNMET NEED

To better understand the current demand for family planning, the next analyses examine differences in the prevalence of modern contraceptive use (i.e., the contraceptive prevalence rate), and in the percentage of sexually active women who use specific methods (oral contraceptives, injectables, and condoms). Differences in the percentage of women who use methods from each supply sector are also examined. To assess the potential for the demand for family planning to expand, differentials in the levels of unmet need for family planning are analyzed using the revised definition of unmet need described in Bradley, Croft, Fishel, and Westoff (2012). Since our focus is on potential opportunities for expanding the market, our analysis of unmet need is limited to sexually experienced women. Women who did not have sexual intercourse during the 30 days prior to the survey were classified as not having an unmet need for family planning.

Demand for condoms for family planning

Table 10 shows the percentage of sexually active Nigerian women who report using condoms for family planning. Overall, only 5% of women are using condoms. However, the percentage of condom users varies significantly by subgroup. For example, the prevalence of condom use is notably higher among women who are aged 15-24 (9.6%), unmarried (21.5%), who do not have any living children (17.5%), and those who want to have children but are unsure about the timing (23.1%). The prevalence of condom use also varies by region, with the prevalence being highest in the South East (12.6%), South South (9%), and South West (11.3%). As anticipated, the prevalence of condom use is higher in urban than rural locations (9.5% vs. 2.6%). Condom use increases sharply with level of education, from only 0.2% among uneducated women to 10.8% for women with secondary education and 16.0% for women with higher education. Likewise, the prevalence of condom use increases with wealth status, ranging from 1.2% for women from very poor households to 12.1% among women from wealthy households.

Information about use of condoms from each of the three supply sectors is shown in Table 11. The results show that in Nigeria socially marketed condoms have the highest user-prevalence (3.8%). Only 1.1% of sexually active women are using commercial condoms, and only 0.3% are using public sector condoms. Although the percentage of women who report using public sector condoms varies significantly by subgroup, the differences are negligible. There is not a single subgroup among whom the percentage of women who use public sector condoms exceeds one percent. The second column in Table 11 shows that there is more variation in the use of socially marketed condoms. The percentage of sexually active women who report using a socially marketed condom for family planning is notably higher among women under age 25 (7.1%), unmarried women (14.7%), women who do not have living children (12.0%) and women who are not sure when they would like to have a child (16.0%). Use of socially marketed condoms is most common among Catholics and other Christians (7.5% and 6.8%), in the southern regions (6.0-9.5%), and in urban areas (6.6%). Use of socially marketed condoms increases sharply with level of education, ranging from 0.1% for the uneducated and 1.9% for those with primary education, to 8.1% for women with secondary education and 10.4% for those with higher education. Use of socially marketed condoms also increases with wealth, ranging from 0.9% for the poorest women to 7.0% for the upper middle group and 6.9% for the wealthiest group.

The percentage of women who use commercial brand condoms shows similar patterns, but they are much less pronounced. There are only two subgroups among whom use of commercial brand condoms for family planning exceed 5%: unmarried women (5.4%) and women who want children but are unsure about the timing (5.9%). It is noteworthy that even among the wealthiest women, the percentage who use socially marketed condoms is higher than the percentage who use commercial brands (6.9% vs. 4.0%).

Demand for oral contraceptives

Table 12 shows the percentage of sexually active Nigerian women who use oral contraceptives. It also shows the percentages who use public sector and private sector oral contraceptives. Overall, 2.2% of women report currently using oral contraceptives. A few subgroups stand out because of their above-average use of oral contraceptives, including unmarried women (3.8%), women who want no more children (3.9%), non-Catholic Christians (3.8%), women in the South South (4.9%), and South West (4.9%). Use of oral contraceptives is also higher among urban women (3.4%), those with secondary and higher education (3.8% and 4.1%), and those from upper middle class and wealthy households (3.8% and 4.3%). The second and third columns in Table 12 show use of public sector and private sector contraceptive pills. Only 0.5% of women are using public sector contraceptive pills, with the prevalence only reaching 1% for women with higher education and those from upper middle class households. Use of private sector oral contraceptives (1.6% overall) is notably higher among unmarried women (3.5%), women who want children but are unsure about the timing (3.2%), other Christians (3.0%), and women living in the South South West regions (4.0% and 3.9%). Use of private sector pills is also higher among women with secondary and higher education (3.6%).

Demand for injectables

Differentials in the use of injectables are shown in Table 13. Overall, 2.9% of all sexually active Nigerian women report currently using injectables. There are several groups that have notably higher use of injectables, including women aged 35 and above (4.3%), those who have three or more living children (4.4%), and those who want no more children (7.7%). Use of injectables is also high among other Christians (5.3%) and among women in the North Central, South South, and South West regions (4.1%, 4.3%, and 5.6%). Injectable use is negligible among uneducated women (0.9%), and high among women who have primary education (4.9%) and secondary education (4.6%). Interestingly, injectable use is lower among women with higher education (3.1%) than those with primary education (4.9%). Use is also high among women in the top two wealth groups (4.5% and 4.3%).

Breakdown by supply sector shows that 1.7% of women are using public sector injectables, while 1.2% report using private sector injectables. Differentials in the use of both public sector and private sector injectables are similar to those discussed above, but less pronounced. Use of public sector injectables is more common than use of private sector injectables in every subgroup examined. Even among women from the wealthiest households, use of public sector injectables is higher than use of private sector injectables (2.3% vs. 1.2%).

Unmet need for family planning

Overall, one out of every seven sexually active women in Nigeria (15.0%) has an unmet need for family planning (see Table 14). Most of this unmet need is for birth spacing (11.4%), rather than family limitation (3.6%). The total unmet need for family planning show that the unmet need is highest among women who have five or more children (20.5%), and women who live in the North Central, South South, and North East regions (21.6%, 18.1%, and 17.6%). It is noteworthy that the total unmet need does not vary much by type of place of residence (12.9% in urban areas; 16.4% in rural areas). Likewise, even though the total unmet need for family planning decreases with wealth levels, the difference is relatively small (from 15.8% for the poorest group to 10.6% for the wealthiest). This suggests that the cost of family planning is not a major driver of the unmet need.

Differentials in the unmet need for birth spacing can help indicate where there are opportunities to grow the market for short-term reversible family planning methods. As anticipated, the unmet need for birth spacing is above the average of 11.4% among women who are young (14.3% for ages 15-24; 13.7% for ages 25-34) and who already have one or two children (14.5%). Although the unmet need for birth spacing does not vary all that much by type of place of residence (9.3% for urbar; 12.8% for rural), it is notably higher among women who

live in the North Central, North East and South South regions (15.6%, 14.4%, and 13.2%). By contrast, it is only 7.3% among women in the South East and 8.3% among those in the South West region. The unmet need for birth spacing does not vary by education, except for women with tertiary education, who report a very low unmet need for birth spacing (6.3%). The unmet need for birth spacing declines with wealth, ranging from 12.6% for the poorest women to 6.9% for the wealthiest.

Examination of differentials in the unmet need for family limitation (3.6% overall) show that this need is mostly concentrated among women aged 35 and above (7.9%), have five or more children (9.9%), and who live in the North Central, South South, or South West regions (5.9%, 4.9%, 5.2%). Hence, among these groups of women there may be opportunities to expand the market for long-term family planning methods. The unmet need for family limitation does not vary significantly by rural/urban residence or by wealth level, suggesting that the need for family limitation is driven more by social factors (such as desired family size, religion, etc.), rather than by access to or the cost of family planning products and services. This is confirmed by the finding that only 1.8% of women who were not using family planning reported the reason was cost-related and only 2.7% that it was access-related. Because these percentages are negligible, more detailed analyses of differentials in the percentage who were not using because of cost or access issues were omitted.

Key findings about the demand for family planning

- Condoms are the most popular family planning method among Nigerian women. Although the overall demand for condoms for FP remians fairly low, there is considerable demand among women who are unmarried, childless, or who are unsure when exactly they would like to have children.
- The condom market is dominated by socially marketed condoms. Use of public sector condoms is negligible. Use of socially marketed condoms is more than three times as high as use of commercial condoms.
- Use of socially marketed and commercial condoms both increase with socioeconomic status. However, even upper middle class and wealthy women are much more likely to use socially marketed condoms than commercial condoms. This indicates there may be a need for social marketing programs to re-assess their targeting and pricing strategies.
- Use of oral contraceptives is quite low, although somewhat higher among women who are unmarried, well educated and well to do. The OC market is dominated by the private sector (including NGOs).
- Except for uneducated and very poor women, use of private sector OCs is substantially higher than use of public sector OCs. This suggests that women who are at least lower middle class have little or no need for fully subsidized OCs.
- The demand for injectables is highest among women who are older and want no more children. Injectable use is very low among uneducated and very poor women.
- Use of public sector injectables is consistently higher than use of private sector injectables, even among highly educated, upper middle class, and wealthy women. This suggests that there is a need to improve the targeting of public sector injectables.
- One in seven Nigerian women have an unmet need for family planning. Most of that need is for family planning, rather than for family limitation, which implies women mostly need short-term reversible methods.

- The finding that the total unmet need does not vary much by rural/urban residence or wealth level suggests that the cost of family planning is not a major cause of the unmet need.
- The unmet need for birth spacing is highest among women who are young, and who already have one or two children. Hence, this group may provide an opportunity to expand the market for short-term reversible family planning methods.
- The unmet need for family limitation is highest among older women who have large families, which indicates there may be opportunities to expand the market for long-term family planning methods. The unmet need for family limitation does not vary by rural/urban residence or wealth level indicates that access to family planning or the cost is not a major factor.

TABLE 10: PERCENTAGE OF WOMEN WHO USE CONDOMS (NIGERIA, 2013)

	Any co bra	ndom nd
	%	Ν
Age 15-24	9.6	9.178
25-34	5.4	12,131
JJ- 1 2	p=.000	11,074
Marital status Not in union	21.5	5,935
Married/cohabiting	2.1	27,268
Surviving children	p000	
None	17.5	6,169 9,596
3-4	2.5	8,664
5+	1.0 p=.000	8,774
Desire for children	P	0.207
Wants after 2+ years	4.2	10,145
Wants, unsure timing	23.1	3,811
Wants no more	3.1	6,199
Sterile/infecund	0.2 p=.000	1,044
Religion	г · · · ·	2 2(0
Other Christian	9.4	13,013
Islamic Other	1.5	16,442 479
	p=.000	т, у
Region North Central	4.6	5,108
North East	0.6	5,858
South East	12.6	8,735 3,511
South South	9.0 11.3	5,110
	p=.000	+,001
Place of residence Urban	9.5	12.479
Rural	2.6	20,724
Education	p=.000	
None Primary	0.2	13,181
Secondary	10.8	10,267
Higher	16.0 p=.000	3,252
International Wealth Index	12	E 000
Lower middle (20-39.9)	1.2 2.6	5,880 10,289
Middle $(40-59.9)$ Upper middle $(60-79.9)$	6.8 9.5	8,729 5,911
Wealthy (80-100)	12.1	2,089
	p=.000	
Total	5.3	33,203

TABLE 11: PERCENTAGE OF WOMEN WHO USE PUBLIC SECTOR, SOCIAL MARKETING, AND COMMERCIAL BRAND CONDOMS (NIGERIA, 2013)

	Public	sector loms	Social m	arketing doms	Commer condoi	rcial ms
	%	N	%	N	%	Ν
Age 15-24 25-34 35-49	0.4 0.3 0.1 p=.002	9,156 12,115 11,891	7.1 3.6 1.4 p=.000	9,156 12,115 11,891	$ \begin{array}{c} 1.9 \\ 1.3 \\ 0.3 \\ p=.000 \end{array} $	9,156 12,115 11,891
Marital status Not in union Married/cohabiting	0.8 0.2 p=.000	5,904 27,258	14.7 1.6 p=.000	5,904 27,258	5.4 0.3 p=.000	5,904 27,258
Surviving children None 1-2 3-4 5+	0.6 0.3 0.1 0.1 p=.000	6,139 9,591 8,661 8,771	12.0 2.9 2.0 0.7 p=.000	6,139 9,591 8,661 8,771	4.4 0.7 0.3 0.1 p=.000	6,139 9,591 8,661 8,771
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	$\begin{array}{c} 0.1\\ 0.2\\ 0.7\\ 0.6\\ 0.2\\ 0.0\\ 0.2\\ 0.0\\ 0.2 = 000 \end{array}$	9,201 10,140 3,789 2,589 6,196 1,044	$ \begin{array}{c} 1.3\\ 3.2\\ 16.0\\ 2.9\\ 2.4\\ 0.2\\ p=000 \end{array} $	9,201 10,140 3,789 2,589 6,196 1,044	$\begin{array}{c} 0.4\\ 0.7\\ 5.9\\ 1.2\\ 0.4\\ 0.4\\ p=000 \end{array}$	9,201 10,140 3,789 2,589 6,196 1,044
Religion Catholic Other Christian Islamic Other	0.5 0.5 0.1 0.0 p=.000	3,257 12,990 16,437 478	7.5 6.8 1.2 1.6 p=.000	3,257 12,990 16,437 478	3.0 1.9 0.3 0.4 p=.000	3,257 12,990 16,437 478
Region North Central North East North West South East South South South West	$\begin{array}{c} 0.2 \\ 0.1 \\ 0.1 \\ 1.0 \\ 0.4 \\ 0.2 \\ 0.7 \\$	5,099 5,857 8,734 3,501 5,092 4,879	3.4 0.2 0.4 8.5 6.0 9.5	5,099 5,857 8,734 3,501 5,092 4,879	$ \begin{array}{c} 0.8\\ 0.2\\ 0.5\\ 2.8\\ 2.2\\ 1.5\\ 0=000 \end{array} $	5,099 5,857 8,734 3,501 5,092 4,879
Place of residence Urban Rural	0.4 0.1 p=.000	12,456 20,706	6.6 1.9 p=.000	12,456 20,706	2.2 0.4 p=.000	12,456 20,706
Education None Primary Secondary Higher	$\begin{array}{c} 0.0\\ 0.3\\ 0.4\\ 0.9\\ p=000 \end{array}$	13,179 6,500 10,243 3,240	$\begin{array}{c} 0.1 \\ 1.9 \\ 8.1 \\ 10.4 \end{array} p = 000$	13,179 6,500 10,243 3,240	$0.0 \\ 0.5 \\ 2.1 \\ 4.4 \\ p= 000$	13,179 6,500 10,243 3,240
International Wealth Index Very poor (0-19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	0.0 0.2 0.4 0.3 1.0 p=.000	5,879 10,285 8,712 5,900 2,083	0.9 2.0 5.0 7.0 6.9 p=.000	5,879 10,285 8,712 5,900 2,083	0.3 0.4 1.3 2.1 4.0 p=.000	5,879 10,285 8,712 5,900 2,083
Total	0.3	33,162	3.8	33,162	1.1	33,162

TABLE 12: PERCENTAGE OF WOMEN WHO USE ANY ORAL CONTRACEPTIVES, PUBLIC SECTOR, AND PRIVATE SECTOR ORAL CONTRACEPTIVES (NIGERIA, 2013)

	Any oral contract	eptives	Public sec oral contrace	tor eptives	Private see oral contrace	ctor eptives
	%	N	%	N	%	N
Age 15-24 25-34 35-49	1.8 2.3 2.3 p=.017	9,178 12,131 11,894	0.2 0.6 0.6 p=.000	9,174 12,125 11,887	1.5 1.7 1.5 p=.515	9,174 12,125 11,887
Marital status Not in union Married/cohabiting	3.8 1.8 p=.000	5,935 27,268	0.1 0.6 p=.000	5,932 27,254	3.5 1.2 p=.000	5,932 27,254
Surviving children None 1-2 3-4 5+	2.6 1.8 2.3 2.2 p=.005	6,169 9,596 8,664 8,774	0.1 0.4 0.6 0.8 p=.000	6,167 9,590 8,662 8,767	2.4 1.3 1.6 1.3 p=.000	6,167 9,590 8,662 8,767
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	$ \begin{array}{c} 1.0\\ 2.1\\ 3.6\\ 1.7\\ 3.9\\ 0.0\\ p=000\\ \end{array} $	9,207 10,145 3,811 2,593 6,199 1,044	$\begin{array}{c} 0.2 \\ 0.5 \\ 0.3 \\ 0.6 \\ 0.9 \\ 0.0 \end{array} = 000$	9,204 10,139 3,809 2,591 6,195 1,044	0.7 1.4 3.2 1.0 2.8 0.0 p=000	9,204 10,139 3,809 2,591 6,195 1,044
Religion Catholic Other Christian Islamic Other	2.5 3.8 1.1 2.0 p=.000	3,269 13,013 16,442 479	0.3 0.7 0.4 1.0 p=.000	3,263 13,006 16,438 479	1.8 3.0 0.7 0.4 p=.000	3,263 13,006 16,438 479
Region North Central North East North West South East South South South West	2.1 0.5 0.7 1.8 4.9 4.9	5,108 5,858 8,735 3,511 5,110 4,881	0.5 0.3 0.3 0.5 0.7 0.9	5,104 5,857 8,734 3,507 5,105 4,879	1.5 0.2 0.3 1.0 4.0 3.9	5,104 5,857 8,734 3,507 5,105 4,879
Place of residence Urban Rural	p=.000 3.4 1.3 p=.000	12,479 20,724	p=.000 0.8 0.3 p=.000	12,469 20,717	p=.000 2.5 1.0 p=.000	12,469 20,717
Education None Primary Secondary Higher	$\begin{array}{c} 0.3 \\ 2.8 \\ 3.8 \\ 4.1 \\ p = 000 \end{array}$	13,181 6,503 10,267 3,252	$\begin{array}{c} 0.1 \\ 0.9 \\ 0.6 \\ 1.2 \\ p = 000 \end{array}$	13,178 6,498 10,260 3,250	$\begin{array}{c} 0.2 \\ 1.7 \\ 3.0 \\ 3.9 \\ p=000 \end{array}$	13,178 6,498 10,260 3,250
International Wealth Index Very poor (0-19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	0.5 1.1 2.9 3.8 4.3 p=.000	5,880 10,289 8,729 5,911 2,089	0.2 0.2 0.6 1.1 0.6 p=.000	5,879 10,287 8,720 5,907 2,088	0.3 0.9 2.1 2.6 3.6 p=.000	5,879 10,287 8,720 5,907 2,088
Total	2.2	33,203	0.5	33,186	1.6	33,186

TABLE 13: PERCENTAGE OF WOMEN WHO USE ANY INJECTABLES, PUBLIC SECTOR, AND PRIVATE SECTOR INJECTABLES (NIGERIA, 2013)

	Any injectat	oles	Public sec injectab	ctor les	Private se injectab	ctor les
	%	N	%	N	%	N
Age 15-24 25-34 35-49	1.0 3.0 4.3 p=.000	9,178 12,131 11,894	0.6 1.8 2.4 p=.000	9,178 12,124 11,887	0.3 1.2 1.8 p=.000	9,178 12,124 11,887
Marital status Not in union Married/cohabiting	1.4 3.2 p=000	5,935 27,268	0.8 1.9 p=000	5,934 27,251	$ \begin{array}{c} 0.6 \\ 1.3 \\ p=000 \end{array} $	5,934 27,251
Surviving children None 1-2 3-4 5+	0.3 1.8 4.4 4.4 p=.000	6,169 9,596 8,664 8,774	0.1 1.1 2.6 2.6 p=.000	6,168 9,593 8,657 8,767	0.1 0.7 1.7 1.8 p=.000	6,168 9,593 8,657 8,767
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	$ \begin{array}{c} 1.1 \\ 2.7 \\ 1.1 \\ 2.3 \\ 7.7 \\ 0.4 \\ p=000 \end{array} $	9,207 10,145 3,811 2,593 6,199 1,044	0.5 1.8 0.5 1.2 4.4 1.6	9,205 10,139 3,810 2,591 6,193 1,044	$\begin{array}{c} 0.6 \\ 0.9 \\ 0.6 \\ 1.0 \\ 3.3 \\ 0.0 \\ p=000 \end{array}$	9,205 10,139 3,810 2,591 6,193 1,044
Religion Catholic Other Christian Islamic Other	2.9 5.3 1.3 2.2 p=.000	3,269 13,013 16,442 479	1.2 3.2 0.8 1.7 p=.000	3,267 13,002 16,437 479	1.6 2.1 0.5 1.0 p=.000	3,267 13,002 16,437 479
Region North Central North East North West South East South South South West	4.1 1.2 1.7 1.7 4.3 5.6	5,108 5,858 8,735 3,511 5,110 4,881	2.5 0.9 1.2 0.9 2.2 2.9	5,105 5,855 8,734 3,509 5,106 4,876	1.5 0.3 0.5 0.7 2.0 2.5	5,105 5,855 8,734 3,509 5,106 4,876
Place of residence Urban Rural	3.6 2.4 p=.000	12,479 20,724	2.1 1.4 p=.000	12,472 20,713	1.4 1.0 p=.000	12,472 20,713
Education None Primary Secondary Higher	$ \begin{array}{c} 0.7 \\ 4.9 \\ 4.6 \\ 3.1 \\ p=000 \end{array} $	13,181 6,503 10,267 3,252	0.5 2.7 2.6 2.2 p=000	13,178 6,498 10,259 3,250	$ \begin{array}{c} 0.2 \\ 2.1 \\ 1.9 \\ 0.9 \\ p=000 \end{array} $	13,178 6,498 10,259 3,250
International Wealth Index Very poor (0-19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	1.1 2.2 3.5 4.5 4.3 p=.000	5,880 10,289 8,729 5,911 2,089	0.6 1.3 2.0 2.8 2.3 p=.000	5,879 10,284 8,723 5,906 2,089	0.5 0.9 1.4 1.6 1.2 p=.000	5,879 10,284 8,723 5,906 2,089
Total	2.9	33,203	1.7	33,185	1.2	33,185

TABLE 14: PERCENTAGE OF WOMEN WHO HAVE AN UNMET NEED FOR FAMILY PLANNING, BIRTH SPACING, AND FAMILY LIMITATION (NIGERIA, 2013)

	To unme	tal t need	Nee birth s	d for pacing	Need family lim	for itation
	%	N	%	N	%	Ν
Age 15-24 25-34 35-49	14.5 15.9 14.4 p=.001	9,085 12,013 11,829	14.3 13.7 6.6 p=.000	9,085 12,013 11,829	0.2 2.2 7.8 p=.000	9,085 12,013 11,829
Marital status Not in union Married/cohabiting	8.7 16.3 p=.000	5,925 27,002	8.1 12.0 p=.000	5,925 27,002	0.6 4.2 p=.000	5,925 27,002
Surviving children None 1-2 3-4 5+	6.9 14.9 15.5 20.5 p=.000	6,118 9,519 8,592 8,698	6.8 14.5 11.9 10.6 p=.000	6,118 9,519 8,592 8,698	0.1 0.4 3.6 9.9 p=.000	6,118 9,519 8,592 8,698
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	0.5 23.7 14.3 29.4 21.5 0.4 p=.000	9,145 10,007 3,806 2,575 6,191 1,044	0.5 23.5 14.2 28.9 1.7 0.0	9,145 10,007 3,806 2,575 6,191 1,044	0.1 0.2 0.0 0.5 19.8 0.0 p=.000	9,145 10,007 3,806 2,575 6,191 1,044
Religion Catholic Other Christian Islamic Other	14.4 15.9 14.6 15.1 p=.010	3,255 12,972 16,225 475	9.9 10.8 12.0 10.7 p=.000	3,255 12,972 16,225 475	4.5 5.0 2.5 4.4 p=.000	3,255 12,972 16,225 475
Region North Central North East North West South East South South South West	21.6 17.6 11.9 10.8 18.1 13.5	5,084 5,803 8,572 3,502 5,093 4,872	15.6 14.4 10.3 7.3 13.2 8.3	5,084 5,803 8,572 3,502 5,093 4,872	5.9 3.2 1.6 3.5 4.9 5.2	5,084 5,803 8,572 3,502 5,093 4,872
Place of residence Urban Rural	p=.000 12.9 16.4 p=.000	12,418 20,509	9.3 12.8 p=.000	12,418 20,509	9000 3.7 3.6 p=.401	12,418 20,509
Education None Primary Secondary Higher	14.7 18.4 15.3 8.8 p= 000	13,181 6,503 10,267 3,252	$ \begin{array}{c} 11.8 \\ 12.0 \\ 12.0 \\ 6.3 \\ p = 000 \end{array} $	13,181 6,503 10,267 3,252	2.9 6.4 3.3 2.5	13,181 6,503 10,267 3,252
International Wealth Index Very poor (0 -19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	15.8 16.1 15.7 12.9 10.6 p=.000	5,880 10,289 8,729 5,911 2,089	12.6 12.4 11.9 9.2 6.9 p=.000	5,880 10,289 8,729 5,911 2,089	3.2 3.7 3.8 3.7 3.7 9=.413	5,880 10,289 8,729 5,911 2,089
Total	15.0	32,927	11.4	32,927	3.6	32,927

TRENDS IN FAMILY PLANNING USE AND UNMET NEED

Table 15 shows trends in the percentage of sexually experienced Nigerian women who are currently using modern family planning for the 10-year period from 2003 to 2013. The p-values shown in the right-hand column test whether current family planning use differs across survey years. Overall, the percentage who were using modern family planning increased steadily, albeit slowly, from 10.4% in 2003 to 12.2 in 2008, and further to 13.0 in 2013. Although use of modern family planning increased for both married and married women, the increase was larger among unmarried women (from 20.1% to 29.3%). Breakdown by the number of surviving children shows that modern family planning use increased among childless women (from 14.1% to 21.7%), which is likely to reflect that these women are trying to delay the onset of childbearing. The increase in modern family planning use among women who already have three or four children is likely to reflect an increased desire to stop childbearing, which suggests an increased demand for long-term family planning methods. This is confirmed by the finding that modern method use among women who want no more children increased from 15.7% in 2003 to 20.7% in 2013. The finding that modern method use did not increase among women who have five or more children was anticipated since this group will include a many women who believe that the number of children they should have is 'up to God'.

Data on different religious groups show that modern method use increased significantly among Catholics and other Christians, but not among Muslim women and women who adhere to other religions. Regional variations show that use of modern family planning is increasing substantially in the southern regions, and less so in the northern regions. While modern method use increased from 16.5% to 20.8% in urban areas, there was no significant change in rural areas.

During the period from 2003 to 2013, use of modern family planning methods increased among women with primary as well as secondary education. However, among uneducated women modern method use has remained negligible and data from 2013 suggest that modern method use may be declining among this group. Among women with tertiary education, use of modern methods has remained constant at roughly 29%.

Breakdown by wealth level shows that within each wealth level, no significant increases in use of modern contraceptives occurred between 2003 and 2013. Among women in the lower-middle wealth group, modern method use is declining. These results are consistent with the earlier findings that the lack of modern contraceptive use is not related to the cost of family products and services, but rather a result of social factors. The findings further suggest that the overall increase in modern method use (from 10.4% to 13.0%) occurred not because of changes of contraceptive behavior for any specific wealth groups, but rather because on average women became slightly wealthier between 2003 and 2013.

Similar analyses can be conducted to show trends in the use of specific family planning methods, as well as in the use of method obtained from different supply sectors. Because the user-prevalence for specific methods is so low in Nigeria, further analyses of trends in the use of specific methods have been omitted.

Table 16 shows trends in the percentage of women who have an unmet need for family planning. Because the older surveys did not include a variable using the new definition of unmet need, the trends shown are based on the older definition (Bradley et al., 2012). As a result, there are some small inconsistencies between the data shown in Table 14 and the 2013 data shown in Table 16. Overall, the total unmet need increased from 15.9% in 2003 to 18.3% in 2008, and then declined to 14.5%. This pattern of an initial increase followed by a decrease in unmet need is observed among nearly all subgroups, and may reflect that unmet need is influenced by opposing forces. Specifically, as the desired family size decreases unmet need will increase. And as contraceptive use increases, the unmet need will decline. The finding that the unmet need decreased by nearly 4% percentage points between 2008 and 2013 (from 18.3% to 14.5%), while modern contraceptive use increased by less than one percentage point (from 12.2% to 13.0%) suggests that some of the need is being met through traditional methods. Therefore,

further examination of use of traditional family planning methods may provide additional information about the potential for future market growth. Table 16 further shows that there are a few subgroups among whom the unmet need for family planning has declined consistently between 2003 and 2013. This is most notably the case among women who are not married or in union (from 11.5% in 2003 to 6.1% in 2013), who are Catholic (18.4% to 14.0%) or other Christian (18.5% to 15.1%), live in the South East region (16.7% to 10.0%) or South South region (20.3% to 17.2%), and among wealthy women (22.4% to 10.7%). Although there has also been a noteworthy decline in unmet need among women who want to stop childbearing (from 28.6% to 20.9%), the levels of unmet need for this group remain unacceptably high.

Key findings about trends in the family planning market

- Between 2003 and 2013, the overall market for modern contraceptives has grown steadily, but very slowly.
- Use of modern family planning increased considerably among women who were unmarried and childless, which reflects a desire to delay the onset of childbearing. Increased use among women who already had 3-4 children reflects a desire to stop childbearing, and suggest an increased demand for long-term methods.
- Use of modern methods remained constant among rural and uneducated women, indicating these groups continue to be disadvantaged.
- Breakdown by wealth level shows that there were no significant increases in modern contraceptive use among any of the wealth groups, which implies that the overall increase in contraceptive use was not caused by changes in contraceptive behavior perse, but rather by the fact that on average women became slightly wealthier. Hence, there may be a need to strengthen family planning behavior change communication programs.
- The unmet need for family planning increased between 2003 and 2008, but decreased below the 2003 levels by 2013. This pattern occurs among nearly all population groups and is likely to reflect that unmet need is determined by two opposing forces. Decreasing desired family size increases the unmet need, and increased contraceptive use decreases the unmet need.
- Between 2008 and 2014, the decrease in the unmet need was considerably larger than the increase in use of modern methods. Moreover, among several subgroups the unmet need decreased even though use of modern family planning did not change. This may indicate that some of the unmet need is being met through traditional family planning methods.

TABLE 15: TRENDS IN THE PERCENTAGE OF SEXUALLY EXPERIENCED WOMEN WHO CURRENTLY USE MODERN FAMILY PLANNING (NIGERIA, 2003-13)

	200	3	200	8	20	13	n value
	%	N	%	N	%	Ν	
Age 15-24 25-34 35-49	11.2 11.3 8.6	2,009 2,251 2,102	13.1 12.8 10.8	8,396 10,599 9,807	13.7 13.4 12.1	9,178 12,131 11,894	.010 .020 .000
Marital status Not in union Married/cohabiting	20.1 8.2	1,206 5,156	23.7 9.7	4,854 23,947	29.3 9.8	5,935 27,258	.000 .002
Surviving children None 1-2 3-4 5+	14.1 8.4 9.4 10.8	1,368 1,906 1,488 1,600	18.8 8.9 12.3 10.7	5,470 8,393 7,610 7,329	21.7 9.3 12.9 11.1	6,169 9,596 8,664 8,774	.000 .295 .000 .751
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	4.6 10.3 19.5 6.0 15.7 8.5	1,984 1,922 845 206 1,107 282	6.3 11.6 20.5 8.8 17.2 15.4	7,550 8,460 3,300 3,270 5,081 957	4.8 10.9 30.3 10.3 20.7 11.0	9,207 10,145 3,811 2,593 6,199 1,044	.000 .122 .000 .043 .000 .002
Religion Catholic Other Christian Islamic Other	15.8 18.2 4.8 2.1	868 2,127 3,245 122	16.3 19.4 5.3 7.5	2,855 11,107 14,124 556	21.4 23.0 5.0 6.1	3,269 13,013 16,442 331	.000 .000 .306 .152
Region North Central North East North West South East South South South West	11.7 3.2 3.6 14.4 17.6 25.3	1,048 1,256 1,650 765 791 862	12.3 3.8 2.6 13.6 20.1 23.3	5,294 5,613 6,826 2,798 4,157 4,114	14.2 3.1 4.6 18.2 22.7 27.4	5,108 5,858 8,735 3,511 5,110 4,881	.012 .125 .000 .000 .000 .000
Place of residence Urban Rural	16.5 7.4	2,483 3,879	19.9 8.2	8,541 20,261	20.8 7.9	12,479 20,724	.000 .145
Education None Primary Secondary Higher	2.5 10.9 20.4 27.6	2,894 1,387 1,666 415	2.6 11.6 20.5 29.1	12,893 5,918 7,678 2,313	1.8 14.0 23.1 29.6	13,181 6,503 10,267 3,252	.000 .000 .000 .706
International Wealth Index Very poor (0-19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	4.3 9.8 16.1 21.7 23.6	2,256 2,045 1,117 579 229	4.0 7.9 17.4 21.6 27.7	9,285 7,973 5,661 3,933 1,442	3.5 7.3 16.3 22.0 28.0	5,880 10,289 8,729 5,911 2,089	.162 .001 .175 .865 .341
Total	10.4	6,362	 12.2	28,802	 13.0	33,203	.000

TABLE 16: TRENDS IN THE PERCENTAGE OF WOMEN WHO HAVE AN UNMET NEED FOR FAMILY PLANNING (NIGERIA, 2003-13)

	2003 2008		20	13	n value		
	%	N	%	N	%	Ν	, praioo
Age 15-24 25-34 35-49	15.2 17.1 15.4	2,007 2,251 2,102	18.0 18.7 18.1	8,383 10,582 9,797	13.5 15.7 13.9	9,165 12,121 11,879	.000 .000 .000
Marital status Not in union Married/cohabiting	11.5 16.9	1,206 5,154	9.3 20.2	4,852 23,909	6.1 16.1	5,930 27,235	.000 .000
Surviving children None 1-2 3-4 5+	11.6 13.4 16.6 22.4	1,366 1,906 1,488 1,600	11.8 16.8 19.1 24.5	5,460 8,380 7,598 7,324	6.9 14.3 14.9 19.6	6,162 9,589 8,655 8,759	.000 .000 .000 .000
Desire for children Wants within 2 years Wants after 2+ years Wants, unsure timing Undecided Wants no more Sterile/infecund	1.4 25.8 15.7 23.5 28.6 0.7	1,984 1,922 845 206 1,107 282	1.8 25.5 20.4 27.9 25.3 2.5	7,550 8,460 3,300 3,270 5,081 957	1.2 23.0 11.8 26.8 20.9 0.0	9,207 10,145 3,811 2,593 6,199 1,044	.019 .000 .000 .340 .000 .000
Religion Catholic Other Christian Islamic Other	18.4 18.5 13.9 12.8	868 2,127 3,243 122	16.5 17.9 19.0 18.0	2,855 11,092 14,099 556	14.0 15.1 14.1 13.7	3,262 12,998 16,426 331	.000 .000 .000 .188
Region North Central North East North West South East South South South West	20.5 17.8 10.7 16.7 20.3 13.8	1,048 1,256 1,648 765 781 862	17.7 17.1 20.3 14.8 19.9 17.4	5,284 5,604 6,810 2,796 4,155 4,113	20.2 16.6 11.7 10.0 17.2 13.7	5,099 5,852 8,728 3,508 5,099 4,879	.009 .575 .000 .000 .002 .000
Place of residence Urban Rural	15.1 16.3	2,481 3,879	16.5 19.2	8,527 20,235	12.9 15.5	12,466 20,699	.000 .000
Education None Primary Secondary Higher	13.8 19.6 17.8 10.8	2,892 1,387 1,666 415	18.6 20.5 18.3 11.5	12,869 5,912 7,671 2,310	13.9 17.6 14.9 9.1	13,166 6,492 10,259 3,248	.000 .000 .000 .011
International Wealth Index Very poor (0-19.9) Lower middle (20-39.9) Middle (40-59.9) Upper middle (60-79.9) Wealthy (80-100)	15.3 16.9 14.0 16.5 22.4	2,255 2,044 1,117 579 229	18.3 19.9 18.8 17.0 13.8	9,268 7,964 5,655 3,927 1,440	14.6 15.3 15.5 12.7 10.7	5,874 10,275 8,720 5,906 2,085	.000 .000 .000 .000 .000
Total	15.9	6,360	18.3	28,762	14.5	33,165	.000

11. OBTAINING INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL FOR A STUDY

All research involving human subjects is subject to specific federal regulations. The role of Institutional Review Board is to prospectively review proposed research studies to ensure that they will meet the federally mandated criteria as well as the ethical principles of the Belmont Report (Amdur & Bankert, 2011). The aim of these criteria and principles is to ensure that:

- the risk to study participants is minimized and that any risk is reasonable in relationship to the expected benefits of the study,
- the selection of study participants is equitable,
- informed consent will be obtained from all study participants (or from their legally authorized representatives) and documented, and
- the privacy of the study participants and the confidentiality of the data gathered are adequately protected.

DOES YOUR STUDY NEED IRB APPROVAL?

An IRB review is required for any study that meets the federal criteria for "research' and that involve "human subjects." Federal guidelines (DHHS – Title 45, Part 46 of the Code of Federal Regulations; <u>http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html</u>) define an activity as research if it meets the following four criteria: 1) it is an investigation, 2) the investigation is systematic, 3) the investigation is designed to develop or contribute to knowledge, and 4) the knowledge that stems from the investigation is generalizable. Generally speaking, whenever there is intent to present or publish results from the study, or to otherwise share the results, it is likely to be considered research. Any investigation that includes either protected health information or data about living individuals is considered to involve human subjects.

Based on these criteria, all household surveys and retail surveys/audits that collect data to inform a TMA plan are considered "human subjects research" and therefore require IRB review and approval. Note that **only** the IRB has the final authority to determine whether or not an activity is human subjects research that requires an IRB review. In cases where the investigators are unsure whether the activity constitutes human subjects research, the activity must be submitted for IRB review.

TYPES OF IRB REVIEW

Three types of IRB review exist: 1) exempt review, 2) expedited review, and 3) full board review. The term "exemption" means exemption from the requirements set forth in Regulations for the Protection of Human Subjects (Title 45 CFR 46), such as the requirements for a written informed consent document. Federal regulations identify six specific categories of human subjects research that may qualify for exemption from federal regulations, provided the study involves no more than minimal risk to the study subjects. However, any exemptions must be formally applied for with the IRB, and only the IRB has the authority to determine whether or not the study is exempt. Because the accidental disclosure of responses to TMA household surveys and TMA retail surveys could potentially cause harm to the study subjects (for example, by affecting the emotional well-being of the respondents), they normally do not quality for exempt review.

Expedited review is an accelerated review procedure that does not require convening a meeting of the full IRB board. The Federal Register contains a list of research types that are eligible for expedited review, provided that the IRB reviewers determine that the research has no more than minimal risk. If the study does not meet the criteria for exempt or expedited review, then it must be submitted for full review by a convened meeting of the IRB board.

TMA household and retail surveys fall under one of the research categories that may be eligible for expedited review:

"Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies." (Source: http://www.hhs.gov/ohrp/policy/expedited98.html).

However, determining whether research involves no more than minimal risk is somewhat subjective. For example, while some IRB reviewers may believe that asking questions related to use of family planning involves little or no risk to the respondents, others may be believe that it could emotionally upset the respondents if their answers were accidentally disclosed. Thus, while it is possible to apply for expedited review, the IRB reviewers may decide that the study must be submitted for full review. Since this would require a new IRB submission, it could delay - rather than accelerate - the IRB approval. Therefore we recommended that investigators who are planning TMA household or retail surveys apply for a full board review.

WHAT DOES AN IRB APPLICATION ENTAIL?

Typically an IRB application will require a cover letter, a completed application form, the study protocol, the final version of study instruments (questionnaires), consent and assent forms, and — if applicable — certified translations.

The IRB normally also requires that all study personnel have completed a human subject education program, and training certificates must be submitted with the application. Many accredited IRBs specifically require that the personnel involved in the study have taken the online training provided by the Collaborative Institutional Training Initiative (CITI). This requirement usually also applies to research sub-contractors in the country where the study will be conducted (e.g., a local survey research agency). The CITI course content provides an overview of research ethics, the background of human subjects research regulations, and the IRB review requirements that must be met before any human subjects research can start. Information about CITI training is available at <u>www.</u> citiprogram.org.

For international studies, evidence of local IRB approval in the country where the study will be conducted must also be included with the IRB application. If any documents (e.g., study instruments or consent/assent forms) are in a language other than English, US-based IRB boards require copies of the English version and all foreign language versions, as well as a letter that certifies that the translator is fluent in both English and the foreign language(s). The translator cannot be someone who is part of the study team.

HOW LONG DOES IT TAKE TO OBTAIN IRB APPROVAL?

When planning data collection to inform a TMA, it is important to pay attention to the timeline to complete the IRB process, which can take three months or more. When US-based institutions are involved in international research, it is nearly always the case that the study must be approved not only by the IRB board of that US institution, but also by an authorized IRB in the country where the data will be collected (sometimes this is referred to as 'site approval'). Normally, these two applications cannot be submitted simultaneously, as most US IRBs will require that evidence of local IRB approval is included with the application. The time needed to obtain local IRB approval often ranges from two to six weeks.

After local IRB approval has been granted, the US application for IRB approval can be submitted. Most US institutions require that the complete application is submitted at least one week before the scheduled IRB meeting date. The IRB may only meet once a month, and it is not uncommon for the IRB to request additional information or changes to the application (e.g., a change in the consent form). Such requests will postpone the approval at least until the next IRB meeting. Therefore, it can take six to eight weeks to receive approval for the study from the US-based IRB. Moreover, if the IRB requests significant changes to the survey instrument or the consent forms, then the local IRB may need to re-approve the revised materials. No data can be collected until all required IRBs have provided written approval of the study, including the final study protocol, survey instruments, and consent forms.

TEMPLATES

Although most IRBs have similar guidelines for study protocols, consent and assent forms, the detailed requirements and format can vary. The IRB you are applying to may provide templates that are specifically designed to address those unique requirements. The templates shown in the next sections have been adapted from templates provided by the Tulane University Human Research Protection Office (HRPO), which is accredited by the Association for the Accreditation of Human Research Protection Programs, Inc. (see http://tulane.edu/asvpr/irb/). The examples provided are illustrative and will need to be replaced with text that is specific to the proposed study and that meets the detailed requirements of the relevant IRB.

IRB PROTOCOL TEMPLATE (TMA HOUSEHOLD SURVEYS)

Study Title: Survey of family planning and reproductive health needs and behaviors.Principal Investigator:Co-Investigator(s): [Remove if N/A]Sub-Investigator(s): [Remove if N/A]

1. Study aim, background, and design

Instructions: In a few paragraphs, provide a non-technical description of the aim and purpose of the study, and explain the research design and methodology. Describe how the data will be analyzed and how this analysis will achieve the study aim.

Example:

In most developing countries, family planning products and services are provided by three different supply sectors: the public sector, nongovernmental organizations (NGOs), and the private/commercial sector. To ensure that key target groups have access to a full range of family planning products and services, there is a lot of interest in a coordinated approach in which family planning suppliers and donors from the three sectors – the public, nongovernmental organization (NGO), and commercial sectors – work together in a manner that uses their comparative advantage to grow the total market. This is referred to as the Total Market Approach (TMA). It is essential that TMA strategies are evidence-based, which requires up-to-date data about various aspects of the family planning market, including consumer use and preferences, their willingness and ability to pay for products and services, as well as on data about trends in the family planning market itself (MEASURE Evaluation & Addis Continental Institute of Public Health, 2014; Pollard, 2007).

The main research topics to be addressed to inform a total market approach should provide information about key characteristics of the market, such as market size, market equity, market accessibility, and market sustainability. Research should also examine health impact and market equity (Barnes, Vail, & Crosby, 2012; Population Services International, 2012; MEASURE Evaluation & Addis Continental Institute of Public Health, 2014; Pallin and Meekers, 2014, Pallin et al., 2013; USAID Contraceptive Security Team, s.d.)

The proposed in-depth analysis of the family planning market has several aims, including:

- Estimating the market size and its growth potential,
- Identifying population segments that are being served/underserved by family planning providers (i.e., who have an unmet need for family planning)
- Verifying that free and subsidized products and services are being used by those who are unable to obtain commercial products, either because they cannot afford them or because they do not have access to sources that provide commercial products.

Bivariate analyses with Chi-Square tests will be used to assess differences in key indicators of family planning needs, preference, and behaviors for different population segments (e.g., differences by region, rural/urban residence, level of education, and wealth level). This information will be used to help inform the pricing and

marketing strategy for family planning products and services, to expand access among underserved groups, and to design targeting strategies that avoid overlapping efforts and/or competition between the public, nongovernmental organization (NGO) and commercial sectors.

2. Subject Population

Instructions: Describe the criteria that are being used to select or exclude study participants, and explain why these criteria are being used. Clarify how many study participants will be selected, and how they will be recruited. For studies that involve minors under age 18, parental consent to participate in research is necessary. If there are reasons why parental consent cannot or should not be obtained, clearly explain that in this section (without adequate justification, the study will not be approved). If the study participants will include other vulnerable groups, such as pregnant women, the reason for their inclusion must be provided.

Example:

The study population will consist of randomly selected women aged 15-49 residing in the selected communities and who consent to participate in the study. Excluded groups include those who do not meet the selection criteria, who have physical or mental health problems that prevent them from participating in the study, and respondents who were not selected by our random selection procedures.

The study uses a multi-stage cluster sample. The primary sampling units will consist of census enumeration areas (EAs), and individuals within households will constitute the ultimate sampling unit. EAs will be selected proportionately to population size, using a sampling frame obtained from by the Central Bureau of Statistics. Within each selected household, the study interviewer will randomly select one eligible woman by using a Kish grid. The targeted sample size is 3,000 respondents, which will enable detection of differences in family planning access and other indicators as small as 9 percentage points.

3. Data Collection Procedure

Instructions: Briefly describe the procedures for collecting the data, including where and when the data will be collected. Clarify the estimated time commitment from the study participants. Note that an IRB application will typically need to include copies of all research material and data collection tools, such as survey questionnaires. If the study uses questionnaires in multiple languages, copies of all versions will need to be included, as well as statements by certified translators that they are accurate translations of the English language questionnaire.

Example:

The proposed survey will be conducted nationwide in randomly selected enumeration areas. To obtain nationallevel estimates the analyses will be weighted using household and individual weights. This procedure is similar to that used by the Demographic and Health Surveys.

A printed questionnaire will be used to collect data on topics such as the respondent's background, household socioeconomic status, fertility preferences, fertility, family planning needs, family planning use and preferences, etc.

Prior to the start of survey activities, the study will be introduced to district administrations and traditional authorities. Study supervisors will contact the local political authority overseeing selected EA and inform them of the study, what it entails, the length of time the teams will be collecting data in the community and options for selected respondents who do not wish to participate.

The survey data will be collected during personal face-to-face interviews conducted by trained interviewers. Study participants will be recruited solely through household visits. There will be no announcements or other informational tools used to recruit study participants. The study team will be allowed a maximum of 3 callbacks if the selected respondent is not available. If after the 3rd visit, contact has not been established, no further visit will be made. Whenever feasible, interviews will be conducted at the home of the respondent. On occasion, the respondent or the interviewer may decide to conduct the interview elsewhere, for example to maintain confidentiality during the interview. It is anticipated that a typical interview will take approximately 45 minutes.

4. Risks

Instructions: Describe the risks to the participants. Note that nearly all studies carry some risk to the study participants. Although there may not be any physical risk, potentials risks may include psychological reactions (anxiety, depression), emotions (anger, sadness, fear), stress, discomfort, or inconvenience. Explain what will be done to minimize each of the potential risks.

The risk of loss of privacy is always a concern when the subjects can be identified in any way. The researcher is responsible for taking steps to protect the privacy of the participants, which must be explained in the research protocol as well as in the consent forms. Describe how the confidentiality of the data will be maintained, including how, where and for how long the original material (e.g., completed questionnaires) will be stored, and whether the electronic data will include any identifiers.

If the intent is to use the data later on as part of another study, then this must be indicated on the consent form.

Example:

This study involves minimal risks to the study participants. The main risk is a breach in confidentiality. Other secondary risks include inconvenience and discomfort. The details below show how the study procedures effectively minimize these risks.

To procedures to prevent any breaches of confidentiality will include the following:

- · hiring non-local interviewers who do not know the participants
- the interviewer will identify an interview location where the interview can take place in private and where the respondent feels comfortable
- de-identification of electronic data that are used for storage and analysis
- use of encrypted laptops to prevent access in case of theft
- storing the completed questionnaires and consent forms in a locked cabinet
- destruction of the completed questionnaires and consent forms after three years

• limiting access to identifying information such as questionnaire cover sheets and consent forms to anyone other than the principal investigator

To reduce inconvenience, all interviews will be conducted at a location and time that is convenient to the respondent.

To reduce discomfort, respondents will be informed that they need not respond to any question that makes them uncomfortable, and that they can withdraw from the study at any moment without penalty. This information will also be explicitly stated in the informed consent form.

The researchers will retain the data without identifiers for possible use in a future projects, which will be consistent with the original research purpose (for example to assess the effect of new family planning programs and strategies).

5. Benefits

Instructions: Describe the direct benefits to the participants, if any. A research study is not required to have direct benefits in order to be approved.

Example:

There will be no direct benefits to subjects for participating in this research. However, the knowledge gained from the study may help improve future family planning and reproductive health programs and policies, which may benefit society in general.

6. Remuneration

Instructions: Describe any remuneration the study participants will receive (e.g., cash, gift certificates, or anything else) for participating in the study.

Example:

There will be no payment for participation in this research study.

7. Costs

Instructions: Describe the costs to the study participants (e.g., transportation to the research site), if any.

Example:

There will be no costs to the subject for participating in this research study.

8. Consent process and documentation

Instructions: Explain and document the procedures that will be used to obtain informed consent. The informed consent procedures should describe the recruitment of participants, the purpose of the research, personnel, procedures, risks and benefits. It is essential that the informed consent procedures reiterate that participation in the research is voluntary. In most cases, consent to participate in a research study is documented by means of a signed consent form. The final consent form that will be presented to the study participants must be approved by the IRB. Many IRBs require that two copies of the consent form are used per study participant. A signed copy is maintained by researcher, who is typically required to store them for a minimum of three years. The other copy is left with the study participant for his/her records. In rare circumstances (e.g., for illiterate study populations, or for phone surveys), the IRB may agree to waive written consent. However, any waiver of written consent must be approved by the IRB prior to the start of data collection.

Example:

Prior to the start of any data collection component, written informed consent will be sought from respondents. The consent form describes: 1) the study objectives; 2) study procedures; 3) risk and benefits associated with participation in the study; 4) strategies employed by researchers to minimize risks; 5) costs/benefits associated with participation in the study; 6) the voluntary nature of the study and the participant's right to refuse to answer questions or withdraw from the study without penalty; 7) contact information for the study personnel. Respondents will be offered a copy of the consent form. Because it is possible that some respondents may be illiterate, the interviewer will read the consent form to all respondents. Subsequently, the interviewer will explicitly ask the respondents whether they have any questions regarding the study procedures and/or the risks/ benefits associated with the study. The consent form allows the interviewer to provide a signature in the event the respondent is illiterate.

Respondents may refuse to participate in the study, or may withdraw at any time at no penalty. The interviewer will also stress that the respondent has the right and possibility to refuse to answer any individual questions he/ she does not feel comfortable answering. The interviewer obtaining the informed consent will be instructed to guarantee adequate privacy during the informed consent procedure.

All participants who are age 18 and older, as well as participants aged 15-17 who are married will provide informed consent personally. For unmarried youth age 15-17, consent will be sought from the parent or guardian and assent from the respondent.

This consent protocol is similar to previous studies [insert reference]. The protocol, questionnaire, consent and assent forms, translations of all documents were submitted for reviewed by [name of required in-country local IRB], who approved the study on [date].

9. Qualifications of the investigators

Instructions: Briefly describe the qualifications of the study investigators.

Example:

The Principal Investigator of the study, Dr. D. Brains, holds a PhD in public health. She has over 20 years of experience implementing and analyzing household surveys, and has published numerous papers on family planning and reproductive health. Dr. Brains will oversee the project and will be responsible for the data analysis and report writing

Dr. S. Fields, PhD, is a statistician with over 15 years of experience in planning, coordinating, and managing survey data collection and analysis. She will be responsible for interviewer training, oversight of the field work, and quality assurance.

10. References

Instructions: List references cited in the Study Aim, Background and Design section.

Example:

- Barnes, Jeffrey, Vail, Janet, & Crosby, Dawn. (2012). Total Market Initiatives for Reproductive Health. Bethesda, MD: Strenghtening Health Outcomes through the Private Sector Project, Abt Associates.
- MEASURE Evaluation, & Addis Continental Institute of Public Health. (2014). Total Market Approach (TMA). Paper presented at the Regional Workshop on Monitoring and Evaluation of Family Planning and Reproductive Health Programs for non-M&E Specialists, June 16-21, 2014, Addis Ababa, Ethiopia.
- Pallin, S. C., & Meekers, D. (2014). Towards the Standardization of Total Market Approach Indicators for Male Condoms. Cases in Public Health Communication & Marketing, 8(Suppl.1), S87-103.
- Pallin, S. C., Meekers, D., Longfield, K., & Lupu, O. (2013). A Total Market Approach for Male Condoms: Uganda. Washington, D.C. and New York: Population Services International and United Nations Fund for Population Activities.
- Pollard, Richard. (2007). Social Marketing. An Introduction to the Total Market Approach to Commodities and Services Supply in Low-Income Countries. Paper presented at the George Washington University, Washington, D.C.
- Population Services International. (2012). Total Market Approach for Condoms in Myanmar. Population Services International.
- USAID Contraceptive Security Team. (s.d.). Taking a Whole Market Approach Contraceptive Security. Ready Lessons (Vol. 3). Washington, D.C.: United States Agency for International Development.

IRB CONSENT TEMPLATE (TMA HOUSEHOLD SURVEYS)

Principal Investigator	:
Co-Investigator(s)	:
Sub-Investigator(s)	:
Study Title	:
Sponsor	:

The following informed consent is required by [name of organization commissioning the study] for any research study conducted by its investigators. This study has been reviewed by the [insert name of IRB board(s)].

Introduction

You are invited to participate in a research study to help understand people's need for family planning and reproductive health products and services. You are being asked to participate because you are a resident of one of the selected study sites areas. We are inviting all women aged 15-49 in these households to participate in the study. This consent form will give you the information you will need to understand why this study is being done and why you are being invited to participate. It will also describe what you will be asked to do, any known risks, inconveniences or discomforts that you may have while participating. We encourage you to take some time to think this over. We also encourage you to ask questions now and at any time. If you decide to participate, you will be asked to sign this form and it will be a record of your agreement to participate. You will be given a copy of this form.

In total, we will invite [enter sample size] people to participate in the study. In [name of community], we will ask [enter number] people to participate. There will only be one interview for this study and if you agree to participate we will not contact you again after the interview is completed. No research activity is to be conducted until you have had an opportunity to review this consent form, ask any questions you may have, and sign this document if applicable.

Disclosure of Potential Conflict of Interest

The investigators are interested in the knowledge to be gained from this study and in your well-being. Investigators may obtain salary or other financial support for conducting the research. You are under no obligation to participate in any research study offered to you.

Why is this study being done?

We are conducting this research study to learn how the government, nongovernmental organization, and private commercial companies can help provide people with the family planning products and services that people need, to learn which products and services people are using, and to learn about their preferences.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will be asked to participate in an interview. The interview will collect information about your background, your household socioeconomic status, your fertility preferences, the number of children you have, your family planning needs, your family planning use and preferences, and similar topics.

Some of the questions might include potentially sensitive topics, such as your use of family planning methods. We will try to hold the interview in a part of your residence where other people cannot hear you or at a nearby location. We think the interview will take about one hour.

What are the risks or inconveniences of the study?

If you agree to participate in this study, the main risk is that someone other than the research team might learn what you answered. The sections that follow will explain what we do to try to reduce the risk that someone else might learn your responses. Some of the possible inconveniences are the time it takes to complete the interview – it will take about one hour – and discomfort that you might feel answering some sensitive questions. You do not have to answer any question that makes you feel uncomfortable and you can stop the interview at any time.

What are the benefits of the study?

There will be no direct benefits to subjects for participating in this research. However, the knowledge gained from the study may help improve future family planning and reproductive health programs and policies, which may benefit society in general.

Will I receive payment for participation?

You will not be paid to be in this study.

Are there costs to participate?

There are no costs to you to participate in this study.

How will my personal information be protected?

The following procedures will be used to protect the confidentiality of your data. The researchers will take all reasonable steps to make sure that your name is kept secret and that you are protected from the risk of someone learning what your answers were. Your name and any other information that might be used to identify you will be kept in a locked file. Nobody except the researchers will be able to access the information and see your responses. For the analysis, your name and the name of the community where you live will be removed and replaced with numbers, so that anyone using the information will not be able to identify you, your family, or anyone else. All electronic files will be stored on computers that have password protection to prevent access by unauthorized users. Data that will be shared with others will be coded as described above to help protect your identity. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and you will not be identified in any publications or presentations.

You should also know that the [name of IRB board] may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Can I stop being in the study and what are my rights?

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. You do not have to answer any question that you do not want to answer.

Who do I contact if I have questions about the study?

Take as much time as you like before you make a decision to participate in this study. We will be happy to answer any question you have about this study. If you have further questions about this study, want to voice concerns or complaints about the research or if you have a research-related problem, you may contact the principal investigator, [insert name and phone number] or [insert name of local researcher and phone number]. If you would like to discuss your rights as a research participant, discuss problems, concerns, and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research, you may contact [insert name of IRB office, phone number, and email].

Documentation of Consent:

I have read this form and decided that I will participate in the research project described above. Its general purposes, the particulars of involvement and possible risks and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

Subject	Date		
Parent/Legally Authorized Representative (if applicable)	Date		
Person Obtaining Consent	Date		
I am unable to read but this consent document has been re (name of reader). I volunteer to participate in this research	ead and explaine	d to me by	
(mine of feader). I volunteer to participate in this feature.	1.		
Subject	Date		
Subject Witness	Date		

IRB PARENTAL CONSENT TEMPLATE FOR UNMARRIED WOMEN AGED 15-17 (TMA HOUSEHOLD SURVEYS)

Principal Investigator	:
Co-Investigator(s)	: [Remove if N/A]
Sub-Investigator(s)	: [Remove if N/A]
Study Title	:
Sponsor	: [Remove if N/A]

The following informed consent is required by [name of organization commissioning the study] for any research study conducted by its investigators. This study has been reviewed by the [insert name of IRB board(s)].

Introduction

Your child has been selected to participate in a research study to help understand people's need for family planning and reproductive health products and services. Your child is asked to participate in the study because your household is in one of the selected study areas. We are inviting all women aged 15-49 in these households to participate in the study. Women under age 18 cannot participate in the study without permission from a parent. Before you decide whether to allow your child to participate. This information is in this document, which is called a Consent Form. We encourage you to ask questions now and at any time. If you decide to allow your child to participate, you will be asked to sign this form and it will be a record of your agreement to participate. You will be given a copy of this form.

In total, we will invite [enter sample size] people to participate in the study. In [name of community], we will ask [enter number] people to participate. There will only be one interview for this study and if you agree to allow your child to participate we will not contact him/her again after the interview is completed. No research activity is to be conducted until you have had an opportunity to review this consent form, ask any questions you may have, and sign this document if applicable.

Disclosure of Potential Conflict of Interest

The investigators are interested in the knowledge to be gained from this study and in your child's well-being. Investigators may obtain salary or other financial support for conducting the research. You are under no obligation to allow your child to participate in any research study offered to you.

Why is this study being done?

We are conducting this research study to learn how the government, nongovernmental organization, and private commercial companies can help provide people with the family planning products and services that people need, to learn which products and services people are using, and to learn about their preferences.

What are the study procedures? What will my child be asked to do?

If you agree to allow your child to take part in this study, he/she will be asked to participate in an interview. The interview will collect information about his/her background, your household socioeconomic status, his/her fertility preferences, the number of children he/she has, his/her family planning needs, his/her family planning

use and preferences, and similar topics. Some of the questions might include potentially sensitive topics, such as his/her use of family planning methods. We will try to hold the interview in a part of your residence where other people cannot hear your child's responses or at a nearby location. We think the interview will take about one hour.

What are the risks or inconveniences of the study?

If you agree to allow your child to participate in this study, the main risk is that someone other than the research team might learn what he/she answered. The sections that follow will explain what we do to try to reduce the risk that someone else might learn your child's responses. Some of the possible inconveniences are the time it takes to complete the interview – it will take about one hour – and discomfort that your child might feel answering some sensitive questions. Your child does not have to answer any question that makes him/her feel uncomfortable and he/she can stop the interview at any time.

What are the benefits of the study?

There will be no direct benefits to your child for participating in this research. However, the knowledge gained from the study may help improve future family planning and reproductive health programs and policies, which may benefit society in general.

Will your child receive payment for participation?

Your child will not be paid to be in this study.

Are there costs to participate?

There are no costs to participate in this study.

How will my child's personal information be protected?

The following procedures will be used to protect the confidentiality of your data. The researchers will take all reasonable steps to make sure that your child's name is kept secret and that he/she is protected from the risk of someone learning what his/her answers were. Your child's name and any other information that might be used to identify him/her will be kept in a locked file. Nobody except the researchers will be able to access the information and see his/her responses. For the analysis, your child's name and the name of the community where you live will be removed and replaced with numbers, so that anyone using the information will not be able to identify your child, your family, or anyone else. All electronic files will be stored on computers that have password protection to prevent access by unauthorized users. Data that will be shared with others will be coded as described above to help protect your child's identity. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and your child will not be identified in any publications or presentations.

You should also know that the [name of IRB board] may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your child's responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Can my child stop being in the study and what are his/her rights?

You do not have to allow your child to be in this study if you do not want to. If you agree for your child to be in the study, but later change your mind, your child may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want your child to participate. We will explain the study to your child separately and ask him/her whether or not he/she agrees to participate. If at any moment during the interview he/she decides not to participate, he/she is free to stop the interview.

Your child does not have to answer any question that he/she does not want to answer.

Who do I contact if I have questions about the study?

Take as much time as you like before you make a decision to participate in this study. We will be happy to answer any question you have about this study. If you have further questions about this study, want to voice concerns or complaints about the research or if you have a research-related problem, you may contact the principal investigator, [insert name and phone number] or [insert name of local researcher and phone number]. If you would like to discuss your rights as a research participant, discuss problems, concerns, and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research, you may contact [insert name of IRB office, phone number, and email].

Documentation of Consent:

I have read this form and decided that I will allow my child to participate in the research project described above. Its general purposes, the particulars of involvement and possible risks and inconveniences have been explained to my satisfaction. I understand that I can withdraw my child from the study at any time. My signature also indicates that I have received a copy of this consent form.

Subject	Date	
I am unable to read but this consent docur (name of reader). I volunteer to participate	nent has been read and explained to me by e in this research.	
Subject	Date	
Witness	Date	
Person Obtaining Consent	Date	

IRB ASSENT TEMPLATE FOR UNMARRIED MINORS (TMA HOUSEHOLD SURVEYS)

Principal Investigator: Co-Investigator(s): Sub-Investigator(s): Study Title: Sponsor:

Who are we and why are we meeting with you? [Introduction]

We want to tell you about a research study we are doing. A research study is a way to learn information about something. We would like to find out more about people's need for family planning and reproductive health products and services. You are being asked to join the study because you live in one of the selected study areas.

What will happen to me in this study? [Description of the study]

If you agree to join the study, you will be asked to do an interview during which you will be asked a series of questions by an interviewer. The purpose of the interview is to learn about the number of children you would like to have, and about any family planning methods and services you might need or that you are already using. The interview will take about one hour.

Can anything bad happen to me? [Risks or Discomforts of Participating]

Sometimes things happen to people in research studies that may hurt them or make them feel bad. These are called risks. The risks of this study are someone other than the research team might learn what you answered. The research team will do whatever they can to make sure that this does not happen.

During the interview there might be some questions that may make you feel shy or uncomfortable. You do not have to answer any question that makes you feel uncomfortable. At any time, you can tell the interviewer that you do not want to answer any more questions.

Can anything good happen to me? [Benefits of Participating]

We do not know if you will be helped by being in this study. We may learn something that will help us understand how we can make family planning and reproductive health programs better.

Will anyone know I am in the study? [Confidentiality]

The people who do this study will do their best to make sure no one knows that you are in the study. We will not keep your name is the same place as your answer.

Will I be given anything to take part in this study? [Compensation for Participation]

You will not be paid to be in this study.

Who can I talk to about the study? [Contact Information]

You can ask us questions at any time. You can ask now. You can ask later. You can talk to me or you can talk to someone else at any time during the study.

If you have any questions about the study or any problems with the study, you can call the Principal Investigator [insert name of Principal Investigator]. You can call him/her at (Principal Investigator's phone number). You can also call a local investigator, [insert name of local study manager] at [insert phone number].

If you have any questions about the study but want to talk to someone who is not part of the study, you may contact [insert name of IRB office, phone number, and email].

What if I do not want to do this? [Voluntary Information]

You don't have to be in this study if you do not want to. No one will get angry or upset if you don't want to be in this study. Just tell us. And remember, you can change your mind later if you decide you don't want to be in this study anymore.

Signatures

If you understand this study and you are willing to participate, please sign below:

Subject Name		
Subject Signature	Date	
I am unable to read but this consent (name of reader). I volunteer to parts	document has been read and explained to me by icipate in this research.	
Subject	Date	
Witness	Date	
Signature of Investigators or Respon	sible Individual:	
"To the best of my ability, I have exp information contained in this consen or legal guardian have been accuratel	plained and discussed the full contents of the study, in at form. All questions of the research subject and the y answered."	ncluding all of the ose of his/her parent(s)

Investigator/Person Obtaining Consent Name

Signature

Date

IRB PROTOCOL TEMPLATE (TMA RETAIL OUTLET SURVEYS)

Study Title: Survey of family planning and reproductive health retail outlets/providersPrincipal Investigator:Co-Investigator(s): [Remove if N/A]Sub-Investigator(s): [Remove if N/A]

1. Study aim, background, and design

Instructions: In a few paragraphs, provide a non-technical description of the aim and purpose of the study, and explain the research design and methodology. Describe how the data will be analyzed and how this analysis will achieve the study aim.

Example:

In most developing countries, family planning products and services are provided by three different supply sectors: the public sector, nongovernmental organizations (NGOs), and the private/commercial sector. To ensure that key target groups have access to a full range of family planning products and services, there is a lot of interest in a coordinated approach in which family planning suppliers and donors from the three sectors – the public, nongovernmental organization (NGO), and commercial sectors – work together in a manner that uses their comparative advantage to grow the total market. This is referred to as the Total Market Approach (TMA). It is essential that TMA strategies are evidence-based, which requires up-to-date data about various aspects of the family planning market (MEASURE Evaluation & Addis Continental Institute of Public Health, 2014; Pollard, 2007).

The main research topics to be addressed to inform a total market approach should provide information about key characteristics of the market, such as market size, market equity, market accessibility, and market sustainability (Barnes, Vail, & Crosby, 2012; Population Services International, 2012; MEASURE Evaluation & Addis Continental Institute of Public Health, 2014; Pallin and Meekers, 2014, Pallin et al., 2013; USAID Contraceptive Security Team, s.d.). Retail outlet surveys are a key tool for obtaining information about the family planning market (Andreasen, 1988; Richter and Meekers, 2000).

The proposed survey of family planning/reproductive health retail outlets has several aims, including:

- Measuring which family planning products and services are currently being provided by all different types of outlets from the public sector, the private non-profit sector and the commercial sector
- Measuring the availability of different brands including any unbranded public sector products for all family planning methods
- Identifying problems with family planning product stockouts and gaps in service availability
- · Estimating the market size and its growth potential

Bivariate analyses with Chi-Square tests will be used to assess differences in key indicators of family planning product/service availability, stockouts, consumer prices, and sales volumes across supply sectors, outlet types, geographic region, etc. This information will be used to help inform the pricing and marketing strategy for family

planning products and services, to expand access among underserved groups, and to design targeting strategies that avoid overlapping efforts and/or competition between the public, nongovernmental organization (NGO) and commercial sectors.

2. Subject Population

Instructions: Describe the criteria that are being used to select or exclude study participants, and explain why these criteria are being used. Clarify how many study participants will be selected, and how they will be recruited. For studies that involve minors under age 18, parental consent to participate in research is necessary. If there are reasons why parental consent cannot or should not be obtained, clearly explain that in this section (without adequate justification, the study will not be approved). If the study participants will include other vulnerable groups, such as pregnant women, the reason for their inclusion must be provided.

Example:

The study population will consist of managers/owners at randomly selected family planning/reproductive health outlets in the selected communities and who consent to participate in the study. Excluded groups include those who do not meet these selection criteria, who have physical or mental health problems that prevent them from participating in the study, and respondents who were not selected by our random selection procedures.

The study uses a multi-stage cluster sample. The primary sampling units will consist of census enumeration areas (EAs), and retail outlets within the EAs will constitute the ultimate sampling unit. EAs will be selected proportionately to population size, using a sampling frame obtained from by the Central Bureau of Statistics. The targeted sample size is 800 retail outlets, which will enable detection of statistically significant differences in family planning availability and other market indicators across regions.

3. Data Collection Procedure

Instructions: Briefly describe the procedures for collecting the data, including where and when the data will be collected. Clarify the estimated time commitment from the study participants. Note that an IRB application will typically need to include copies of all research material and data collection tools, such as survey questionnaires. If the study uses questionnaires in multiple languages, copies of all versions will need to be included, as well as statements by certified translators that they are accurate translations of the English language questionnaire.

Example:

The proposed survey will be conducted nationwide in randomly selected enumeration areas. To obtain nationallevel estimates the analyses will be weighted to correct for differences in the probability of selection across geographic areas.

A printed questionnaire will be used to collect data on topics such as the characteristics of the retail outlet, the types of family planning products and services offered, availability of specific brands, stockouts, retail prices, sales volumes, and the reasons for not offering contraceptive products or services.

Prior to the start of survey activities, the study will be introduced to district administrations and traditional authorities. Study supervisors will contact the local political authority overseeing selected EA and inform them of the study, what it entails, the length of time the teams will be collecting data in the community and options for selected respondents who do not wish to participate.

The survey data will be collected during personal face-to-face interviews conducted by trained interviewers. Study participants will be recruited solely through visits at family planning and reproductive health outlets. There will be no announcements or other informational tools used to recruit study participants. The study team will be allowed a maximum of 3 callbacks if the selected respondent is not available. If after the 3rd visit, contact has not been established, no further visit will be made. Whenever feasible, interviews will be conducted at the outlet. On occasion, the respondent or the interviewer may decide to conduct the interview elsewhere, for example to maintain confidentiality during the interview. It is anticipated that a typical interview will take approximately 20 minutes.

4. Risks

Instructions: Describe the risks to the participants. Note that nearly all studies carry some risk to the study participants. Although there may not be any physical risk, potentials risks may include psychological reactions (anxiety, depression), emotions (anger, sadness, fear), stress, discomfort, or inconvenience. Explain what will be done to minimize each of the potential risks. The risk of loss of privacy is always a concern when the subjects can be identified in any way. The researcher is responsible for taking steps to protect the privacy of the participants, which must be explained in the research protocol as well as in the consent forms. Describe how the confidentiality of the data will be maintained, including how, where and for how long the original material (e.g., completed questionnaires) will be stored, and whether the electronic data will include any identifiers. If the intent is to use the data later on as part of another study, then this must be indicated on the consent form.

Example:

This study involves minimal risks to the study participants. The main risk is a breach in confidentiality. Other secondary risks include inconvenience and discomfort. The details below show how the study procedures effectively minimize these risks.

To procedures to prevent any breaches of confidentiality will include the following:

- · hiring non-local interviewer who do not know the participants
- the interviewer will identify an interview location where the interview can take place in private and where the respondent feels comfortable
- · de-identification of electronic data that are used for storage and analysis
- · use of encrypted laptops to prevent access in case of theft
- storing the completed questionnaires and consent forms in a locked cabinet
- destruction of the completed questionnaires and consent forms after three years
- limiting access to identifying information such as questionnaire cover sheets and consent forms to anyone other than the principal investigator
To reduce inconvenience, all interviews will be conducted at a location and time that is convenient to the respondent.

To reduce discomfort, respondents will be informed that they need not respond to any question that makes them uncomfortable, and that they can withdraw from the study at any moment without penalty. This information will also be explicitly stated in the informed consent form.

The researchers will retain the data without identifiers for possible use in a future projects, which will be consistent with the original research purpose (for example to assess the effect of new family planning programs and strategies).

5. Benefits

Instructions: Describe the direct benefits to the participants, if any. A research study is not required to have direct benefits in order to be approved.

Example:

There will be no direct benefits to the respondents or the selected outlets for participating in this research. However, the knowledge gained from the study may help improve future family planning and reproductive health programs and policies, which may benefit society in general.

6. Remuneration

Instructions: Describe any remuneration the study participants will receive (e.g., cash, gift certificates, or anything else) for participating in the study.

Example:

There will be no payment for participation in this research study.

7. Costs

Instructions: Describe the costs to the study participants (e.g., transportation to the research site), if any.

Example:

There will be no costs to the subject for participating in this research study.

8. Consent process and documentation

Instructions: Explain and document the procedures that will be used to obtain informed consent. The informed consent procedures should describe the recruitment of participants, the purpose of the research,

personnel, procedures, risks and benefits. It is essential that the informed consent procedures reiterate that participation in the research is voluntary. In most cases, consent to participate in a research study is documented by means of a signed consent form. The final consent from that will be presented to the study participants must be approved by the IRB. Many IRBs require that two copies of the consent form are used per study participant. A signed copy is maintained by researcher, who is typically required to store them for a minimum of three years. The other copy is left with the study participant for his/her records. In rare circumstances (e.g., for illiterate study populations, or for phone surveys), the IRB may agree to waive written consent. However, any waiver of written consent must be approved by the IRB prior to the start of data collection.

Example:

Prior to the start of any data collection component, written informed consent will be sought from respondents. The consent form describes: 1) the study objectives; 2) study procedures; 3) risk and benefits associated with participation in the study; 4) strategies employed by researchers to minimize risks; 5) costs/benefits associated with participation in the study; 6) the voluntary nature of the study and the participant's right to refuse to answer questions or withdraw from the study without penalty; 7) contact information of study personnel. Respondents will be offered a copy of the consent form. Because it is possible that some respondents may be illiterate, the interview will read the consent form to all respondents. Subsequently, the interviewer will explicitly ask the respondents whether they have any questions regarding the study procedures and/or the risks/benefits associated with the study. The consent form allows the interviewer to provide a signature in the event the respondent is illiterate.

Respondents may refuse to participate in the study, or may withdraw at any time at no penalty. The interviewer will also stress that the respondent has the right and possibility to refuse to answer any individual questions he/ she does not feel comfortable answering. The interviewer obtaining the informed consent will be instructed to guarantee adequate privacy during the informed consent procedure.

All participants will provide informed consent personally. This consent protocol is similar to previous studies [insert reference]. The protocol, questionnaire, consent forms, and translations of all documents were submitted for reviewed by [name of required in-country local IRB], who approved the study on [date].

9. Qualifications of the investigators

Instructions: Briefly describe the qualifications of the study investigators.

Example:

The Principal Investigator of the study, Dr. D. Brains, holds a PhD in public health. She has over 20 years of experience implementing and analyzing sample, and has published numerous papers on family planning and reproductive health, and health information system. Dr. Brains will oversee the project and will be responsible for the data analysis and report writing

Dr. S. Fields, PhD, is a statistician with over 15 years of experience in planning, coordinating, and managing survey data collection and analysis. She will be responsible for interviewer training, oversight of the field work, and quality assurance.

10. References

Instructions: List references cited in the Study Aim, Background and Design section.

Example:

- Andreasen, Alan R. (1988). Conducting an Effective Retail Audit. Washington, D.C.: SOMARC/The Futures Group.
- Barnes, Jeffrey, Vail, Janet, & Crosby, Dawn. (2012). Total Market Initiatives for Reproductive Health. Bethesda, MD: Strenghtening Health Outcomes through the Private Sector Project, Abt Associates.
- MEASURE Evaluation, & Addis Continental Institute of Public Health. (2014). Total Market Approach (TMA). Paper presented at the Regional Workshop on Monitoring and Evaluation of Family Planning and Reproductive Health Programs for non-M&E Specialists, June 16-21, 2014, Addis Ababa, Ethiopia.
- Pallin, S. C., & Meekers, D. (2014). Towards the Standardization of Total Market Approach Indicators for Male Condoms. Cases in Public Health Communication & Marketing, 8(Suppl.1), S87-103.
- Pallin, S. C., Meekers, D., Longfield, K., & Lupu, O. (2013). A Total Market Approach for Male Condoms: Uganda. Washington, D.C. and New York: Population Services International and United Nations Fund for Population Activities.
- Pollard, Richard. (2007). Social Marketing. An Introduction to the Total Market Approach to Commodities and Services Supply in Low-Income Countries. Paper presented at the George Washington University, Washington, D.C.
- Population Services International. (2012). Total Market Approach for Condoms in Myanmar. Population Services International.
- Richter, Kerry, & Meekers, Dominique. (2000). The Distribution Survey (DS). Tool Kits for Social Marketing Research. Washington D.C.: Research Division, Population Services International.
- USAID Contraceptive Security Team. (s.d.). Taking a Whole Market Approach Contraceptive Security. Ready Lessons (Vol. 3). Washington, D.C.: United States Agency for International Development.

IRB CONSENT TEMPLATE (TMA RETAIL OUTLET SURVEYS)

Principal Investigator	:
Co-Investigator(s)	:
Sub-Investigator(s)	:
Study Title	: Baseline survey of family planning and reproductive health outlets in [country name]
Sponsor	:

The following informed consent is required by [name of organization commissioning the study] for any research study conducted by its investigators. This study has been reviewed by the [insert name of IRB board].

Introduction

You are invited to participate in a research study to help understand how family planning and reproductive health products and services are being supplied.

You are being asked to participate because your outlet is located in one of the selected study sites areas. We are inviting owners/managers in these outlets to participate in the study. This consent form will give you the information you will need to understand why this study is being done and why you are being invited to participate. It will also describe what you will be asked to do, any known risks, inconveniences or discomforts that you may have while participating. We encourage you to take some time to think this over. We also encourage you to ask questions now and at any time. If you decide to participate, you will be asked to sign this form and it will be a record of your agreement to participate. You will be given a copy of this form.

In total, we will invite [enter sample size] outlets to participate in the study. In total, we will ask [enter number] outlets to participate. There will only be one interview for this study and if you agree to participate we will not contact this outlet again after the interview is completed. No research activity is to be conducted until you have had an opportunity to review this consent form, ask any questions you may have, and sign this document if applicable.

Disclosure of Potential Conflict of Interest

The investigators are interested in the knowledge to be gained from this study. Investigators may obtain salary or other financial support for conducting the research. You are under no obligation to participate in any research study offered to you.

Why is this study being done?

We are conducting this research study to learn how the government, nongovernmental organization, and private commercial companies can help provide people with the family planning products and services that people need. We are interested in learning about the family planning products and services that are currently being provided by all different types of outlets from the public sector, the private non-profit sector and the commercial sector. The study collects data on all brands on the market – including any unbranded public sector products – for all family planning methods.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will be asked to participate in an interview. The interview will collect information about the types of contraceptive methods and services this outlet provides, the specific brands that you sell or distribute, and on stockouts, pricing, and sales volumes for each brand. It also collects information about family planning services that you offer, and the availability and cost of those services

Some of the questions might include potentially sensitive topics, such as the prices that your outlet charges or how much you sell. We will try to hold the interview where other people cannot hear you. We think the interview will take about twenty minutes.

What are the risks or inconveniences of the study?

If you agree to participate in this study, the main risk is that someone other than the research team might learn what you answered. The sections that follow will explain what we do to try to reduce the risk that someone else might learn your responses. Some of the possible inconveniences are the time it takes to complete the interview; it will take about twenty minutes. If any clients come that you need to take care of, we can pause the interview and continue the interview when you are finished with them. You might not feel comfortable answering some of the questions. You do not have to answer any question that makes you feel uncomfortable and you can stop the interview at any time.

What are the benefits of the study?

There will be no direct benefits for your outlet or for yourself for participating in this research. However, the knowledge gained from the study may help improve future family planning and reproductive health programs and policies.

Will I receive payment for participation?

You will not be paid to be in this study.

Are there costs to participate?

There are no costs to you to participate in this study.

How will my personal information be protected?

The following procedures will be used to protect the confidentiality of your data. The researchers will take all reasonable steps to make sure that the name of your outlet and your own name is kept secret and that you are protected from the risk of someone learning what your answers were. The name of your outlet, your own name and any other information that might be used to identify you will be kept in a locked file. Nobody except the researchers will be able to access the information and see your responses. For the analysis, the name of your outlet, your outlet, your outlet, your outlet, your outlet, your outlet, so that anyone using the information will not be able to identify your outlet or yourself. All electronic files will be stored on computers that have password protection to prevent access by unauthorized users. Data that will be shared with others will be coded as described above to help protect your identity. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and you or your outlet will not be identified in any publications or presentations.

You should also know that the [name of IRB board] may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Can I stop being in the study and what are my rights?

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. You do not have to answer any question that you do not want to answer.

Who do I contact if I have questions about the study?

Take as much time as you like before you make a decision to participate in this study. We will be happy to answer any question you have about this study. If you have further questions about this study, want to voice concerns or complaints about the research or if you have a research-related problem, you may contact the principal investigator, [insert name and phone number], or [insert name of local researcher and phone number]. If you would like to discuss your rights as a research participant, discuss problems, concerns, and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research, you may contact [insert name of IRB office, phone number, and email].

Documentation of Consent:

I have read this form and decided that I will participate in the research project described above. Its general purposes, the particulars of involvement and possible risks and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

Subject	Date	
Person Obtaining Consent	Date	
I am unable to read but this consent document has l (name of reader). I volunteer to participate in this re	been read and explained to esearch.	o me by
Subject	Date	
Witness	Date	
Person Obtaining Consent	Date	

12. SAMPLING STRATEGIES

SAMPLING STRATEGIES FOR POPULATION-BASED SURVEYS

Simple random sampling and stratified sampling

Population-based surveys are typically conducted using sampling strategies that ensure that the resulting sample is nationally representative. One possible sampling strategy would be to use a simple random sample, which could be accomplished by listing all individuals in the population and to use a computer program with a random number generator to select the sample. However, in practice drawing a simple random sample is often not feasible because countries do not have a list of the entire population. Moreover, a simple random sample would select respondents who are scattered all over the country, which would make it prohibitively time-consuming and expensive to locate the respondents. To reduce costs, high-quality population-based surveys -- such as the DHS and MICS surveys -- are conducted using a two-stage stratified random sample, also called cluster sample (ICF International Inc, 2012a; Vaessen, Thiam, & Le, 2005; Yansaneh, 2005).

In a stratified sample, the population is first divided into smaller groups based on predefined characteristics. For example, population may be stratified by major geographic region and/or rural/urban residence. Within each stratum, a random sample is drawn with a sample size that is proportional to the size of the population in the stratum. The selection is typically done in two stages. In the first stage, a number of primary sampling units or clusters are selected from a complete list, with probability of selection proportional to the population size. In most cases, the primary sampling unit will consist of census enumeration areas (EA). A complete listing of all EAs, as well as maps delineating their boundaries, can normally be obtained from the census bureau or national statistics office. For each EA selected during the first phase, a listing of all households is prepared (or updated if such a listing already existed). In the second sampling stage, households are selected within each selected EA. In the DHS surveys all women aged 15-49 in the selected households are eligible for interviewing (a sample of males aged 15 and older is typically drawn from a subsample of one in three households).

Selecting fewer clusters and more respondents per cluster will decrease the cost of the survey, mostly because it decreases expensive travel between clusters. However, because people who live in the same cluster tend to have strong similarities (intra-cluster correlation) increasing the number of interviews per cluster will decrease the precision of the survey. Hence, there are important tradeoffs between the cost of the survey and the precision of the survey estimates (Aliaga & Ren, 2006; Yansaneh, 2005). DHS surveys typically select 30-40 women per cluster in rural areas and 20-25 women in urban areas (Vaessen et al., 2005). For a stratified sample to have the same precision as a simple random sample, a larger sample size will be required. However, a stratified sample ensures that each stratum (e.g., each geographic region) will be included in the final sample, while a simple random sample has a very small probability that one of the smaller strata could be excluded.

Rapid assessment sampling techniques

Because implementing stratified random samples is both time-consuming and expensive, there has been a lot of interest in rapid assessment techniques such as Lot Quality Assurance Sampling (LQAS). Rapid assessment sampling techniques enable relatively simple and speedy data collection, but do so at the expense of statistical precision. Although they are sometimes labeled as 'quick and dirty' techniques, their more limited precision implies that they need to be very carefully and accurately executed. Moreover, it is essential that users of rapid assessment techniques are aware of the strengths and limitations of the method they are using (Anker, 1991).

LQAS methods were originally developed to control the quality of goods manufactured on machines or assembly lines in factories. Because goods tended to be produced in batches, or lots, a random sample of goods from each lot was selected and checked for defects (Hedt-Gauthier, Mitsunaga, Hund, Olives, & Pagano, 2013; Hedt, Olives, Pagano, & Valadez, 2008; Robertson, Anker, Roisin, Macklai, & Engstrom, 1997). Based on the number of defective goods in the sample, LQAS rules would be used to determine if quality of the lot was acceptable or unacceptable. If the quality was deemed unacceptable, the entire lot would be discarded. In this case, it would be attempted to identify what caused the defects in that particular lot and to rectify the problem.

The extension of the LQAS methodology to public health applications is relatively straightforward. In public health, the equivalent of a lot may be a health catchment area, or a supervision area assigned to a health worker. The equivalent of "defective" goods would be individuals who do not meet a certain health standard. For example, it could be individuals who did not get immunized, who did not get tested for HIV, who did not get the appropriate treatment for a disease, or who are not using family planning (Hedt et al., 2008; Robertson et al., 1997).

LQAS is intended to help identify areas that have an unsatisfactory health performance, so that resources can be allocated to the areas with the biggest need. Nevertheless, it is possible to combine the results from individual lots can be combined to obtain a precise point estimate – with a confidence interval – for the larger region, similar to a stratified random sample. In the past two decades LQAS has been used in a wide variety of public health applications. For example, it has been used to estimate disease incidence, immunization coverage, use of family planning, antenatal care, and oral rehydration therapy, to assess condom availability and visibility at traditional and non-traditional outlets, to assess data quality in routine health information systems, and to assess the performance of HIV/AIDS programs (Ahanhanzo et al., 2015; Bhuiya, Hanifi, Roy, & Streatfield, 2007; Hedt et al., 2008; Pezzoli et al., 2009; Piot et al., 2010; Robertson et al., 1997). With respect to TMA, LQAScan be used to calculate national and regional estimates of the percentage of women who know where to obtain modern family planning, who use modern family planning, etc..

One of the main advantages of LQAS is that it requires a relatively small sample, which reduces the survey costs. An important disadvantage of the method is that the procedures for drawing the sample are more complicated than either simple random sampling or stratified random sampling (Anker, 1991; Lanata & Black, 1991) and that relatively few researchers have experience implementing LQAS. Because of the complexities involved in LQAS sampling methodology, it is not recommended to use LQAS when a single cross-sectional survey is needed. However, the methodology holds more promise when there is a need for repeat surveys at regular intervals, such as for monitoring purposes (for an example, see Piot et al., 2010).

BOX 1: HOW TO USE LOT QUALITY ASSURANCE SAMPLING (LQAS)

To use LQAS, it is first necessary to divide the study population into lots, or supervision areas. In public health applications these lots may consist of health facility catchment areas, or villages, etc. (Robertson et al., 1997). Lots should be homogenous, as this increases the chance that the few persons selected for the sample will be representative of the entire lot. Therefore, it is important that each lot is homogenous in terms of health risks, exposure to health information, and care. It is also important that the health performance varies across lots, as the purpose of the methodology is to identify lots that are not performing well.

LQAS requires that all lots are visited. From each selected lot a sample of "n" respondents is selected. Each lot is then classified as either being satisfactory or unsatisfactory, depending on the number of respondents who do not meet the pre-defined quality standards (for example, having access to modern family planning). For a given sample size, two rules are used to determine whether a lot should be accepted. The first rule sets the maximum number items in each sample that do not meet the quality standards. If the number of unsatisfactory items in the sample exceeds this maximum, the lot is considered unsatisfactory. The second rule sets the lower cutoff for the number of items in the sample that do not meet the quality standard. If the number of items that do not meet the quality standard in the sample is below the lower cutoff, the lot will be considered satisfactory (Hedt-Gauthier et al., 2013; Hedt et al., 2008; Robertson et al., 1997). For example, in the case of family planning availability the quality standard may be based on the percentage of women of reproductive age who know a family planning source. The gap between the upper and lower performance cutoff points will determine the required sample size, which can be obtained from published LQAS statistical reference tables. A larger gap will require a smaller sample size. However, it is important that the upper and lower health performance levels are realistic. Setting the lower bound too low, may result in none of the lots being rejected. Similarly, if the upper bound is set too high, none of the lots will be deemed acceptable (Lanata & Black, 1991). In practice, the sample size for each lot is initially often set to 19 or 20, and adjusted as better data about actual health performance become available (Hedt et al., 2008).

Point estimates for larger regions can be obtained by calculating a weighted average of the results from each supervision area, using the population size of the supervision area as the weight (Lanata & Black, 1991; Robertson et al., 1997). However, the formulas used to estimate the precision (and confidence intervals) of traditional LQAS samples assume that observations are selected using simple random sampling, which may not be feasible in public health applications because the geographic distance between the observations can make it prohibitively time-consuming and expensive. Therefore, it may be better to use an alternative approach that involves randomly sampling clusters of observations (e.g., districts or census enumeration areas) and to subsequently select individuals within the selected clusters. This approach reduces the data collection costs, but also decreases the precision of the estimates (Hedt-Gauthier et al., 2013; Pezzoli et al., 2009).

SAMPLING STRATEGIES FOR RETAIL AUDITS/DISTRIBUTION SURVEYS

Conducting a nationally representative retail audit or distribution survey requires drawing a sample of retail outlets and/or health facilities (Andreasen, 1988; Richter & Meekers, 2000). As was the case for household surveys, this is best accomplished using a stratified sample, as this will ensure that all geographic regions will be represented in the sample. It may also be possible to use Lot Quality Assurance Sampling. It will be necessary to decide which types of retail outlets and health facilities should be included in the survey. Although it may not be possible to include every single type of retail outlets or health facility, it is important that the key outlets types used by the public sector, nongovernmental organization (NGO) sector, and commercial sector are included.

While census data provide a good sampling frame for household surveys, sampling frames for retail outlets and health facilities are unlikely to exist. Therefore, drawing the sample is likely to involve first drawing a stratified sample of locations. Because rural and urban areas tend to vary substantially in terms of the availability of retail outlets and health facilities, it is recommended to stratify not only by geographic region, but also by rural/ urban location. Locations should be selected with probability of selection proportional to population size. To select outlets/facilities, one option is to do the selection using a fixed sampling interval (e.g., every third outlet or facility). However, using this procedure outlet/facility types that are uncommon (e.g., family planning clinics) may be poorly represented in the sample. Therefore, it may be better to also stratify by outlet/facility type. If estimates of the total number of retail outlets and health facilities exist (e.g. the number of pharmacies, health clinics, patent medicine shops, etc.) exist, then this information can be used to determine appropriate sampling intervals for different types of outlets and facilities for each location. For example, it may be decided to include all health clinics, every second pharmacy, and every tenth patent medicine vendor. If data on the number of outlets/facilities do not exist, then it may be necessary to conduct a listing of relevant facilities in each location.

For larger outlets and facilities it will also be necessary to have a procedure for determining which person should be interviewed. In most cases, it is best to interview the owner or manager of the outlet/facility.

13. MODEL TMA HOUSEHOLD SURVEY QUESTIONNAIRE

The purpose of this model household questionnaire is to provide sample questions that can be used to calculate key indicators that will be helpful while planning a Total Market Approach (TMA) for family planning products and services. As such, it aims to collect information about all modern family planning products and services. To ensure that the information collected provides data about all three supply sectors (the public sector, the private non-profit sector and the commercial sector), the aim is to collect data on use of all brands on the market – including any unbranded public sector products – for all family planning methods.

Since data on market trends are important for TMA planning, it has been attempted to use questions that have also been used on other data sources that could potentially be available. Many questions have been drawn from the model women's questionnaire for the DHS waves 7 household surveys (ICF International Inc, 2015). A number of additional questions were obtained or adapted from specific DHS surveys (especially the 1998 and 2003 Philippines DHS, the 1998 Kenya DHS, and the 1992, 2000, and 2005 Egypt DHS).

The questionnaire will need to be adapted to reflect the family planning methods and brands that are available in each specific country. It is absolutely essential that the adapted country-specific questionnaires are pretested before data collection is attempted. Model household questionnaire for a total market approach (TMA) for family planning products and services

Introduction

The purpose of this model household questionnaire is to provide sample questions that can be used to calculate key indicators that will be helpful while planning a Total Market Approach (TMA) for family planning products and services. As such, it aims to collect information about all modern family planning products and services. To ensure that the information collected provides data about all three supply sectors (the public sector, the private non-profit sector and the commercial sector), the aim is to collect data on use of all brands on the market – including any unbranded public sector products – for all family planning methods.

Since data on market trends are important for TMA planning, it has been attempted to use questions that have also been used on other data sources that could potentially be available. Many questions have been drawn from the model women's questionnaire for the DHS waves 7 household surveys (ICF International Inc, 2015). A number of additional questions were obtained or adapted from specific DHS surveys (especially the 1998 and 2003 Philippines DHS, the 1998 Kenya DHS, and the 1992, 2000, and 2005 Egypt DHS).

The questionnaire will need to be adapted to reflect the family planning methods and brands that are available in each specific country. It is absolutely essential that the adapted country-specific questionnaires are pretested before data collection is attempted.

No.	Question	Answer options	Code	Skip to
001	Questionnaire number			
002	Interviewer ID code			
003	Supervisor ID code			
005	Town/city/village Name:			
006	Region/Province	[Country-specific]	1	
			2	
			3	
			4	
			5	
007	District	[Country-specific]		
008	Rural/urban area	Rural	1	
		Urban	2	
009	Interview date	Day		
		Month		
		Year		
010	Interview result (last visit)	Completed	1	
		Partially completed	2	
		Respondent unavailable	3	
		Refused	4	
		Other	5	

Consent¹

Hello. My name is _______. I am working with [NAME OF ORGANIZATION]. We are conducting a survey about family planning and reproductive health and other topics all over [NAME OF COUNTRY]. The information we collect will help the government, non-governmental organizations and the private sector to plan health services. Your household was selected for the survey. We would like to interview all women aged 15-49 in your household. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

At this point, do you have any questions about the study? Do I have your agreement to proceed?

Interviewer's signature indicating consent obtained Date

101	May I begin the interview?	No	0	STOP
		Yes	1	
102	Interview start time	Hours		
		Minutes		

¹ This sample consent statement was adapted from the model women's questionnaire for the DHS wave 7 surveys (ICF International Inc, 2015), and will need to be adapted to ensure it conforms to the requirements of the relevant Institutional Review Boards. Many IRBs require much more elaborate consents forms.

Section	n 1a: Respondent background			
No.	Question	Answer options	Code	Skip to
103	In what month and year were you born?	Month		
		Don't know month	$-\frac{1}{98}$	
		Year		
		Don't know year	9998	
104	How old were you at your last birthday?	Age in completed years		
	COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.			
105	Have you ever attended school?	Yes	1	110
106	What is the high act level of achool you	NO Drive on t	<u> </u>	110
106	what is the highest level of school you	Primary		
	nimony cocondeny or higher	Secondary	2	
107	What is the highest grade you completed at	[Grade/form/year]	3	
107	that level	[Grade/Torni/year]		
108	Are you currently in school?	Yes	1	
		No	2	
109	Do you read a newspaper almost every day, at	Almost every day	1	
	least once week, less than once a week or not	At least once a week	2	
	at all?	Less than once a week	3	
		Almost never/not at all	4	
110	Do you listen to the radio almost every day, at	Almost every day	1	
	least once a week, less than once a week or	At least once a week	2	
	not at all?	Less than once a week	3	
		Almost never/not at all	4	
111	Do you watch television almost every day, at	Almost every day	1	
	least once a week, less than once a week or	At least once a week	2	
	not at all?	Less than once a week	3	
		Almost never/not at all	4	
112	Do you own a mobile phone?	Yes	1	
		No	2	
113	Have you ever used the internet?	Yes	1	
		No	2	115
114	During the last month, how often did you use	Almost every day	1	
	the internet: almost every day, at least once a	At least once a week	2	
	week, less than once a week, or not at all?	Less than once a week	3	
115		Almost never/not at all	4	
115	What is your religion?	Catholic	1	
		Protestant	2	
		Nuslim	3	
116	What is your otheric group?		6	
110	what is your einnic group?	[Country-specific]		
			2	
			л Эл	
1				1

Section 1b: Household characteristics

No.	Question	Answer options	Code	Skip to
117	What is the main source of drinking water for	PIPED WATER		
,	members of your household?	Piped into dwelling	11	
	5	Piped into yard/plot	12	
		Piped to neighbor	13	
		Public tap/standpipe	14	
		TUBE WELL OR BOREHOLE DUG WELL	21	
		Protected well	31	
		Unprotected well	32	
		WATER FROM SPRING		
		Protected spring	41	
		Unprotected spring	42	
		Rainwater	51	
		Tanker truck	61	
		Cart with small tank	71	
		Surface water (river/dam/lake/pond/		
		stream/canal/irrigation channel)	01	
		Bottled water	81	
		of toilet facility do members of nold usually use?		
OTHER			06	
118	What kind of toilet facility do members of	FLUSH OR POUR FLUSH TOIL FT	90	
110	your household usually use?	Flush to nined sewer system	11	
	your nousenoid usually use.	Flush to sentic tank	12	
		Flush to pit latrine	13	
		Flush to somewhere else	14	
		Flush, don't know where	15	
		DIT I ATDINE		
		Ventilated improved nit latrine	21	
		Pit latrine with slab	22	
		Pit latrine without slab/open pit	23	
		1 1	_	
		Composting toilet	31	
		Bucket toilet	41	
		Hanging toilet/hanging latrine	51	
		No facility/bush/field	61	121
		OTHER	96	
119	Do you share this toilet facility with other	Yes	1	
	households?	No	2	
120	Where is this toilet facility located?	In own dwelling	1	
		In own yard/plot	2	
		Elsewhere	3	

No.	Question	Answer options	Code	Skip
121	What type of fuel does your household mainly	Electricity	01	10
121	use for cooking?	LPG	02	
		Natural gas	03	
		Biogas	04	
		Kerosene	05	
		Coal, lignite	06	
		Charcoal	07	
		Wood	08	
		Straw/shrubs/grass	09	
		Agricultural crop	10	
		Animal dung	11	
		No food cooked in household	95	
		Other	96	
122	How many rooms in this household are used for sleeping?			
123	How many people sleep in this household?			
124	Does this household own any livestock, herds,	Yes	1	
	other farm animals, or poultry?	No	2	126
125	How many of the following animals does this	IF NONE, RECORD '00'		
(a-f)	household own?	IF 95 OR MORE, RECORD '95'		
		IF UNKNOWN, RECORD '98'		
	a) Milk cows or bulls?	Cows/bulls		
	b) Other cattle?	Other cattle		
	c) Horses, donkeys, or mules?	Horses/donkeys/mules		
	d) Goats?	Goats		
	e) Sheep?	Sheep		
126	1) Chickens of other poultry?	Chickens/poultry		
120	agricultural land?	No	2	128
127	How many hectares of agricultural land do	Hectares		
	members of this household own?			
		95 or more hectares	950	
	IF 95 OR MORE, CIRCLE '950'	Don't know	998	
128	Does your household have:		YES NO	
	a) Electricity?	Electricity	1 2	
	b) A radio?	A radio	1 2	
	c) A television?	A television	1 2	
	d) A non-mobile phone?	A non-mobile phone	1 2	
	e) A computer?	A computer	1 2	
120	1) A reingerator?	A reingerator	I Z	
129	a) A watch?	A watch	1 2	
	b) A mobile phone?	A mobile phone	1 2	
	c) A bicycle?	A hicycle	1 2	
	d) A motorcycle or motor scooter?	A motorcycle or motor scooter	1 2	
	e) An animal-drawn cart?	An animal-drawn cart	$1 \frac{-}{2}$	
	f) A car or truck?	A car or truck	1 2	
	g) A boat with a motor?	A boat with a motor	1 2	

Section 1c: Household observations

No.	Question	Answer options	Code	Skip to			
130	OBSERVE MAIN MATERIAL OF THE	NATURAL FLOOR					
	FLOOR OF THE DWELLING	Earth/sand	11				
		Dung	12				
		RUDIMENTARY FLOOR					
		Wood planks	21				
		Palm/bamboo	22				
		FINISHED FLOOR					
		Parquet or polished wood	31				
		Vinyl or asphalt strips	32				
		Ceramic tiles	33				
		Cement	34				
		Carpet	35				
		OTHER (specify)	96				
131	OBSERVE MAIN MATERIAL OF THE	NATURAL ROOFING					
	ROOF OF THE DWELLING	No roof	11				
		Thatch/palm leaf	12				
		Sod	13				
		RUDIMENTARY ROOFING					
		Rustic mat	21				
		Palm/bamboo	22				
		Wood planks	23				
		Cardboard	24				
		FINISHED ROOFING					
		Metal	31				
		Wood	32				
		Calamine/cement fiber	33				
		Ceramic tiles	34				
		Cement	35				
		Roofing Shingles	36				
122	ODSEDVE MAIN MATERIAL OF THE	NATURAL WALLS	90				
152	EXTERIOR WALLS OF THE WELLING	No walla	11				
	EATERIOR WALLS OF THE WELLING	INO WALLS	11				
			12				
		RUDIMENTARY WALLS	15				
		Ramboo with mud	21				
		Stone with mud	21				
		Uncovered adobe	22				
		Plywood	23				
		Cardboard	25				
		Re-used wood	26				
		FINISHED WALLS	20				
		Cement	31				
		Stone with lime/cement	32				
		Bricks	33				
		Cement blocks	34				
		Covered adobe	35				
		Wood planks/shingles	36				
		OTHER	96				

Section 2: Reproduction

No.	Question	Answer	Code	Skip
		options		to
201	Now I would like to ask you about all the birth you have had during your	Yes	1	
	life. Have you ever given birth?	No	2	
202	How many sons have you given birth to?			
203	How many daughters have you given birth to?			
204	ENTER TOTAL NUMBER OF BIRTHS			
205	CHECK 204:			
	Just to make sure that I have this right, you have had in TOTAL			
	births during your life. Is that correct?			
206	CHECK 206:			
	NO BIRTHS			217
	ONE OR MORE BIRTHS			
207	In the last five years, that is since [month, year] how many children have you given birth to?			

Now I would like to record the names of your children born in the past five years, whether still alive or not, starting								
RECORD	ne who was NAMES C	S BORN LA	THE BIRTHS IN 208	8. RECOR	D TWINS A	AND TRIPLE	IS ON SEPARATE	LINES.
208 What name was given to	209 Were any of these births	210 Is (NAME)	211 In what month and year was (NAME) born?	212 Is (NAME) still alive?	213 IF ALIVE: How old was (NAME) at	214 IF ALIVE Is (NAME) living with you?	215 IF DEAD: How old was (NAME) when he/she died?	216 Were there any other
your baby? (NAME)	twins?	à boy or a girl?	PROBE: What is his/her birthday?		his/her last birthday? RECORD AGE IN COM- PLETED YEARS.		IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01-LAST BORN	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 208(02)	DAYS 1 MONTHS2 YEARS 3	
02 - SECOND TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 >216	DAYS1 MONTHS2 YEARS 3	YES 1 NO 2
03- THIRD TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 216	DAYS 1 MONTHS2 YEARS 3	YES1 NO2
04 - FOURTH TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 216	DAYS 1 MONTHS2 YEARS 3	YES1 NO2
05- FIFTH TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 216	DAYS 1 MONTHS2 YEARS 3	YES1 NO2
06 - SIXTH TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 216	DAYS1 MONTHS2 YEARS 3	YES1 NO2
07 - SEVENTH TO LAST BORN	SING 1 MULT 2	BOY 1 GIRL2	MONTH YEAR	YES1 NO2 V215	AGE IN YEARS	YES 1 NO 2 > 216	DAYS 1 MONTHS2 YEARS 3	YES 1 NO 2

No.	Question	Answer options	Code	Skip
				to
217	Are you pregnant now?	Yes	1	
		No	2	301
		Unsure	8	301
218	When you got pregnant, did you want to get pregnant at that time?	Yes	1	301
		No	2	
219	Did you want to have a baby later or did you not want any more	Later	1	
	children	No More	2	

Section 3: Contraception

No.	Question	Answer options	Code	Skip to
301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?			
-01	Female Sterilization.	Yes	1	
	PROBE: Women can have an operation to avoid having any more children.	No	2	
-02	Male Sterilization.	Yes	1	
	PROBE: Men can have an operation to avoid having any more children.	No	2	
-03	IUD.	Yes	1	
	PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	No	2	
-04	Injectables.	Yes	1	
	PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	No	2	
-05	Implants.	Yes	1	
	PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	No	2	
06	D;11	Vec	1	
-00	PROBE: Women can take a nill every day to avoid becoming pregnant	No	2	
-07	Condom	Ves	1	
07	PROBE: Men can put a rubber sheath on their penis before sexual intercourse	No	2	
-08	Female Condom	Ves	1	
00	PROBE: Women can place a sheath in their vagina before sexual intercourse	No	2	
-09	Emergency Contracention	Ves	1	
0)	PROBE: As an emergency measure within three days after they have	No	2	
	unprotected sexual intercourse, women can take special pills to prevent	110	-	
	pregnancy.			
-10	Standard Davs Method.	Yes	1	
-	PROBE: A woman uses a string of colored beads to know the days she can	No	2	
	get pregnant. On the days she can get pregnant, she uses a condom or does			
	not have sexual intercourse.			
-11	Lactational Amenorrhea Method (LAM).	Yes	1	
	PROBE: Up to six months after childbirth, before the menstrual period has	No	2	
	returned, women use a method requiring frequent breastfeeding day and			
	night.			
-12	Rhythm Method.	Yes	1	
	PROBE: To avoid pregnancy, women do not have sexual intercourse on the	No	2	
	days of the month they think they can get pregnant.			
-13	Withdrawal.	Yes	1	
	PROBE: Men can be careful and pull out before climax.	No	2	
-14	Have you heard of any other ways or methods that women or men can use to	Yes, modern	1	
	avoid pregnancy?	No, traditional	2	
1		No	3	

No.	Question	Answer options	Code	Skip
				to
302	Have your ever used or tried in any way to	No	0	307
	delay or avoid getting pregnant?	Yes	1	303
303	CHECK 217 (PREGNANT NOW)	Pregnant		307
		Not pregnant/not sure		304
304	Are you or your partner currently doing	No	0	307
	something or using any method to delay or	Yes	1	305
	avoid getting pregnant?			
305	Which method are you using?	Female sterilization	А	
		Male sterilization	В	
	RECORD ALL MENTIONED.	IUD	С	
		Injectables	D	
	IF MORE THAN ONE METHOD	Implants	E	
	MENTIONED,	Pill	F	
	FOLLOW SKIP INSTRUCTION FOR	Condom	G	
	HIGHEST	Female condom	Н	
		Emergency contraception	Ι	
	METHOD IN LIST.	Standard days method	J	
		Lactational amenorrhea	K	
		Rhythm method	L	
		Withdrawal	М	
		Other modern method	Х	
		Other traditional method	Y	
306	CHECK 305 (CURRENT METHOD)	Female sterilization	01	401F
		Male sterilization	02	401G
	CIRCLE METHOD CODE:	IUD	03	401H
		Injectables	04	401I
	IF MORE THAN ONE METHOD IS	Implants	05	401J
	CIRCLED IN 305, CIRCLE CODE FOR	Pill	06	401A
	HIGHEST METHOD IN THE LIST	Condom	07	401B
		Female condom	08	401C
		Emergency contraception	09	401D
		Standard days method	10	401E
		Lactational amenorrhea	11	501
		Rhythm method	12	501
		Withdrawal	13	501
		Other modern method	95	501
		Other traditional method	96	501
307	Do you know of a place where you can	No	0	501
	obtain a method of family planning?	Yes	1	

No.	Question	Answer options	Code	Skip
				to
308	Where is that?	PUBLIC SECTOR		
		Government hospital		
	PROBE: Any other place?	Government health center		
		Family planning clinic		
	PROBE TO IDENTIFY EACH TYPE OF	Mobile clinic		
	SORUCES AND CIRCLE	Fieldworker		
	APPROPRIATE CODES	Other public sector		
	IF UNABLE TO DETERMINE IF	PRIVATE MEDICAL SECTOR		
	HOSPITAL, HEALTH CENTER, OR	Private hospital/clinic		
	CLINIC IS PUBLIC OR PRIVETE,	Pharmacy		
	WRITE IN THE NAME OF THE PLACE	Private doctor		
		Mobile clinic		
		Fieldworker		
		Other private medical		
		OTHER SOURCE		
		Shop		
		Church		
		Friend/Relative		
		Other(specify):		
309	How long would it take you to travel from	Minutes	1	
	your home to the nearest place where you	Hours	2 0	
	can obtain family planning?	Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
				501
	GO TO QUESTION			501

Section 4a: Questions for users of oral contraceptives (pills)

No.	Question	Answer options	Code	Skip
				to
401A	What is the brand name of the pills you are	Brand A	01	
	using?	Brand B	02	
		Brand C	03	
	IF DON'T KNOW THE BRAND, ASK TO SEE	Unbranded	04	
	PACKAGE OR SHOW BRAND CHART FOR	OTHER:	96	
	PILLS.	DON'T KNOW	98	
402A	From where did you obtain the pills the	PUBLIC SECTOR		
	last time?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC	Fieldworker	15	
	OR PRIVATE, WRITE THE NAME OF THE	Other public sector	16	
	PLACE	PRIVATE MEDICAL SECTOR		
		Private hospital/clinic	21	
		Pharmacy	22	
		Private doctor	23	
	(Name of place)	Mobile clinic	24	
		Fieldworker	25	
		Other private medical	26	
		OTHER SOURCE		
		Shop	31	
		Church	32	
		Friend/Relative	33	
		Other(specify):	96	
-				
403A	How long did it take to travel from your	Minutes	$1 \square \square \square$	
	home to (NAME OF SOURCE)	Hours	2 0	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404A	How much (in cash) does one packet	Amount		406A
	(cycle) of pills cost you?	Free	996	
		Don't know	998	
405A	Would you be willing to pay for your	Yes	1	
	pills?	No	2	501
406A	How much would you be willing to pay		YES NO	
	for one packet (cycle) of pills?			
	• \$0.50?	\$0.50	1 2	
	• \$1.00?	\$1.00	1 2	
	• \$1.50?	\$1.50	1 2	
	• \$2.00?	\$2.00	1 2	
	• \$2.50?	\$2.50	1 2	
	• \$3.00?	\$3.00	1 2	
	• More than \$3.00?	More than \$3.00	1 2	
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4b: Questions for users of male condoms

No.	Question	Answer options	Code	Skip
1015				to
401B	What is the brand name of the condoms	Brand A	01	
	you are using?	Brand B	02	
		Brand C	03	
	IF DON'T KNOW THE BRAND, ASK TO SEE	Unbranded	04	
	PACKAGE OR SHOW BRAND CHART FOR	OTHER:	96	
	MALE CONDOMS	Don't know	98	
402B	From where did you obtain the condom	PUBLIC SECTOR		
	the last time?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC	Fieldworker	15	
	OR PRIVATE. WRITE THE NAME OF THE	Other public sector	16	
	PLACE	PRIVATE MEDICAL SECTOR		
		Private hospital/clinic	21	
		Pharmacy	22	
		Private doctor	22	
	(Name of place)	Mobile clinic	23	
	(Name of place)	Fieldworker	24	
		Other private medical	23	
		OTHER SOURCE	20	
		OTHER SOURCE	21	
		Snop	31	
		Church	32	
		Friend/Relative	33	
		Other(specify):	96	
403B	How long did it take to travel from your	Minutes	$1 \square \square$	
	home to (NAME OF SOURCE)	Hours		
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404B	How much (in cash) do the condoms cost	Cost of a 3-pack	3000	406B
	you? For how many condoms?	Cost of a single condom		406B
	your for now many condonio.	Free	9996	TOOD
	RECORD COST FOR RELEVANT PACKET	Don't know	9998	
	SIZE		,,,,,	
405B	Would you be willing to pay for condoms?	Ves	1	
	in the jet of mining to pay for condoms.	No	2	501
406B	How much would you be willing to pay		VES NO	001
100D	for a 3-nack of condoms?		TES NO	
	• \$0 50?	\$0 50 2	1 2	
	 ♥ 00.501 \$1.002 	\$0.30? \$1.002	1 2	
	• \$1.00?	\$1.00? \$1.509	1 2	
	• \$1.30?	\$1.50?	1 2	
	• \$2.00?	\$2.00?	1 2	
	• \$2.30?	\$2.50?	1 2	
	• \$3.00?	\$3.00?	1 2	
	• More than \$3.00?	More than \$3.00?	1 2	
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4c: Questions for users of female condoms

No.	Question	Answer options	Code	Skip
4010	What is the brand name of the female	Drond A	01	to
4010	condoms you are using?	Brand B	01	
	condoms you are using?	Brand C	02	
	IE DONIT KNOW THE DRAND A SK TO SEE	Diana C Unbrandad	03	
	IF DON I KNOW THE BRAND, ASK TO SEE		04	
	FEMALE CONDOMS	DON'T KNOW	90	
402C	From where did you obtain the female	PUBLIC SECTOR	70	
402C	condom the last time?	Government hospital	11	
	condoni the last time:	Government health conter	11	
	DRODE TO IDENTIEV TYPE OF SOURCE	Family planning alinia	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Faimry plaining chine Mobile clinic	13	
	IE LINADI E TO DETERMINE IE DUDI IC	Fieldworker	14	
	OP DEIVATE WEITE THE NAME OF THE	Other public sector	15	
	DIACE	DRIVATE MEDICAL SECTOR	10	
	FLACE	Drivate hospital/alinia	21	
		Phormaou Dhormaou	21	
		Private dester	22	
	(Nama of place)	Mabila alinia	23	
	(Name of place)	Fieldwarker	24	
		Other private medical	23	
		Other private medical	20	
		Shore	21	
		Shop	22	
		Erion d/D alativa	32	
		Other(greeify)	33	
403C	How long did it take to travel from your	Minutes		
703C	home to (NAME OF SOURCE)	Hours		
		Don't know	20000 9998	
	IF LESS THAN 2 HOURS. RECORD IN		,,,,,	
	MINUTES. ELSE RECORD IN HOURS			
404C	How much (in cash) do the female	Cost of a 3-pack	3	406C
	condoms cost vou? For how many female	Cost of a single female condom		406C
	condoms?	Free	9996	
		Don't know	9998	
	RECORD COST FOR APPROPRIATE			
	PACKET SIZE			
405C	Would you be willing to pay for female	Yes	1	
	condoms?	No	2	501
406C	How much would you be willing to pay		YES NO	
	for a 3-pack of female condoms?			
	• \$0.50?	\$0.50?	1 2	
	• \$1.00?	\$1.00?	1 2	
	• \$1.50?	\$1.50?	1 2	
	• \$2.00?	\$2.00?	1 2	
	• \$2.50?	\$2.50?	1 2	
	• \$3.00?	\$3.00?	1 2	
	• More than \$3.00?	More than \$3.00?	1 2	
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4d: Questions for users of emergency contraception

No.	Question	Answer options	Code	Skip
401D		D 14	01	to
401D	What is the brand name of the emergency	Brand A	01	
	contraception you are using?	Brand B	02	
		Brand C	03	
	IF DON'T KNOW THE BRAND, ASK TO SEE	Unbranded	04	
	PACKAGE OR SHOW BRAND CHART FOR	UTHER:	96	
4000	EMERGENCY CONTRACEPTION	DUN'I KNUW	98	
402D	From where did you obtain the emergency	PUBLIC SECTOR	1.1	
	contraception the last time?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC	Fieldworker	15	
	OR PRIVATE, WRITE THE NAME OF THE	Other public sector	16	
	PLACE	PRIVATE MEDICAL SECTOR		
		Private hospital/clinic	21	
		Pharmacy	22	
		Private doctor	23	
	(Name of place)	Mobile clinic	24	
		Fieldworker	25	
		Other private medical	26	
		OTHER SOURCE		
		Shop	31	
		Church	32	
		Friend/Relative	33	
		Other(specify):	96	
403D	How long did it take to travel from your	Minutes	1	
	home to (NAME OF SOURCE)	Hours	2 0	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404D	How much (in cash) does a single-use	Cost	1	406D
	packet of emergency contraception cost	Free	9996	
	you?	Don't know	9998	
405D	Would you be willing to pay for	Yes	1	
	emergency contraception?	No	2	501
406D	How much would you be willing to pay		YES NO	
	for a single-sue packet of emergency			
	contraception?	\$0.50?	1 2	
	• \$0.50?	\$1.00?	1 2	
	• \$1.00?	\$1.50?	1 2	
	• \$1.50?	\$2.00?	1 2	
	• \$2.00?	\$2.50?	1 2	
	• \$2.50?	\$3.00?	1 2	
	• \$3.00?	More than \$3.00?	1 2	
	• More than \$3.00?			
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4e: Questions for users of the Standard Days Method (Cycle beads)

No.	Question	Answer options	Code	Skip
				to
401E	What is the brand name of the cycle beads	Brand A	01	
	you are using?	Brand B	02	
		Brand C	03	
	IF DON'T KNOW THE BRAND, ASK TO SEE	Unbranded	04	
	PACKAGE OR SHOW BRAND CHART FOR	OTHER:	96	
	CYCLE BEADS	DON'T KNOW	98	
402E	From where did you obtain the cycle beads	PUBLIC SECTOR		
	the last time?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC OR	Fieldworker	15	
	PRIVATE, WRITE THE NAME OF THE	Other public sector	16	
	PLACE	PRIVATE MEDICAL SECTOR		
		Private hospital/clinic	21	
		Pharmacy	22	
		Private doctor	23	
	(Name of place)	Mobile clinic	24	
		Fieldworker	25	
		Other private medical	26	
		OTHER SOURCE		
		Shop	31	
		Church	32	
		Friend/Relative	33	
			00	
		Other(specify):	96	
403E	How long did it take to travel from your	Minutes	1	
	home to (NAME OF SOURCE)	Hours	$2\overline{0}$	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404E	How much (in cash) do the cycle beads	Cost	1	406E
	cost you?	Free	9996	
		Don't know	9998	
405E	Would you be willing to pay for cycle	Yes	1	
	beads?	No	2	501
406E	How much would you be willing to pay		YES NO	
	for cycle beads?			
	• \$0.50?	\$0.50?	1 2	
	• \$1.00?	\$1.00?	1 2	
	• \$1.50?	\$1.50?	1 2	
	• \$2.00?	\$2.00?	1 2	
	• \$2.50?	\$2.50?	1 2	
	• \$3.00?	\$3.00?	1 2	
	• More than \$3.00?	More than \$3.00?	1 2	
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4F: Questi	ons for women	who have l	been sterilized
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No.	Question	Answer options	Code	Skip
				to
401F	[Not used]			
402F	In what facility did the sterilization take	PUBLIC SECTOR		
	place	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC OR	Other public sector	16	
	PRIVATE, WRITE THE NAME OF THE	PRIVATE MEDICAL SECTOR		
	PLACE	Private hospital/clinic	21	
		Private doctor	22	
		Mobile clinic	23	
	(Name of place)	Other private medical	26	
		OTHER SOURCE		
		Other(specify):	96	
403F	How long did it take to travel from your	Minutes	1	
	home to (NAME OF SOURCE)	Hours	2 0	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404F	How much (in cash) did the sterilization	Cost	1	406F
	operation cost you, including the cost of	Free	9996	
	any consultation?	Don't know	9998	
405F	Would you have been willing to pay for	Yes	1	
	the sterilization?	No	2	501
406F	How much would you have been willing		YES NO	
	to pay for the sterilization?			
	• \$ 5.00?	\$ 5.00	1 2	
	• \$10.00?	\$10.00	1 2	
	• \$15.00?	\$15.00	1 2	
	• \$20.00?	\$20.00	1 2	
	• \$25.00?	\$25.00	1 2	
	• \$30.00?	\$30.00	1 2	
	• More than \$30.00?	More than \$30.00	1 2	
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4G: Questions for women whose partner has been sterilized

No.	Question	Answer options	Code	Skip to
401G	[Not used]			
402G	In what facility did the male sterilization	PUBLIC SECTOR		
	take place	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC OR	Other public sector	16	
	PRIVATE, WRITE THE NAME OF THE	PRIVATE MEDICAL SECTOR		
	PLACE	Private hospital/clinic	21	
		Private doctor	22	
		Mobile clinic	23	
	(Name of place)	Other private medical	26	
		OTHER SOURCE		
		Other (arran if x)	06	
		Other(specify):	96	
403G	How long did it take your	Minutes		
	[husband/partner] to travel from your	Hours		
	home to (NAME OF SOURCE)	Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404G	How much (in cash) did the male	Cost	1	406G
	sterilization operation cost, including the	Free	9996	
	cost of any consultation?	Don't know	9998	
405G	Would your [husband/partner] have been	Yes	1	
	willing to pay for the sterilization?	No	2	501
406G	How much would you or your		YES NO	
	[husband/partner] have been willing to pay			
	for the sterilization?	\$ 5.00	1 2	
	• \$ 5.00?	\$10.00	1 2	
	• \$10.00?	\$15.00	1 2	
	• \$15.00?	\$20.00	1 2	
	• \$20.00?	\$25.00	1 2	
	• \$25.00?	\$30.00	1 2	
	• \$30.00?	More than \$30.00	1 2	
	• More than \$30.00?			
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

No.	Question	Answer options	Code	Skip
		-		to
401H	What is the brand name or type of IUD	Brand/type A	1	
	you are using?	Brand/type B	2	
		Brand/type C	3	
		Other:	96	
		Don't know	98	
402HB	Did you get the IUD at the place where	Same place	1	
	you had it inserted or did you get it from	From somewhere else	2	
	somewhere else?			
402H	Where did you go to have the IUD	PUBLIC SECTOR		
	inserted?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF	Family planning clinic	13	
	SOURCE	Mobile clinic	14	
		Other public sector	16	
	IF UNABLE TO DETERMINE IF	PRIVATE MEDICAL SECTOR		
	PUBLIC OR PRIVATE, WRITE THE	Private hospital/clinic	21	
	NAME OF THE PLACE	Private doctor	22	
		Mobile clinic	23	
		Other private medical	26	
	(Name of place)	OTHER SOURCE		
		Other(specify):	96	
403H	How long did it take to travel from your	Minutes	$1 \square \square \square$	
	home to (NAME OF SOURCE)	Hours	2 0	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404H	In total, how much (in cash) did the IUD	Cost	1	406H
	cost, including all costs?	Free	9996	
		Don't know	9998	
405H	Would you have been willing to pay for	Yes	1	
	the IUD?	No	2	501
406H	How much in total would you have been		YES NO	
	willing to pay for the IUD, including all			
	costs?	\$ 5.00	1 2	
	• \$ 5.00?	\$10.00	1 2	
	• \$10.00?	\$15.00	1 2	
	• \$15.00?	\$20.00	1 2	
	• \$20.00?	\$25.00	1 2	
	• \$25.00?	\$30.00	1 2	
	• \$30.00?	More than \$30.00	1 2	
	• More than \$30.00?			
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4H: Questions for IUD users

Section 4I: Questions for contraceptive injection users

No.	Question	Answer options	Code	Skip
				to
401I	What is the name or type of injectables	Noristerat (2 months)	1	
	you are using?	Norigynon (2 months)	2	
		Depo-Provera (3 months)	3	
		Sayana Press (3 months)	4	
		Other:	96	
		Don't know	98	
402IB	Did you get the injectable at the place	Same place	1	
	where you got the injection service or did	From somewhere else	2	
	you get it from somewhere else?			
402I	Where did you go to have the injectables	PUBLIC SECTOR		
	service?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF	Family planning clinic	13	
	SOURCE	Mobile clinic	14	
		Other public sector	16	
	IF UNABLE TO DETERMINE IF	PRIVATE MEDICAL SECTOR	21	
	PUBLIC OR PRIVATE, WRITE THE	Private hospital/clinic	21	
	NAME OF THE PLACE	Private doctor	22	
		Widdlie clinic	23	
	(Name of place)	Other private medical	20	
	(Name of place)	OTHER SOURCE		
		Other(specify):	96	
		Stile(speeny)	70	
403I	How long did it take to travel from your	Minutes		
	home to (NAME OF SOURCE)	Hours		
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404I	In total, how much (in cash) did the	Cost	1	406I
	injectables cost, including all costs?	Free	9996	
		Don't know	9998	
405I	Would you have been willing to pay for	Yes	1	
	the injectables?	No	2	501
406I	How much in total would you have been		YES NO	
	willing to pay for the injectables, including			
	all costs?	\$ 5.00	1 2	
	• \$ 5.00?	\$10.00	1 2	
	 \$10.00? 	\$15.00	1 2	
	 \$15.00? 	\$20.00	1 2	
	• \$20.00?	\$25.00	1 2	
	• \$25.00?	\$30.00	1 2	
	• \$30.00?	More than \$30.00	1 2	
	• More than \$30.00?			
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 4J: Questions for implant users

No.	Question	Answer options	Code	Skip
				to
401J	What is the brand name or type of implant	Brand/type A	1	
	you are using?	Brand/type B	2	
		Brand/type C	3	
		Other:	96	
		Don't know	98	
402JB	Did you get the implant at the place where	Same place	1	
	you had it inserted or did you get it from	From somewhere else	2	
4021	Where did you go to have the implant	DUBLIC SECTOR		
402J	inserted?	Government hospital	11	
	hiserted.	Government health center	12	
	PROBE TO IDENTIFY TYPE OF	Family planning clinic	13	
	SOURCE	Mobile clinic	14	
		Other public sector	16	
	IF UNABLE TO DETERMINE IF	PRIVATE MEDICAL SECTOR		
	PUBLIC OR PRIVATE, WRITE THE	Private hospital/clinic	21	
	NAME OF THE PLACE	Private doctor	22	
		Mobile clinic	23	
		Other private medical	26	
	(Name of place)	OTHER SOURCE		
		Other (an acity)	06	
		Other(specify):	90	
403J	How long did it take to travel from your	Minutes	1	
	home to (NAME OF SOURCE)	Hours	$2 0 \square$	
		Don't know	9998	
	IF LESS THAN 2 HOURS, RECORD IN			
	MINUTES. ELSE RECORD IN HOURS			
404J	In total, how much (in cash) did the	Cost	1	406J
	implant cost, including all costs?	Free	9996	
10.53		Don't know	9998	
405J	Would you have been willing to pay for	Yes	1	501
4061	How much in total would you have been	INO	VES NO	301
4005	willing to pay for the implant including		ILS NO	
	all costs?	\$ 5.00	1 2	
	• \$ 5.00?	\$10.00	1 2	
	• \$10.00?	\$15.00	1 2	
	• \$15.00?	\$20.00	1 2	
	 \$20.00? 	\$25.00	1 2	
	• \$25.00?	\$30.00	1 2	
	• \$30.00?	More than \$30.00	1 2	
	• More than \$30.00?			
	IF YES: ASK NEXT AMOUNT.			
	IF NO: GO TO THE NEXT QUESTION			

Section 5: Contraceptive history

No.	Question	Answer options	Code	Skip to
501	[IF INFORMATION ON CONTRACEPTIVE			
	DISCONTINUATION AND/OR METHOD			
	SWITCHING IS DESIRED, INSERT			
	CONTRACEPTIVE CALENDAR			
	QUESTIONS HERE			
Section 6: Marriage and sexual activity

No.	Question	Answer options	Code	Skip to
601	Are you currently married or living together	Yes, currently married	1	
	with a man as if married?	Yes, living with a man	2	
		No, not in union	3	603
602	Is your (husband/partner) living with you now	Living with her	1	
	or is he staying elsewhere?	Staying elsewhere	2	
603	Now I would like to ask about your (first)	Month		
	(husband/partner). In what month and year did	Don't know month	- 98	
	you start living with him?	Year		
		Don't know year		
			9998	
604	How old were you when you first started	Age		
	living with him?			
605	Now I would like to ask some questions about	Never had sexual intercourse	00	717
	sexual activity in order to gain a better			
	understanding of some important life issues.	Age in years		
	Let me assure you again that your answers are			
	completely confidential and will not be told to			
	anyone. If we should come to any question			
	that you don't want to answer, just let me			
	know and we will go to the next question.			
	How old were you when you had sexual			
50.5	intercourse for the very first time?			
606	When was the <u>last</u> time you had sexual	D		
	intercourse?	Days ago		
		Weeks ago		
	IF LESS THAN 12 MONTHS, ANSWER	Months ago		
	MUST BE RECORDED IN DAYS, WEEKS,	Y ears ago	4 🗆 🗀	
	OR MONTHS.			
	IF 12 MONTHS (ONE YEAR) OR MORE,			
	ANSWER MUST BE RECORDED IN			
607	I LARS	Husbord	1	
007	when you last had sexual intercourse?	nusband Live in partner	1	
	whom you last had sexual intercourse?	Boyfriend not living with her	2	
	IF BOYFRIEND: Were you living together as	Casual acquaintance	5 Л	
	if married?	Client/sex worker	5	
	n married.	Other	5	
	IF YES RECORD '2'	ould	0	
	IF NO RECORD '3'			
608	The last time you had sexual intercourse was	Ves	1	
000	a condom used?	No	2	701

No.	Question	Answer options	Code	Skip to
609	What was the brand name of the condom used	Brand A	01	
	that time?	Brand B	02	
		Brand C	03	
	IF BRAND NOT KNOWN, ASK TO SEE			
	THE PACKAGE OR SHOW THE BRAND	Other (specify)	96	
	CHART FOR MALE CONDOMS	Don't know	98	
610	From where did you obtain the condom the	PUBLIC SECTOR		
	last time?	Government hospital	11	
		Government health center	12	
	PROBE TO IDENTIFY TYPE OF SOURCE	Family planning clinic	13	
		Mobile clinic	14	
	IF UNABLE TO DETERMINE IF PUBLIC	Fieldworker	15	
	OR PRIVATE, WRITE THE NAME OF THE PLACE	Other public sector	16	
		PRIVATE MEDICAL SECTOR		
		Private hospital/clinic	21	
		Pharmacy	22	
	(Name of place)	Private doctor	23	
		Mobile clinic	24	
		Fieldworker	25	
		Other private medical	26	
		OTHER SOURCE		
		Shop	31	
		Church	32	
		Friend/Relative	33	
		Other(specify):	96	

Section 7: Unmet need for family planning/fertility preferences

No.	Question	Answer options	Code	Skip to
701	CHECK 207 (BIRTH IN LAST 5 YEARS?)	One or more		
		No births in last 5 years		707
702	When you got pregnant with (NAME OF	Yes	1	705
	LAST CHILD), did you want to get pregnant	No	2	
	at that time?			
703	Did you want to have a baby later on, or did	Later	1	
	you not want any (more) children?	No more	2	705
704	How much longer did you want to wait?	Months		
		Years		
		Don't know	98	
705	Has your menstrual period returned since the	Yes	1	
	birth of (NAME OF LAST CHILD?	No	2	707
706	For how many months after the birth of	Months		
	(NAME OF LAST CHILD) did you not have			
	a period?	Don't know	98	
707	CHECK 305 (CURRENT METHOD)	NEITHER ARE STERILIZED		708
		HE OR SHE STERILIZED		801
708	CHECK 217 (PREGNANT NOW?)	Pregnant		709
		Not pregnant/not sure		710
709	[PREGNANT] Now I have some questions	Have (a/another) child	1	711
	about the future. After the child you are	No more/none	2	717
	expecting now, would you like to have	Undecided/don't know	8	717
	another child, or would you prefer not to have			
	any more children?			
710	[NOT PREGNANT/NOT SURE] Now I have	Have (a/another) child	1	711
	some questions about the future. Would you	No more/none	2	716
	like to have (a/another) child, or would you	Says she can't get pregnant	3	801
	prefer not to have any more children?	Undecided/don't know	8	716
711	CHECK 217 (PREGNANT NOW?)			
		Months		
	IF NOT PREGNANT OR UNSURE:	Years		
	How long would you like to wait from now			
	before the birth of (a/another) child?	Soon/now	993	717
		Says she can't get pregnant	994	801
	IF PREGNANT:	After marriage	995	717
	After the birth of the child you are expecting	Other	996	717
	now, how long would you like to wait before			
	the child of another child?	Don't know	998	717

No.	Question	Answer options	Code	Skip to
712	CHECK 217 (PREGNANT NOW)	NOT PREGNANT OR UNSURE		713
		PREGNANT		717
713	CHECK 304: USING A CONTRACEPTIVE	NOT CURRENTLY USING		714
	METHOD?	CURRENTLY USING		801
714	CHECK 711 (WAIT HOW LONG?)	NOT ASKED		715
		24+ MONTHS OR 2+ YEARS		715
		0-23 MONTHS OR 0-1 YEARS		717
715	CHECK 710 (WANT A/ANOTHER CHILD)	Not married	А	[ALL TO
	IF WANTS TO HAVE A/ANOTHER	FERTILITY-RELATED REASONS		717]
	CHILD:	Not having sex	В	-
		Infrequent sex	С	
	You said that you do not want (a/another)	Menopausal/hysterectomy	D	
	child soon. Can you tell me why you are not	Can't get pregnant	Е	
	using a method to prevent pregnancy? Any	Not menstruated since last birth	F	
	other reason?	Breastfeeding	G	
		Up to God/fatalistic	Н	
	IF WANTS NO MORE/NONE:	-		
		OPPOSITION TO USE		
	You said that you do not want any (more)	Respondent opposed	Ι	
	children. Can you tell me why you are not	Husband/partner opposed	J	
	using a method to prevent pregnancy? Any	Others opposed	Κ	
	other reason?	Religious prohibition	L	
	RECORD ALL REASONS MENTIONED	LACK OF KNOWLEDGE		
		Knows no method	М	
		Knows no source	N	
		METHOD-RELATED REASONS		
		Side effects/health concerns	0	
		Lack of access/too far	Р	
		Costs too much	Q	
		Preferred method not available	R	
		No method available	S	
		Inconvenient to use	Т	
		Interferes with body's normal process	U	
		Other	Х	
		Don't know	Z	
716	CHECK 304: USING A CONTRACEPTIVE	NOT ASKED		717
	METHOD?	NOT USING		717
		CURRENTLY USING		801
717	Do you think you will use a method to delay	Yes	1	719
	or avoid pregnancy within the next 12	No	2	
	months?	Don't know	8	
718	Do you think you will use a contraceptive	Yes	1	
	method to delay or avoid pregnancy at any	No	2	722
	time in the future?	Don't know	8	801

No.	Question	Answer options	Code	Skip to
719	Which contraceptive method would you	Female sterilization	01	
	prefer to use?	Male sterilization	02	
		IUD	03	
		Injectables	04	
		Implants	05	
		Pill	06	
		Condom	07	
		Female condom	08	
		Emergency contraception	09	
		Standard days method	10	
		Lactational amenorrhea	11	
		Rhythm method	12	
		Withdrawal	13	
		Other modern method	14	
		Other traditional method	15	
		Unsure	98	
720	Would you be willing to pay for (METHOD)?	Yes	1	
		No	2	722
721	How much would you be willing to pay for			
	(METHOD), including all costs?			
			YES NO	
	ASK COST OF ONE PACKET/SERVICE			
	• \$ 5.00?	\$ 5.00	1 2	
	 \$10.00? 	\$10.00	1 2	
	 \$15.00? 	\$15.00	1 2	
	 \$20.00? 	\$20.00	1 2	
	• \$25.00?	\$25.00	1 2	
	• \$30.00?	\$30.00	1 2	
	• More than \$30.00?	More than \$30.00	1 2	
	IF YES: ASK NEXT AMOUNT.			
		IF NO, GO TO		801

No.	Question	Answer options	Code	Skip to
722	What is the main reason that you think you	Not married	01	
	will not use a contraceptive method at any			
	time in the future?	FERTILITY-RELATED REASONS		
		Infrequent sex/no sex	02	
		Menopausal/hysterectomy	03	
		Can't get pregnant	04	
		Wants as many children as possible	05	
		ODDOSITION TO USE		
		DPPOSITION TO USE Begnendent enneged	06	
		Husband/nartnar opposed	00	
		Others opposed	07	
		Religious prohibition	08	
		Kengious promotion	09	
		LACK OF KNOWLEDGE		
		Knows no method	10	
		Knows no source	11	
		METHOD-RELATED REASONS		
		Health concerns	12	
		Fear of side effects	13	
		Lack of access/too far	14	
		Costs too much	15	
		Inconvenient to use	16	
		Interferes with body's normal process	17	
			0.6	
		Other	96	
722	W	Don't know	98	
123	would you ever use a method if you were	Yes		
	married?	No Dau: 24 Jun	2	
		Don't know	8	

Section 8: Other country-specific questions on family planning media exposure and other determinants of contraceptive use

No.	Question	Answer options	Code	Skip to
801	In the last few months have you:			
	a) Heard about family planning on the	Yes	1	
	radio?	No	2	
	b) Seen anything about family planning	Yes	1	
	on the television?	No	2	
	c) Read about family planning in a	Yes	1	
	newspaper or magazine?	No	2	
	d) Received a voice or text message	Yes	1	
	about family planning on a mobile	No	2	
	phone?			
802	QUESTIONS ON EXPOSURE TO	[Country-specific]		
	SPECIFIC MEDIA MESSAGES ABOUT			
	FAMILY PLANNING			
803	QUESTIONS ABOUT OTHER	[Country-specific]		
	DETERMINANTS OF FAMILY			
	PLANNING USE			
	(e.g., norms, attitudes,			
	women's status,			
	husband-wife communication)			

Additional notes

- Sections 1b ("Household characteristics") and 1c ("Household observation") are typically asked as part of a separate household survey. Since cost consideration may not permit doing a separate household survey, we have integrated those questions in the women's questionnaire.
- <u>Measuring use of specific brands</u>: In the model questionnaire for DHS-7 survey, current pill users and condom users are asked which brand they are using; those who do not know the brand are asked to see the package. To reduce the number of missing values for the various brand identification questions, we recommend that respondents who do not know the name of the brand and who cannot produce the package are shown a brand chart for the relevant product as a visual aid. Some earlier DHS surveys have also used brand charts for respondents who do not now the brand name and who cannot show the package. For example, a similar procedure was successfully used in the 1993-94 Bangladesh DHS. That survey yielded only 2% missing values for the pill brand and 14% for the condom brand (Mitra, Nawab Ali, Islam, Cross, & Saha, 1994).
- <u>Contraceptive discontinuation/switching</u>: Measuring contraceptive discontinuation or method switching requires a contraceptive history. However, including a contraceptive history requires extensive interviewer training and also increases the duration of the interviews, which can lead to a substantial increase in the cost of survey implementation. A placeholder for a contraceptive history is provided in section 5.

14. MODEL TMA SERVICE DELIVERY POINT QUESTIONNAIRE

The purpose of this model service delivery point questionnaire is to provide sample questions that can be used to calculate key indicators that will be helpful while planning a Total Market Approach (TMA) for family planning products and services. As such, it aims to collect information about all modern family planning products and services. To ensure that the information collected provides data about all three supply sectors (the public sector, the private non-profit sector and the commercial sector), the aim is to collect data on all brands on the market – including any unbranded public sector products – for all family planning methods.

Since data on market trends are important for TMA planning, it has been attempted to use questions that have also been used on other data sources that could potentially be available. Specifically, questions have been drawn from the DHS Service Provision Assessment (MEASURE DHS, 2012) and from retail audit questionnaires that Population Services International has implemented in several countries (Richter & Meekers, 2000).

The questionnaire will need to be adapted to reflect the family planning methods and brands that are available in each specific country. It is absolutely essential that the adapted country-specific questionnaires are pretested before data collection is attempted. Model service delivery point questionnaire for a total market approach (TMA) for family planning products and services

Acknowledgements

This questionnaire draws heavily on questions from the DHS Service Provision Assessment and from several retail audit questionnaires implemented by Population Services International (PSI). We are grateful to PSI for granting access to those questionnaires, and to Dana Sievers, Nirali Chakraborty, Rebecca Firestone, Kim Longfield, Bram Piot, Brian Shaw and Noah Taruberekera for their assistance and feedback on this model questionnaire.

Introduction

The purpose of this model service delivery point survey questionnaire is to provide sample questions that can be used to calculate key indicators that will be helpful while planning a Total Market Approach (TMA) for family planning products and services. As such, it aims to collect information about all modern family planning products and services. To ensure that the information collected provides data about all three supply sectors (the public sector, the private non-profit sector and the commercial sector), the aim is to collect data on all brands on the market – including any unbranded public sector products – for all family planning methods.

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The questionnaire will need to be adapted to reflect the family planning methods and brands that are available in each specific country. It is absolutely essential that the adapted country-specific questionnaires are pretested before data collection is attempted.

No.	Question	Answer options	Code	Skip to
101	Questionnaire number			
102	Interviewer ID code			
103	Supervisor ID code			
104	Name of service delivery point Name:			
105	Town/city/village Name:			
106	Region/Province			
107	District			
107	Rural/urban area	Rural		
100		Urban	2	
109	Service delivery point ID number	Crown		
110	Type of service delivery point	Hospital		
110	Type of service derivery point	Health center	2	
		Clinic	3	
		Dispensary	<u>З</u> Д	
		Private practice	5	
		Comm Health worker	5	
		Other medical	07	
		Other medical	/	
		Pharmacy	8	
		Drugstore	9	
		Supermarket	10	
		Convenience store	10	
		Kingk	11	
		KIUSK Street vender	12	
		Street vendor	13	
		Other non-modical	14	
111	Type of any archin/managing authority	Covernment/muhlie	13	
111	Type of ownership/managing authority	Government/public	1	
		Drivets/for profit	2	
		Mission /faith based	3	
		Mission/Tattn-based	4	
112	Compiler delivery reside has investigated and	Uther	5	
112	Service derivery point has inpatients only	N0 V	0	
112	What is your position in this actabilishment?	Yes	1	
113	what is your position in this establishment?	Deletine of owner		
		Keiative of owner	2	
		Employee	3	
		Other	4	
114	Interview data	D		
114	Interview date	Day Marti		
		Month		
117		Y ear		
115	Interview result (last visit)	Completed		
		Partially completed	2	
		Kespondent unavailable	3	
		Refused	4	
		Other	5	

Section 1: Service delivery point identification and interview information

Consent¹

FIND THE MANAGER, THE PERSON IN-CHARGE OF THE SERVICE DELIVERY POINT, OR THE MOST SENIOR HEALTH WORKER RESPONSIBLE FOR CLIENT SERVICES WHO IS PRESENT AT THE SERVICE DELIVERY POINT. READ THE FOLLOWING GREETING:

Good day! My name is ______. We are here on behalf of [IMPLEMENTING AGENCY] conducting a survey of health facilities to assist the government in knowing more about health services in [COUNTRY].

Now I will read a statement explaining the study.

Your service delivery point was selected to participate in this study. We will be asking you questions about various health services. Information collected about your service delivery point during this study may be used by the [MOH], organizations supporting services in your service delivery point, and researchers, for planning service improvement or for conducting further studies of health services.

Neither your name nor the names of any other health workers who participate in this study will be included in the dataset or in any report; however, there is a small chance that any of these respondents may be identified later. Still, we are asking for your help to in order to collect this information.

You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation.

If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information.

At this point, do you have any questions about the study? Do I have your agreement to proceed?

Interviewer's signature indicating consent obtained

117	May I begin the interview?	No	0	STOP
		Yes	1	
118	Interview start time	Hours		
		Minutes		

¹ This sample consent statement was reproduced from the DHS model Service Provision Assessment questionnaire (MEASURE DHS, 2012), and will need to be adapted to ensure it conforms to the requirements of the relevant Institutional Review Boards.

Section 2: FP products/services offered

No.	Question	Answer options	Code	Skip
				to
201	Does this service delivery point normally offer any	No	0	1301
	family planning products or services – including	Yes	1	
	modern methods, natural family planning, male or			
	female surgical sterilization?			
202	Which type(s) of contraceptive methods or services	Oral contraceptive pills	А	
	does this service delivery point normally provide?	Male condoms	В	
		Female condoms	С	
		Emergency contraception	D	
		Cycle beads	E	
		Injectables	F	
		Implants	G	
		IUD	Н	
		Female sterilization	Ι	
		Male sterilization	J	
		Other:	K	

Section 3: Oral contraceptives (Pills)

No.	Question	Answer options	Code	Skip
				to
301	Check 202 – Provides oral contraceptives (pills)	No	0	401
		Yes	1	
302	Which of the following oral contraceptive brands did	Commercial brands		
	this service delivery point sell or distribute at any	Brand A	А	
	point during the past three months? ²	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
303	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

² This model questionnaire provides space for up to eight pre-coded brands for each type of contraception. The questionnaire will need to be adjusted to reflect the known number of brands in each country. Since all brands may not be known, it is recommended to always include a category for "other commercial brands" and "other social marketing brands".

	Now I am going to ask you some questions about each of the oral contraceptive (pill) brands you have				
	stocked				
		[Brand A]	[Brand B]	[Brand C]	[Brand D]
304	Check 302 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand
	stocked?	YesQ305	YesQ305	YesQ305	YesQ305
305	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
306	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
307	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days 🗌
	past 30 days?				
308	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		cycles	cycles	cycles	cycles
309	How many cycles of [brand				
	name] do you sell per month?	cycles	cycles	cycles	cycles
310	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q304	Return to Q304	Return to Q304	Return to Q304

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
304	Check 302 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ401
	stocked?	YesQ305	YesQ305	YesQ305	YesQ305
305	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
306	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
307	[If "no"] How many days was				
	[brand name] out of stock in the	days 🗌	days 🗌	days 🗌	days 🗌 🗌
	past 30 days?				
308	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		cycles	cycles	cycles	cycles
309	How many cycles of [brand				
	name] do you sell per month?	cycles	cycles	cycles	Cycles
310	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q304	Return to Q304	Return to Q304	Q401

Section 4: Condoms (male)

No.	Question	Answer options	Code	Skip
				to
401	Check 202 – Provides condoms	No	0	501
		Yes	1	
402	Which of the following condom brands did this	Commercial brands		
	service delivery point sell or distribute at any point	Brand A	Α	
	during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
403	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the condom brands you have stocked				
		[Brand A]	[Brand B]	[Brand C]	[Brand D]
404	Check 402 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand
	stocked?	YesQ405	YesQ405	YesQ405	YesQ405
405	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
406	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
407	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days
	past 30 days?				
408	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		condoms	condoms	condoms	condoms
409	How many [brand name]				
	condoms do you sell per month?	single condoms	single condoms	single condoms	single condoms
410	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q404	Return to Q404	Return to Q404	Return to Q404

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
404	Check 402 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ501
	stocked?	YesQ405	YesQ405	YesQ405	YesQ405
405	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
406	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
407	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days
408	What is the consumer price of			<u>s</u>	
100	[brand name]?	*∟∟∙∟∟			ŶĹĹĹŀĹĹĹ
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		condoms	condoms	condoms	condoms
409	How many [brand name]				
	condoms do you sell per month?	single condoms	single condoms	single condoms	single condoms
410	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q404	Return to Q404	Return to Q404	Q501

No.	Question	Answer options	Code	Skip
				to
501	Check 202 – Provides female condoms	No	0	601
		Yes	1	
502	Which of the following female condom brands did	Commercial brands		
	this service delivery point sell or distribute at any	Brand A	Α	
	point during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
503	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

Section 5: Female condoms

	Now I am going to ask you some questions about each of the female condom brands you have stocked				
		[Brand A]	[Brand B]	[Brand C]	[Brand D]
504	Check 502 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand
	stocked?	YesQ505	YesQ505	YesQ505	YesQ505
505	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
506	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
507	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days
	past 30 days?				
508	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		condoms	condoms	condoms	condoms
509	How many [brand name]				
	condoms do you sell per month?	single condoms	single condoms	single condoms	single condoms
510	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q504	Return to Q504	Return to Q504	Return to Q504

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
504	Check 502 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ601
	stocked?	YesQ505	YesQ505	YesQ505	YesQ505
505	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery point?	Yes1	Yes1	Yes1	Yes1
506	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
507	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days 🗌 🗌	days
	past 30 days?				
508	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		condoms	condoms	condoms	condoms
509	How many [brand name]				
	condoms do you sell per month?	single condoms	single condoms	single condoms	single condoms
510	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q504	Return to Q504	Return to Q504	Q601

Section 6: Emergency contraception

No.	Question	Answer options	Code	Skip
				to
601	Check 202 – Provides emergency contraception	No	0	701
		Yes	1	
602	Which of the following emergency contraception	Commercial brands		
	brands did this service delivery point sell or distribute	Brand A	А	
	at any point during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
603	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the emergency contraception brands you have					
	stocked					
		[Brand A]	[Brand B]	[Brand C]	[Brand D]	
604	Check 602 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand	
	stocked?	YesQ605	YesQ605	YesQ605	YesQ605	
605	Is [brand name] currently	No0	No0	No0	No0	
	available at this service delivery	Yes1	Yes1	Yes1	Yes1	
	point?					
606	In the last 30 days, that is since	No0	No0	No0	No0	
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1	
	[brand name] in stock without					
	interruption?					
607	[If "no"] How many days was					
	[brand name] out of stock in the	days	days	days 🗌		
	past 30 days?					
608	What is the consumer price of	\$	\$	\$	\$	
	[brand name]?					
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	
		units	units	units	units	
609	How many units of [brand name]					
	do you sell per month?	units	units	units	units	
610	How long has this outlet been	Years:	Years:	Years:	Years:	
	offering [brand name]?	Months:	Months:	Months:	Months:	
		Return to O604	Return to O604	Return to O604	Return to O604	

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
604	Check 602 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ701
	stocked?	YesQ605	YesQ605	YesQ605	YesQ605
605	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
606	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
607	[If "no"] How many days was				
	[brand name] out of stock in the	days 🗌		days 🗌 🗌	days 🗌 🗌
	past 30 days?				
608	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		units	units	units	units
609	How many units of [brand name]				
	do you sell per month?	units	units	units	Units
610	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q604	Return to Q604	Return to Q604	Q701

Section 7: Cycle beads

No.	Question	Answer options	Code	Skip
				to
701	Check 202 – Provides cycle beads	No	0	801
		Yes	1	
702	Which of the following cycle bead brands did this	Commercial brands		
	service delivery point sell or distribute at any point	Brand A	Α	
	during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
703	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the cycle bead brands you have stocked				
		[Brand A]	[Brand B]	[Brand C]	[Brand D]
704	Check 702 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand
	stocked?	YesQ705	YesQ705	YesQ705	YesQ705
705	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
706	In the last 30 days that is since	No 0	No 0	No 0	No 0
/00	the [day] of last month was	Ves 1	Vec 1	Ves 1	Vec 1
	[brand name] in stock without	1051	1051	1051	1051
	interruption?				
707	[If "no"] How many days was				
/0/	[In no] now many days was				
	past 30 days?				
708	What is the consumer price of				
708	[brand name]?				
		ner 🗆 🗆	ner 🗆 🗆	ner 🗆 🗆	ner 🗌 🗌
700	How many units of [brand name]				
709	do you call par month?				
710					
/10	How long has this outlet been	Y ears:	Y ears:	Y ears:	Y ears:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q704	Return to Q704	Return to Q704	Return to Q704

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
704	Check 702 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ801
	stocked?	YesQ705	YesQ705	YesQ705	YesQ705
705	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
706	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
707	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days
	past 30 days?				
708	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		units	units	units	units
709	How many units of [brand name]				
	do you sell per month?	units	units	units	Units
710	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
		Return to Q704	Return to Q704	Return to Q704	Q801

Section 8: Injectables

No.	Question	Answer options	Code	Skip
				to
801	Check 202 – Provides injectables	No	0	901
		Yes	1	
802	Which of the following injectable brands did this	Commercial brands		
	service delivery point sell or distribute at any point	Brand A	А	
	during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
803	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the injectable brands you have stocked					
		[Brand A]	[Brand B]	[Brand C]	[Brand D]	
804	Check 802 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand	
	stocked?	YesQ805	YesQ805	YesQ805	YesQ805	
805	Is [brand name] currently	No0	No0	No0	No0	
	available at this service delivery	Yes1	Yes1	Yes1	Yes1	
	point?					
806	In the last 30 days, that is since	No0	No0	No0	No0	
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1	
	[brand name] in stock without					
	interruption?					
807	[If "no"] How many days was					
	[brand name] out of stock in the	days	days	days	days 🗌 🗌	
	past 30 days?					
808	What is the consumer price of	\$	\$	\$	\$	
	[brand name]?					
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	
		unit	unit	unit	unit	
809	How many units of [brand					
	name] do you sell per month?	units	units	units	units	
810	How long has this outlet been	Years:	Years:	Years:	Years:	
	offering [brand name]?	Months:	Months:	Months:	Months:	
811	Does this service delivery point	No0				
	provide injectable services?	Yes1				
812	[If yes] Would a client be able	No0				
	to receive these services today?	Yes1				
813	[If yes] What is the cost of the	\$				
	service?					
814	[If yes] Has the service been	No0				
	available without interruption in	Yes1				
	the past 30 days?					
815	[If no] How many days was the	days				
	service unavailable in the past	·				
	30 days?					
		Return to Q804	Return to Q804	Return to Q804	Return to Q804	

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
804	Check 802 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ901
	stocked?	YesQ805	YesQ805	YesQ805	YesQ805
805	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
806	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
807	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days 🗌 🗌
	past 30 days?				
808	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		units	units	units	units
809	How many units of [brand				
	name] do you sell per month?	units	units	units	Units
810	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
811	Does this service delivery point				
	provide injectable services?				
812	[If yes] Would a client be able				
	to receive these services today?				
813	[If yes] What is the cost of the				
	service?				
814	[If yes] Has the service been				
	available without interruption in				
	the past 30 days?				
815	[If no] How many days was the				
	service unavailable in the past				
	30 days?				
		Return to Q804	Return to Q804	Return to Q804	Q901

Section 9: Implants

No.	Question	Answer options	Code	Skip
				to
901	Check 202 – Provides implants	No	0	1001
		Yes	1	
902	Which of the following implant brands did this	Commercial brands		
	service delivery point sell or distribute at any point	Brand A	А	
	during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	Е	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
903	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the implant brands you have stocked					
		[Brand A]	[Brand B]	[Brand C]	[Brand D]	
904	Check 902 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	Nonext brand	
	stocked?	YesQ905	YesQ905	YesQ905	YesQ905	
905	Is [brand name] currently	No0	No0	No0	No0	
	available at this service delivery	Yes1	Yes1	Yes1	Yes1	
	point?					
906	In the last 30 days, that is since	No0	No0	No0	No0	
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1	
	[brand name] in stock without					
	interruption?					
907	[If "no"] How many days was					
	[brand name] out of stock in the	days 🗌		days	days 🗌 🗌	
	past 30 days?					
908	What is the consumer price of	\$	\$	\$	\$	
	[brand name]?					
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	
		unit	unit	unit	unit	
909	How many units of [brand					
	name] do you sell per month?	units	units	units	units	
910	How long has this outlet been	Years:	Years:	Years:	Years:	
	offering [brand name]?	Months:	Months:	Months:	Months:	
911	Does this service delivery point	No0				
	provide implant services?	Yes1				
912	[If yes] Would a client be able	No0				
	to receive these services today?	Yes1				
913	[If yes] What is the cost of the	\$				
	service?					
914	[If yes] Has the service been	No0				
	available without interruption in	Yes1				
	the past 30 days?					
915	[If no] How many days was the	days 🗌 🗌				
	service unavailable in the past					
	30 days?					
		Return to Q904	Return to Q904	Return to Q904	Return to Q904	

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
904	Check 902 – Was [brand name]	Nonext brand	Nonext brand	Nonext brand	NoQ1001
	stocked?	YesQ905	YesQ905	YesQ905	YesQ905
905	Is [brand name] currently	No0	No0	No0	No0
	available at this service delivery	Yes1	Yes1	Yes1	Yes1
	point?				
906	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
	interruption?				
907	[If "no"] How many days was				
	[brand name] out of stock in the	days	days	days	days
	past 30 days?				
908	What is the consumer price of	\$	\$	\$	\$
	[brand name]?				
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
		units	units	units	units
909	How many units of [brand				
	name] do you sell per month?	units	units	units	Units
910	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
911	Does this service delivery point				
	provide implant services?				
912	[If yes] Would a client be able				
	to receive these services today?				
913	[If yes] What is the cost of the				
	service?				
914	[If yes] Has the service been				
	available without interruption in				
	the past 30 days?				
915	[If no] How many days was the				
	service unavailable in the past				
	30 days?				
		Return to Q904	Return to Q904	Return to Q904	Q1001

Section 10: IUD (Intra-uterine device)

No.	Question	Answer options	Code	Skip
				to
1001	Check 202 – Provides IUD	No	0	1101
		Yes	1	
1002	Which of the following IUD brands or types did this	Commercial brands		
	service delivery point sell or distribute at any point	Brand A	А	
	during the past three months?	Brand B	В	
		Brand C	С	
		Brand D	D	
		Social marketing brands		
		Brand E	E	
		Brand F	F	
		Gov't/public brands		
		Brand G	G	
		Unbranded (no logo) H	Н	
1003	During the past 30 days, that is since [day] of last	No	0	
	month, was there any point during which none of	Yes	1	
	these brands were in stock?			

	Now I am going to ask you some questions about each of the IUD brands or types you have stocked				
		[Brand A]	[Brand B]	[Brand C]	[Brand D]
1004	Check 1002 – Was [brand	Nonext brand	Nonext brand	Nonext brand	Nonext brand
	name] stocked?	YesQ1005	YesQ1005	YesQ1005	YesQ1005
1005	Is [brand name] currently	No0	No0	No0	No0
	available at this service	Yes1	Yes1	Yes1	Yes1
	delivery point?				
1006	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
1007	interruption?				
1007	[If "no"] How many days was				
	[brand name] out of stock in				
1008	What is the consumer price of				
1008	[brand name]?		◈∟∟⊡	◈∟∟・∟∟	≗∟∟⊡
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
1009	How many units of [brand				
1009	name] do you sell per month?	units	units	units	Units
1010	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
1011	Does this service delivery	No0			
	point provide IUD services?	Yes1			
1012	[If yes] Would a client be able	No0			
	to receive these services	Yes1			
	today?				
1013	[If yes] What is the cost of the	\$			
	service?				
1014	[If yes] Has the service been	No0			
	available without interruption	Yes1			
	in the past 30 days?				
1015	[If no] How many days was				
	the service unavailable in the				
	past 30 days?	Determent	Determent	Deferred	Determine
		Return to	Return to	Return to	Return to
1		Q1004	Q1004	Q1004	Q1004

	(Continued)				
		[Brand E]	[Brand F]	[Brand G]	[Brand H]
1004	Check 1002 – Was [brand	Nonext brand	Nonext brand	Nonext brand	NoQ1101
	name] stocked?	YesQ1005	YesQ1005	YesQ1005	YesQ1005
1005	Is [brand name] currently	No0	No0	No0	No0
	available at this service	Yes1	Yes1	Yes1	Yes1
	delivery point?				
1006	In the last 30 days, that is since	No0	No0	No0	No0
	the [day] of last month, was	Yes1	Yes1	Yes1	Yes1
	[brand name] in stock without				
1007	interruption?				
1007	[If "no"] How many days was				
	[brand name] out of stock in				
1008	What is the consumer price of	¢□□□□	¢□□□□	¢□□□□	
1008	[brand name]?	⁰∟∟⊡		◈∟∟⊡	
		per 🗌 🗌	per 🗌 🗌	per 🗌 🗌	per 🗌 🗌
1009	How many units of [brand				
	name] do you sell per month?	units	units	units	Units
1010	How long has this outlet been	Years:	Years:	Years:	Years:
	offering [brand name]?	Months:	Months:	Months:	Months:
1011	Does this service delivery				
	point provide IUD services?				
1012	[If yes] Would a client be able				
	to receive these services				
	today?				
1013	[If yes] What is the cost of the				
	service?				
1014	[If yes] Has the service been				
	available without interruption				
1015	in the past 30 days?				
1015	[If no] How many days was				
	the service unavailable in the				
	past 50 days?	Dotum to	Dotum to	Dotume to	01101
		O10042	O1004	O1004	QIIUI
1		Q10045	Q1004	Q1004	

No. Question Code Skip Answer options to 1101 Check 202 – Provides female sterilization No 0 1201 Yes 1 1102/11 [Not used] 1112 Would a client be able to receive female 0 No sterilization services today? Yes 1 1113 What is the cost of the service? \$ 1114 In the last 30 days, that is since the [day] of last No 0 month, were female sterilization services available, Yes 1 without interruption? 1115 [If "no"] How many days were female sterilization services not available in the past 30 days? days How many female sterilizations does this service 1116 units delivery point provide per month?

Section 11: Female Sterilization

No. Question Code Answer options Skip to 1201 Check 202 – Provides male sterilization 1302 No 0 Yes 1 1202/11 [Not used] 1212 Would a client be able to receive male sterilization 0 No services today? Yes 1 1213 What is the cost of the service? \$ 1214 In the last 30 days, that is since the [day] of last No 0 month, were male sterilization services available Yes 1 without interruption? 1215 [If "no"] How many days were male sterilization services not available in the past 30 days? days 1302 1216 How many male sterilizations does this service units delivery point provide per month?

Section 12: Male Sterilization

		. 0 1				
No.	Question			Answer options	Code	Skip
						to
1301	What is the main reason w	hy this service de	elivery	No demand	1	
	point does not provide contraceptive products or		No supply	2		
	services?			Too expensive to stock	3	
				Profit margin too small	4	
				Not relevant for business	5	
				Opposes FP	6	
				Other:	7	
1302	Interview end time			Hours		
				Minutes		
	Thank your respondent and	d move to the nex	t service			
	delivery point					

Section 13: Reasons for not providing FP products/services
- Questions 811-815 (in reference to injectables services) assume that even though there may be different brands of injectables, only one type of service is offered. In other words, it assumes that the actual service (as distinct from the contraceptive commodity) is not brand-specific. This is also the case for questions 911-915 (on contraceptive implant services), and 1011-1015 (on IUD services). If there is reason to believe that the cost and availability of the service itself is also brand-specific, then these questions should be asked separately for each brand.
- Question 409 (number of male condoms sold) and 509 (number of female condoms sold) should be recorded in single units. Interviewers should be instructed and trained to convert the number of 3-packs, 12-packs etc. to single units.

15. INDICATOR REFERENCE SHEETS

Indicator	Total number of each type of family planning product/service needed to meet the demand for family planning (universe of need for family planning)
Definition	Total number of each type of family planning product/service needed to meet the demand for family planning (universe of need).
Method of measurement	Universe of need is calculated by multiplying the population at risk, the time at risk, the number of products or services needed to cover the time at risk, and the method mix for the population of interest.For family planning, the population at risk is defined as all women of reproductive age (15-49) who are currently using family planning or who have an unmet need for family planning. The time at risk for the calculation is one year. The number of products or services needed to protect a woman from pregnancy for one year is given by couple years of protection. The method mix refers to the distribution of contraceptive users by method.
Unit of measurement	Number
Use of indicator	Universe of need for family planning can be used as an estimate of the potential market size. It can also be used in comparison with current market volume to assess the extent to which the current market meets the need for family planning products and services.
Data sources	Population-based surveys, service statistics, CYP conversion factor estimates
Known data limitations/issues	Because demand or preference for a specific method may change rapidly and data are often several years old, universe of need estimates may not reflect the current situation. Universe of need estimates are based on current method mix, which may not reflect users' real method preference. There are also concerns about the accuracy and validity of CYP conversion factors.
Comments	Universe of need estimates are most valuable when considered in conjunction with information on market volume, access, user preference, and unmet need. These factors can help to determine the reasons that the current market does not meet the universe of need and identify the most effective approaches to remedy this.

Indicator	Total number of each type of family planning product/service sold, distributed, or provided across all supply sectors (market volume)
Definition	The total number of products or services sold, distributed, or provided across all sectors (public, nongovernmental organization (NGO), commercial).
Method of measurement	Market volume should include all products on the market in a given year, regardless of cost. Total market volume will include any free products distributed as well as any products sold. The total market should be calculated by adding the total number of free products distributed, the total number of products/services sold at a subsidized cost or at cost recovery levels, and the total number of products/services sold for profit. When calculating market volume, it is important that each product is counted in the correct units. For example, condoms may be sold in packs of three; this will need to be taken into account to avoid underreporting. Volume should be reported in single units. The following volumes are counted as one single unit: - Condoms: one condom - Oral contraceptives: one 28-day cycle of pills
Unit of measurement	For each product/service, number of single units
Use of indicator	Market volume is an important indicator of market size. It is used for assessing how the market is currently meeting the need for family planning products/services, analyzing market composition and composition of market sources over time, and calculating other indicators, including market value and other subsidy indicators.
Data sources	For non-clinical methods, data sources include service statistics, including government reports, marketing data, and sales reports. For clinical methods, data sources should include data from clinics on how many procedures were completed (e.g., injections, IUD insertions, surgeries for sterilization) and which types of products and brands were used for these services. Import data is not an appropriate data source for market volume, as import data include stock that are not yet on the market. When beginning a TMA analysis, we recommend creating a list of all major entities of family planning products (e.g. government, different nongovernmental organizations, commercial companies, etc.) and then obtaining data for each entity. When sales data for commercial companies are unavailable, it may be possible to obtain estimates from key informant interviews. Key informants should be market experts who have extensive experience and familiarity with the market and understand changes that may be occurring. It is recommended that market data will be reported by calendar year. Most providers will collect/record sales and distribution data on either a monthly or quarterly basis, which can easily be converted to annual (calendar) data.
Known data limitations/issues	Data from commercial companies are often difficult to access. If data from the commercial sector are not available, they must be estimated. Estimates may not reflect the current market situation. Data from different sectors are of varying qualities and may be collected infrequently. Information on how the data were collected is often unavailable. Products or services distributed for free by small private companies or foundations may be easy to overlook. Sometimes, only import data are available; import data should not be used for market volume calculations since the number of products imported is often very different from the number distributed or sold. Finally, converting all data to single units can be complex and time consuming.
Comments	Disaggregation by region and urban/rural would be very informative, but is often not possible because social marketing programs typically only track sales to large distributors (rather than to retailers), which may serve multiple regions.

Indicator	Percentage of sexually active women currently using each type of family planning method
Definition	Percentage of sexually active women who currently use each type of family planning method.
Method of measurement	 For each family planning product, the numerator is the number of sexually active females aged 15-49 who currently use the product. The denominator is the total number of sexually active females aged 15-49. Example: The percentage of sexually active women who currently use oral contraceptives equals the number of women who report currently using oral contraceptives, divided by the total number of sexually active women aged 15-49.
Unit of measurement	Percentage
Use of indicator	Trends in the percentage of women who use each method type can help indentify the method that have the most potential for market growth and profit.
Data sources	Population-based surveys
Known data limitations/issues	This indicator is subject to the same limitations as all population-based survey data, including incomplete data and poor data quality, among others.
Comments	

Indicator	Percentage of sexually active women who currently use contraceptives (contraceptive prevalence rate)
Definition	The percentage of sexually active women of reproductive age using a contraceptive method.
Method of measurement	The numerator is the number of sexually active women aged 15-49 who currently report using a family planning method, irrespective of the type of method. It is important that the numerator includes women who are using both traditional and modern methods, as women using traditional methods are potential future consumers of modern methods.
	The denominator is the total number of sexually active women aged 15-49. Sexually active women are defined as women who reported having sex in the last 12 months.
	In standardized surveys such as the DHS, information for the numerator is derived from the questions "Are you or your partner currently doing something or using any method to delay or avoid getting pregnant". The denominator is derived from the question "How long ago did you last have sexual intercourse".
Unit of measurement	Percentage
Use of indicator	CPR reflects the current number of consumers of FP products and services, an important piece of information for estimating potential market growth and potential profit.
Data sources	Population-based surveys
Known data limitations/issues	CPR is vulnerable to the same limitations as all population-based survey data, including incomplete data and poor data quality, among others. As an indicator of market size, CPR itself focuses only on the current market. It does not take into consideration unmet need for family planning, which may account for many potential future consumers.
Comments	Note that although CPR is sometimes calculated as a percentage of all women of reproductive age, this is not advised as it would include women who are not sexually active in the denominator, which will lead to an underestimation of contraceptive prevalence. Instead, we recommend using sexually active women in the denominator, as this is a better proxy for the population at risk of pregnancy.
	Often the CPR is calculated only for women who are married or in union. For TMA analyses this is not recommended because excluding sexually active unmarried women would exclude many current users of family planning methods. Instead it is recommended to calculate the CPR for all sexually active women and to subsequently disaggregate the results by marital status.

Indicator	Percentage distribution of contraceptive users by family planning method (contraceptive method mix)
Definition	The percentage distribution of contraceptive users by method.
Method of measurement	For each method, the numerator is the number of all sexually active women ages 15-49 who reported currently using each family planning method. The denominator should be all sexually active women ages 15-49 who currently use any method of family planning. Sexually active women are defined as women who reported having sex in the last 12 months.
Unit of measurement	Percentage distribution
Use of indicator	Method mix may reflect user preferences. However, it may also reflect provider preferences for a certain product, social bias regarding gender responsibility in family planning, or a bias towards certain methods due to religious or cultural beliefs. Method mix is necessary for calculating the universe of need for each family planning product or service. It is also used by governments and family planning programs to make decisions about commodities in order to plan for the future.
Data sources	Population-based surveys, service statistics
Known data limitations/issues	Method mix is vulnerable to the same limitations as all population-based survey data, including incomplete data and poor data quality, among others. As an indicator of market size, CPR itself focuses only on the current market. Method mix in itself does not yield any insight into why certain methods are being used over others. More investigation is needed to determine the drivers of method mix in a country at any given time.
Comments	

Indicator	Percentage of sexually active women with an unmet need for family planning (total unmet need)
Definition	The percentage of women aged 15-49 who do not want to become pregnant but are not using any form of contraception.
Method of measurement	The total unmet need for family planning equals the sum of the unmet need for spacing births and the unmet need for limiting births. The numerator for total unmet need is the sum of the number of women aged 15-49 who have an unmet need for spacing births and the number of women who have unmet need for limiting births (see respective reference sheets). The specific calculation of the unmet need for spacing and limiting births has changed over the years. We recommend using the revised calculation methods provided by DHS because it can be used for a wider range of surveys (Bradley et al., 2012). The denominator consists of all women aged 15-49.
Unit of measurement	Percentage
Use of indicator	Unmet need can provide insight on the potential market size. A high percentage of women with an unmet need for family planning indicates a good potential for market growth. Other indicators, such as knowledge of a family planning source, access to family planning, and cost, can help identify causes of unmet need and determine the most effective approach for closing this gap.
Data sources	Population-based surveys
Known data limitations/issues	Calculation for unmet need must take into account that some women may be pregnant, infecund, or postpartum amenorrheic, and is therefore complex, using more than 15 separate survey questions. In addition, because precise definition of unmet need has changed over time, published estimates of unmet need may not be comparable. The revised definition of unmet need (Bradley et al., 2012) ensures that the indicator can be calculated for both recent and older DHS and MICS surveys.
Comments	To obtain an accurate estimate of the unmet need for family planning, both married and unmarried women should be included in the calculation.

Indicator	Percentage of sexually active women with an unmet need for birth spacing
Definition	The percentage of women of reproductive age who want to delay pregnancy, but are not using any form of contraception.
Method of measurement	We recommend using the revised calculation methods provided by DHS because it can be used for a wider range of surveys (Bradley et al., 2012).
	The numerator consists of the number of women aged 15-49 who have an unmet need for birth spacing. The calculation of this number is very complex, and involves information on the preferred timing of women's last birth, on the preferred timing of women's current pregnancy, their current use of family planning, and their fecundity status. For details about the exact calculation, see Bradley et al. (2012). SPSS and STATA code to calculate the number of women with an unmet need for birth spacing is available at http://dhsprogram.com/topics/unmet-need.cfm .
	The denominator consists of all women aged 15-49.
Unit of measurement	Percentage
Use of indicator	Because the need for birth spacing is most common among younger married women, and among women with fewer children, a high unmet need for birth spacing may indicate a need for short-term family planning methods. This could indicate that appropriate short-term methods are not widely accessible or are too expensive. A high unmet need for birth spacing may also imply a need for targeting marketing activities to this demographic.
Data sources	Population-based surveys
Known data limitations/issues	Calculation for unmet need must take into account that some women may be pregnant, infecund, or postpartum amenorrheic, and is therefore complex, using more than 15 separate survey questions. In addition, because precise definition of unmet need has changed over time, published estimates of unmet need may not be comparable. The revised definition of unmet need (Bradley et al., 2012) ensures that the indicator can be calculated for both recent and older DHS and MICS surveys.
Comments	To obtain an accurate estimate of the unmet need for birth spacing, both married and unmarried women should be included in the calculation.

Indicator	Percentage of sexually active women with an unmet need for family limitation
Definition	The percentage of women of reproductive age who do not want any more children or did not want the last pregnancy or birth but who are not using any form of contraception.
Method of measurement	We recommend using the revised calculation methods provided by DHS because it can be used for a wider range of surveys (Bradley et al., 2012).
	The numerator consists of the number of women aged 15-49 who have an unmet need for family limitation. The calculation of this number is very complex, and involves information on the preferred timing of women's last birth, on the preferred timing of women's current pregnancy, their current use of family planning, and their fecundity status. For details about the exact calculation, see Bradley et al. (2012). SPSS and STATA code to calculate the number of women with an unmet need for family limitation is available at http://dhsprogram.com/topics/unmet-need.cfm .
	The denominator is the total number of women aged 15-49.
Unit of measurement	Percentage
Use of indicator	Because the need for limiting is most common among older women who have already achieved their desired family size, a high unmet need for limiting may indicate a need for long-term family planning methods. This could indicate that appropriate long-term methods are not widely accessible or are too expensive. A high unmet need for limiting may also imply a need for targeted marketing to this demographic.
Data sources	Population-based surveys
Known data limitations/issues	Calculation for unmet need must take into account that some women may be pregnant, infecund, or postpartum amenorrheic, and is therefore complex, using more than 15 separate survey questions. In addition, because precise definition of unmet need has changed over time, published estimates of unmet need may not be comparable. The revised definition of unmet need (Bradley et al., 2012) ensures that the indicator can be calculated for both recent and older DHS and MICS surveys.
Comments	To obtain an accurate estimate of the unmet need for family limitation, both married and unmarried women should be included in the calculation.

Indicator	Percentage of women of reproductive age who know at least one family planning source
Definition	Percentage of women of reproductive age who know at least one source of family planning products or services.
Method of measurement	The numerator consists of the total number of women aged 15-49 who respond that they know of a place where a family planning method can be obtained. The denominator is the total number of women aged 15-49.
Unit of measurement	Percentage
Use of indicator	This indicator may be used to assess the need for family planning education or to market family planning products or services. Disaggregation by region, urban/rural status, education, and age can help identify areas where marketing and promotion should be targeted. If lack of access is shown to be a significant reason for non-use of family planning, this indicator can aid in understanding the extent to which lack of knowledge contributes to non-use.
Data sources	Population-based surveys
Known data limitations/issues	Although knowledge of a source is necessary for obtaining family planning, it is not sufficient. A woman may have knowledge of a source but may not be able to travel there, may not be able to afford products, or may face other social or cultural limitations in obtaining contraception. Additionally, this indicator does not provide insight into levels of knowledge of a preferred family planning method.
Comments	Some sources suggest restricting this indicator to use of a modern contraceptive method. However, this would require a more complex set of survey questions and would make the indicator inconsistent with information collected by other large population-based surveys, such as DHS.

Indicator	Percentage of current female family planning users who last obtained their method from each supply sector
Definition	Percentage of current female family planning users who last obtained their method from each supply sector (public, non-governmental, and commercial).
Method of measurement	 For each family planning product, the numerator is the number of females currently using the product who reported using a commercial brand, a social marketing brand, or a government brand (or unbranded product). The denominator consists of women currently using each family planning product. Example: The percentage of oral contraceptive users who last obtained their method from the commercial sector is calculated as the number of oral contraceptive users who report using a commercial brand, divided by the total number of women who currently use oral contraceptives. For each family planning service, the numerator is the number of females currently using the family planning service (e.g., male sterilization) who report that they obtained this service from a government source or a commercial source. The denominator equals the number of women currently using a family planning service.
Unit of measurement	Percentage distribution
Use of indicator	This indicator can be used to identify the proportion of the population relying on each sector for specific family planning products and services. We would expect that these percentages roughly match the market volume percentages by sector. However, unlike distribution and sales figures, this indicator may give more insight into which products are actually being used by consumers.
Data sources	Population-based surveys
Known data limitations/issues	Many consumers may be unsure of the brand of the product, which may skew results. In some countries, popular brands have become synonyms for the product name, which could result in an over-reporting of these brands (Harvey, 1999). These errors may be hard to identify and when identified, hard to quantify, which can raise questions about the reliability of the indicator. Sources of family planning services present another set of complex challenges. First, it may be difficult to distinguish partially subsidized (social marketing) services from commercial services. Second, the brands or source of the specific products used in service delivery (i.e., brands of IUDs or injectables) cannot be discerned from this indicator. Finally, both public sector sources and non-governmental sources may vary with regard to cost of services, which may limit the indicator's usefulness as a sustainability measure.
Comments	Extracting meaningful data from these survey questions requires knowledge of brands and appropriate coding.

Indicator	Percentage of female non-users who report lack of access as the reason for not using family planning
Definition	Percentage of sexually active females not currently using family planning who report lack of access as the reason for non-use.
Method of measurement	Standardized surveys, such as the Demographic and Health Surveys, ask women aged 15- 49 who do not want to get pregnant but who are not using any form of family planning about the reason why they are not using family planning. The numerator for this indicator is the number of women who respond that the reason they are not using a family planning method is a lack of access to family planning. The denominator is calculated as the number of females ages 15-49 who do not want to get pregnant but who are not using any form of contraception.
Unit of measurement	Percentage
Use of indicator	This indicator can provide clarity on the reasons behind unmet need. Disaggregation by age, wealth, income, urban/rural status, and region can give further insight on how approaches to meeting this need could be appropriately targeted to have the greatest impact. A high percentage of non-use due to lack of access may signal problems with distribution.
Data sources	Population-based surveys
Known data limitations/issues	This indicator is limited by women's knowledge of existing family planning sources; a lack of knowledge about family planning sources could result in the belief that a preferred method is not available. Non-use of family planning often involves many complex factors that cannot be captured by the answer options available in a standardized survey. Even when lack of access to family planning is an important reason for non-use, improving access may not lead to increased use of family planning, as there may be additional obstacles that limit use.
Comments	Interpretation of this indicator can be enriched by data on geographic access to family planning sources.

Indicator	Percentage of female non-users who report cost as the reason for not using family planning
Definition	Percentage of sexually active females not currently using family planning who report cost as the reason for non-use.
Method of measurement	Standardized surveys, such as the Demographic and Health Surveys, ask women aged 15-49 who do not want to get pregnant but who are not using any form of family planning about the reason why they are not using family planning.The numerator for this indicator is the number of women who respond that the reason they are not using a family planning method is the cost of family planning.The denominator is calculated as the number of females ages 15-49 who do not want to get pregnant but who are not using any form of contraception.
Unit of measurement	Percentage
Use of indicator	This indicator can provide clarity on the reasons behind unmet need. Disaggregation by age, wealth, income, urban/rural status, and region can give further insight on how approaches to meeting this need could be appropriately targeted to have the greatest impact. A high percentage of non-use due to the cost may signal a need for subsidized products and/or services.
Data sources	Population-based surveys
Known data limitations/issues	This indicator is depends on women's knowledge of the cost of a range of available family planning products and services. Incomplete or inaccurate knowledge about the actual cost of various available family planning products and services may lead women to believe that they cannot afford family planning. Non-use of family planning often involves many complex factors that cannot be captured by the answer options available in a standardized survey. Even when the cost of family planning is an important reason for non-use, increasing the availability of affordable products and services may not lead to increased use of family planning, as there may be additional obstacles that limit use.
Comments	

Indicator	Percentage of female contraceptive users who would be willing to pay a specific amount for their current contraceptive method
Definition	Percentage of female contraceptive users aged 15-49 who would be willing to pay a specific amount for their current contraceptive method.
Method of measurement	 Willingness to pay is calculated separately for each contraceptive method. The calculation is this indicator is based survey questions about a user's current method. Users of each method are asked whether they would be willing to pay \$0.50, \$1.00, \$1.50, etc. for a specific unit of product. The numerator is the number of female users 15-49 who would be willing to pay a specific amount for their method. The denominator is the total number of females 15-49 currently using each contraceptive method (including those who are not willing to pay).
	Example: The percentage of oral contraceptive users who would be willing to pay \$3.00 for one packet (cycle) of pills is calculated as the number of OC users who would be willing to pay \$3.00 or more, divided by the total number of OC users.
Unit of measurement	Percentage
Use of indicator	 Willingness to pay for family planning is an important part of market sustainability and of a total market approach. A high willingness to pay may indicate that products are over-subsidized and that efforts should be made to ensure that those who are willing to pay are using unsubsidized products. A high willingness to pay may also encourage increased commercial participation in the market. A low willingness to pay may indicate several things. First, it is possible that many people do not have the ability to pay for family planning. In this case, efforts should be made to target these populations with subsidized products. A low willingness to pay may also indicate that the market is flooded with free products, and people are not willing to pay for something they consider free, even if they have the ability to do so. In this case, better targeting of both subsidized and unsubsidized products is necessary. Marketing of unsubsidized brands may also encourage those with the ability to pay to use unsubsidized products. Disaggregation of this indicator by region, urban/rural status, age, and other demographic characteristics may help to develop a targeted approach.
Data sources	Population-based surveys
Known data limitations/issues	This indicator does not give insights about the reasons why people are willing (or unwilling) to pay for family planning, which is necessary for making decisions about marketing and targeting.
Comments	

Indicator	Percentage of women of reproductive age who report living within two hours of the nearest family planning source (geographic access)
Definition	Percentage of women who report living within two hours of the nearest family planning source (among women who are not currently using family planning).
Method of measurement	The numerator is the number of women who report living within two hours of a family planning source, among women who are not currently using family planning. The denominator is the number of females aged 15-49 who are not currently using family planning.
Unit of measurement	Percentage
Use of indicator	Understanding geographic access to family planning can help make decisions about how locations of new family planning services or retail outlets could be strategically placed to improve equitable access. Alternately, this indicator could help develop targeted distribution strategies to reach these women.
Data sources	Population-based surveys
Known data limitations/issues	This indicator reflects women's perceived access, which may not correspond with actual access. For example, women may not know about all family planning sources, which may lead them to incorrectly believe that there are no sources nearby. In addition, although women may know a family planning source that is nearby, the nearest source does may not offer their preferred method.
Comments	

Indicator	Percentage of female non-users who report unavailability of their preferred family planning method as the reason for not using family planning
Definition	Percentage of sexually active females not currently using family planning who report unavailability of their preferred family planning method as the reason for not using family planning.
Method of measurement	Standardized surveys, such as the Demographic and Health Surveys, ask women aged 15- 49 who do not want to get pregnant but who are not using any form of family planning about the reason why they are not using family planning.
	they are not using a family planning method is the unavailability of their preferred family planning method.
	The denominator is calculated as the number of females ages 15-49 who do not want to get pregnant but who are not using any form of contraception.
Unit of measurement	Percentage
Use of indicator	This indicator can provide clarity on the reasons behind unmet need. Disaggregation by preferred family planning method, as well as demographic characteristics such as age, wealth, income, urban/rural status, and region, can give further insights about the groups of women who have problems accessing their preferred method.
Data sources	Population-based surveys
Known data limitations/issues	This indicator is limited by women's knowledge of existing family planning sources; a lack of knowledge about family planning sources could result in the belief that a preferred method is not available.
	Non-use of family planning often involves many complex factors that cannot be captured by the answer options available in a standardized survey. Even when lack of access to one's preferred family planning method is an important reason for non-use, improving access to the preferred method may not lead to increased use of family planning, as there may be additional obstacles that limit use.
Comments	

Indicator	Percentage of delivery points that report a stockout of each specific family planning method in the past month
Definition	The percentage of family planning delivery points that report experiencing a product stockout for a specific family planning method in the past 30 days.
Method of measurement	For each type of family planning product, the denominator consists of the number of delivery points offering the family planning product.
	product in the past 30 days.
Unit of measurement	Percentage
Use of indicator	Assess the extent to which problems with specific types of family planning service delivery may cause a lack of access. Identify geographical areas that have an above average frequency of gaps in family planning services.
Data sources	Retail audit surveys of family planning delivery points.
Known data limitations/issues	Because this indicator relies on recall by informants, it is subject to common recall errors.
Comments	Family planning outlets may not keep records on product stockouts. These types of data are not routinely available and may be expensive and time consuming to collect. Additional information about causes of the stockouts is needed to identify needs and inform resource allocation.

Indicator	Percentage of providers reporting gaps in availability of each specific family planning service in the past month
Definition	The percentage of service providers that report experiencing a gap in services for a specific family planning method in the past 30 days.
Method of measurement	For each method, the denominator is the number of delivery points that offer services for a specific family planning method. The numerator is the number of those delivery points that reported that there was a gap in service availability for that specific family planning method in the past 30 days.
Unit of measurement	Percentage
Use of indicator	Assess the extent to which problems with specific types of family planning services may cause a lack of access. Identify geographical areas that have an above average frequency of gaps in family planning services.
Data sources	Surveys of family planning and service providers (i.e. clinics, health centers, etc.)
Known data limitations/issues	Because this indicator relies on recall by informants, it is subject to common recall errors.
Comments	Clinics and other family planning outlets may not regularly collect information on service gaps. These types of data are not routinely available and may be expensive and time consuming to collect. Additional information about causes of service gaps is needed to identify needs and inform resource allocation.

Indicator	Total market value of all family planning products and services sold
Definition	Total market value of all family planning products and services sold.
Method of measurement	The total market value of all family planning product and services is obtained by summing the market value of each specific product or service.
	For each type of family planning product, the market value will be the market volume (number of units) multiplied by the cost to the consumer per unit. If the product is sold in different package sizes, the calculation should include the market volume and consumer cost of each package size.
	Each brand (and brand extension where applicable) should be calculated separately, to account for difference in prices.
	Example: The market value for condoms of Brand A equals the number of single units of Brand A condoms sold multiplied by the average retail price of a single Brand A condom, plus the number of 3-packs of Brand A condoms sold multiplied by the average retail price of a 3-pack of Brand A condoms.
	The total market value for condoms equals the sum of the market value for each condom brand and brand extension.
	For each type of family planning service, the market value would be the cost to consumer for the service multiplied by the number of services provided. Where possible, data should be separated into the cost of the product or device, and the cost of the clinical service.
Unit of measurement	Dollar value (or other currency)
Use of indicator	Market value can serve as an indicator of market growth and may reflect a willingness to pay for family planning products and services. Because a high market value may encourage commercial interest in the market, it also indicates the level of market sustainability. Examining market value over time can provide an idea of how the market has grown. For clinical services, separating data into the cost of the product or device and the cost of the clinical service can give insight into how costs are distributed and where there may be potential for growth.
Data sources	For non-clinical methods, data sources for the market volume include service statistics, including government reports, marketing data, and sales reports, while the data sources for the product cost are obtained from retail audits or distribution surveys.
	For clinical methods, data sources should include statistics from clinics and other facilities on the number of procedures that were completed and the cost of the procedure. Cost estimates can also be obtained from household surveys.
Known data limitations/issues	Detailed information on market volume by brand, brand extension, and package size may not be available, particularly for commercial products. As a result, estimates have to be made, which may or may not reflect the true state of the market. Second, prices of clinical services may be difficult to collect, and may differ widely by clinic and region. Finally, it is difficult to disaggregate market value by region, which may make it difficult to identify specific areas that have potential for market growth.
Comments	Where brand-specific pricing data cannot be obtained, the average price of each specific family planning product can be used to give a very rough estimate of market value.

Indicator	Percentage of each type of family planning products/services provided by the market leader
Definition	Percentage of each type of family planning products/services provided by the market leader .
Method of measurement	The market leader's market share is calculated separately for each type of family planning product and service. For each family planning product or service, the numerator equals the volume of that product or service that was provided by the market leader (defined as the entity that accounts for the greatest market volume of that product or service). The denominator consists of total market volume for the relevant product or service.
Unit of measurement	Percentage
Use of indicator	This indicator can be used to assess the extent to which the market is dominated by a single player. Domination of the market by a single source can lead to many problems, including vulnerability to stockouts and shortages. Markets dominated by the government or by subsidized products or services can also inhibit participation by the commercial sector, thereby limiting sustainability. If a market leader accounts for more than 30-40% of the market and is distributing subsidized products, implementation should focus on shifting those who are able to pay to commercial products using targeted marketing.
Data sources	Service statistics
Known data limitations/issues	The indicator does not take into account the amount that consumers are willing and able to pay for family planning products or services. In very low-income countries, many consumers may not be able to afford to pay for family planning products, which may justify a reliance on free and subsidized product.
Comments	It is important to remember that the same supplier may distribute multiple brands and brand extensions; the market volume of each brand must be considered as part of the total volume.

Indicator	Total number of unsubsidized brands of each family planning product on the market
Definition	Total number of unsubsidized brands of each family planning product on the market.
Method of measurement	For each family planning product, the total number of unsubsidized (neither fully nor partially subsidized) brands and brand extensions on the market during a given time period. The calculation should include commercial brands that are sold for profit as well as any brands sold by nongovernmental organizations at full cost recovery.
Unit of measurement	Number
Use of indicator	This indicator can be used in conjunction with other indicators to assess how the commercial market is growing over time.
Data sources	Service statistics
Known data limitations/issues	In itself, the number of unsubsidized brands has little meaning for market sustainability. In order to provide insight, trends in this indicator must be examined over several years, which may not be possible.
Comments	Brand extensions are a key component of the calculation, since they indicate growth of existing unsubsidized brands.

Indicator	Percentage of the total market volume of each family planning product accounted for by unsubsidized brands
Definition	Percentage of the total market volume of each family planning product accounted for by unsubsidized brands.
Method of measurement	The numerator is the market volume of unsubsidized brands. This estimate should include the market volume of commercial brands that are sold for profit as well as the market volume of any brands sold by nongovernmental organizations at full cost recovery. The denominator is the total market volume.
Unit of measurement	Percentage
Use of indicator	The percentage of the market accounted for by unsubsidized brands can serve as an indicator of market health. A market dominated by subsidized brands may discourage market growth and sustainability by inhibiting participation of the commercial sector. Assessed over time, this indicator may signal market growth. An increase may indicate an increase in consumer willingness to pay for family planning products.
Data sources	Service statistics
Known data limitations/issues	This calculation requires that all market volume data be disaggregated by brand; without this level of detail, estimates will not be accurate.
Comments	

Indicator	Percentage of female users of family planning products who report using an unsubsidized brand
Definition	Percentage of female users of family planning products who report using an unsubsidized brand .
Method of measurement	The level of use of unsubsidized family planning products is calculated separately for each type of family planning product. For each family planning product, the numerator is the number of sexually active females aged 15-49 who currently use the product and who report that they are using unsubsidized brand. Unsubsidized brands should include commercial brands that are sold for profit as well as any brands sold by nongovernmental organizations at full cost recovery. The denominator is the total number of sexually active females aged 15-49 who report that they are currently using the relevant family planning product.
Unit of measurement	Percentage
Use of indicator	The use of unsubsidized family planning products is another way to examine the percentage of family planning users who rely on unsubsidized products. Discrepancy between this indicator and market volume data should be examined, as it may reflect wastage of distributed products, an association of the product with a specific brand (typically due to marketing campaigns), or another reason for the difference between reports of distribution and use.
Data sources	Population-based surveys, ad hoc surveys
Known data limitations/issues	Many consumers may be unsure of the brand of the product, which may skew results. In some countries, popular brands have become synonyms for the product name, which could result in an over-reporting of these brands (Harvey, 1999). These errors may be hard to identify and when identified, hard to quantify, which can raise questions about the reliability of the indicator.
Comments	

Indicator	Percentage of female users of family planning service who report using a public sector source
Definition	Percentage of female users of family planning service who report using a private medical sector.
Method of measurement	The level of use of unsubsidized family planning services is calculated separately for each type of family planning service.
	For each type of family planning service, the numerator is the number of sexually active females aged 15-49 who report that they obtained the service from a private medical sector source.
	The denominator is the total number of sexually active females aged 15-49 who report that they are currently using the relevant family planning service.
Unit of measurement	Percentage
Use of indicator	The use of family planning services provided by the private medical sector can provide a rough estimate of the percentage of family planning service users who rely on unsubsidized services. A high percentage would indicate a high willingness to pay for family planning services, implying good long-term market sustainability.
Data sources	Population-based surveys
Known data limitations/issues	Survey respondents may find it difficult to accurately classify the type of sources they used. While most private medical sector sources are unsubsidized, it cannot be ruled out that some may be partially subsidized. It is also possible that other sources of unsubsidized services exist outside of the private medical sector. Consequently, this indicator provides only a rough proxy of the use of unsubsidized family planning services.
Comments	

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